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Urban Transformations in Rio de Janeiro

Development, Segregation,
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Luiz Cesar de Queiroz Ribeiro
INCT Observatório das Metrôpoles
Rio de Janeiro
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Foreword

In 2005, I was pleased to participate in the attribution of CNPQ's Millennium Institute Statute to the Observatório das Metrôpoles and since then I have been accompanying the consolidation of this research network that currently comprises 14 Brazilian metropolitan regions, corresponding to a total population of 70 million of people. The network of the Observatory, whose annual meetings I have seen with great success, is surely the most developed instrument of comparative urban research in the world. The set of 14 volumes recently published in Brazil, between 2014 and 2015, on the urban transformations occurring there in the last 30 years, is perhaps the largest information and critical source in the field of demography, sociology, economics and metropolitan politics of our days.

The present volume on urban transformations in the metropolis of Rio de Janeiro, home to 12 million people, brings together the work of 18 researchers dedicated to these themes at IPPUR—Institute of Research and Urban and Regional Planning of the Federal University of Rio de Janeiro (UFRJ), under the coordination of Prof. Luiz Cesar de Queiroz Ribeiro. In it, the demographic, social, labor and school transformations of the metropolis are analyzed successively under the double perspective that, according to the authors, marks the Region of Rio de Janeiro, namely: residential segregation and political culture of a city without civility (*urbs* without *civitas*). In effect, the research summons an exhaustive source of themes and information, while it submits this material to a rigorous analysis inspired by a deep theoretical and methodological knowledge in constant updating. In short, a work that will become a model for the coming decades in Brazil and in any other country.

This book is inspired by the Portuguese version published by the Observatório das Metrôpoles entitled “Rio de Janeiro: Transformações na Ordem Urbana” (Letra Capital, 2015),¹ and this English version contains a very important update of the former volume to consider the latter changes deliberately introduced in Rio's the urban order by the mega-events of entertainment tourism, as they are called by the

¹For further information, visit <http://transformacoes.observatoriodasmetropoles.net>.

authors, such as the Football World Cup of 2014 followed almost immediately by the Olympic Games of 2016. Announced by their promoters—the National, the local State and the City governments, as well as a vast array of private sectors and entrepreneurs that are studied here—as aiming at changing the metropolis well known deep inequalities, the authors have no doubt in stating that “twenty-first century Rio urban order remains the same”. And so, they proceed in numerous chapters to show that in fact Rio’s unequal urban model, having deeply changed morphologically due to the so-called “public–private partnerships” huge interventions, remained nonetheless the same socially and politically. As Prof. Queiroz Ribeiro puts it, “inequalities core-periphery shifted from the quantitative dimension into the qualitative dimension”!

Indeed, “favelas” continue to host 25% of the metropolis population and, though the period since the early twenty-first century has coincided with a huge educational boom under the governments of President Lula and his follower, President Dilma, it is important to note that this greater complexity of the so-called middle classes did not translate into a similar levelling of incomes across the urban network. Far from it, equivalent graduate professionals living in privileged “South Zone” and the peripheral county of Duque de Caxias have remained separated by an average income difference of 1–6 which can only contribute to class reproduction. Under this huge movement of neoliberal modernization of Rio de Janeiro, the patterns of territorial organization expressed by either of the two historical grammars of segregation—social and territorial—are not due to the lack of development but, in fact, to the reproduction of the social, economic and political power relations that support Rio’s/Brazilian urban order.

The authors believe, indeed, that the move from some kind of Keynesian state policies into increasingly liberal entrepreneurship, especially in domains such as transportation and security, as well as gentrification and real-estate appreciation promoted at the same time that social housing, has deepened social and spatial inequalities in Rio due to the two mentioned mega-events. By the same token, this neoliberal modernization has contributed to a parallel move from traditional clientelism into a new pattern of political governance which raises the question of how will urban conflicts evolve as well as the whole future of the metropolis. As a general conclusion about the whole investigation, one can be sure that the reader of this large set of approaches to the urban order and conflict in Rio de Janeiro will be led to question how the old and new cultures and policies will combine to produce the future city as well as its commitment to democratic governance.

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Luiz Cesar de Queiroz Ribeiro

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Chapter 1

Metamorphoses of the Urban Order of the Brazilian Metropolis: The Case of Rio de Janeiro

Luiz Cesar de Queiroz Ribeiro

Métamorphoses, dialectique du même et du différent; dégager les transformations historiques de ce modèle, souligner ce que ses principales cristallisations comportent à la fois de nouveau et de permanent, fût-ce sous des formes qui ne les sont pas immédiatement reconnaissables (Castel 1995, p. 16)

Abstract This article is a chronicle of the historical evolution of the metamorphosis of the urban order in Rio de Janeiro during the period 1980–2010. It is based on a synthesis of an investigation conducted by the Observatório das Metrópoles in the period 2009–2015 on urban order changes in the metropolis of Rio de Janeiro as part of the research program entitled “Metropolises: social cohesion, territory and governance” comprising a comparative work between 14 different metropolitan contexts. Our discussion will address the following questions: what are the impacts of the economic and political changes that took place in Brazil on the metropolis of Rio de Janeiro over the last 30 years? Can we identify signs of transformations in the urban order? What is the relevance of taking as reference for our analysis the period comprised between 1980 and 2010? We conclude our discussion by reflecting on the reproduction explanatory mechanisms of this urban order, despite the fact that the period covered by our analysis comprises different economic and political frameworks.

Keywords Rio de Janeiro (Brazil) · Urban Order · Metropolization · Social changes

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1.1 Introduction

The title of this text contains the essence of our synthesis of the trajectory of the metropolis of Rio de Janeiro over the last 30 years. Contrary to the common sense, and even to the erudite sense—lulled by negative and positive resounding metaphors (such as *broken city* or *Olympic city*) seeking to point to ruptures and discontinuities in the urban order derived from successive cycles of crisis and growth—we have to state that the twenty-first century Rio de Janeiro remains the same. A city-metropolis that reproduces in its core the unequal urban model set when it merged into the second wave of the national peripheral modernization started in the 1930s. An urban model that is, at the same time, producer and reproducer of social relations of domination and of struggles whose epicenter is the appropriation of territory regarded as the base for a selective access to scarce urban resources, either material or symbolic. But if this aspect of the urban order of Rio de Janeiro is likely to remain, on the other hand, we observe some trends to the emergence of new ways through which it expresses itself.

This article is a chronicle of the historical evolution of the metamorphosis of the urban order in the period 1980–2010, seen as the dialectic of the same and the different. It is based on a synthesis of an investigation conducted by the Observatório das Metrópoles in the period 2009–2015 on urban order changes in the metropolis of Rio de Janeiro as part of the research program entitled “Metropolises: social cohesion, territory and governance” comprising a comparative work between 14 different metropolitan contexts.¹ Our discussion will address the following questions: what are the impacts of the economic and political changes that took place in Brazil on the metropolis of Rio de Janeiro over the last 30 years? Can we identify signs of transformations in the urban order? What is the relevance of taking as reference for our analysis the period comprised between 1980 and 2010?

This text is divided into six parts. After this introduction, the second part briefly presents the design of the concept of urban order that guided our analysis. With its support, we analyze the articulation of the social organization of the territory with the production and reproduction mechanisms of social relations. In the third part, we describe the general traits of this urban order in Brazil as part of the conditions governing the social transformations of Brazilian society during the accelerated industrialization stage that started in the 1940s. In the fourth part, we present how these general traits, in the metropolis of Rio de Janeiro, were translated into an urban order in which urban class relations are expressed in a segregated and unequal pattern of social organization developed in a double social grammar² of

¹The overall results of this program were grouped in the collection “Metropolis: urban transformations”, available at: <http://transformacoes.observatoriodasmetropoles.net>.

²The use of the term ‘grammar’ expresses our intention to highlight the need to overcome a purely spatial reading of residential segregation, including the possible social meanings present in the interactions resulting from distancing and proximity carried out through the territory. In our view,

distancing, hierarchy and inequality. In the fifth part, is our synthesis of the empirical analysis of the transformations occurring in the various dimensions of the urban order in the Metropolitan Region of Rio de Janeiro from 1980 onwards. Finally, we conclude our discussion by reflecting on the reproduction explanatory mechanisms of this urban order, despite the fact that the period covered by our analysis comprises different economic and political frameworks.

1.2 The Urban Order: The Construction of a Concept

What do we want to convey with the expression “urban order” adopted as the key element in our analysis? We want it to convey our way of envisaging the social organization of the territory as one of the instances of society, thus expressing material, symbolic and institutional orders. This theoretical-methodological conception has, as its starting point, classic references from Urban Sociology regarding the inescapable theoretical need of thinking the city from the relationship between society and space. Among these references, it is worth mentioning the seminal work of Castells (1975), in which the author argues that the understanding of the urban phenomenon is only made possible when we understand the city as a projection of society, namely, when we consider the relationship between city and society as sociohistorical and morphological facts.

This starting point is the only one which allows us to overcome the empiricism in the description of the city as a unique geographic or demographic object, a fundamental task mainly in a research project guided by comparative concerns about socio-spatial changes. But, as Castells has already argued, the quest to overcome empiricism poses the risk of considering “(...) space as a blank page on which the actions of groups and institutions are inscribed, without encountering any another obstacle than the trace of past generations” (Castells 1972, p. 181). Later, the author, in his famous text, states that the form, function and meaning of space constituted as a city cannot be seized as “(...) a mere occasion of the unfolding of social structure, but the concrete expression of each historical ensemble in which society is specified” (Castells 1975, p. 152). Thus, in the same way as to any other actual object, structural and conjunctural laws which command its existence and its transformation need to be established, as well as the specificity of its articulation with the other elements of a historical reality. Castells then concludes that: “There is

(Footnote 2 continued)

this is only possible by reading the residential segregation from the acknowledgment of the institutionalized patterns that naturalize and legitimize hierarchies and inequalities of society. Such purpose has affinity with the works of Katzman (2007) on the understanding of the patterns of residential segregation in Latin America, of Souza (2004) on the foundations of social inequalities in Brazil, and of Nunes (1997) on the patterns of political relations between State and Society in Brazil.

no theory of space that is not an integral part of a general social theory, even implied” (Castells 1975, p. 152).

We recognize that to resume these theoretical considerations may seem somehow naive due to the evolution and complexification that have currently been reached by “urban thinking”, especially considering investigations inspired by Henry Lefebvre and David Harvey’s formulations. But we consider that it is worth recovering these ideas of Castells to explore two implications that will be important to our analysis. The first—of a more epistemological and theoretical nature—would be: (i) to reaffirm the need for a theoretical construction of our object of comparative analysis (urban order), overcoming the intuitive and empirical attitude; (ii) to understand it as a result of a relationship with a concrete society; (iii) which, in turn, is understood as a specific spatio-temporal reality; (iv) an understanding that is only possible when a social theory is adopted.

We would like to emphasize this last aspect, insofar as it helps to place us in the universe of urban thinking. We know that there is not a social theory, but several possible social theories by means of which we can understand a concrete society. Indeed, the vast disciplinary field of Social Sciences is strongly marked by the existence of several distinct possibilities of theoretical formulation, highlighted by epistemological, theoretical and methodological guidelines addressed to the sociological object they want to explain and by the foundations of their explanation. In numerous existing textbooks and manuals on urban theory, we find different ways of showing this diversity in accordance with the author’s affiliation: methodological individualism, methodological collectivism and theoretical individualism; or structuralism, historicism and culturalism.

Often, these social theories are implied in the theoretical formulations of the relationship between space and society or society and city. Our appropriation of propositions and hypotheses of these theories must, therefore, take into consideration their guidelines and fundamentals. Not only on account of the accession of our elective affinities in terms of historically significant value-based choices, as Max Weber would argue, but also on the elective affinities with our research issue.

The second implication is of an analytical and methodological nature. To take as a starting point the thesis that the city is the result of a one-to-one relationship between society and space implies that we assume that the urban space is structured. In other words, “(...) it means it is not organized at random, and the social processes linked to it express, when they specify them, the determinisms of every type and every stage of social organization” (Castells 1972, p. 162). Therefore, to understand the urban order it is necessary to first understand the specific effects of social processes upon the organization of the territory.

Consistent with the statement above, we propose the construction of the concept of the urban order from the critical social theory which postulates the understanding of social organization as a whole based on power relations between groups and social classes. These relationships have multiple concrete expressions in society, and those related to the economic, social and political spheres are the most identified. But, considering Bourdieu’s theorizing, such spheres reflect different ways of structuring and exercising power which stem from society complexification and

internal diversification, which in his theory are established in the concept of field. The emergence of fields of structuring and exercise of power is based on social struggles between classes and class fractions over domination (Bourdieu 1979).

1.3 Brazilian Urban Order: Historical Context

Why should we take the historical period aforementioned as a reference in our analysis? Above all, because in those decades three striking historical periods took place on the account of the emergence of transformation trends in Brazilian society regarding economy, society and the State, though all these trends presented ambiguous and even contradictory dynamics. The first period corresponds to the 1980s, and is considered the “lost decade” due to its low economic growth, increased social inequalities, unemployment and underemployment, urban poverty, explosion of violent crime, that is, due to the social crisis resulting from the depletion of the industrialization model. But, at the same time, it was the period of redemocratization, with the resumption of labor union and social movements, and of the progressive state and municipal governments, in addition to the drafting of the 1988 Constitution as an institutional milestone of the construction of a social contract founded on principles and instruments of a social well-being regime.

In 1991 began a new period marked by policies seeking monetary stabilization, a national economy addressed to global competition and, above all, the “neoliberal experiment” introduced in the second half of the 1990s. Currency stability is achieved and significant positive effects are generated in the structure of personal income inequalities, while productive restructuring of enterprises and of the public sector via privatization—combined with the successive exchange crises—produced negative currency impacts on labor market.

The election of Luiz Inácio Lula da Silva is the milestone of the third period which, however, will only take shape from 2005 onwards when several government initiatives started the “neodevelopmental experiment”, made possible by the resumption of the world economic growth boosted by the expansion of China industrialization. Combining social policies with income and employment growth, it fostered a dynamic economic growth with income distribution, credit expansion, incorporation of wide popular strata into the market of durable consumer goods, a type of market from which, until then, this population historically had been excluded. The public sector expanded and the State resumed its role as a provider of essential goods, as it had done as regards social interest housing.

Having these historical scenarios as reference, it seemed appropriate to ask whether over the last 30 years we have found signs of an urban inflection in urban Brazilian metropolises.³ The relevance of this question is based on the

³The thesis of the inflection of urban order was analytically constructed and presented in Ribeiro (2013).

understanding that Brazilian metropolization characteristics resulted from economic, social and political conditions which ruled our accelerated industrialization from the second half of the 1950s under the hegemony of monopoly capitalism, that is to say, of the industrial-financial complex.⁴ As Arend (2012) points out, our industrialization occurred at two distinct times that were quite different due to the systemic conditions that delineated our insertion in the capitalist world-economy.

Between 1930 and 1951, the national-developmental strategy of Getúlio Vargas prevailed, and large international companies were invited to develop sectors related to the economic infrastructure and the national capital of sectors of consumer goods. This strategy was already weakened in Vargas' second government because of changes in the global systemic conditions of accumulation, including the consolidation of the United States of America hegemony and its geopolitical choice for Europe and Japan. The American government presses the Brazilian government to open up the sectors of durable goods production to the large American companies. The election of Juscelino Kubitschek and his Master Plan express a transformation in the internal power bloc and a change of strategy towards a developmentalism (1950–1980) associated with large international companies that produced durable goods, a sector that occupied the core of the global capitalist accumulation at that time.

The metropolization generated by industrial expansion under monopolistic hegemony was also expressed by the constitution of an urban order consistent with the heavy concentration of the economic, social, political and cultural power of the classes that have income, wealth and opportunities and of the vast and heterogeneous labor world formed by the mobilization of a workforce carried out by an intensive country–city migration. In the cities of São Paulo and Rio de Janeiro, migration flows amounted to nearly 30 million people in a population of 93 million by 1970. Therefore, the accelerated urbanization was the central mechanism of the constitution of the reserve army of labor from which the fundamental traits of Brazilian industrial capitalism originated (Singer 1975). This would be the historical foundation of the urban growth organized along the lines of a logic that features the expansion of capitalist relations frontiers. The dynamics of occupation of the metropolitan territory of the two largest cities in the country reproduced in urban space the same management mechanisms of the social conflict in the peripheral industrial capitalism established in Brazil (Fiori 1995; Tavares 1999), whose main feature was the combination of authoritarianism and *laissez-faire* in social relations regulation.⁵ The intensity and speed of the process of workforce mobilization

⁴As Fernandes argued, our insertion in the expansion of the industrial-financial capitalism brings out the urban and metropolitan hegemony simultaneously on national territory, resulting in a dynamic concentration of material, human and technical resources in some cities “giving rise to typical phenomena of metropolization and satellization under dependent capitalism” (1976, p. 207).

⁵It is worth to consider in this reflection the following description of Tavares on the territorial and demographic fundamentals of the conservative alliance that presided over the development of Brazilian capitalism: “The periodical resource to an authoritarian order seeks its State reasons both

through rural masses migration have generated an early and explosive metropolization,⁶ an urban space whose main feature was the production of precarious and improvised areas in terms of urbanization and access to basic goods and services. Areas that could fulfill the role of internal frontier to the space of capital reproduction due to the fact that a reserve army of labor and assets for future cycles of capitalist expansion are accumulated in them. Given this, we can explain the apparent contradiction of Brazilian industrial capitalism in concentrating the private property of land in the country and disseminating it in the city through mechanisms that combined prices and local social institutions based on conventions and values shared by the population.⁷ In short, workforce mobilization via migration-metropolization resulted in the creation of an unequal and combined urban order where relations and practices, and social relations which emanate from the capitalist use and production of space, are articulated with other typical relations of creation, destruction and re-creation of successive internal frontiers of capital reproduction.

But, on the other hand, the urban order which presided over metropolization also resulted from the role exercised by urban accumulation on the feasibility of setting up a power bloc founded in the alliance between State, national capital and international companies, a political fact defined as *Sacred Alliance*⁸ by Lessa and Dain (1984). To the authors, the State would have been the counterbalance of the alliance when it ensured two conditions: the first, by reserving to the national capital certain non-industrial accumulation circuits as reserve; the second, by establishing ways to ensure a horizontal partition of profits between two orbits, thus leveling profitability. The circuits of value organized by real estate capital, public works

(Footnote 5 continued)

in the preservation of the national territory and in the support of capitalist expansion, in new frontiers of accumulation, where its role was to prevent open class struggle, of landowners and capital, and to ensure the submission of local or migrant populations, which spread throughout the vast Brazilian territory (...). In turn, the process of massive spatial displacements of rural-urban migrations of our populations and the radical changes in living conditions and exploitation of the workforce did not allow the formation of more homogeneous social classes, capable of a systematic confrontation that could lead to a systematic bourgeois order" (Tavares 1999, p. 457).

⁶The concept of metropolization here used refers simultaneously to the demographic and productive concentration in three main agglomerations—São Paulo, Rio de Janeiro and, later, Belo Horizonte—creating a polarized urban network. See Ribeiro et al. (2011) and Lipetz (1989).

⁷The classical literature on country/city migration in Brazil described this process as a social process in which social bonds held in the point of departure are present in the point of arrival creating urban territories that, despite precariousness and poverty, were more than an agglomeration of individuals. Singer, for example, points out in his well-known study on the theme: "The adaptation of the newly arrived migrant to a social milieu occurs often through mutual aid mechanisms and solidarity of older migrants" (Singer 1975, p. 55).

⁸Lessa and Dain so defined the Holy Alliance: "(...) a community and a convergence of interests between dominant capital in orbits of non-industrial capital and a branch system in industrial circuit. They are systematic relations of solidarity in the joint expansion of existing capital in that national space of accumulation, a space that respects a "specialization", a kind of division of space, in accordance with orbits, by capitals from different sources. This pact is constituted with the presence of the State" (Lessa and Dain 1984, p. 254).

contractors, urban services concessionaries, and by land ownership formed the protected orbit and constituted the urban segment of capital accumulation, a fact that is at the base of the historic hypertrophy of the role of speculation in the dynamics of the social organization of the territory in our metropolises.

1.4 Formation of the Urban Order of the Metropolis of Rio de Janeiro

Can we assume that in the period 1980–2010 emerged trends of inflections in the urban order built in Brazilian metropolises? This hypothesis is even more relevant in Rio de Janeiro because of its trajectory in the previous industrialization, marked by the early loss of its dynamism to São Paulo. Nowadays, with nearly 12 million inhabitants, the metropolis of Rio de Janeiro accumulates the effects of an intense process of an urbanization dissociated from a corresponding industrial base,⁹ i.e. a base with the ability to generate a labor market capable of sustaining the level of metropolization achieved. On the other hand, the “lost decade” of the 1980s produced disproportionate effects in Rio de Janeiro, expressed in the form of a social (unemployment, informality, poverty, violence, etc.) and urban-metropolitan crisis (housing crisis, urban mobility, growth of favelas, among others). Interestingly, however, in this period of crisis, a movement of an intense real estate speculation emerged with the incorporation of the large area of Barra da Tijuca as the new front of urban sprawling, a fact that will have long lasting impacts on the dynamics of metropolization. This vast area with over 105 km² remained on the fringes of the metropolis urban sprawling until the 1970s. At the end of the 1960s, the lands of Barra belonged to four major owners: *Esta* companies, *Grupo de Desenvolvimento*, Carvalho Hosken S.A. and Pasquale Mauro. In 1970, the *Grupo Desenvolvimento* tries to perform a major operation by launching a set of towers, but it failed, however, to accomplish its goal. After the enterprise failure, the company began selling several tracts for the companies Carvalho Hosken, *Construtora Santa Izabel*, ENCOL and *Construtora Eldorado*.

In the early 1970s, in Negrão de Lima’s government, a set of roadworks was built, with the aim of promoting the area’s connection with the south side of the city. Later, Lúcio Costa’s Master Plan (*Plano Lúcio Costa*) was designed not only to regulate Barra da Tijuca land use but also to create the “Rio de Janeiro of the future”. In 1976, the decree No. 324 was enacted, establishing construction standards especially designed for Barra and institutionalizing Lúcio Costa’s Plan.

⁹One of the reasons for Rio de Janeiro’s low industrial dynamism stems from the huge weight on its structure resulting from sectors that have become obsolete in the successive technological revolutions, as identified by Dain (1990). The famous debate on Rio de Janeiro’s economic drain was enriched by the recent research of Silva (2012) and Sobral (2013).

At the end of the 1970s, Barra is ready to be established as a new front of expansion, led by a coalition of interests formed by four large landowners, a few large real estate developers, large public works companies and the public power, forming a classic case of urbanization organized by the logic of generation and extraction of a type of land rent similar to the class-monopoly rent conceptualized by Harvey (1974). This fact set in motion a drag force in the dynamics of the social organization of the metropolitan territory made visible when Barra da Tijuca started concentrating over half of the city's real estate launchings in 1989—measured in square meters—while they were just 7.9% in 1980 (Ribeiro 1997).

We applied the socio-spatial analysis described in the previous item for the years 1980, 1991, 2000 and 2010—from demographic census data, basing our discussion on the description of the metropolis in the 1970s, a description that has been enshrined in works considered the classics of urban thinking on Rio de Janeiro. The texts of Vetter (1975), Santos and Bronstein (1978), Vetter et al. (1981a, b) and Abreu (1987) point out that, at that time, the social organization of the metropolitan territory of Rio de Janeiro featured a dualized core-periphery¹⁰ urban structure which expressed society class inequalities, despite the significant presence of popular areas—such as favelas—at its core. The policy of displacing the population from these areas and of moving them to the periphery was regarded as the consolidation of the dualized standard. These works—comprising the reproduction of regional inequalities based on Myrdal's theorizing (1968) on the circular cumulative causation and the reproduction of urban inequalities based on Harvey's concepts (1973)—sought to explain the forces that acted on the reproduction of the core-periphery structure of the metropolis of Rio de Janeiro, highlighting the economic and political impacts of the socio-territorial dynamics once the process of residential segregation started. On the one hand, the areas with high concentration of groups occupying the highest positions in the social structure are also an economic and political power that tends to favorably influence public decisions on investment allocation, appropriating the larger share of the resulting benefits, mainly those concerning urban well-being and social opportunities. At the same time, these groups also tend to profit in terms of patrimonial wealth, since the selective allocation of urban investments produces differential impacts on housing and urban land value. Insofar as this dimension of social inequality is the object of dispute over land rent appropriation, it involves the various segments of actors present in real estate market in which landowners, real estate developers and segregated groups stand out. The result of this dispute is the increase in the price of

¹⁰In these works, the morphology of the metropolitan territory was thus described: **core**: the commercial and financial central area—old historic core, which expanded towards the ocean edge (the “South Zone”) and to the inner area (Tijuca, Vila Isabel, São Cristóvão and Caju neighborhoods), in addition to Downtown and the South Zone of Niterói; **near periphery**: suburbs of the axis Madureira of the line of Central do Brasil railway and of the axis Irajá of the old Leopoldina railway, in addition to the North Zone of Niterói. Classically, Barra da Tijuca is included in this space; **intermediate periphery**: Baixada Fluminense, part of Magé and São Gonçalo; **distant periphery**: according to the terms used at that time, it would be the conurbation area.

housing and land in segregated and privileged areas recipient of urban investments, which leads to removing from these areas social groups that occupy lower positions in the social structure and that, therefore, have less economic and political power, a procedure that reinforces and reproduces segregation. Therefore, the mechanism of circular cumulative causation reproduces the unequal space expressed in the core-periphery morphology insofar as economic and political power inequalities are reflected in the territorial segregation of this power that, once set up, becomes power of segregation as it is capable of acting selectively on the access to urban investments and privileged areas.

We will turn now to some analytical elements that resulted in starting points for the analysis undertaken to answer the questions raised in the introduction to this text. In previous works (Ribeiro 1986, 1997, 2000; Ribeiro and Lago 1995, 2000), we sought to interpret the changes in the patterns and in the dynamics of the core-periphery organization of the metropolis of Rio de Janeiro in the period 1980–2000 in the light of this analytical milestone. However, in those works we expanded the understanding of the socio-territorial forces present in the circular cumulative causation of the reproduction of the core-periphery pattern. Firstly, we would have the forces arising from the political economy of urbanization in Rio de Janeiro, whose main feature is the power of interests historically set around urban accumulation, in which the interests of the fractions of real estate capital, both as contractor and public services concessionaire, play a very important political role. The action of this power commanded, through State intervention, the successive cycles of the city expansion, founded in the production of new centralities and new expansion fronts that gradually established the features of the dynamics of the metropolitan organization of the territory. The first cycle was the recovery of Rio de Janeiro's downtown area in relation to popular classes—in a period marked by the urban reforms carried out by Pereira Passos—when the ruling classes intended to build a *Paris in the Tropics*. The second cycle corresponds to the time of appropriation of Copacabana and the invention of the “South Zone—Apartment Building” in the period 1930–1980, a new centrality presented as the construction of a Tropical Paradise since it promised to bring together nature and modernity. The third great cycle begins at the end of the 1970s and lasts until now with the appropriation and invention of “Barra da Tijuca—Gated Condominium” as the new centrality, which corresponds to the construction of Latin America Miami as a promise of a postmodern urban model.¹¹ Each of these cycles results from the action of political coalitions of interests present in urban accumulation and their ability to orchestrate public intervention as the base for designing successive centralities.¹²

¹¹We used as symbolic markers of each cycle the creative and relevant metaphors built by Lessa (2000) to symbolize the nature of the process of urban development in Rio de Janeiro in the twentieth century.

¹²In the present moment we live the emergence of a new cycle of urban accumulation founded in the recovery of the old central area of the city of Rio de Janeiro, as described by Britto (2015).

The second driving force of the mechanism of circular cumulative causation resulted from the irruption in the social structure of a new professional middle class also known as the “upper middle class”,¹³ linked to the industrialization process of the country.¹⁴ This occurred especially after the 1950s, with the State modernization and the establishment of large international companies in Brazil. It is noteworthy that in Brazilian society it does not result in a creation of a social group similar to the one identified by Charles Wright Mills as the “white collar”. But from this, emerges a social class which, despite not comprising a large population, generated a gravitational force in urban policy based on its social cohesion and on the fragmentation of the urban popular world as consequence of the existing vast reserve army of labor in the metropolis. In other words, the territorial concentration of this cohesive group, conducted abruptly on the grounds of the power of urban accumulation breaking new fronts of urban sprawling and creating new centralities, intensified and accelerated in the socio-territorial dynamics of the metropolis the transformation of the segregation of power into the power of segregation. Third, we incorporated, in our way of conceiving the dynamics of the social organization of the metropolitan territory of Rio de Janeiro, the dimension of the social conflicts over the appropriation of the metropolitan territory as the base for the selective access to sources of well-being, opportunities and wealth. Indeed, in our view, the mechanism of circular cumulative causation from the 1970s onwards already embodied countertrends to the establishment of the uneven pattern of core-periphery, which leads us to overcome the dualistic conception underlying the previous analyses. In our previously mentioned works—and also in others—we see the action resulting from the three following dynamics: the *self-segregation* of the upper classes in the form of their heavy concentration in the most valued spaces, the *peripherization* of the popular classes, in addition to the *infiltration* in areas of

¹³The concept of the New Professional Middle Class here mentioned is used similarly to the concept formulated by Goldthorpe (1980) in the ‘Higher-Grade Professionals’ category and by Boltanski (1982) in the ‘Cadre’ category. In short, it is worth stating that this is a relatively heterogeneous group in terms of its professional activity, but is cohesive in terms of the position it occupies in the social space. In addition to its high education level, it is characterized by exercising executive functions of command mainly in the private sector, but also in the public sector.

¹⁴It is the understanding of this fact that gives meaning to the famous statement of Francisco de Oliveira, in a text written in 1982 when the urban began to emerge as a political question under the impetus of movements addressed to redemocratization: “I would summarize, stating that nowadays, in Brazil, the urban is the middle classes, that is, cities are *par excellence*—retrieving the question of outsourcing—under this angle—the urban expression of this new class, where the weight of the middle classes emerge with enormous strength, with enormous gravitation, in view of the type of organization that the international capitalism created when designing its companies within Brazilian society. It is also important from a political point of view. The enormous gravitation of the middle classes in Brazil, seen from another aspect, is one of the bases of authoritarianism of the Brazilian society. From the urban point of view, from its relations with the State and the urban, these middle classes have created demands within cities. And the State today, from the point of view of its relation with the urban, among other important aspects, I point out, is mostly determined by the demand of the middle classes within the city (Oliveira 1982, p. 25)”.

the metropolitan core and in areas of its immediate periphery by those same popular strata, a process known in the common sense as “favelization”.

Such an interpretation is based on our understanding of the uneven and combined nature of the urban order of Brazilian metropolises, as stated previously. However, some clarifications are necessary. We do not use here the concept of infiltration in the ecological-functional sense developed by McKenzie (1970), but in the sense that infiltration is seen as resulting from the social struggles around the urban land regarded as the foundation of the access to resources that act upon well-being, real estate capital, monetary income and opportunities of access to resources distributed unevenly in the social organization of the metropolitan territory. Along the social and urban history of the city of Rio de Janeiro, the dynamics of infiltration was expressed in the form of favela as a result of collective actions in which fractions of popular classes can access interstitial spaces in areas inaccessible to them if only the price of the land worked as a selection mechanism. Even in a strongly hierarchical space commanded by real estate speculation, the relations and practices of capitalist appropriation and space production mingled with infiltration practices of the popular strata in the form of public and private land occupations or as markets embedded in social institutions shared by the population. As an example, we have a large number of favelas built on the edge of successive centralities produced by the self-segregation dynamics of the upper middle classes, as occurred in Copacabana-Ipanema-Leblon during the period 1950/1970 or, more recently, in the incorporation of Barra da Tijuca as expansion front of the big real estate capital.

The uneven and combined nature of the urban order of the metropolis of Rio de Janeiro stems from the coexistence of different dynamics of use and production of housing space. A first dynamics results from the logic of the capitalist market ruled by real estate development always associated (directly or indirectly) with other circuits of urban accumulation; a second dynamics results from the combination of a mix that may involve production on demand, self-production, in addition to the formal market itself; and a third results from the use of parts of the city within the logical frontier (as management mechanism of the reserve army of labor) mentioned earlier, whose central feature is the presence of access practices to urban land of invasion or of market embedded in relations of solidarity and reciprocity. From the morphological point of view, this way of interpreting the dynamics of the socio-territorial metropolis of Rio de Janeiro has led us to identify a more complex pattern of residential segregation than what was expected from the hypothesis of circular cumulative causation, since this patterns is based on a double scalar grammar: on microscale, with the territorial proximity and the social distance between social classes, highlighted by the presence of favelas in the areas of concentration of the economic and political power, and, on macroscale, with the concentration of the popular strata in successive peripheries formed from the core of the city of Rio de Janeiro.

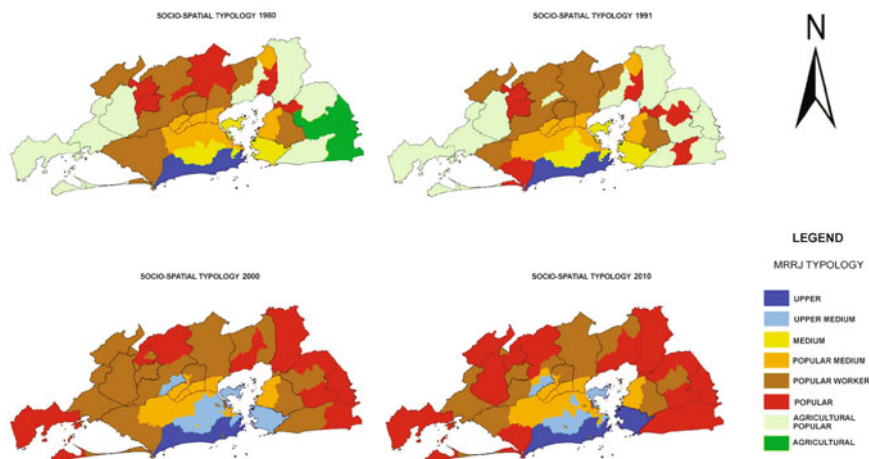


Fig. 1.1 Socio-spatial typology of the metropolitan region of Rio de Janeiro. *Source* Ribeiro and Ribeiro (2015, p. 185)

1.5 Metamorphoses of the Urban Order of the Metropolis of Rio de Janeiro

What happened in the post-1980 period? We examined various dimensions of the transformations of the urban order in this period. The empirical results in Ribeiro et al. (2015) led us to conclude that despite the macro-trends of the economic, social and political transformation aforementioned, the period 1980–2010 presented few changes in the morphology and dynamics of the social organization of the metropolitan territory. Throughout these 30 years, in fact, we observed obvious signs of the continuity of the mechanism of circular cumulative causation whose result is the maintenance of the process of residential segregation based on a double scalar grammar: social distance and territorial proximity expressed in the favela-neighborhood dichotomy and territorial distance and social distance materialized, in turn, by the core-periphery pair. We will examine some evidence for this assertion, firstly showing what occurred in the socio-territorial dynamics, and later in the connections between segregation processes and mechanisms of reproduction of inequalities.

Figure 1.1, shown, expresses the permanence of the segregation pattern in the metropolis over the period 1980/2010.

The maps result from the analysis of the evolution of the social organization of the metropolitan territory conducted by Ribeiro and Ribeiro (2015) based on the

socio-spatial typology designed by the Observatório das Metrópoles.¹⁵ Its examination points to signs of reproduction of the dynamics of the residential concentration of classes that hold the economic and social power in the upper areas of the metropolis. This turned the metropolitan space into a more polarized space on the large scale of the social organization of the territory, due to the movement of residential mobility of the population, with the popular strata moving from the upper areas located in the city of Rio de Janeiro—especially the South Zone and Barra da Tijuca—to the metropolitan periphery. Despite the limitations of census data, Oliveira and Tavares (2015) showed that between 2000 and 2010 approximately 60% of the changes of residence which took place in the upper areas, showing a displacement from those upper areas to the metropolitan periphery, were performed by workers and small employers who moved to areas whose dwellers occupied social positions similar to their own. The reverse was also noted by the authors, i.e. people who entered the upper areas were mostly those in economic and social positions of power.

This movement certainly is related to the expansion of the logic of commodification of urban land and housing, driven by real estate market whose most obvious expression is the rise in prices and rents.¹⁶ Cardoso and Lago (2015) found, objectively, that after the stagnation of the 1990s occurred a vigorous resumption of real estate launchings by incorporation—as shown in Chart 1.1—driven by rising incomes and the institutional reform of the housing system.¹⁷ We shifted from an average level of 4000 housing units launched until 2003–9000 between 2005 and 2006, 11,000 in 2008 and 2009 (years in which there was a negative impact of the crisis), reaching almost 18,000 units in 2010. A little more than 60% of the overall launched units are concentrated in the axis Barra da Tijuca/Jacarepaguá (the main front of the open urban sprawling in the late 1970s and in the 1980s) and only a little more than 10% in the consolidated upper area formed by the axis South Zone/Tijuca.

At the same time, during this period, we also observed the reproduction of the dynamics of the peripheralization of the metropolitan space, although trends of social diversification emerged with the creation of enclaves of the upper middle

¹⁵See the description of this methodology in Ribeiro and Ribeiro (2013) available at: http://www.observatoriodasmetropoles.net/index.php?option=com_k2&view=item&id=604:e-book-an%C3%A1lise-social-do-territ%C3%B3rio&Itemid=167&lang=en.

¹⁶We do not have systematic and reliable statistics on the real estate valuation that took place. Taking as reference the FIPE ZAP index (Economic Research Institute Foundation/ZAP real estate) raised by Cardoso and Lago (2015) between 2008 and 2013, the average selling price amounted to 164.7%, against an increase of 32.5% of the IGP-M (General Index of Prices in the Market) in the period considered. The values of rents for two-bedroom type of buildings (the predominant type) also showed a significant increase along the second half of the decade, which accelerated from 2007/2008 onwards. The rise in prices in Rio de Janeiro, accumulated until 2014, was 137%, against a IGP-M growth of 42.8%.

¹⁷It was a significant expansion of the provision by banks of the SBPE and the housing system resources due to the growth in the issuance of Real Estate Receivables Certificate and creation of Real Estate Funds.

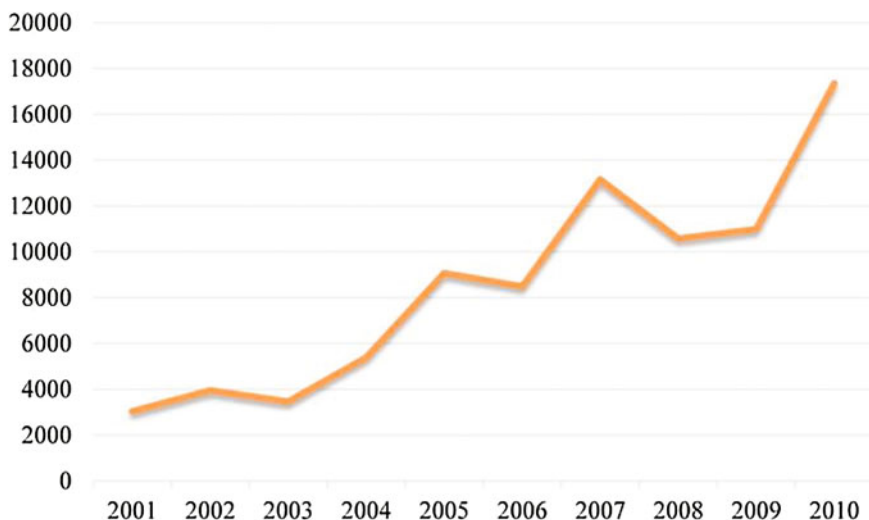


Chart 1.1 Units launched in the city of Rio de Janeiro (2001–2010). *Source* Real Estate Managers Association (ADEMI). Extracted from Cardoso and Lago (2015, p. 346)

class spaces in the consolidated metropolitan periphery, namely the region of *Baixada Fluminense*, located on Guanabara Bay and composed of many municipalities. However, these enclaves do not alter significantly the social distance in relation to the most central spaces, a fact that stands out when we note the maintenance of the general profile of the social composition of the periphery considered as a whole, as shown in Fig. 1.1. The emergence of the mentioned enclaves on the metropolitan periphery corresponds to the process of stratification of the urban world of the middle classes, an ongoing process resulting from the phenomenon of the huge expansion of higher education which, on the other hand, created the phenomenon known as ‘over education’¹⁸ in which an assured and direct relationship between social position and economic and political power no longer exists.

Despite the strong property appreciation in the central areas of the metropolis, we observed the continuity of the conflicting process of infiltration by the popular strata into the upper spaces through the growth of favelas in the city of Rio de Janeiro. Let us consider a few data: in a previous work (Ribeiro and Lago 2001), we noted the expansion of favelas during the period 1980–2000, expressed in the fact

¹⁸An illustration of our argument: the *per capita* income of a graduated professional residing in Lagoa Rodrigo de Freitas neighborhood in the South Zone of Rio is 6 times greater than the income of an equivalent graduated professional residing in the municipality of Duque de Caxias, a typical consolidated suburban space. The dissociation between education, social position and social status in contemporary metropolitan Brazil was competently evidenced on the Doctoral Thesis of Marcelo Gomes Ribeiro titled “Education, Class Position and Territory: an analysis of income inequality in metropolitan regions of Brazil”. See: Ribeiro (2012).

that the growth of the population living in those spaces had been superior to the one noted in the city as a whole, reversing the trend observed in the 1970s. We observed the continuity of this movement between 2000 and 2010, since the city's population increased by just 5%, while the population living in favelas increased by 19%, representing about 23% of Rio de Janeiro's dwellers. In other words, despite the improvement of income and employment in recent years, this type of housing has continued to grow, a fact essentially concentrated on two axes: the South Zone of the city, located in the expansion area of self-segregation in the previous period and where favelas increased by 28% while the population decreased by 1%; and the axis Barra da Tijuca/Jacarepaguá, the new frontier of expansion of real estate capital and, therefore of self-segregation, where the population residing in favelas grew by 53% in 10 years, following the demographic explosion of 28%.¹⁹

But it is important to note that the process of infiltration has been gaining new contours over the last 10 years, which resulted in the trend to transform the existing social conditions with the increase in the level of household income, without changing, however, the essence of the social composition of favela areas. As a matter of fact, Lago and Cardoso (2015) have shown that institutional barriers (violence, socio-territorial stigma, among others) continued operating as a selective mechanism that acts to prevent the full integration of favelas into the city, despite the expansion trends of marketing practices in the production of housing in these spaces. Objectively, the authors, when they compared the changes in social composition, verified that the social diversification of the popular spaces of the periphery does not occur in favela spaces. Despite improvements in the income of the city taken as a whole and, particularly, in the popular world, favelas are still the result of the dynamics of the social infiltration of the most precarious popular strata of the labor market into the upper spaces that concentrate resources in the form of income, employment and opportunity. The result is the maintenance of the grammar of residential segregation founded on social distance and on territorial proximity to the upper spaces of the metropolis. Chart 1.2 shows this fact.

Non-favela dwellers of the "upper" socio-spatial type earned on average (both in 2000 and in 2010) 6.4 times more than favela dwellers. In relation to the "upper medium" type, this relationship was 2.9 times more. Non-favela dwellers of the "popular medium" type earned on average twice as much of favela dwellers. In the "popular worker" and "popular" types, the difference was only 20% in favor of non-favela dwellers. This finding enables us to understand that the difference between favela and non-favela obeys the socio-spatial hierarchy of the metropolis of Rio de Janeiro, according to its pattern of social organization of the territory which follows the core-periphery model. As further from the metropolitan core, the closer the social conditions of favela dwellers and non-favela dwellers are. However, in the metropolitan core and in the socio-spatial types near the core, the difference between favela dwellers and non-favela dwellers is very expressive.

¹⁹Data are from the demographic censuses and were tabulated by Cavalieri and Vial (2012).

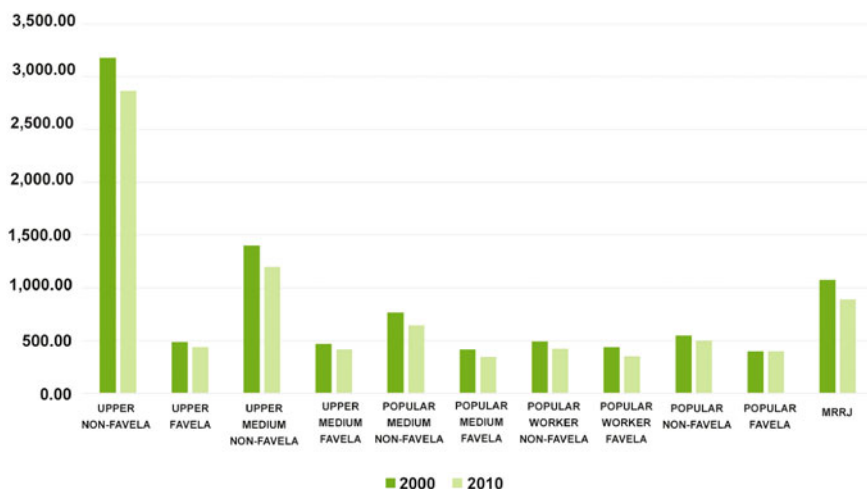


Chart 1.2 Total average income by *Favela* and *Non-Favela*, according to the social organization of the territory of the metropolitan region of Rio De Janeiro—2000 and 2010. *Source* Ribeiro and Ribeiro (2015, p. 192)

When we examined the inequalities of the urban living conditions based on the Urban Well-Being Index (*Índice do Bem-Estar Urbano—IBEU*) produced by the Observatório das Metrópoles from the 2010 Demographic Census data of IBGE,²⁰ we confirmed the maintenance of the inequalities between central and peripheral areas, notwithstanding the relative spatial deconcentration of urban investments—as for example in environmental sanitation—that occurred after 1980. This fact is highlighted in the map shown in Fig. 1.2. Thus, as observed by several analysts, in the metropolis of Rio de Janeiro remain strong relations between residential segregation and inequality of urban conditions of life, as reported by the aforementioned seminal studies on the 1970s.

When we assessed in more detail the indices that make up IBEU in the Metropolitan Region of Rio de Janeiro,²¹ only 93 weighting areas (27% of the total) have higher indices of urban well-being, classified as good and very good, meaning, respectively, levels between 0.801–0.900 and 0.901–1. In the weighting areas belonging to these levels, live 2751,537 people, that is, only 23.18% of the population of the MRRJ, in 1,026,866 households.

²⁰The inequalities in life urban conditions expressed on this map were estimated through the Urban Well-Being Index (*Índice do Bem-Estar Urbano—IBEU*) produced by the Observatório das Metrópoles. See: http://www.observatoriodasmetrolopes.net/index.php?option=com_k2&view=item&id=642%3Alan%C3%A7amento-do-livro-%E2%80%9C%C3%ADndice-de-bem-estar-urbano-%E2%80%93-ibeu%E2%80%9D&Itemid=167&lang=pt.

²¹The Metropolitan Region of Rio de Janeiro (MRRJ) comprises 20 municipalities containing a total of 338 weighting areas and a population of 11,872,164 inhabitants, but with very heterogeneous urban well-being characteristics.

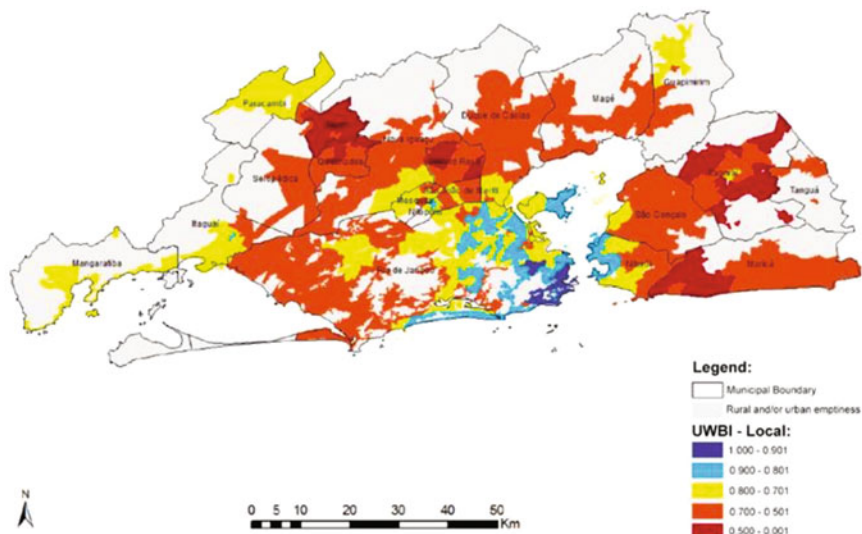


Fig. 1.2 Urban well-being index in the metropolitan region of Rio de Janeiro—2010. *Source* Nery and Costa (2015, p. 416)

On the other hand, the lower tracks, with levels classified as bad and very bad, represented on the map by the colors orange and red, respectively, comprise 135 weighting areas (about 39.94% of the total). Their population comprises 5,571,678 people, which corresponds to 46.93% of the population of the metropolitan area, residing in 1,768,066 households in weighting areas with levels of urban well-being between 0.001–0.500 and 0.501–0.700. The level classified as medium in IBEU is represented on the map by the yellow color and features urban well-being indices between 0.701 and 0.8. It is present in 110 weighting areas corresponding to 32.54% of the total of the metropolitan region. These areas have altogether a population of 3,099,769 people, about 26.11% of the MRRJ residing in 1,167,042 households.

Another element that indicates the maintenance of the mechanism of circular cumulative causation stems from the results of the analysis on the relationship between the social organization of the territory and the reproduction of inequalities in educational opportunities (Ribeiro and Kaztman 2008; Ribeiro et al. 2010) and inequalities in occupational opportunities (Ribeiro et al. 2008). We noted, for example, that children of similar social background (in terms of the mother's educational level, *per capita* family income, gender and color), attending the eighth grade of primary education in public schools, have a 30% higher risk of failure at school when they live in favelas in Rio de Janeiro (Alves et al. 2008). At the same time, in this same survey, we observed the somehow surprising fact that children living in favelas located in the most self-segregated neighborhoods did not benefit from this location in terms of higher chances of acquiring school capital, compared

to children living in favelas in medium and even popular neighborhoods, a fact that clearly shows the effects of the social media formed by processes of residential segregation in the differentiation of the chances of acquiring school capital, and points to a trend of the inter-generational reproduction of social inequalities. The work conducted by Koslinski et al. (2015)—using indicators and similar procedures—empirically confirmed, on the metropolitan scale, the negative effects of residential segregation and the precarious urban and housing conditions on the school performance of children and young people. With regard to inequalities in occupational opportunities, the research indicates that adults aged 25–59 years, living in neighborhoods where prevails a low degree of concentration of school capital, present a 18.2% higher risk of being in a precarious occupation in the labor market, compared to those with similar individual features, but living in spaces that, conversely, concentrate more school capital. This research also showed that there is a trend that renders the occupation income 37.92% smaller in these spaces, following the same comparison.

Thus, there are strong and relevant empirical evidence of the effects of the different social contexts, generated by residential segregation in the core-periphery and favela-neighborhood scales, on the reproduction of a structure of inequality in terms of access to urban well-being and opportunities, a fact that allows us to consider the permanence of the circular cumulative causation action as the very foundation of the urban order that reigns in the metropolis of Rio de Janeiro.

1.6 Conclusion: Forces of the Urban Order

As we have seen, despite three distinct macroeconomic cycles included in the long period 1980–2010, no substantial changes were observed in the social organization of the metropolitan territory of Rio de Janeiro regarding the segregated and unequal pattern established in the industrialization stage following import replacement. One could argue that this fact would derive from the expected effects of inertia of the spatial form in relation to social changes. Our explanatory proposition, however, encourages a search for a different cause. Our proposition seeks to identify the connections between the pattern of the social organization of the territory and the dynamics of reproduction of social relations of domination and social inequalities, as set out in the concept of urban order presented earlier. In this sense, without aiming an exhaustive analysis, we seek to highlight the political economy of the dynamics of the organization of the territory, which, based on a set of economic, social and political forces, forms the urban order in the metropolis of Rio de Janeiro.

Firstly, we have the framework of fragmentation of the urban governance of the metropolis. While maintaining the traditional pattern of urban policy in the metropolis based on the patronage-patrimonialism binomial—as shown by Britto (2015) and Rojas (2015)—the metropolitan core formed by the city of Rio de Janeiro has been object, since the early 1990s, of a process of liberal modernization (Santos

Junior 2015) of form of government and public intervention that recycles the political conditions of urban accumulation, in addition to maintaining the framework of institutional fragmentation in metropolitan governance. The public intervention in the preparation of the city of Rio de Janeiro to host the mega events of 2014 Football World Cup and 2016 Summer Olympics as new cycles of the city commodification which update and reassemble the forces of urban accumulation, in our argument, form the base of the reproduction of the mechanism of circular cumulative causation. Universalist and redistributive commitments expressed in the Master Plan approved in 1991 have been abandoned, and the city government has begun to find guidance in actions considered strategic in order to render the city competitive in the global market of consumption of services, particularly those related to entertainment tourism. Urban policies began to concentrate their enabling actions addressed to the market—in terms of investment and urban regulation—in Barra da Tijuca, the Port Area and the South Zone, feeding, thus, the mechanism of circular cumulative causation of urban inequalities. At the same time, the institutional changes that took place in 2010 in the relationships between municipal public power and bus companies in the city of Rio de Janeiro—analyzed by Matela (2015)—turns the precarious regime of patrimonialist permission, in force until that time, into a modern system of contractualization. Formally, the institutional milestones of the urban *laissez-faire* that have prevailed in the city since the 1950s were abandoned, but the political sense of the change is, in fact, a revival under new bases—rationalized and entrepreneurial—of the power of the concessionaire capital upon the public transport services of the city. In this sense, we can also speak of a neoliberal modernization action that meets the needs of the new cycle of urban accumulation.

As a counterpart, in terms of society, the reproduction of the mechanism of circular cumulative causation is supported by partition of the civic-political culture and the modes of exercising political citizenship between the most central areas of the metropolis and of the periphery. In fact, as shown in Ribeiro and Corrêa (2015) and in Ribeiro and Santos Junior (1996), there is a definite partition of the associative fabric and the sociopolitical participation system of the metropolis of Rio de Janeiro between the central areas of the metropolis—the South Zone and the North Zone (Tijuca and Vila Isabel) of the city of Rio de Janeiro and the city of Niterói—in which predominate high indices of the dwellers' adherence to the corporate pattern (union, professional association and party), while in the metropolitan periphery prevails the community-popular pattern (philanthropic and religious entities and dwellers' association). This fact is expressed in the greatest power of mobilization and claim of the dwellers of the areas shaped by self-segregation, areas which have already profited from the selective intervention of public power in terms of investment and regulation. Such participation is counteracted by a strong differentiation in the modes for the exercise of political citizenship translated into different modes of connections and political representations between the metropolis' areas. While in the periphery the political clientelism tends to prevail through the favor-vote dynamics and the localist pattern of political representation, in the central areas prevail the electoral competition and a more universalist pattern of representation. The result of the civic-political territorial partition is the strong

connection between the pattern of residential segregation and the reproduction of social and urban inequalities between central and peripheral areas of the metropolis of Rio de Janeiro, as empirically demonstrated by Corrêa (2011).

Then, the circle of circular cumulative causation of inequality is closed: the segregation of the economic, social and political power turning into the power of segregation expressed in the ability of the proprietary classes to command on their behalf the occupation and the use of the urban land, i.e. to make the appropriation of the territory and its inscribed resources selective—well-being, income, wealth, opportunity and power. This means that the mechanism of circular cumulative causation of inequality based on the dynamics of social organization of the metropolitan territory does not stem from a contingency fact such as the dictatorship of the 1960s, 1970s and 1980s. Categorically, if the country democratization, which started in the second half of the 1980s, changed the concentrated pattern of territorial allocation of urban investments in favor of the periphery, as shown by some works,²² the intrametropolitan inequalities of well-being, wealth, income, opportunity and power did not change, as evidenced above. A set of forces of a sociopolitical nature maintains the logic of circular cumulative causation of the inequalities of the core-periphery that shift from the quantitative dimension to the qualitative dimension. As shown by Porto (2003) and Britto and Porto (2000), the fragmented, targeted and discontinuous pattern of the public interventions that took place in the metropolitan periphery from 1984 onwards in the field of environmental sanitation, boosted by popular claims, promoted investments which were not capable of actually changing precarious sanitation and drainage conditions of the periphery. This pattern results from the submission of public intervention in popular spaces—metropolitan periphery and favela—to the logic of the State of exception that permanently transforms social claim into assistance policy, whose substrate is the civic-political fragmentation of the popular world. On the other hand, in the central areas of the metropolis, the pattern of provision of services and infrastructure comes close to the universalistic policy founded, on the contrary, on the territorial corporatism of the upper middle classes, as shown by Ribeiro (2002) and Malerba (2005).

There is an intrinsic connection between the mechanism of circular cumulative causation and the power of segregation, to the extent that its exercise is materialized by the social and political domination of the urban centrality of the metropolis as oligarchic wealth²³ (Hirsch 1976), i.e. in a set of material and immaterial resources of a positional nature, curdled in the central areas which, due to this, cannot be generalized to be used in the periphery, despite the improvement of the social and

²²See, for example, Marques (1998).

²³The concept of oligarchic wealth was created by Roy Harrod and used by Hirsch (1976) to formulate a theory about the social limits to growth. There would be, according to the author, two different types of wealth referred to as “democratic” and “oligarchic”. The first type is the dominance over resources that, in principle, are available to everybody in a direct relation with the intensity and efficiency of his/her efforts. Oligarchic wealth, on the other hand, has no relationship with efforts and is never available to everybody.

urban living conditions of the population. As a result, patterns of organization of the territory expressed in the two grammars of segregation—social distance/territorial proximity, social distance/territorial distance—previously mentioned, result not from the absence of development, but from the reproduction of social, economic and political power relations that support the urban order, founded upon the maintenance of absolute and relative urban scarcity, and underlie the capture of various modes of class-monopoly rent.

References

- Abreu MA (1987) *Evolução Urbana do Rio de Janeiro*. IPLANRIO/Jorge Zahar, Rio de Janeiro
- Alves F, Franco Junior, FC, Ribeiro LCQ (2008) Segregação residencial e desigualdade escolar no Rio de Janeiro. In Ribeiro LCQ, Kaztman R (ed) *A Cidade contra a Escola. Segregação Urbana e desigualdades educacionais em grandes cidades da América Latina*. Letra Capital/Observatório das Metrôpoles, Rio de Janeiro, pp 91–118
- Arend M (2012) O Brasil e o longo século XX: condicionantes sistêmicos para estratégias nacionais de desenvolvimento. Available at: http://www.gpepsm.ufsc.br/html/arquivos/Texto_para_Discussao_2012-n1_Arend.pdf.2012. Accessed 18 Feb 2014
- Boltanski L (1982) *Les Cadres. La formation d'un groupe social*. Editions Minuit, Paris
- Bourdieu P (1979) *La Distinction. Critique social du jugement*. Editions Minuit, Paris
- Britto AL (2015) A gestão do saneamento ambiental: entre o mercado e o direito. In: Ribeiro LCQ (ed) *Rio de Janeiro: Transformações na Ordem Urbana*. Letra Capital, Rio de Janeiro, pp 484–514
- Britto AL, Porto HR (2000) Universalização e privatização: os dilemas da Política de Saneamento na Metrópole do Rio de Janeiro. In: Ribeiro LCQ (ed) *O Futuro das Metrôpoles: Desigualdades e Governabilidade*. Editora REVAN/Observatório das Metrôpoles, Rio de Janeiro, pp 457–478
- Cardoso AL, Lago LC (2015) Dinâmica imobiliária: Estado e o capital imobiliário. In Ribeiro LCQ (ed) *Rio de Janeiro: Transformações na Ordem Urbana*. Letra Capital, Rio de Janeiro, 320–353. Available at: <http://transformacoes.observatoriodasmetrosoles.net/livro/rio-de-janeiro/>. Accessed 14 Jan 2016
- Castel R (1995) *Les Métamorphoses de la Question Sociale. Une chronique du salariat*. Fayard, Paris
- Castells M (1972) *A questão urbana*. Paz e Terra, Rio de Janeiro, 1983. 4ª Ed.
- Castells M (1975) *La Question Urbaine*. François Maspero, Paris
- Cavaliere F, Vial A (2012) *Favelas na cidade do Rio de Janeiro: o quadro populacional com base no Censo 2010*. Coleção Estudos Cariocas, Rio de Janeiro, n. 20120501
- Corrêa FS (2011) *Conexões eleitorais, Conexões territoriais: as bases socioterritoriais da representação política na metrópole fluminense*. 2011. Master thesis (Master Degree in Urban and Regional Planning), Instituto de Pesquisa e Planejamento Urbano e Regional, Universidade Federal do Rio de Janeiro, Rio de Janeiro
- Dain S (1990) O Rio de todas as crises—crise econômica. *Série Estudos*, Rio de Janeiro, n. 80, dez
- Fernandes F (1976) *A revolução burguesa no Brasil*. Zahar, Rio de Janeiro
- Fiori JL (1995) *O Voo da Coruja: Uma leitura não liberal da crise do estado desenvolvimentista*. EDUERJ, Rio de Janeiro
- Goldthorpe JH (1980) *Social mobility and class structure in modern Britain*. Clarendon Press (Oxford University Press), England, Oxford
- Harvey D (1973) *Social justice and the city*. John Hopkins, Baltimore
- Harvey D (1974) Class-monopoly rent, finance capital and the urban revolution. *Reg Stud* 8 (3–4):239–255

- Hirsch F (1976) Limites sociais do crescimento. Zahar, Rio de Janeiro
- Katzman R (2007) La calidad de las relaciones sociales en las grandes ciudades de América Latina: viejos y nuevos determinantes. Revista Pensamiento Latinoamericano, n 1, 2º Epoca, del 15 oct
- Koslinski MC, Alves F, Heredia PH, Regis A (2015) Segregação residencial, moradia e desigualdade escolar. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 389–415
- Lago LC, Cardoso AL (2015) In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana (354–388). Letra Capital, Rio de Janeiro
- Lessa C (2000) O Rio de Todos os Brasis. Uma reflexão em busca da auto-estima. Record, Rio de Janeiro
- Lessa C, Dain S (1984) Capitalismo associado: algumas referências para o tema Estado e Desenvolvimento. In Beluzzo LGM, Coutinho R (eds) Desenvolvimento capitalista no Brasil: Ensaio sobre a crise. vol 1. Unicamp-IE, Campinas, pp 214–228
- Lipietz A (1989) Fordismo, Fordismo Periférico e Metropolização. Ensaio FEE 10(2):303–334
- Malerba J (2005) Segregação do Poder, Poder de Segregação. Democracia, desigualdade e participação na dinâmica de acumulação urbana na metrópole do Rio de Janeiro. Master's thesis (Master Degree in Urban and Regional Planning) Instituto de Pesquisa e Planejamento Urbano e Regional, Universidade Federal do Rio de Janeiro, Rio de Janeiro
- Marques EC (1998) Redes Sociais e Permeabilidade do Estado: instituições e atores políticos. Doctoral thesis (Doctoral Degree in Social Sciences), Instituto de Filosofia e Ciências Humanas, Universidade Estadual de Campinas, São Paulo
- Matela IP (2015) A gestão dos transportes: a renovação do pacto rodoviário. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 515–543
- Mckenzie RD (1970) A comunidade humana abordada ecologicamente. In: Donald P (ed) Estudos de Ecologia Humana. Livraria Martins Fontes, Tomo I. São Paulo, pp 95–110
- Myrdal G (1968) Teoria econômica e regiões subdesenvolvidas. Saga, Rio de Janeiro
- Nery JL, Costa GHP (2015) “As desigualdades de bem-estar urbano”. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 416–424
- Nunes E (1997) A Gramática Política do Brasil. Clientelismo e Insulamento burocrático. Jorge Zahar Editores, Rio de Janeiro
- Oliveira F (1982) O Estado e o Urbano no Brasil. Espaços e Debates, n 6
- Oliveira RAD, Tavares E (2015) Transformações demográficas: os movimentos da população no território. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 221–254
- Porto H (2003) Saneamento e Cidadania. Trajetórias e efeitos das políticas de saneamento na Baixada Fluminense. FASE/Observatório das Metrôpoles, Rio de Janeiro
- Ribeiro LCQ (1986) Acumulação urbana e a cidade. Impasses atuais da política urbana. In: ANPOCS (ed) Ciências Sociais Hoje. ANPOCS/CORTEZ, São Paulo, p 53–78
- Ribeiro LCQ (1997) Dos cortiços aos condomínios fechados. As formas de produção da moradia na cidade do Rio de Janeiro. Civilização Brasileira, Rio de Janeiro
- Ribeiro LCQ (2000) Cidade desigual ou cidade partida? Tendências da metrópole do Rio de Janeiro. In: Ribeiro LCQ (ed) O Futuro das Metrôpoles: Desigualdades e Governabilidade. Revan/Observatório das Metrôpoles, Rio de Janeiro, pp 63–98
- Ribeiro LCQ (2002) Segregação, acumulação urbana e poder: classes sociais e desigualdades na metrópole do Rio de Janeiro. Cadernos IPPUR, ano XV, n. 2, ago./dez. 2001 / ano XVI, n. 1, jan./jul. 2002
- Ribeiro MG (2012) Educação, Posição de Classe e Território. Uma análise das desigualdades de renda em regiões metropolitanas do Brasil. 2012. Doctoral thesis (Doctoral Degree in Social Sciences), Instituto de Pesquisa e Planejamento Urbano e Regional, Universidade Federal do Rio de Janeiro, Rio de Janeiro
- Ribeiro LCQ (2013) Transformações da Ordem Urbana na Metrópole Liberal-Periférica: 1980–2010. Hipótese e estratégia teórico-metodológica para estudo comparativo. Reprodução em fotocópia, Rio de Janeiro

- Ribeiro LCQ, Corrêa F (2015) Cultura política, cidadania e representação na *urbs* sem *civitas*. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 197–220
- Ribeiro LCQ, Kaztman R (2008) A Cidade contra a Escola. Segregação Urbana e desigualdades educacionais em grandes cidades da América Latina. Letra Capital/Observatório das Metrôpoles, Rio de Janeiro
- Ribeiro LCQ, Lago LC (1995) Restructuring in large Brazilian cities: the centre/periphery model. *Int J Urban Reg Res* 19(3):369–382
- Ribeiro LCQ, Lago LC (2000) O espaço social das grandes metrôpoles brasileiras: Rio de Janeiro e Belo Horizonte. *Revista Brasileira de Estudos Urbanos e Regionais*, n 3
- Ribeiro LCQ, Lago LCA (2001) oposição favela-bairro no espaço social do Rio de Janeiro. *São Paulo em Perspectiva*, São Paulo, 15(1):144–154
- Ribeiro LCQ, Ribeiro MG (2013) Análise Social do Território: metodologia para o estudo da estrutura urbana brasileira. Letra Capital/Observatório das Metrôpoles, Rio de Janeiro
- Ribeiro LCQ, Ribeiro MG (2015) In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 163–192
- Ribeiro LCQ, Santos Junior OA (1996) Associativismo e Participação Popular. Observatório de Políticas Urbanas e Gestão Municipal/IPPUR/FASE, Rio de Janeiro
- Ribeiro LCQ, Rodrigues JM, Corrêa FS (2008) Território e Emprego: segregação, segmentação urbanas e oportunidades ocupacionais na Região Metropolitana do Rio de Janeiro. *Anais do XVI Encontro Nacional de Estudos Populacionais*. Caxambu-MG, ABEP
- Ribeiro LCQ et al (2010) Desigualdades Urbanas. Desigualdades Escolares. Letra Capital/Observatório das Metrôpoles, Rio de Janeiro
- Ribeiro LCQ et al (2015) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro
- Ribeiro LCQ, Silva ET, Rodrigues JM (2011) Metrôpoles Brasileiras: diversificação, concentração e dispersão. *Revista Paranaense de Desenvolvimento*, número 120, p 171–201
- Rojas N (2015) “Poder local: clientelismo e deficit legislativo”. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 427–454
- Santos C, Bronstein O (1978) Meta-urbanização: o caso do Rio de Janeiro. *Revista de Administração Municipal*, Rio de Janeiro 25(149):6–34
- Santos Junior OAS (2015) Governança empreendedorista: a modernização neoliberal. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na Ordem Urbana. Letra Capital, Rio de Janeiro, pp 453–483
- Silva RD (2012) Indústria e desenvolvimento regional no Rio de Janeiro: 1990–2008. Editora Fundação Getúlio Vargas, Rio de Janeiro
- Singer P (1975) Economia Política da Urbanização. Brasiliense, São Paulo
- Sobral BLB (2013) Metrôpole do Rio e projeto nacional. Uma estratégia de desenvolvimento a partir de complexos e centralidades no território. Garamond, Rio de Janeiro
- Souza J (2004) A Gramática social da desigualdade brasileira. *Revista Brasileira de Ciências Sociais*, 19, número 54
- Tavares MC (1999) Império, território e dinheiro. In Fiori J (ed) Estados e moedas no desenvolvimento das nações. Vozes, Petrópolis
- Vetter D (1975) The distribution of money and real income in grande Rio’s metropolitan system. UCLA, Los Angeles
- Vetter D et al (1981a) Apropriação dos benefícios das ações do Estado em áreas urbanas: seus determinantes e análise através da ecologia fatorial. *Revista Brasileira de Geografia*, Rio de Janeiro, ano 43, n 4, p 457–477, out./dez
- Vetter D et al (1981b) A apropriação dos benefícios das ações do Estado em áreas urbanas: seus determinantes e análise através de ecologia fatorial. *Revista Espaço e Debates*, n 4, p 5–37

Part I
Territory, Economy and Society

Chapter 2

Productive and Spatial Changes

Hipólita Siqueira

Abstract Since the early 1990s, Rio de Janeiro State has undergone major changes in its economic dynamics, in sharp contrast to the severe economic and social crisis that marked the 1980s. The expansion of the oil extraction sector and the macroeconomic policies of the 2000s are important elements of its recent history. This chapter aims to analyze the nature and determining factors of those changes, considering the main quantitative and qualitative trends in the production structure (sectoral and regional) and in the spatial division of labor in Rio de Janeiro State and in the Metropolitan Region of its capital.

Keywords Rio de Janeiro economy · Economic dynamics · Production structure · Spatial division of labor · Territorial reorganization

2.1 Introduction

Similarly to the national context, the 1980s were a period of low growth of the gross domestic product (GDP) and employment, both in Rio de Janeiro State (RJ) and the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ). However, since the early 1990s, and especially as of 2004, Rio de Janeiro State has undergone major changes in its economic dynamics, in sharp contrast to the severe economic and social crisis that marked the previous decade. Prominent in this scenario are the performance and expansion prospects of oil extraction and refining activities as well the preparations to host international mega-events (2014 World Cup and 2016 Olympic Games, among others).

Such changes warrant an analysis of the nature and the determining factors of this process, considering the main quantitative and qualitative trends and the potential changes in the social-spatial structure of Rio de Janeiro State, especially in

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its metropolis. An extensive account of the history of said state is beyond the scope of this chapter; however, it is important to underline the specificities of its socioeconomic and territorial formation, founded on two very distinct political and administrative units, from an economic, social, demographic, and fiscal point of view, among others (Lessa 2000).

Throughout its process of economic development, the industrial sector failed to play a central role in structuring the urban and regional space, both metropolitan and state, in terms of generating effects of inter-sectoral linking (back and forth). According to Ribeiro (1997), the underlying causes would be related to the political hegemony of the “secondary circuit of urban accumulation,” with the predominance of social groups interested in the appropriation of income, formed by public works contractors and urban services concessionaires, real estate developers, and landowners.

Due to these “inherited” territorial characteristics, the process of territorial integration and spatial organization of Rio de Janeiro State was not accompanied by a deeper spatial division of labor. The Metropolitan Region of Rio de Janeiro, with a strong ascendancy of the city of Rio de Janeiro, based on its historical role as political capital, main port and trade center, and national metropolis, failed to attain a significant economic position in its own hinterland, capable of unfolding into a significant “sprawl” of economic activities, as is characteristic in the formation of urban agglomeration economies. The fact that the municipalities in the metropolis’s area of influence were under the jurisdiction of a distinct federation unit prevented a greater complexity of the intra-metropolitan division of labor, despite the transference of production units from the capital city to peripheral municipalities (Davidovich 2010; Santos et al. 2012).

The improvement in economic performance, especially in the 2000s, motivated the emergence of new studies on the production and territorial dynamics of the Rio de Janeiro State (hitherto very scarce).¹ Despite the divergences as to the nature and determining elements of the process, there is consensus in identifying clear changes in relation to the historical pattern of development in the state, indicating a certain level of sectoral diversification, and territorial reorganization of economic activities.

This chapter seeks to examine the major changes in the production structure (sectoral and regional) and spatial division of labor of Rio de Janeiro State and its Metropolitan Region, situating them in the context of more general transformations in the country, since the 1980s. The main hypothesis being examined is that the transformations undergone by the Metropolitan Region and the state as a whole, despite being positive in terms of their potential, have not yet given signs of promoting an economic and territorial diversifying integration trend capable of significantly changing the specialization in oil industry and the historical pattern

¹Natal (2005), Oliveira (2007), Lago (2009), Urani and Giambiachi (2011), Osório da Silva (2011), Piquet (2011), Santos et al. (2012), Silva (2012), Pinheiro and Veloso (2012), Sobral (2013).

of high economic concentration in the RMRJ, especially in its Metropolitan Capital, the city of Rio de Janeiro.

The chapter is divided into three sections. The first section seeks to characterize the main factors determining the state's economic dynamics between 1980 and 2010 and the changes in Rio de Janeiro State's position within the Brazilian economic context. The second and third sections focus on examining the main changes and quantitative and qualitative trends in the state and metropolitan production structure.

2.2 Changes in the Economic Dynamics of Rio de Janeiro State (1980–2010)

The 1980s were a particularly difficult period for Rio de Janeiro State. Amidst the severe national economic crisis and the fiscal and financial crisis of the state, important industrial sectors (steel, machinery, shipbuilding, textiles, and chemicals) dependent on the domestic market and direct state stimulus (through purchases, tax incentives, among others), for example, the shipbuilding industry, were negatively affected. The trade and services sectors, highly concentrated in the Metropolitan Region and Metropolitan Capital (public administration, finance, transport, and others), suffered harshly from the effects of low domestic growth and reduction in state investment and spending. In the public administration sector, within the hyperinflation context of the decade, the civil service wage squeeze weighed heavily on the urban economic dynamics of the city of Rio de Janeiro (capital) and the other metropolitan municipalities (Dain 1990).

However, during that decade, the oil industry gained greater prominence in the state's economy with the strong and sustained expansion of production in the Campos Basin, in Northern Rio de Janeiro State, thanks to consolidated investment programs of the II PND—II National Economic Development Plan (1974–1979) of the military governments. Production in the Campos Basin began in 1977 when Petrobras expanded investment in deepwater drilling technology, and, in the 1980s, the huge Albacora, Marlim, and Barracuda oil fields were discovered. In the 1990s there was a substantial increase in domestic production with the discovery of oil in the Roncador field (1996), considered the largest in the country in the post-salt layer (Tolmasquim and Pinto 2011).

This resulted in intense growth in oil production since 1985, with Rio de Janeiro State accounting for approximately 82% of domestic oil production (offshore) and about 52% of natural gas production (data from the National Agency of Petroleum, Natural Gas and Biofuels/ANP for 2012).

Between 1985 and 90, according to National Accounts data of the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*—IBGE), the relative share of Rio de Janeiro State in the national manufacturing industry GDP had a slight increase (from 9.5 to 10.2%). On the other hand, the state's percentage in the extractive industry, which was 1.4% in 1980, expanded to 13.3% in 1985, and reached 50% in 1990.

Overall, since the mid-1990s the Rio de Janeiro State economy has shown positive GDP growth rates, following the course of national economic cycles. Amid production restructuring processes, greater selectivity of investment, and privatization of state enterprises, economic growth rates were low in the 1990s, below 2%. However, in the 2000s, Rio de Janeiro State showed higher growth rates, following the national economic cycle (3.2% in 2004; 3.0% in 2005; 4.0% in 2006; 3.6% in 2007), falling from 4.1% in 2008 to 2.0% in 2009 after the outbreak of the international crisis.

Regarding its importance in the national economy, according to IBGE National Accounts data, the state's share in the national GDP was approximately 11% between 1995 and 2011. In comparison to other Brazilian States, the relative share of São Paulo State in the national GDP dropped from 37.3 to 32.6%, while Minas Gerais State increased its relative percentage from 8.6 to 9.3%.

The steady share of Rio de Janeiro State and the increased percentage of Minas Gerais state in Brazil's GDP are clearly associated with national economy trends. The production of commodities plays an important role in the production structures of some of Brazilian States, which in turn are affected by the commodity boom, strongly influenced by the high level of the prices and the expansion of Chinese demand in the 2000s.

Accordingly, it can be inferred that the extremely robust expansion of oil production in the Campos Basin was the sole reason preventing Rio de Janeiro State from losing its status of the second largest economy in the country. The state GDP was influenced by the increase in actual production and also by prices, thanks to the strong expansion of the international market in the 2000s.

Changes in the production structure of Rio de Janeiro State resulted from both international factors and domestic market policies implemented during the second term of President Luiz Inácio Lula da Silva's government (real increase of the minimum wage, employment growth, expansion of consumer credit, conditional cash transfers and, housing construction programs, among others).

According to Pereira (2012), the dynamism of the oil sector led to a sharp reprimarization of the state's exports. The relative share of primary products in Rio de Janeiro State exports increased from approximately 40–70% between 2001 and 2011. As a result, the relative percentage of Rio de Janeiro State in Brazilian exports increased from 3.3 to 11.5% over the same period, ranking third among the country's top exporting states.

The following section examines the main productive changes and quantitative and qualitative trends in the state and metropolitan production structure of Rio de Janeiro, triggered by these broader movements.

2.3 Changes in the Production Structure and Spatial Division of Labor of Rio de Janeiro State

This section analyzes information on the state's production and territorial structure in order to identify quantitative and qualitative trends in the spatial division of labor of Rio de Janeiro State and the Metropolitan Region of the city of Rio de Janeiro.

The 1990s brought some improvement in the state's investment attractiveness. In addition to the substantial amount of investment in oil sector in Northern Rio de Janeiro State, there have also been significant investments in auto plants in Southern Rio de Janeiro State (Peugeot Citroen in Porto Real and Volkswagen in Resende) and in a chemical industry plant in the Metropolitan Region (Rio Polímeros). In the 2000s, future and/or ongoing investment projects were intensified with the launch of the infrastructure projects from the federal government's Growth Acceleration Program (*Programa de Aceleração do Crescimento*—PAC), along with the preparations for international sports mega-events, and the discovery of oil in the pre-salt layer. In general, this occurred in the context of more “cooperative” political relations between national, state, and municipal governments.

According to information of the Industrial Development Company of Rio de Janeiro (*Companhia de Desenvolvimento Industrial do Estado do Rio de Janeiro*—CODIN), systematized by Silva (2012), the main areas receiving industrial investment in the state between 1996 and 2006 were as follows: Metropolitan Region (63%), Mid-Paraíba River Valley (15.4%), and Northern Rio de Janeiro State (11.6%).

As observed in the composition of the state GDP by sector in Table 2.1, the industrial sector showed the highest gain in relative share between 1995 and 2011. That was due to the increase of the extractive industry percentage (1.2–14.5%), since the percentage of the manufacturing industry decreased from 10 to 8%. Overall, although Rio de Janeiro State has received large industrial plants, a specialization of production can be observed in its industrial structure.

On the other hand, despite the reduction in the relative share of the tertiary sector in the state's GDP (80–70%), its contribution to the regional economy remains high. The most important tertiary subsectors are: “Administration, public health and education, and social security;” “Trade;” “Real estate activities and rentals.” Service activities such as of the so-called “advanced” tertiary sector (“Financial intermediation” and “Business services”) showed no growth trend and together account for 12% of the Rio de Janeiro State's GDP.

In spatial terms, municipal GDP data for the period between 1999 and 2011 indicate a significant decentralization trend of the state domestic product toward the state hinterlands, more precisely from the Metropolitan Region to Northern Rio de Janeiro State. The Metropolitan Region's share in the state domestic product fell from about 80–63%, with the most significant drop recorded in the state capital, from 54 to 41% (Chart 2.1). This was due to the increase in the relative percentage of Northern Rio de Janeiro State (from 4.2 to 15%), the largest onshore base for oil extraction. The Coastal Lowlands region, also strongly influenced by oil extraction activities (including Rio das Ostras and Cabo Frio), increased its relative share from 3 to 7%, while the Mid-Paraíba River Valley region, despite investments from the automotive industry, lost one (1) percentage point in its share of the state GDP.

Table 2.1 Rio de Janeiro State GDP, by economic sectors and subsectors, in % (1995 and 2011)

Economic sectors	1995	2000	2005	2011
Agriculture	0.8	0.7	0.5	0.4
Industry	19.6	24.0	30.2	30.4
Extractive industry	1.2	5.7	12.0	14.5
Manufacturing industry	9.8	9.8	10.2	8.0
Building	6.5	6.1	5.0	5.7
Prod. and distribution of electricity and gas, water sanitation, and urban cleaning	2.0	2.5	2.9	2.2
Services	79.6	75.3	69.3	69.2
Trade and repair and maintenance services	10.6	9.3	9.1	10.7
Accommodation and food	–	–	2.0	2.8
Transport, storage, and mail	–	–	4.6	5.4
Information services	–	–	5.3	4.6
Financial intermediation, insurance, and complementary pension plans and related services	9.4	5.7	5.8	6.1
Services provided to families and associations and domestic services	–	–	3.0	3.9
Business services	–	–	6.4	6.0
Real estate activities and rentals	–	–	10.7	8.4
Administration, public health, and education, and social security	20.3	18.4	17.8	18.1
Private health and education	–	–	3.2	3.1
Domestic services	–	–	1.4	–
Other services	39.4	41.9	–	–
Total	100	100	100	100

Source Ceperj [State Foundation Center for Statistics, Research and Instruction of Civil Servants of Rio de Janeiro (*Fundação Centro Estadual de Estatísticas, Pesquisas e Formação de Servidores Públicos do Rio de Janeiro*)]

Sectors in bold are the major economic sectors, which makes a total of 100%, and the others are subsectors

Despite the oil revenues significant effects on fiscal budget, the impact on the state labor market and production chain is still below expectations, considering the substantial amount of financial resources involved. The oil industry is capital intensive and its effects on the labor market (and, therefore, on income) are only expanded when investment is directed to its production chain and other sectors such as petrochemicals. A case in point is the investment project in the Petrochemical Complex of Rio de Janeiro (*Complexo Petroquímico do Rio de Janeiro—Comperj*) in the Metropolitan Region.

In order to better qualify this trend of relative decentralization it is essential to consider the “oil effect” in these GDP statistics, ranging from the strong expansion of production to the high level of international prices in the last decade. The analysis would be more appropriate if the industrial GDP were broken down into

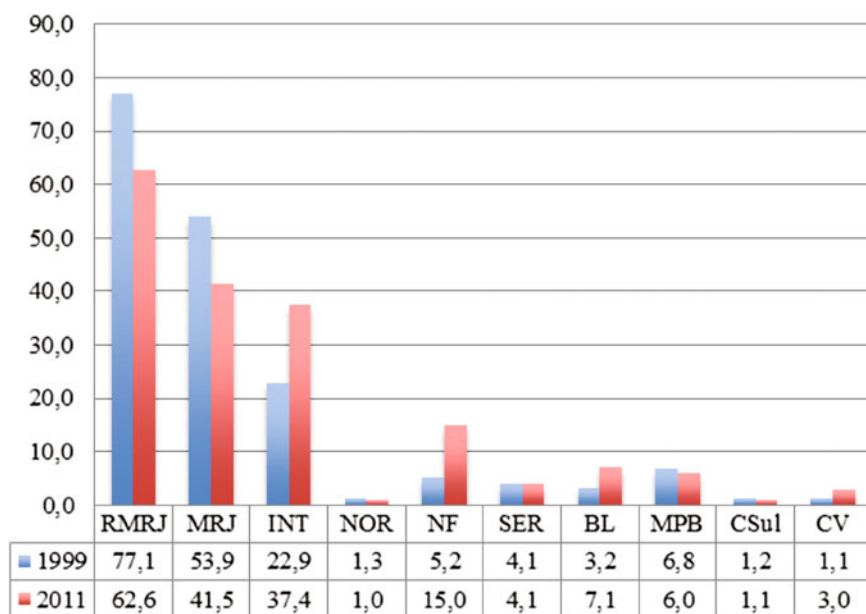


Chart 2.1 Composition of Rio de Janeiro State's GDP by selected regions and municipalities, in % (1999 and 2011). *Note* INT: Rio de Janeiro State Inland Region; NOR: Northwestern Rio de Janeiro State; SER: Highlands Region; NF: Northern Rio de Janeiro State; BL: Coastal Lowlands; MPB: Mid-Paraíba River Valley; CSul: Mid-South Rio de Janeiro State; CV: Green Coast Region. *Source* Municipal GDB, Ceperj

two categories, Extractive Industry and Manufacturing Industry, but this information is not available in Ceperj data by region.

As a result of the “oil effect,” the analysis of the regional composition of the state's industrial GDP reflects an even greater decentralization than that observed for the total GDP. Chart 2.2 shows a fall in the relative shares of the Metropolitan Region and of the capital city from 63.5 to 35% and from 42.8 to 20%, respectively. The percentage of the Rio de Janeiro State hinterlands increased from 37 to 65%, surpassing the Metropolitan Region. Since oil extraction has a heavy influence in these results, Northern Rio de Janeiro State reached a GDP percentage equivalent to that of the Metropolitan Region (increase from 12 to 35.3%). The Coastal Lowlands region also stands out, increasing from 5 to 14%. The contribution of the Mid-Paraíba River Valley region, one of the main manufacturing regions in the state, decreased from 13 to 7.6%.

These data suggest that the decentralization trend of economic activities in Rio de Janeiro State, especially when considering charts related to the extractive industry, has not been accompanied by a greater regional spread of the manufacturing industry and the services sector, which, it should be noted, is a typically urban sector. Thus, it appears that the reorganization of production in the territory

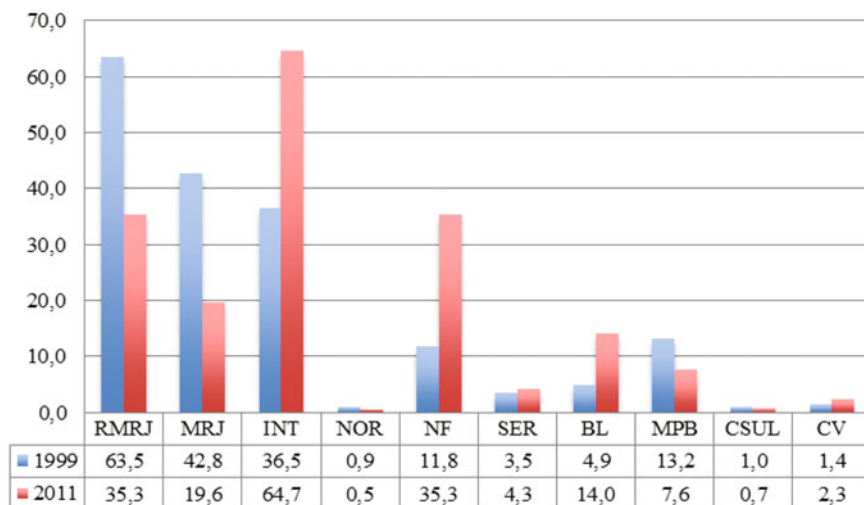


Chart 2.2 Composition of Rio de Janeiro State's industrial GDP by selected regions and municipalities, in % (1999 and 2011). *Note* INT: Rio de Janeiro State Inland; NOR: Northwestern Rio de Janeiro State; SER: Highlands Region; NF: Northern Rio de Janeiro State; BL: Coastal Lowlands; MPB: Mid-Paraíba River Valley; CSul: Mid-South Rio de Janeiro State; CV: Green Coast Region. *Source* Municipal GDB, Ceperj

has not been widely based on an interaction between different sectors, at least from the point of view of the major economic sectors.

2.4 Changes in the Production Structure in the Metropolitan Region of Rio de Janeiro

Concerning the productive changes within the Metropolitan Region, in terms of the major sectors, a main point is that this decentralizing trend in production, based on the decentralization of GDP, was far more limited than that observed between the Metropolitan Region and other state regions, as analyzed in the previous topic. That is expressed in the reduction of the state capital's share in the total metropolitan GDP in the 1999–2011 period, of only four (4) percentage points (Chart 2.3). Among the other municipalities, the only one with a more significant increase in relative percentage was Duque de Caxias, precisely the municipality with the greater share in the final stages of the oil production chain.

The figures showed in the following charts give a clearer view of the intra-metropolitan productive changes. Regarding the GDP of the agriculture sector, the most important municipalities are Rio de Janeiro, São Gonçalo, Magé, and Itaguaí (Chart 2.4). It should be noted that, as a whole, agriculture has an insignificant share of GDP in Rio de Janeiro State, the hinterlands contribute most

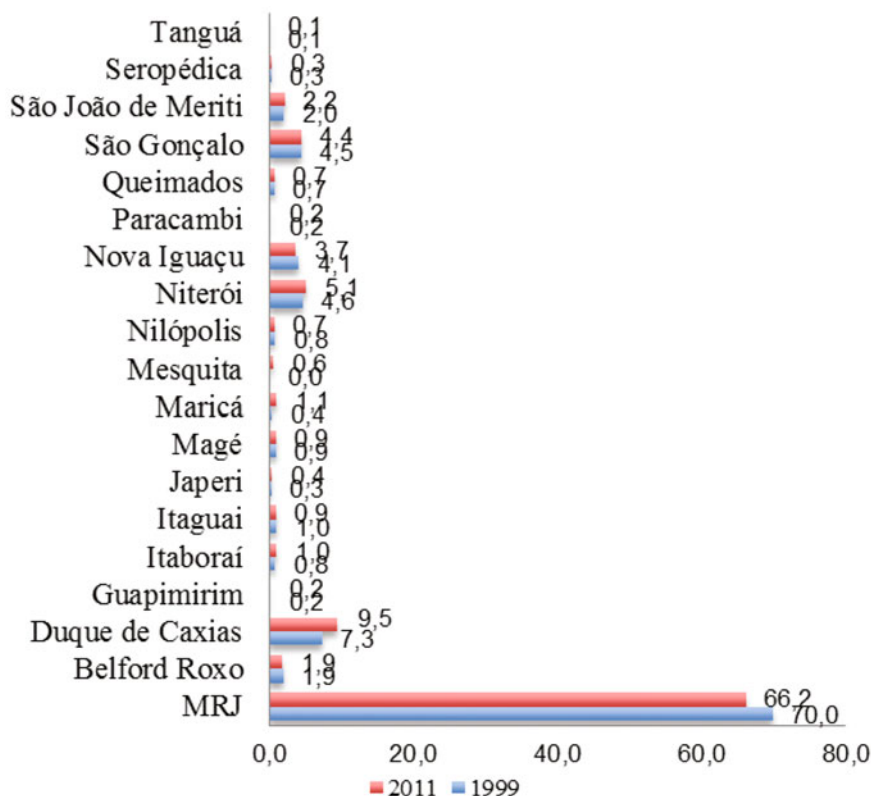


Chart 2.3 Composition of the Rio de Janeiro metropolitan region's GDP by municipalities, in % (1999 and 2011). *Source* Municipal GDP, Ceperj

to this sector. In the metropolitan area, agriculture is in the outskirts and, despite being a source of occupation and income for a significant number of families, has no relevance in metropolitan and state production. The metropolitan agricultural sector consists mainly of small-scale production of goods for the local consumer market (cabbage, lettuce, cassava, coconut, chayote, among others).

Regarding the metropolitan industrial GDP, the decrease in the share of the capital city was more pronounced, with percentage changes restricted to a small group of municipalities (Duque de Caxias, Niterói, and Maricá) (Chart 2.5). These three municipalities have been directly influenced by the dynamics of investment in the oil sector. In the case of Duque de Caxias, besides the expanded production of the Reduc refinery, new companies related to refining activities have been established, composing a gas-chemical complex (Rio Polímeros). Niterói, in turn, has benefited from the recovery of the state shipbuilding industry boosted by vigorous federal policy and guidance based on Petrobras investments and commissions. Maricá has increased its importance due to new investments related to Comperj.

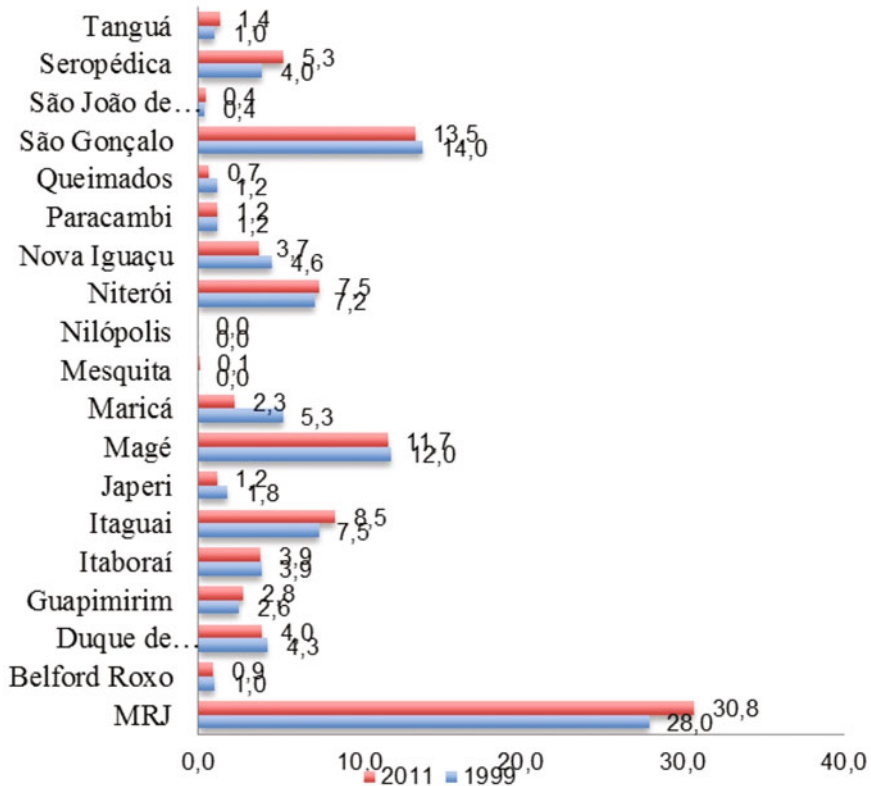


Chart 2.4 Composition of the agriculture GDP of Rio de Janeiro’s metropolitan region by municipalities, in % (1999 and 2011). *Source* Municipal GDP, Cepej

Although it has not yet been captured by the statistics, it is important to note that other municipalities of the so-called *Baixada Fluminense*, Rio de Janeiro State Lowlands, have shown a more robust expansion of investment than in the recent past, given that Queimados, Nova Iguaçu, and Belford Roxo have been gaining prominence at state level. Queimados has benefited from the recovery of the municipal industrial district, and the other two from investments in sectors related to chemicals (Bayer) and the production of cosmetics (Embelleze, Nielly, Natural Beauty).

Similarly, large investment projects in the oil and steel production chains and export logistics such as Comperj (São Gonçalo and Itaboraí), Sepetiba Port (Itaguaí), and the Metropolitan Beltway (linking the cities of Itaboraí and Itaguaí via the Rio de Janeiro State Lowlands), when implemented,² will be important

²There is a certain degree of uncertainty concerning Comperj: Petrobras has indicated that, contrary to the initial objective of producing petrochemicals, the project will be restricted to the installation of a Premium Refinery.

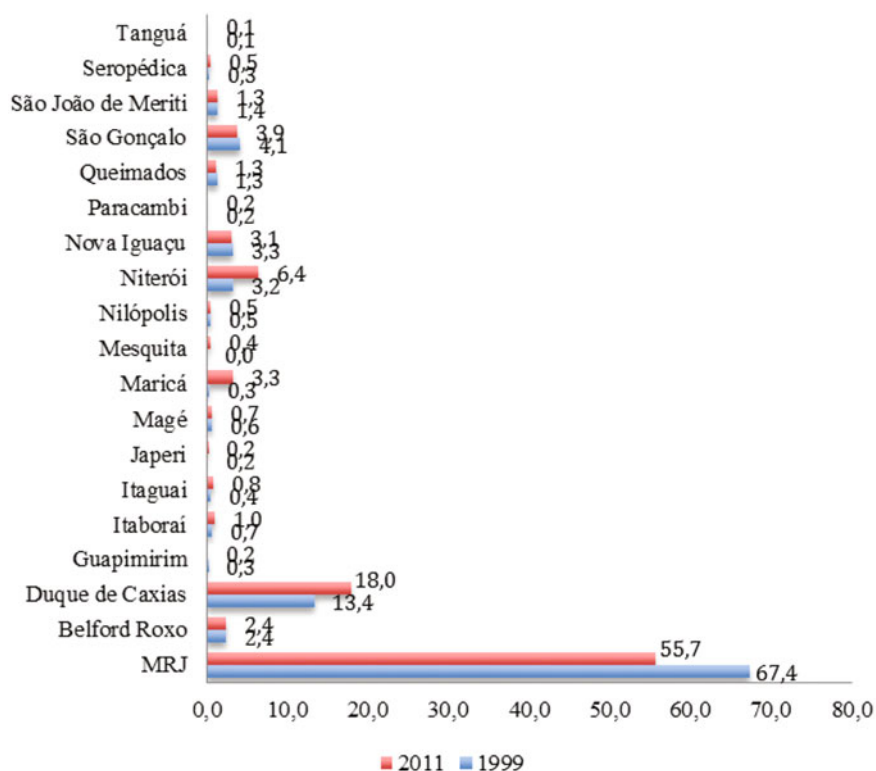


Chart 2.5 Composition of the industrial GDP of Rio de Janeiro's metropolitan region by municipalities, in % (1999 and 2011). *Source* Municipal GDP, Ceperj

vectors of decentralization and greater inter-sectoral integration in the metropolitan production structure. Such projects, if combined with industrial, regional, and urban development policies, may have an impact on improving investment attractiveness and creating jobs in the eastern area of the Metropolitan Region and the Rio de Janeiro State Lowlands.

At the same time, in the Metropolitan Capital, important changes stem from the strategy to transform the city of Rio de Janeiro into a hub of international mega-events and its impact on infrastructure, as well as from oil industry investments. It is worth mentioning that oil industry research centers were installed by international companies at the Technology Park in Ilha do Fundão/UFRJ³ which already houses the Petrobras Research Center (*Centro de Pesquisas e Desenvolvimento Leopoldo Américo Miguez de Mello*—Cenpes). Besides the expansion of the Gerdau steel

³Baker Hughes, FMC Technologies, Halliburton, Usiminas and Tenaris, Vallourec, General Electric, L'Oréal, among others.

hub (Cosigua) in 2010, the industrial district of Santa Cruz, in the West Zone of the city of Rio de Janeiro, received a steel manufacturing plant (production of steel plates for export) of the Atlantic Steel Company (*Companhia Siderúrgica do Atlântico—CSA*), which is a joint venture between ThyssenKrupp and Vale.⁴ According to information from Codin, this district will also house the Center for Final Manufacturing of Vaccines and Biopharmaceuticals (of Biomanguinhos/Fiocruz⁵) and supply industries for the oil extraction sector (of Rolls Royce, Champion Technologies, Jeumont Electric, and Oil States) and the building industry (Gypsum), among other sectors. In addition to state tax incentives, since these companies are exporters and suppliers for oil extraction in the Campos Basin, the proximity to Sepetiba Port, in Itaguaí, was an essential factor in attracting these companies to invest in the area. Itaguaí has also received investments in port terminals and nuclear submarines and, along with the industrial district of Santa Cruz, is yet another dynamic hub in the Metropolitan Region.

With regard to the services sector GDP's composition, changes were not very significant. The Metropolitan Capital preserved its share of around 70%, followed by Duque de Caxias, Niterói, São Gonçalo, and Nova Iguaçu. As noted earlier, the capital is dominant not only at metropolitan, but also at state level. The other four prominent metropolitan municipalities are sub-regional service centers with a certain degree of “peripheral” centrality, both in the eastern metropolitan area and in the two main communication hubs of the Rio de Janeiro State Lowlands (Washington Luiz and Presidente Dutra highways) (Chart 2.6).

Similarly, considering the changes in the spatial division of labor at state level, there was a certain degree of increase in inter-sectoral and spatial complexity within the Metropolitan Region. However, these changes are still inserted in a spatial context of strong concentration in the Metropolitan Capital and relative “scarcity” of production, services, and employment in intra-metropolitan terms.

According to data from CEMPRE⁶/IBGE on the distribution of the employed population and local business units in the Metropolitan Region, the Metropolitan Capital concentrates 70% of local units and 74.5% of the employed population. In the other metropolitan municipalities, only Niterói presents a more significant percentage of total metropolitan local units (6.2%); and Niterói and Duque de Caxias, each with 5.5% of the employed population.

⁴The Project received funding from the Brazilian Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social—BNDES*) and the German company ThyssenKrupp tried repeatedly to sell its share in the business, given the accumulated losses. In addition, great environmental damage has been caused by CSA operations.

⁵Oswaldo Cruz Foundation (*Fundação Oswaldo Cruz*).

⁶Brazilian Business Commitment for Recycling (*Compromisso Empresarial para Reciclagem—CEMPRE*).

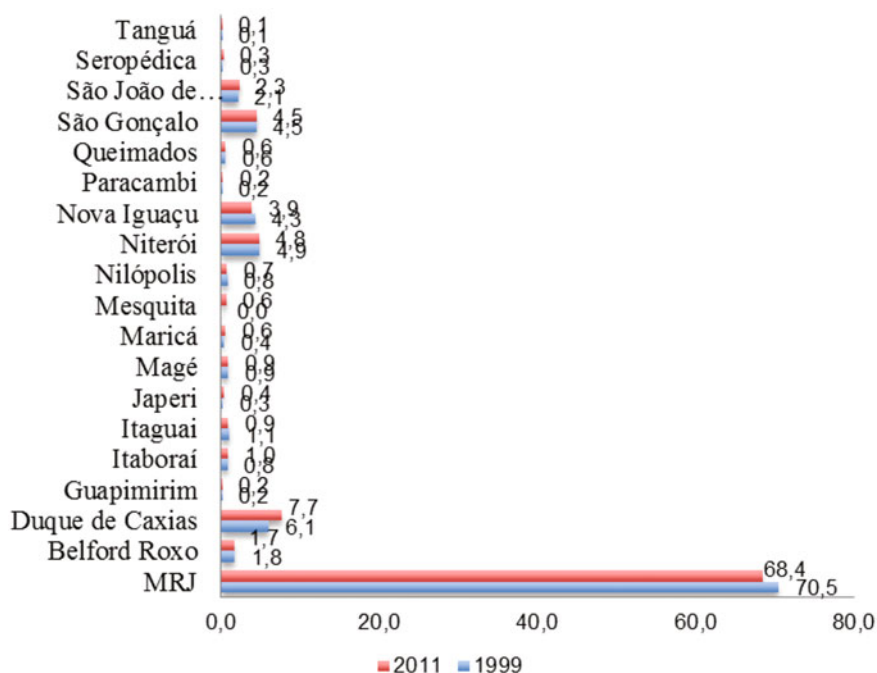


Chart 2.6 Composition of the services sector GDP of Rio de Janeiro's metropolitan region by municipalities, in % (1999 and 2011). *Source* Municipal GDP, Cepej

2.5 Conclusions

This chapter aimed to examine the configuration and recent changes in state and metropolitan production structures in Rio de Janeiro State. The analysis contextualized such changes in a wider panorama of Brazil as a whole. The state and its Metropolitan Region reveal the contradictions, challenges, and potential of the national and international contexts, which must be examined in light of their specific productive and territorial characteristics.

The national economic crisis and the fiscal and financial crisis of the state in the 1980s strongly affected Rio de Janeiro State, given the importance of investment and expenditure of state enterprises and of the public administration in its economy, especially in the Metropolitan Capital. However, in this same period, as a result of the investment programs of the military governments during the 1970s, the expansion in oil production since the 1990s was decisive for the subsequent recovery of the state's economic growth in the following decades.

In the 1990s and 2000s, Rio de Janeiro State began to show positive GDP growth rates, following national economic cycles, and improved its investment attractiveness. Thus, it preserved its rank as the second largest economy in the country. However, it is important to note that Rio de Janeiro State was only able to

maintain this relative position due to the substantial growth of oil extraction in the Campos Basin (influenced by both physical production and high level of international prices), which did not occur with the manufacturing and tertiary sectors. On the other hand, the state's rate of economic growth, while positive in recent decades, was lower compared to other Brazilian states such as São Paulo and Minas Gerais.

Regarding the analysis of production structures (state and metropolitan) in recent times, it was observed that concluded and/or ongoing investments in the manufacturing industry contribute to a certain level of sectoral diversification (automotive sector in Southern Rio de Janeiro State) and to strengthen previously established sectors in the state: steel (West Zone of the capital city and Itaguaí), shipbuilding (Niterói and Angra dos Reis), and oil (Northern Rio de Janeiro State, Duque de Caxias, São Gonçalo, and Itaboraí in the Metropolitan Region). Despite the economic concentration in the Metropolitan Capital, other trends also contribute to greater territorial complexity in the state, such as the increased growth of local units and employed population in medium-sized municipalities.

However, there is strong evidence that the changes have not occurred within a framework of consolidated production chains integrated in a more complex spatial division of labor. Specialization of the production structure has proved to be a stronger trend. That could be seen in the analysis of the composition of the state's GDP by economic sectors. The industrial sector now accounts for a third of the state domestic product; however, the increased share of the oil extraction sector (in Northern Rio de Janeiro State and Coastal Lowlands) was not accompanied by an increase in the share of the manufacturing industry (heavily concentrated in the Metropolitan Region, more specifically in the capital). Moreover, the contribution of the tertiary sector is still quite significant in the state economy (also concentrated in the capital). Overall, despite these quantitative and qualitative changes, it can be argued that the industrial sector has not yet shifted the sectors linked to the "secondary circuit of urban accumulation," as termed by Ribeiro (1997), with regard to the territorial organization of Rio de Janeiro State and the Metropolitan Region.

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References

- ANP—Agência Nacional do Petróleo. Gás Natural e Biocombustíveis. Dados Mensais. Available at: <http://www.anp.gov.br>
- CEMPRE—Compromisso empresarial para reciclagem. Cadastro Central de Empresas, IBGE. Available at: <http://www.cempre.org.br/>. Accessed 18 May 2016
- Dain S (1990) Rio de todas as Crises—Crise Econômica. Série Estudos, Rio de Janeiro, IUPERJ, 80, dez

- Davidovich FR (2010) Estado do Rio de Janeiro: o urbano metropolitano, hipóteses e questões. *Geo UERJ*, ano 12, 2(21)
- IBGE—Instituto Brasileiro de Geografia e Estatística. Contas Nacionais e Contas Regionais. Available at: http://www.ibge.gov.br/home/estatistica/pesquisas/pesquisa_resultados.php?id_pesquisa=48. Accessed 18 May 2016
- Lago LC (ed) (2009) Como anda o Rio de Janeiro? *Letra Capital*, Rio de Janeiro, v 1. p 7–42
- Lessa C (2000) O Rio de todos os Brasis: uma reflexão em busca de auto-estima. Record, Rio de Janeiro
- Natal JL (ed) (2005) O Estado do Rio de Janeiro pós-1995: dinâmica econômica, rede urbana e questão social. Faperj-Publicati, Rio de Janeiro
- Oliveira FJG (2007) Reestruturação econômica, planos de desenvolvimento e mudanças territoriais no Estado do Rio de Janeiro. *Revista de Economia Fluminense*, Ano II, 6–17
- Osório da Silva M (2011) Reflexões sobre o Rio de Janeiro. *Revista de Economia Fluminense*, ano V, n 11
- Pereira LV (2012) As exportações fluminenses: a maldição dos recursos naturais? In: Pinheiro AC, Veloso F (eds) *Rio de Janeiro: um estado em transição*. Editora da FGV, Rio de Janeiro
- Pinheiro AC, Veloso F (eds) (2012) *Rio de Janeiro: um estado em transição*. Editora da FGV, Rio de Janeiro
- Piquet R (ed) (2011) *Mar de Riqueza, Terras de Contrastes: o petróleo no Brasil*. Mauad X/FAPERJ, Rio de Janeiro
- Ribeiro LCQ (1997) Segregação, acumulação urbana e poder na metrópole do Rio de Janeiro. *Cadernos IPPUR*, Rio de Janeiro 19:01–21
- Santos AMSP, Marafon GJ, Sant’Anna MJG (eds) (2012) *Rio de Janeiro: um território em mutação*. Gramma/FAPERJ, Rio de Janeiro
- Silva RD (2012) *Indústria e Desenvolvimento Regional no Rio de Janeiro (1990–2008)*. Editora da FGV, Rio de Janeiro
- Sobral BLB (2013) *Metrópole do Rio e Projeto Nacional: uma estratégia de desenvolvimento a partir de complexos e centralidades no território*. Garamond, Rio de Janeiro
- Tolmasquim MT, Pinto H (2011) *Marcos Regulatórios da Indústria Mundial do Petróleo*. Synergia, Rio de Janeiro
- Urani A, Giambiagi F (eds) (2011) *Rio: a hora da virada*. Elsevier, Rio de Janeiro

Chapter 3

Spatial Transformations

Luiz Cesar de Queiroz Ribeiro and Marcelo Gomes Ribeiro

Abstract This chapter analyzes and interprets the evolution and pattern of the social organization of the territory of the Metropolitan Region of Rio de Janeiro, between the years of 1980 and 2010, understood from the inscription of its social structure into the physical space. Thus, it evaluates whether the ‘core-periphery’ analytical model is still valid as an explanation of the socio-spatial phenomena of segregation of that metropolis. It also evaluates the meaning expressed by this analytical model from the processes of diversification and territorial polarization observed in the above-mentioned period. It also incorporates another grammar of expression of the social organization of the territory of the metropolis of Rio de Janeiro: physical proximity and social distance, bearing in mind the existence of favelas, especially in areas of the metropolitan core.

Keywords Territory · Core-periphery model · Physical proximity and social distance · Socio-spatial segregation

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3.1 Introduction

The organizational pattern of the metropolis of Rio de Janeiro, during the 1970s, was characterized by what has conventionally been called the core-periphery model. Said model, understood from an analytical perspective, was capable of expressing the inequalities in conditions of urban livelihoods between the metropolitan core and its surroundings, showing that the socio-economic groups with higher purchasing power, concentrated in the core, were those that mostly appropriated the collective resources available in the city. Thus, as the distance grew from the urban center, the conditions of infrastructure and collective services became increasingly scarcer. As an analytical model, it served, thus, to denounce the existing urban inequalities that were constituted from State action. In this regard, the State was the major responsible actor for the privileges granted to socio-economic groups with higher purchasing power through access to better and more abundant urban services and infrastructures that, ideally, should serve all equivalently (Vetter et al. 1976; Abreu 1976).

It was through the analysis of the distribution of infrastructure (paving, electricity, etc.), services (sanitation, sewage, trash collection, etc.) and of the socio-economic profile of the population that the correspondence between places occupied by the most affluent socio-economic groups and concentration of infrastructure and services—and vice versa—was empirically verified. What was sought, therefore, was the comprehension of the State's action in contributing, historically, to favor the spaces where the socio-economic groups with higher purchasing power were concentrated to the detriment of poorer groups. Also sought at the same time, was an understanding of the result of the State's action in contributing to reinforce the power of appropriation of such privileged groups in contrast with those deprived of adequate living conditions and, therefore, devoid of claiming power (Lago 2000).

Such was the pattern of territorial organization, expressed by the core-periphery model that had been constituted until the 1970s in the metropolis of Rio de Janeiro. Since then, many changes have occurred in Brazil that could provoke changes in this pattern of territorial organization, whether they were related to the political sphere (the return to democracy), or related to the economic dimension (exhaustion of the import substitution model), or, yet, related to the social dimension per se. In this sense, could one say that there were changes in the pattern of territorial organization of the metropolis of Rio de Janeiro over the last three decades? If so, how could we characterize today the new pattern of organization of the territory? Otherwise, if the core-periphery model still expresses the pattern of organization of the territory of the city of Rio de Janeiro, is the existing sense today the same as the one observed in the 1970s?

In order to characterize the pattern of metropolitan organization, this paper will proceed onwards from the inscription of its social structure in the physical space, comprehended by means of a social stratification scheme built from the occupation (profession) of subjects (Ribeiro and Ribeiro 2013). Using a stratification scheme

elaborated from the occupation variable that is a proxy of the social structure, it is possible to consider the social organization by means of a variable that is less sensitive to cyclical changes and, at the same time, capable of expressing the different social positions occupied by different individuals. As for cyclical changes, this variable is sensitive to structural changes that may occur in any given society, which reinforces, in the view of the authors of this paper, the advantage of its usage, in that it allows analyzing the changes of the social structure and investigating the mechanisms that, perchance, have caused them. Because of such reasons, we start referring to the social organization of the metropolitan territory.

The present chapter, therefore, intends to analyze and interpret the evolution and pattern of the social organization of the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ) from the 1980s to 2010, understood from the inscription of its social structure in the physical space (Bourdieu 1997). Thus, we intend to evaluate whether the analytical core-periphery model still possesses validity in terms of explanation of the phenomena of socio-spatial segregation of the metropolis of Rio de Janeiro.

This chapter is organized into four sections, including its introduction. The second section seeks to interpret the explanatory principles of the structuring of the metropolis of Rio de Janeiro. The third analyzes the inscription of its social structure in the physical space. The fourth section analyzes yet another grammar of social organization of the RMRJ, characterized by physical proximity and social distance. Finally, the conclusion synthesizes the main results found and the interpretations on the evolution and pattern of the social organization in the metropolitan territory.

3.2 Principles of Structuring of the Metropolitan Space: From 1980s to 2010

This section seeks to interpret the structuring principles of the Metropolitan Region of Rio de Janeiro during the decades comprehended between 1980 and 2010. The social organization of the territory of Rio de Janeiro has, as the main explanatory principle of its structuring, a pronounced class antagonism.¹ This means that the social groups (or classes) are, largely, distributed in the metropolitan territory according to the position that they occupy in the social structure, which reveals, on the one hand, the existence of a relative concentration in the physical space of social groups of upper positions in the social structure and, on the other, social groups of lower positions, a phenomenon that expresses an existence of social polarization in

¹This finding stems from the interpretation of correspondence analysis used as one of the constructions of socio-spatial typology, as shown in Ribeiro and Ribeiro (2013).

the territory of the RMRJ. Although this principle was observed in all analyzed years—1980, 1991, 2000, and 2010², its content has suffered variations throughout time. Nevertheless, the weight of this explanatory principle has risen in the evolution of the analysis period, demonstrating that such opposition has become increasingly an expression of the social organization of the metropolitan territory.

In 1980, class conflict corresponded to a more classic antagonism of class structure, dividing in the metropolitan space, on the one hand, the upper classes of the social structure (expression designating both the economic capital holders and the cultural capital holders), represented by large employers, private sector executives, and all categories of top-level professionals, along with supervisory occupations and domestic workers and, on the other hand, the working class, represented by the workers of modern industry and workers of traditional industry along with construction workers and agricultural workers.

The presence of domestic workers along the upper layers of the social structure corresponds to a singular moment in Brazilian society in which domestic workers resided largely at their employers' houses. And, in spite of being a category that occupies a lower position in its social structure, it tended to concentrate in the same areas as the upper layers of the social structure.

Construction workers, in spite of being classified as secondary sector workers, present important differences from the industrial proletariat, which makes them a more popular category than a working one. In this sense, we can consider that the lower occupations that are in opposition with the upper layers of the social structure, as a structuring principle, are occupations that may be interpreted as popular and as a working one. This means that, even though the working categories of the metropolis of Rio de Janeiro were important in 1980, they were already blended with the popular categories, which did not constitute a polarization within the predominantly industrial workers.

It is important to consider that, in this moment, the category of agricultural workers still held an important weight in the structuring of the metropolitan space, despite presenting a meager participation in the social structure of the metropolis of Rio de Janeiro, inasmuch as the people who fit into this category were concentrated in the same areas of the metropolitan territory. Because of this, they ended up cooperating with a polarization of the metropolitan space, given that such areas of concentration of agricultural workers were substantially different from other areas of the metropolis.

In 1991, some important changes occurred in class conflicts as an explanatory principle of structuring of the metropolitan space in the RMRJ. The antagonism verified used to be between the upper classes (or layers)—represented by major employers, private sector executives, and upper level professionals, but, at that particular moment, without the presence of occupations of supervision and of domestic workers, and of the lower classes (or layers)—represented by factory

²Data from the demographic censuses of 1980, 1991, 2000 and 2010 conducted by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*—IBGE).

workers, modern industry workers, and construction workers—not including here the agricultural workers.

It is of paramount importance to consider that, besides the loss of importance of the supervision occupations as a category that is able to express the space structuring process alongside the upper layers, at that moment the domestic workers also lost importance in the explanation of said process, which demonstrates that this social layer has diminished its territorial concentration in spaces where the upper layers of the social stratum are, which may mean an important shift in Brazilian society, because, in general, domestic workers are ceasing to live at their employer's house.

In regards to the lower layers that contribute to the explanation of the structuring of the metropolitan space, it is important to highlight the absence of agricultural workers. This demonstrates that this social layer has diminished its territorial concentration as well, because it has also diminished its weight in the very social structure, as aforementioned. The outcome of this has been the markedly urban disposition of the metropolis of Rio de Janeiro.

In 2000, class conflict was represented by the uppermost layers of the social structure, comprising major employers, private sector executives, and upper level professionals, with the exception of statutory professionals with higher education, in opposition to construction workers. In this sense, although we can refer to class conflict—since we observe an antagonism between upper and lower layers of the social structure—that which represents the lower layers is a social group with popular characteristics, unlike previous periods when these lower layers were still characterized by social groups that had both popular and working class characteristics.

In 2010, the same opposition (or conflict) that was observed in 2000 was maintained, however, reinforced by the presence of statutory professionals with higher education in the uppermost layers. This demonstrates that, despite the loss of importance between 1991 and 2000, this category retakes its important role in the social structure of the metropolis of Rio de Janeiro and, thus, in the social organization of its territory. The absence of this category in 2000 expresses the very moment lived by Brazilian society in the 1990s when public tenders were practically nonexistent due to the “minimal State” policy adopted by the Federal Government and by several subnational governments. And the presence of this category in 2010 expresses quite the opposite because since 2003 there have been significant changes in the policy adopted by governments in Brazil, resulting in the realization of many public tenders.

In summary, there was a change in the content of the meaning of the main principle of social organization of the metropolitan territory, although this principle has increased its weight over time, that is, the opposition between the upper layers—represented by both economic capital holders and cultural capital holders—and the lower layers, represented by both worker categories and popular categories—something that we could call social working—gave way to opposition between the upper layers—represented both by holders of economic capital and holders of cultural capital—and the lower layers, now represented only by popular categories,

aiming a reduction of the industrial worker's weight in the social structure during the period analyzed. This means that the space of the metropolis of Rio de Janeiro, despite having in class antagonism the main explanatory principle of its social organization, caused this antagonism to stop being a more classic opposition between the upper layers and the working class, and thus acting, henceforward, as an opposition between the upper and popular layers.

The second principle of the urban space structuring in the city of Rio de Janeiro has also undergone changes from 1980 to 2010. In 1980, this second principle corresponded to the opposition between office occupations, on the one hand, and construction workers, domestic workers, and agricultural workers, on the other hand. This opposition means that, as the second explanatory factor of the social organization of the territory at that time, there was an opposition between the middle layers of the social structure and the popular layers, represented by the lower categories of that social structure, which demonstrates the existence of areas of concentration of the middle layers in relation to the popular layers.

In 1991, the aforementioned second principle of spatial structuring became the opposition between the middle layers of social structuring, represented by the office, security and post office occupations on one side, and on the other, by the lower layers of social structuring; that is, the uppermost layers mixed with the lowermost layers. The uppermost layers are represented by major employers and executives of the private sector and the lowermost layers by construction workers, domestic workers, and agricultural workers. This opposition might as well indicate that higher diversification has come into existence within the metropolitan territory, in view of the greater presence of social groups of the uppermost layers spread throughout the metropolis, making the metropolitan space a more diversified one. And such diversification of the metropolitan set, derived from the spreading of the uppermost layers throughout its territory, contributes to lessen the differences between middle and upper spaces, up until now existing more clearly. In 2000 and 2010, the same opposition observed in 1991 between layers was maintained. The difference being that, in 2000, the middle layers incorporated also the technical occupations, whereas the difference verified in 2010 is that, in that period, middle layers started to be represented only by office occupations.

What can be grasped from these social processes in the metropolitan territory is that there has been further diversification of the metropolitan territory due to the spreading of the upper layers, while the extremes of the social structure tend to be concentrated in space. This contributes to demarcate more clearly the spaces of the lower classes, segregated by constraint, and the spaces of the upper layers within the city of Rio de Janeiro, segregated by choice. What we see, therefore, is that this territorial dynamics presents an apparent paradox, because while it diversifies, it also concentrates, polarizing the metropolitan territory.

This is an apparent paradox because both processes are constituted jointly, to the extent that one cannot be explained without the existence of the other. So, territorially, the metropolitan space is diversified due to the changes of the social structure herein verified, but it does not alter the relationships between social groups in the spatial appropriation process, to the extent that the social groups that are also

holders of cultural capital continue to lead this territorial process and, therefore, to reserve for themselves the spaces that are exclusive in the metropolis.

But what are these areas? The districts that relatively concentrate social groups of the upper layers of the social structure are predominantly districts of the South Zone of Rio de Janeiro, including Tijuca and Vila Isabel (in the North Zone) and Barra da Tijuca (in the West Zone). In 1980, the district that concentrated the majority of upper layer social groups was Lagoa, which includes the neighborhoods of Lagoa itself, plus Jardim Botânico, Gávea, Ipanema, and Leblon. In 1991, 2000 and 2010, in addition to the Lagoa district, it is also verifiable that Barra da Tijuca began to stand out as a district concentrating mostly upper layer social groups. The expansion of Barra da Tijuca from the 1980s was a concentrating expansion, as it privileged social groups that occupy higher positions of the social structure. And that helps us understand and identify how the territorial development of the city of Rio de Janeiro has occurred, marked by polarization and diversification processes.

3.3 Social Organization of the Metropolitan Territory: Core-Periphery Model—1980–2010

In order to observe how the processes of diversification and polarization of the metropolis of Rio de Janeiro are expressed territorially, socio-spatial typology is used as a representation of these processes, from 1980 to 2010. The evolutionary analysis of this spatial structure, made by said type, enables us to grasp the changes in the pattern of social organization of the metropolitan territory. These processes of diversification and polarization that were constituted over time translate, in turn, the socio-spatial segregation phenomena for analysis of the overall metropolis of Rio de Janeiro, since they generate processes of socio-spatial differentiation and segmentation with potential to promote symbolic barriers between social groups that occupy different positions in the social structure and, in turn, different positions in their own metropolitan territory.

The social organization of the territory of the city of Rio de Janeiro has different typological representation of the years analyzed, showing, in itself, that there were changes in the evolution of the metropolitan structure over time, as can be seen in Fig. 3.1. The typological representation of each year is expressed as a socio-spatial hierarchy, in that it shows the relative concentration of social groups in the metropolitan territory according to the position they occupy in the social structure. In 1980, this socio-spatial hierarchy is expressed by the following socio-spatial types: **upper, middle, middle popular, working popular, popular, agricultural popular, and agricultural**. In 1991, the socio-spatial hierarchy corresponds to the same types as in 1980, with the exception of the absence of the agricultural type. In 2000, the existing socio-spatial types are: **upper, upper middle, middle popular, working popular, and popular**; there is no presence of **middle and agricultural popular** types, as in 1991. In 2010, the socio-spatial hierarchy has the same

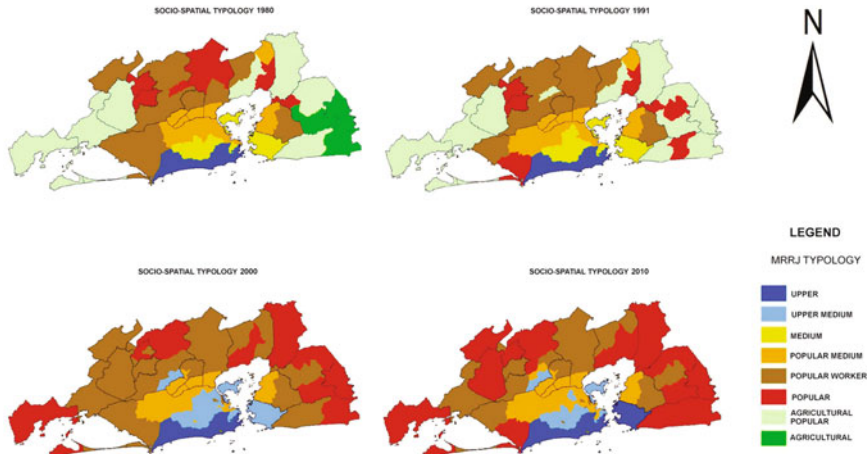


Fig. 3.1 Socio-spatial typology in the Metropolitan Region of Rio de Janeiro

designation as in 2000, although there are differences of territorial location of these socio-spatial types.

The **upper** type has that name because it is the socio-spatial type that takes the uppermost position in the socio-spatial hierarchy. It is characterized by a relative concentration of people who occupy higher positions in the social structure, positions related to socio-occupational categories of the groups of executives and top-level professionals. In 1980, the top brand was located in the districts called Lagoa, Botafogo, Copacabana, Tijuca, Vila Isabel, and Barra da Tijuca. In 1991 and 2000, the same districts of 1980 were observed. In 2010, the district corresponding to the city of Niterói was incorporated into the upper type. In general, the districts belonging to this socio-spatial type are located in the south of the municipality of Rio de Janeiro and the others are spatially contiguous to them, except for Niterói in 2010, due only to the natural separation made by Guanabara Bay. But what is seen on the map is a continuous spot, which could be considered the core of the metropolis of Rio de Janeiro.

The **middle** type, already existent in 1980 and 1991, is characterized by the presence of a social composition in which there is a relative concentration of people occupying middle social positions in the social structure, especially with regards to the socio-occupational categories of the group of middle occupations. In 2000 and 2010, the corresponding socio-spatial type is denominated upper middle. The characteristic which defines it as upper middle, and not merely middle, is due to its social mix in which there is a relative concentration of people with middle occupations and also upper groups in the social structure—especially higher education professionals and executives. Even though such socio-spatial types present relative concentrations in the upper categories of the social structure, this concentration is far more inferior to its weight in the upper type. The fact that in 1980 and in 1991

there was a socio-spatial type classified as **middle** and in 2000 and 2010 there emerged one denominated **upper middle** means that there were territorial changes in this period that raised the position of several districts of the metropolis of Rio de Janeiro, inasmuch as its social composition became characterized also by a larger relative presence of social groups that occupy higher positions in the social structure. This **middle** (1980 and 1991) or **upper middle** (2000 and 2010) socio-spatial type is located in the vicinities of the upper type, characterized as a middle zone for the other socio-spatial types with popular characteristics.

The **middle popular** type is a socio-spatial type existing in all the analyzed years. It is characterized for presenting a relative concentration of people occupying social positions related to some socio-occupational categories of the group of middle occupations and to the lowermost categories of the social structure. Due to the prevalence of a relative concentration of lower categories rather than middle ones, it is designated as **middle popular**. It is mostly located in the periphery of Rio de Janeiro, in districts of the municipalities of Duque de Caxias, São João de Meriti, Mesquita, Belford Roxo, Nilópolis, Magé, Nova Iguaçu, all municipalities of the RMRJ's Lowlands (*Baixada Fluminense*), and districts of São Gonçalo. If it were not for the geographic features, it could be said that this socio-spatial type presents a practically continuous spot in the metropolitan space (with the exception of the Magé district that matches this type) that is verified adjacent to the **middle** type (in 1980 and 1991) or higher middle (in 2000 and 2010). Since 1991, the district of Campo Grande, located within the municipality of Rio de Janeiro, has ceased to be classified as a **working popular** type of district to be a **middle popular** type. The same has occurred since 2000 with a district called Belford Roxo, within the city with the same name, and with a district of the city of Nova Iguaçu, in 2010. Since 2000, the district of Magé, which was characterized as a **middle popular** type of district, has lost this condition, since it began to be characterized as a **working popular** type of district.

The **working popular** type is also represented in socio-spatial typologies throughout all the years analyzed. It is designated as **working popular** because, although there is a relative concentration of people occupying the socio-occupational categories for the industrial working class itself, when compared with other socio-spatial types, the predominant concentration is still in other categories that occupy the bottom position in the social structure of popular feature, which makes it therefore a **working popular** type. It is located posteriorly to the **middle popular** type in districts of almost all the municipalities of the metropolitan area of Rio de Janeiro. The favelas that constitute districts, with rare exceptions, are classified within this socio-spatial type.

The **popular** type, also present in all the studied years, is characterized as presenting a relative concentration of people that belong to the lowermost socio-occupational categories of the social structure. It is possible to observe, through the usage of maps, that there was an increase in spaces characterized by this socio-spatial type, which might mean that, as industrial workers tend to lose their leverage in the social structure of the metropolis, the number of districts characterized as popular increases, since they begin to dominate those lower

socio-occupational categories of the social structure. The districts of this socio-spatial type are usually located in the “outskirts” of the metropolis.

The **agricultural popular** type existed only in the years of 1980 and 1991. It is denominated as such because, although there is a relative concentration of the category of agricultural workers, the prevailing type is the popular one, related to the lowest categories of the social structure. This socio-spatial type is present in districts of the municipalities of Itaboraí, Itaguaí, Guapimirim, Magé, Mangaritiba, Maricá, and Seropédica in the 1980s. Besides said municipalities, there is still a district from Nova Iguaçu that ceases to be characterized as **popular** and constitutes itself, in 1991, as an **agricultural popular** type. However, in 2000 and 2010, such district was typified as **working popular**. Much in the same way, the municipality of Tanguá (just one district) ceases to be characterized as **agricultural** (1980) and begins to be classified as a **agricultural popular** (1991), being characterized in subsequent years as a **popular** type, something which occurred in several districts that previously belonged to the **agricultural popular** type.

The **agricultural** type is a socio-spatial type that existed only in 1980. It is characterized by having a strong relative concentration of people occupying the lower socio-occupational category of agricultural workers. Only four districts are characterized by such socio-spatial type: two municipal districts of Itaboraí, the city of Tanguá, and one district of the city of Maricá. The fact that this socio-spatial type does not exist in other yearly censuses of the metropolis of Rio de Janeiro means that, in those years, there was no district with a high concentration of people in the category of **agricultural workers**, to the extent that the economic activities of this metropolis have become predominantly urban.

This analysis shows that the periphery of the city of Rio de Janeiro has become increasingly **popular**, due both to the reduction of the importance of industrial workers in the social structure of the city and the loss of importance of **agricultural workers**, becoming, therefore, increasingly polarized in relation to the **upper** type spaces of the metropolis, in view of the relative high presence of the lower layers of the social structure in these areas of the periphery. Nevertheless, there is greater diversification due to an increased presence of middle and even high social groups, as is the case of top-level professionals, yet without changing the relative (low) weight that these social groups have in the periphery.

The diversification can be also observed from the analysis of the **middle** types (1980 and 1991) that, in many cases, have become an **upper middle** type (2000 and 2010). This shift has only occurred because there was a larger relative concentration of the upper social groups of the social structure in spaces previously denominated as ‘middle’. Despite this, the **upper** type spaces continued to concentrate the upper social groups of the social structure in a process of socio-spatial polarization with territorial expansion such as Barra da Tijuca—a neighborhood that enhanced its relative importance throughout time—and Niterói, that went from being a **middle** type of municipality in 1980 and 1991, first to **upper middle** in 2000 and then to **upper** type in 2010.

Therefore, one observes throughout this period the expansion of the **upper** type spaces within the metropolis of Rio de Janeiro that nevertheless still concentrate the

social groups that are the very same holders of the highest positions in the social structure, which, in turn, makes the metropolitan territory more and more polarized in regards to the so-called ‘popular’ spaces that have also become more and more ‘popular’. Both the concentrating expansion of the upper spaces of the metropolis and the changes in popular spaces can be controlled by the same social force, constituted in what we call mercantile capital. If so, it is under the sign of this mercantile capital that the process of appropriation of the metropolitan territory has taken place. On the one hand, it expands the spaces for the upper groups which become increasingly concentrators of these social layers; on the other hand, it changes the social composition of the popular areas—popularizing them even more—to the extent that the mercantile capital now requires social positions (construction workers, ancillary services, etc.) that contribute to enable the territorial appropriation that the upper groups execute in the metropolis.

Under the logic of the mercantile capital, the evolution of the urban structure of the city of Rio de Janeiro has reproduced the pattern of social organization of the territory observed in the 1970s, characterized by the core-periphery model. Respecting the denomination consecrated by the academic literature of the 1970s, we could match the **higher** socio-spatial type to the core of the metropolis of Rio de Janeiro; similarly, the **higher middle** type to the transition zone; the **popular middle** type to the immediate periphery; the **popular working** type to middle periphery; and the **popular** type to the far periphery. Thus, when considering the inscription of the social structure in the physical space, one observes the maintenance of the core-periphery model as the standard of the social organization of the metropolitan territory nowadays, being more diverse but also more polarized.

3.4 Social Organization of the Metropolitan Territory: Physical Proximity and Social Distance—1980–2010

The evolution of the social organization of the metropolitan territory of Rio de Janeiro based on the so-called core-periphery pattern, as seen above, results from the analysis of the whole of this metropolitan area, when one observes the inscription of its social structure in the physical space. This pattern of social organization of the territory presents itself with these characteristics due to the scale used for evaluation. The use of another geographical scale in which one can observe the social division of the territory in a more detailed way allows, in turn, the seizing of another pattern of social planning organization whose main characteristic is expressed both by physical proximity and social distance (Ribeiro 2008), in view of the existence of favelas scattered virtually throughout the entire urban fabric of the metropolis of Rio de Janeiro.

Favelas have existed in the metropolis of Rio de Janeiro since the beginning of the twentieth century, but their constitution as a social and urban problem only gained such contours in later decades (Valladares 2000). It is only at a very

subsequent time of their constitution as a social and urban problem that the pattern of the social organization of the territory of said metropolis will also be characterized by the designation of physical proximity and social distance (Lago and Ribeiro 2001). This designation stems from the differences in the social conditions observed between the spaces of the favelas and their surrounding spaces, usually with much higher conditions, especially when the favelas are located in prime areas of the metropolis.

Despite the changes in social conditions observed in recent decades—incremented level of education of the population, increased formalization of labor, and reduced income inequalities, for example—the differences between favela and nonfavela areas remain largely unchanged, maintaining the standard configuration that is characterized by both physical proximity and social distance. And this setting is most emblematic in the noblest areas of the metropolis of Rio de Janeiro, especially where its social core is located, that is, the higher socio-spatial type areas. In the metropolitan periphery, where the most popular social groups in the social structure prevail, although there are differences between the social conditions of favela areas and nonfavela areas, these differences are much smaller. It is what is verified, for instance, when one analyzes the average income among residents of favelas areas and residents of nonfavela areas, according to the socio-spatial type of where the favelas are located (Chart 3.1).

Residents of nonfavela areas of the **upper** socio-spatial type earned on average, both in 2000 and in 2010, 6.4 times more than the residents of favela areas. Regarding the **upper middle** type, that ratio was of 2.9 times. The residents of nonfavela areas pertaining to the **middle popular** type earned on average twice that

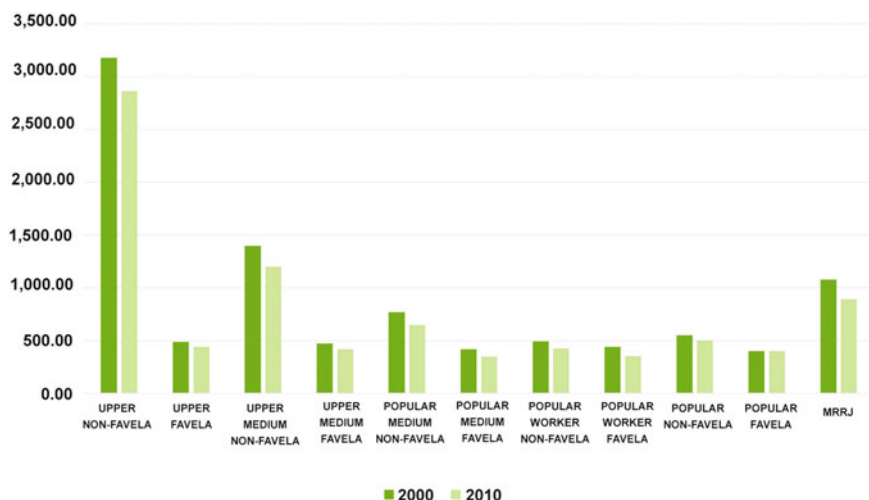


Chart 3.1 Average total income by favela and nonfavela areas according to the social organization of the territory of the Metropolitan Region of Rio de Janeiro (RMRJ)—2000 and 2010. *Source* IBGE, Demographic censuses of 2000 and 2010. Observatório das Metr p les

of residents of favela areas. In the **working popular** type and the **popular** type, the difference is only 20% in favor of residents of nonfavela areas. This finding allows one to understand that the differences between favela and nonfavela areas obey the socio-spatial hierarchy of the metropolis of Rio de Janeiro, in accordance with its pattern of social organization of the territory according to the core-periphery model. The farther it gets from the metropolitan core, the more there is a proximity between the social conditions of residents of favela areas and residents of nonfavela areas; nonetheless, in the metropolitan core and in the socio-spatial types that are closer to the core, the gap between residents of favela and nonfavela areas is quite significant.

3.5 Final Considerations

Throughout the present article, it has been confirmed that the core-periphery model continues to express the pattern of social organization of the metropolis of Rio de Janeiro even in current days, once this pattern is analyzed according to the inscription of the social structure in the physical space. It is also verified that an analysis conducted in a more detailed spatial scale makes it possible to seize the coexistence of yet another pattern of social organization of the territory based on the model of physical proximity and social distance, when the analysis of favelas is incorporated. The core-periphery model continues, therefore, to possess analytical validity to explain the socio-spatial segregation processes, captured both by the social conditions of the population and by the urban conditions of life. Nevertheless, the sense expressed by the core-periphery model currently incorporates a dual process in its dynamics: diversification and polarization.

The territory of the metropolis of Rio de Janeiro has become more and more diversified as a consequence of a higher degree in the scattering of the social groups of the upper layers of the social structure to other spaces within the metropolis. This scattering process, though, presents some limitations, as only the **middle** socio-spatial type has undergone changes since 1980, presenting configurations typical of the **upper middle** type in 2000. The same dynamics was not observed, for instance, in the popular types (**middle popular**, **working popular**, and **popular**), all existent since 1980, that continued to present a very similar composition throughout time.

Notwithstanding the higher degree of diversification observed in the RMRJ, its territory has become more and more polarized. Said polarization is due to, on the one hand, the concentration of social groups of the upper layers especially in the districts of Lagoa and Barra da Tijuca. The latter, for example, despite its configuration as an **upper** socio-spatial type in 1980, did not have the territorial expression it possesses today, considering the relative concentration of social groups of the upper layers. This feature was already present in the district of Lagoa in 1980 when it was the main stronghold of the social groups of the upper layers of the social structure. On the other hand, the polarization also arises from the relative concentration of social groups of the lower layers of the social structure in the

spaces of the metropolitan periphery, where they represent the **middle popular**, **working popular**, and **popular** socio-spatial types. This polarization of social groups of the lower layers is happening alongside a greater popularization of the social structure, in that it has reduced the relevance of the working class in the metropolis of Rio de Janeiro.

The question that arises from these conclusions is to know under what mechanisms this double process of diversification and polarization has been set up in the metropolis of Rio de Janeiro, which has upgraded the meaning of the core-periphery model featured since the 1970s. The question is to know the nature of its structuring dynamics in relation to the action of social agents directly or indirectly involved in the production of urban space, such as the State, the real estate market, urban social movements, and economic agents in general. But it is also necessary to understand the broader social processes, such as the demographic and family dimensions, urban mobility, and the structure of the labor market. Only with a more detailed assessment of this process can one move forward in the interpretation of the current pattern of the social organization of the metropolitan territory of Rio de Janeiro.

Our hypothesis is that the reproduction of this core-periphery model, despite the changes of its content observed over time, brought about by the processes of diversification and polarization, is caused by the existing role of the mercantile capital as a structuring social power of the territory of the metropolis of Rio de Janeiro. The reason for this stems from the changes in social structure that have enhanced the social groups linked to the service sector of the economy or to the sectors that have the characteristic of construction of space. However, for this hypothesis to be proven it is necessary to conduct a deeper analysis of the commanding role of the mercantile capital in the structuring of the metropolitan territory, in order to understand how the metropolitan territory changes when it reproduces its pattern of social organization.

References

- Abreu MA (1976) Contribuição ao estudo do papel do Estado na evolução da estrutura urbana. *Revista Brasileira de Geografia*, Rio de Janeiro, Fundação IBGE 1(1):577–585
- Bourdieu P (1997) Efeitos do lugar. In: Bourdieu P (ed) *A miséria do mundo*. Vozes, Petrópolis
- IBGE—Instituto Brasileiro de Geografia e Estatística (1980) *Microdados de amostra. Censo demográfico de 1980*. IBGE, Rio de Janeiro
- IBGE—Instituto Brasileiro de Geografia e Estatística (1991) *Microdados de amostra. Censo demográfico de 1991*. IBGE, Rio de Janeiro
- IBGE—Instituto Brasileiro de Geografia e Estatística (2000) *Microdados de amostra. Censo demográfico de 2000*. IBGE, Rio de Janeiro
- IBGE—Instituto Brasileiro de Geografia e Estatística (2010) *Microdados de amostra. Censo demográfico de 2010*. IBGE, Rio de Janeiro
- Lago LC (2000) *Desigualdades e segregação na metrópole: o Rio de Janeiro em tempo de crise*. Revan/Fase, Rio de Janeiro

- Lago LC, Ribeiro LCQ (2001) A divisão favela-bairro no espaço social do Rio de Janeiro. Cadernos Metr pole, Rio de Janeiro, vol 5
- Ribeiro LCQ (2008) Proximidade territorial e dist ncia social: reflex es sobre o efeito do lugar a partir de um enclave urbano. Revista VeraCidade, Salvador, vol 3
- Ribeiro LCQ, Ribeiro MG (2013) An lise social do territ rio: fundamentos te ricos e metodol gicos. Letra Capital, Rio de Janeiro
- Valladares L (2000) A g nese da favela carioca. Produ o anterior  s ci ncias sociais. Revista Brasileira de Ci ncias Sociais, vol 15
- Vetter DM et al (1976) A apropria o dos benef cios da a o do Estado em  reas urbanas: seus determinantes e an lise atrav s de ecologia fatorial. Revista Brasileira de Geografia, Rio de Janeiro, Funda o IBGE 1(1):457-476

Chapter 4

Social Transformations

André Ricardo Salata and Michael Chetry

Abstract Recently in Brazil, much public attention has been given to the idea of the emergence of a “New Middle Class,” supposedly composed of individuals who have been lifted out of poverty into that condition by achieving an intermediate level of income. This chapter proposes, first, to contribute a critical reflection on the analysis of social structure through income strata, a common practice in Brazil and many other countries, and which supports the idea of the expansion of the middle class. Second, by using empirical analysis based on data from the last two population censuses, to argue that, at least with regards to the Metropolitan Region of Rio de Janeiro (Região Metropolitana do Rio de Janeiro—RMRJ), no substantial change in social structure can be verified in the last few years. The chapter will try to demonstrate that the recent changes would be more correctly interpreted as an improvement in the standard of living of the lower classes of the RMRJ rather than a growth of the middle class.

Keywords Middle class • Social structure • Inequalities • Income • Rio de Janeiro

4.1 Introduction

Between fragilization in developed countries and growth in emerging countries, the middle classes play everywhere a decisive role in social, political, and urban issues. Recently in Brazil, much public attention has been given to the idea of the emergence of a “New Middle Class,” supposedly composed of individuals who have

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been lifted out of poverty into that condition by achieving an intermediate level of income. However, when we address the issue of social classes, and of the middle class in particular, we are soon faced with the problem of the criteria used to identify them. Driven by works that, like the one written by Neri (2008), use only income to define “class,” the thesis of the “New Middle Class” has been strongly criticized by advocates of a sociological perspective who resort to other characteristics such as occupation or cultural capital rather than income.

This chapter proposes, first, to contribute a critical reflection on the analysis of social structure through income strata, a common practice in Brazil and many other countries which supports the idea of the expansion of the middle class. It will show that this method of analyzing the middle class is a far cry from how the sociological literature seeks to define and identify the classes, and that this debate is at the heart of the main criticisms of the thesis of the New Brazilian Middle Class. Second, by using empirical analysis based on data from the last two population censuses, it will argue that, at least with regards to the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ), no substantial change in social structure can be verified in the last few years, contradicting the arguments that support the New Middle Class thesis. The chapter will try to demonstrate that the recent changes would be more correctly interpreted as an improvement in the standard of living of the lower classes of the RMRJ than as growth of a middle class.

4.2 The Current Debate on the Brazilian Middle Class

The mid-2000s witnessed significant changes in income distribution in Brazilian society (Barros et al. 2010). Since 2001, the Gini index, one of the most traditional measures of income inequality, has been falling continuously, reaching the lowest figures of the last three decades. In recent years, income among the poorer classes has grown significantly, causing a decline in poverty levels (from 38.6% of the population in 2001 to 28.0% in 2007) and extreme poverty (from 17.4% of the population in 2001 to 10.2% in 2007).¹

Whether from the point of view of income distribution and poverty reduction, or of growth in employment and formal relations in the labor market, the last decade brought significant improvement for a large part of the population. Based on such data, a few authors have demonstrated that thousands of individuals have achieved intermediate levels of income.

The study coordinated by Neri (2008), the main work of reference of the current debate, divides Brazilian society into four income brackets classified in letters (AB,

¹These data were taken from the excellent article by Barros et al. (2010). The figures are based on the 2001–2007 PNADs (National Household Sample Survey—Brazilian Institute of Geography and Statistics—IBGE).

C, D, and E). Bracket E comprises individuals with income up to R\$ 768 reais (based on the extreme poverty² line for 2002); with incomes between R\$ 768 and R\$ 1064 (based on the distribution median³ for 2002) are those individuals comprising bracket D; the so-called New Middle Class, bracket C, is made up of individuals with income between R\$ 1064 and R\$ 4591 (ninth decile of the distribution in 2002); finally, comprising the national elite, bracket AB, individuals with income of at least R\$ 4591.⁴

According to the study, between 2002 and 2008, the participation of “Bracket C” among the Brazilian population rose from 44.2 to 51.9%, therefore resulting in an increase of 17.0%. The elite, “AB,” accounted for 13.0% of the population in 2002, rising to 15.5% in 2008, a 19.5% increase. Brackets “D” and “E,” which in 2002 accounted for 42.8% of the population, dropped to 32.6% in 2008. Thus, the lower income brackets reduced their participation, and the middle and upper income brackets increased their presence among the Brazilian population.

Neri’s research interprets these data on the growth of “Bracket C” as a growth of the middle class. Situated between the poorest 50% and the richest 10%, Bracket C receives on average the average income of society. For this reason, Neri defines it as “[...] middle class in the statistical sense [...] the most accurate picture of Brazilian society” (Neri 2008, p. 5). And as “Bracket C” now comprised more than half the country’s population, Brazil could therefore be considered a middle-class country.

4.2.1 Criticism of the Economic Perspective and the Thesis of the New Brazilian Middle Class

Like Neri (2008), many studies carried out by economists⁵ base their analyses mainly on income. In the sociological literature, however, the association between “class,” “inequality,” and “employment/occupation” has a solid foundation that cannot be easily undone, as stated by Crompton (2010). A large body of empirical research has shown, for quite a few decades now, that the occupational status (or work, more generally) of individuals is an extremely important “causal component” of their “life chances,” capable of influencing their health, education, mortality, and many other outcomes, including income and the chances of unemployment (Reid 1998; Scott 2002).

In a recently published article, British sociologist John Goldthorpe presents a number of criticisms at works developed in the economic area that analyzed inequality solely by income. For Goldthorpe (2009), inequalities should be

²Defined and calculated by the Social Policy Center (Ferreira et al. 2003).

³All limits were calculated considering *per capita* household income from work, but the featured values are the equivalent in total household income from all sources.

⁴2008 values.

⁵See Ravallion (2010).

considered in terms of social relationships—he calls this perspective “relational,” a context in which individuals have, in some sense, advantages and disadvantages. Such inequalities, therefore, are of a “structured” kind, not only in terms of individual chances, but inherent to previous forms of social relationships whose foundation is, to a certain extent, institutional.

This deeper “relational” aspect of inequality would be precisely what is lacking in studies on the topic developed in the economic area, as they tend to rely solely on income, analyzed as an attribute of unequal distribution among individuals. Thus, these studies fail to see risks as socially structured (originating from institutionalized social relations), especially around the labor market and production units, where a large amount of resources is created and sustained.

In a similar perspective, Wright (2005) states that the different meanings potentially evoked by the notion of class are associated with different research objectives, i.e., with the different questions they seek to answer, which in turn are naturally related to the theoretical perspective used. One of the questions whose answers are usually accompanied by the notion of class is: *How are people objectively located in distributions of material inequalities?*⁶ In order to answer such a question, “class” is considered in the more general sense of standard of living, usually measured by income, forming a continuous distribution or income groups ranging from the poorest to the richest, passing through the intermediary sectors of distribution. As we have seen, this is usually how economists formulate their classes, so that “middle class” means nothing more than the aggregate of those occupying the intermediate sector of income distribution.

However, there is another extremely important question which a different perspective of class seeks to answer, which is: *What explains inequalities in life chances and material standards of living?*⁷ This is a more complex and difficult question to answer than the former, since the goal here is not only to describe, but also explain inequalities; it is not only a matter of locating individuals in distributions, but also analyzing the causal mechanisms that help explain that location.

In this second perspective—called relational, as opposed to the first, called gradational—classes form a system in accordance with their mutual dependencies, understood as something based on causal relationships (Ossowski 1963, p. 146). Therefore, rather than a succession of ladder rungs (e.g., poor, middle class, upper class, etc.), we have a structure of interdependent classes (example: unspecialized manual workers, large employers, executives, and professionals, etc.) whose resulting inequality (e.g., in terms of income) is due to structured and often institutionalized relations assumed by these classes, whether in the production process (Marx and Engels 1998), the market (Weber 1971), or the social space (Bourdieu 2008).

Thus, for Wright (2005, 1979)—as for Goldthorpe (2009)—the different approaches to class (whether gradational/attributional or relational), over and above

⁶Author’s italics.

⁷Id.

a mere disagreement on the operationalization of a concept, reflect different ways whereby inequalities are understood and analyzed.

The preference of sociologists for this perspective—how people make money, not how much money they have (Hout 2008)—stems, therefore, from the importance they attach to the relationships (structural and/or institutional) established by individuals. Class, in this sense, could also be understood as a set of people with trajectories which are probably similar: young medical, law, or business students, for example, despite their potentially modest incomes, could be part of the same class of people who currently occupy positions to which they aspire (doctors, lawyers, executives, etc.), and whose incomes are already well above average.

This is a crucial point in the potential criticism of economic studies from a sociological perspective. The example above by Hout (2008) shows how and why—from a more sociological viewpoint—individuals can be part of the same class despite having different levels of income; or, on the other hand, how and why individuals who share the same level of income can be found in different classes. In the example given in the previous paragraph, medical or law students could have an income similar to that of low-status manual workers. However, these low wages are viewed as a short-term period in a career that will culminate in some of the best paid jobs. Therefore, although they briefly share levels of income with low-status workers, it is the source of the income that really matters.

In Brazil, Sobrinho (2011) and Pochmann (2012) raise questions similar to those made by Goldthorpe (2009), Crompton (2010), and Wright (2005, 1979) regarding the study on middle class by the Getúlio Vargas Foundation (FGV), arguing that the definition of class used by Neri (2008) does not take into account the structural dimension of social stratification.⁸

Sobrinho (2011) raises various issues regarding the New Middle Class thesis, highlighting the traditional way in which sociology addresses the subject and comparing it to the approach proposed by that thesis. The author seeks to show how the occupational characteristics of individuals (property, skills, training, organizational resources, autonomy, and control over their own work and the work of others, etc.) and their insertion in the labor market are key variables in studies on class. According to him, such information is indispensable to capture the structural dimension of inequalities—the main goal of class analysis.

Pochmann (2012) follows a similar line to build an analysis that focuses on occupational structure to establish a counterpoint to the interpretation of recent social changes in Brazil based on the emergence of the so-called New Middle Class. In this sense, he seeks to support—by empirical data—the argument that, rather than an expansion of the middle class, what occurred in Brazil in recent years was a strengthening of the working classes grounded on work. Founded on the expansion of the formal labor market, with the creation of jobs, especially in the services

⁸Souza (2010), in turn, based on a completely different theoretical framework, criticizes extensively what Neri (2008) understands as “middle class,” and emphasizes other factors—close to the ideas of “cultural capital” and “habitus” developed by Pierre Bourdieu—that should be taken into account in a study on class.

sector, and with earnings of up to 1.5 minimum wages, this undeniable social ascent cannot, according to the author, be mistaken for middle class inclusion, as it would still be a far cry from any configuration other than working class (whether by level of income, occupation, or individual attributes).⁹

Thus, criticisms of the economic approach to the middle classes focus on how they—and therefore inequality—should be identified and analyzed. Such differences place on one side those authors who interpret the recent changes in the country—in terms of growth and income distribution—based on the idea of the growing middle class, and, on the other, those authors who believe that we are dealing with an “Affluent Working Class.”

Based on the arguments of authors like Pochmann (2012) and Sobrinho (2011), analyzing structures of inequality would require paying attention to socio-occupational structure (Crompton 2010; Goldthorpe 2009; Wright 2005), providing more relevant information to interpret the recent changes in the country. In this particular paper, the interest is to analyze the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ).

4.3 Labor and Social Structure in the Metropolitan Region of Rio de Janeiro

Several studies have been published with the aim of verifying the behavior of the metropolises and their social structure in face of the macroeconomic changes in Brazilian society (Ribeiro 2000; Marques et al. 2008; Lago and Mammarella 2010). Generally speaking, these works, which analyze data from the 1980s and 1990s, were inserted in the debate on *global cities*¹⁰ (Sassen 1991), and sought to test the hypothesis of the polarization of social structure.

One could say that their findings demonstrated that the transformations in social structure did not confirm the hypothesis of social polarization, and indicated that the changes in the social structure of those cities were much more complex and diverse than suggested by that hypothesis.

This debate took place in a metropolitan scenario of rising unemployment, deteriorating employment conditions, reduced income and increased poverty (Ribeiro 2000; Rocha 2006), when the national economy was progressing from the crisis of the 1980s to the adjustment policy of the 1990s.

If in the 1980s and 1990s, the hypothesis posed was the reduction of the intermediate strata, the dominant idea nowadays is the growth of the middle class in Brazilian society (Neri 2008). This paper focuses on investigating the behavior of

⁹Also focusing on the socio-occupational structure, Scalón and Salata (2012), using data from the 2002 and 2009 PNAD, argue that changes in class structure would not have been significant enough to support the idea of a new class or the expansion of the traditional middle class.

¹⁰Emphasis added by the authors.

the Rio de Janeiro Metropolitan Region within this new scenario. In particular, it aims to examine possible changes between 2000 and 2010 in the socio-occupational structure—Socio-Occupational Categories (CATs)—of the RMRJ, and as well as its relation to certain attributes such as income, education, formal employment, and consumption.

4.3.1 Social Structure of the RMRJ in Recent Years

In previous works that also made use of CATs, Ribeiro (2000), based on data from the 1980 and 1991 Censuses, show that in the 1980s the middle class preserved, or even increased, its high level of participation in the social structure of the RMRJ, and that there was a relative and absolute decrease of workers in the secondary sector, an increase of workers in the specialized and nonspecialized tertiary sectors, a strong growth of the intellectual elite (high-level professionals), and a decrease of the administrative elite.

In more recent periods, in turn, Lago and Mammarella (2010) show that in the 1990s in the RMRJ, the trend of increasing participation of high-level professionals and workers in the specialized tertiary sector was sustained, the administrative elite continued showing a slight decrease, and workers in the secondary sector lost even more participation in the social structure of the RMRJ. However, unlike the 1980s, small employers and, especially, middle-level occupations suffered significant losses over that period. In addition, participation of workers in the nonspecialized tertiary sector remained basically constant (with a very slight downward trend).

The following Table 4.1 shows the breakdown of those categories in 2000 and 2010:

Table 4.1 Breakdown of socio-occupational categories in the RMRJ for 2000 and 2010

Socio-occupational categories	Year	
	2000	2010
Large employers	2.1	1.5
High-level professionals	8.5	12.3
Small employers	2.0	1.2
Middle-level occupations	27.9	26.7
Workers in the specialized tertiary sector	20.4	20.2
Workers in the secondary sector	20.2	20.2
Worker in the nonspecialized tertiary sector	18.4	17.3
Agricultural workers	0.6	0.6
Total	100	100

Source 2000 and 2010 censuses (Brazilian Institute of Geography and Statistics—IBGE). Table designed by the authors

Table 4.1 features some interesting variations, but they are far from giving any suggestion of more radical transformations. In fact, the sharpest variation that can be observed in recent years, namely, the increased participation of high-level professionals, which rose from 8.5 to 12.3% between 2000 and 2010, is a long-term trend previously shown in works dealing with the 1980s and 1990s in the RMRJ (Ribeiro 2000; Lago and Mammarella 2010), mentioned above. On the other hand, there are small reduction trends in the participation of large and small employers, and also of workers in the nonspecialized tertiary sector.

Therefore, as expected, no major changes are observed in the social structure of the RMRJ in recent years other than the persistence of a trend already seen in previous decades, the growth in the participation of high-level professionals.

However, there may have been important changes concerning the relation of those social categories with attributes such as income, education, occupational fragility, and purchasing power.

4.3.2 *Characteristics of Socio-occupational Categories in the RMRJ in the Last Decade*

Table 4.2 compares the eight socio-occupational categories and income from the main occupation.¹¹ It first features the average income, on the left, and then the breakdown by income brackets: R\$ 0–R\$ 255, R\$ 256–R\$ 510, R\$ 511–R\$ 1020, R\$ 1021–1530, R\$ 1531–2550, and R\$ 2551 or more.¹²

The bottom row of the table features income variations (from main occupation) for the RMRJ as a whole between 2000 and 2010. Although there was no great variation in average income, which remained steady around R\$ 1590, some important trends can be observed, for example, the growth from 33.6 to 37.7% in the share of the R\$ 510 to R\$ 1020 income bracket.

Anyway, the most important variations, as can be seen, occur mainly in the lower categories of the social structure. The average income of workers in the nonspecialized tertiary sector, which was R\$ 595 in 2000, rose to R\$ 649 in 2010. Also in that category, in 2000 almost 47% of workers had an income between R\$ 256 and R\$ 510, a percentage that fell to 41% in 2010. On the other hand, the percentage of workers earning between R\$ 511 and R\$ 1020 increased from 35 to 42%. A similar trend, but less intense, can also be observed for workers in the secondary sector, whose percentage of income between R\$ 511 and R\$ 1020 increased from 41 to 45%.

It is also worth noting the decrease in average income of large employers (R\$ 9919–R\$ 9479), high-level professionals (R\$ 3793–R\$ 3741), and small employers (R\$ 4934–R\$ 4066). Nevertheless, despite these decreases for the wealthier classes,

¹¹Being a metropolitan region, the category “Agricultural Workers” was not included.

¹²2010 values (INPC).

Table 4.2 Income average and brackets^a by socio-occupational category in the RMRJ, 2000 and 2010

Socio-occupational categories	Year	Average	Income brackets							Total
			0–255	256–510	511–1020	1021–1530	1531–2550	2551+		
			%	%	%	%	%	%		
Large employers	2000	9919.5	0.2	1.1	3.5	2.3	8.9	83.9	100	
	2010	9479.2	0.3	1.4	4.4	4.6	9.5	79.7	100	
High-level professionals	2000	3793.2	2.4	3.8	12.0	9.0	21.9	50.9	100	
	2010	3741.4	0.9	4.0	15.1	13.5	19.8	46.8	100	
Small employers	2000	4934.3	0.3	2.9	12.6	6.7	21.9	55.7	100	
	2010	4066.5	0.7	5.5	13.9	11.1	19.5	49.3	100	
Middle-level occupations	2000	1619.5	3.0	14.3	31.7	15.2	19.6	16.1	100	
	2010	1636.4	2.1	14.0	37.7	16.2	14.9	15.2	100	
Workers in the specialized tertiary sector	2000	935.0	6.2	29.0	42.3	9.8	8.3	4.5	100	
	2010	908.5	5.6	28.3	46.6	10.5	5.9	3.2	100	
Workers in the secondary sector	2000	1007.0	4.8	22.2	41.4	15.6	11.2	4.8	100	
	2010	1020.6	3.8	21.3	45.2	17.8	8.3	3.7	100	
Workers in the nonspecialized tertiary sector	2000	595.0	9.0	46.9	35.3	4.9	2.9	1.1	100	
	2010	649.7	8.2	41.4	42.8	5.3	1.6	0.7	100	
Total	2000	1590.7	5.2	23.5	33.6	11.2	12.5	13.8	100	
	2010	1593.4	4.8	21.6	37.7	12.7	10.0	13.2	100	

Source 2000 and 2010 censuses (IBGE). Table designed by the authors

^aIncome from main occupation/constant prices, 2010 (INPC)

and the increased income of the less affluent categories, the persistent and huge income inequality between the categories must be emphasized, with the executives still in 2010 with average incomes more than 14 times higher than those of workers in the nonspecialized tertiary sector.

One of the most cited elements in the thesis of the New Middle Class relates to the formalization of the labor market (Pochmann 2012). Table 4.3 features the categories ranked according to the occupational fragility of workers. Classified as “non-fragile” are workers with a formal employment contract—or who pay social security taxes—civil servants, military personnel, and self-employed workers who pay social security taxes; “fragile” workers are those with no formal employment contract and who do not pay social security taxes, and self-employed workers who do not pay social security taxes.¹³

Generally speaking, although the percentage of workers in situations of occupational fragility is still high, there has been a positive trend with regard to the

¹³Employers, self-sustaining workers, and workers without wages have not been included in the analysis due to the difficulty of fitting them into these categories.

Table 4.3 Occupational fragility by socio-occupational categories in the RMRJ 2000 and 2010

Socio-occupational category	Year	Working conditions		Total
		No fragile	Fragile	
Large employers	2000	96.8	3.2	100
	2010	96.4	3.6	100
High-level professionals	2000	81.8	18.2	100
	2010	85.3	14.7	100
Small employers	2000	81.3	18.7	100
	2010	83.6	16.4	100
Middle-level occupations	2000	65.2	34.8	100
	2010	67.5	32.5	100
Workers in the specialized tertiary sector	2000	54.6	45.4	100
	2010	58.8	41.2	100
Workers in the secondary sector	2000	50.6	49.4	100
	2010	61.1	38.9	100
Workers in the nonspecialized tertiary sector	2000	67.5	32.5	100
	2010	71.9	28.1	100

Source 2000 and 2010 censuses (IBGE). Table designed by the authors

formalization of labor relations in the RMRJ. Therefore, as a whole, the percentage of “non-fragile” workers decreased 4.4 points between 2000 and 2010. With the exception of large employers, who recorded a small increase in occupational fragility, all other socio-occupational groups show improvement in work formalization in the last decade. Such improvement benefited mainly the occupations located at the base of the social pyramid, and which were, in general, the weakest categories in 2000.

Thus, the rate of “non-fragile” workers in the nonspecialized tertiary sector showed a strong increase from 50.6% in 2000 to 61.1% in 2010, surpassing the percentage for workers in the secondary sector. However, despite these advances, differences in occupational fragility remain high between the lower groups of the social hierarchy and those in higher positions. The percentage of workers in a situation of non-fragility in middle-level occupations (16.4%) is well below that found among workers in the specialized tertiary sector (32.5%), who are located immediately below them on the socio-occupational scale.

Table 4.4 features the level of education of the different occupational categories for 2000 and 2010:

First of all, an increase in education is observed among the total working population of the RMRJ between 2000 and 2010, reflected in the reduced rates of workers below the level of incomplete secondary education and the increased participation of workers with complete secondary to complete higher education. This improving trend in level of education occurs in all socio-occupational groups, although the most significant changes, such as in terms of income and work formalization, occurred in the lower categories of the social structure. Most evident is the situation of the workers in the specialized tertiary sector, whose share in the

Table 4.4 Level of education by socio-occupational categories in the RMRJ, 2000 and 2010

Socio-occupational category	Year	Level of education			Total
		No education/incomplete elementary education	Complete elementary/incomplete secondary education	Complete secondary/incomplete higher education	
Large employers	2000	6.3	7.0	29.0	100
	2010	4.9	5.1	26.6	100
High-level professionals	2000	2.7	2.6	13.6	100
	2010	1.7	1.8	13.5	100
Small employers	2000	17.9	14.4	36.9	100
	2010	12.0	12.6	39.2	100
Middle-level occupations	2000	12.5	19.8	54.7	100
	2010	8.8	13.5	58.8	100
Workers in the specialized tertiary sector	2000	44.1	28.1	25.6	100
	2010	27.5	25.2	43.8	100
Workers in the secondary sector	2000	59.1	24.2	15.6	100
	2010	44.0	25.0	29.3	100
Workers in the nonspecialized tertiary sector	2000	69.6	19.8	10.1	100
	2010	53.7	24.7	20.7	100
Total	2000	38.4	20.5	28.0	100
	2010	26.9	18.6	36.7	100

Source 2000 and 2010 Censuses (IBGE). Table designed by the authors

category “incomplete elementary education” fell from 44.1 to 27.5% between 2000 and 2010, while over the same period their share in the category “up to complete secondary education” increased from 25.6 to 43.8%. Similar trends, though less extensive, can be observed for workers in the secondary and nonspecialized tertiary sectors, whose percentages of no education or incomplete elementary education fell, respectively, from 59.1 to 44.0% and from 69.6 to 53.7% between 2000 and 2010.

Nonetheless, despite these improvements in the last decade, differences in educational levels remain conspicuous between the different socio-occupational groups across the whole social hierarchy. As can be noted, the percentages of workers with no or little education remain high in the lower categories, composing a large majority of the working population, while, on the other hand, the middle and higher categories are characterized by a much higher level of instruction, with the majority of the working population having a complete secondary education.

The issue of expanded consumption, especially among the lower classes, has been an essential element to support the thesis of the New Middle Class. Table 4.5 features the percentage of ownership of specific consumer goods among the employed population in the RMRJ in 2000 and 2010.

Analyzing the data for the entire working population of the Metropolitan Region of Rio de Janeiro, one notes the expansion of access to the listed consumer goods between 2000 and 2010, with the exception of radios. The most considerable increases concern the ownership of personal computers, telephone lines, and washing machines. Once again, this trend is mainly due to the lower classes, the most poorly equipped in 2000. For example, the percentage of personal computer owners among workers in the specialized tertiary sector increased from 10.5% in 2000 to 52.5% in 2010. Also in this category, washing machine owners accounted for 70.0% in 2010, against 53.7% in 2000. A similar trend is observed for workers in the secondary and nonspecialized tertiary sectors, whose percentage of personal computer owners, for example, increased, respectively, from 7.2 to 43.7% and from 6.6 to 38.6% between 2000 and 2010.

It is observed that the gap between different categories also remains high for consumer goods. Already in 2010, the middle- and high-level occupations had much higher percentages than the other groups, with the exception of goods such as radio, TV, and refrigerator, in which the differences between the groups are minimal, since access to them was already fairly widespread.

4.4 Conclusion: New Middle Class or Affluent Working Class?

As mentioned before, in the past few years the hypothesis that Brazil is becoming a middle-class country has been constantly raised. The main argument used to support this thesis has been the growth in the share of intermediate income levels. The data presented above do actually show some level of growth of intermediate income

Table 4.5 Consumer goods by socio-occupational categories in the RMRJ, 2000 and 2010

Socio-occupational category	Year	Radio	TV	Washing machine	Refrigerator or freezer	Telephone line	Personal computer	Automobile
Large employers	2000	99.0	99.9	92.5	99.9	90.7	70.0	89.6
	2010	93.7	99.6	95.6	99.9	92.6	92.8	88.3
High-level professionals	2000	99.0	99.6	87.8	99.7	86.5	64.0	75.0
	2010	93.7	99.6	93.0	99.8	91.7	91.4	73.0
Small employers	2000	98.1	99.7	85.7	99.6	80.3	46.8	79.7
	2010	92.1	99.5	92.1	99.6	87.3	83.0	78.8
Middle-level occupations	2000	98.0	99.4	72.3	99.4	59.7	30.1	47.8
	2010	91.8	99.4	83.1	99.5	80.3	74.6	49.5
Workers in the specialized tertiary sector	2000	96.0	98.4	53.7	98.1	36.0	10.5	29.5
	2010	88.7	99.0	70.0	99.0	65.6	52.5	31.7
Workers in the secondary sector	2000	95.4	97.8	46.7	97.1	27.6	7.2	27.9
	2010	88.0	98.6	63.2	98.5	59.9	43.7	31.6
Workers in the nonspecialized tertiary sector	2000	95.2	97.2	41.0	96.6	24.1	6.6	18.2
	2010	87.9	98.6	59.6	98.3	56.6	38.6	18.0
Total	2000	96.6	98.5	59.4	98.2	45.0	21.1	38.3
	2010	90.0	99.0	73.7	99.0	70.6	59.8	40.5

Source 2000 and 2010 censuses (IBGE). Table designed by the authors

levels in the RMRJ, especially among the categories closest to the base of the social structure.

It must therefore be acknowledged that when it comes to income, purchasing power, education, and formalization of labor relations, there has been substantial improvement, especially for the lower categories of the socio-occupational structure. But how could these results be more thoroughly interpreted without falling into the tempting hypothesis of the growing middle class?

This is not a new issue in social stratification studies. In fact, similar issues were intensely debated a few decades ago in some of the so-called developed countries, especially in England of the mid-twentieth century, when a very positive economic environment, which had raised the standard of living of the lower orders, gave rise to the debate between the thesis of “*embourgeoisement* of the working class” and the thesis of the “affluent worker” (Goldthorpe et al. 1969; Devine 1992).

The analysis herein developed, based on occupational categories, did not identify any substantial change in the social structure of the Metropolitan Region of Rio de Janeiro, especially concerning a growth in middle-level occupations and a reduction in lower occupational categories—such as workers in the secondary and nonspecialized tertiary sectors—that could support the thesis of the “New Middle Class.” However, despite the stability in terms of social structure, significant variations were found with respect to some of the attributes related to different social positions. Notwithstanding the persistent inequalities, it was possible to verify in recent years a substantial increase in income, education, formal labor relations, and level of consumption of those classes closest to the base of the social structure.

Therefore, if on the one hand the study’s analyses do not support the idea of the growth of the middle class, on the other, important changes in recent years cannot be ignored, such increased income, labor formalization, education, and level of consumption among the lower classes, which reduced the economic gaps between the social strata. In this sense, it is believed that, rather than speaking of a “New Middle Class,” a more correct interpretation of recent trends within the RMRJ would be the idea of improvement in the standards of living of the working class.

References

- Barros R, Carvalho M, Franco S, Mendonça R (2010) Determinantes da Queda na Desigualdade de Renda no Brasil. IPEA, Texto para discussão 1460
- Bourdieu P (2008) A Distinção: crítica social do julgamento. Edusp, São Paulo
- Crompton R (2010) Class and employment. *Work Employ Soc* 24:9–26
- Devine F (1992) Affluent workers revisited: privatism and the working class. Edinburg University Press, Edinburg
- Ferreira F, Neri M, Lanjouw P (2003) A robust poverty profile for Brazil using multiple data sources. *Revista Brasileira de Economia* 57:59–92
- Goldthorpe JH (2009) Analyzing social inequality: a critique of two recent contributions from economics and epidemiology. *Eur Sociol Rev* 26(6):731–744

- Goldthorpe JH et al (1969) *The affluent worker in the class structure*. Cambridge University Press, Cambridge
- Hout M (2008) How class works: objective and subjective aspects of class since the 1970s. In: Lareau A, Dalton C (eds) *Social class: how does it work?*. Russell Sage Foundation, New York, pp 25–64
- Lago L, Mammarella R (2010) Da hierarquia de classes à organização social do espaço intraurbano: um olhar comparativo sobre as grandes metrópoles brasileiras. *Cadernos Metrópole*, São Paulo 12:65–84
- Marques E, Scalon C, Oliveira MA (2008) Comparando estruturas sociais no Rio de Janeiro e em São Paulo. *Dados—Revista de Ciências Sociais* 51(1):215–238
- Marx K, Engels F (1998) *O manifesto comunista*. (Ed. rev.) Paz e Terra, Rio de Janeiro
- Neri M (2008) *A Nova Classe Média. O lado brilhante da base da pirâmide*. Saraiva, Rio de Janeiro
- Ossowski S (2008) *Class structure in the social consciousness (1963)*. Routledge, London
- Pochmann M (2012) *Nova classe média? O trabalho na base da pirâmide social brasileira*. Boitempo, Rio de Janeiro
- Ravallion M (2010) The developing world's bulging (but vulnerable) middle class. *World Dev* 38(4):445–454
- Reid I (1998) *Class in Britain*. Polity Press, Cambridge
- Ribeiro LCQ (2000) Cidade desigual ou cidade partida? Tendências da metrópole do Rio de Janeiro. In: Ribeiro LCQ (ed) *O Futuro das Metrópoles: Desigualdades e governabilidade*. Revan, Rio de Janeiro, pp 63–98
- Rocha S (2006) *Pobreza no Brasil: afinal, de que se trata?*. FGV, Rio de Janeiro
- Sassen S (1991) *The global cities*. Princeton University Press, Princeton
- Scalon C, Salata A (2012) Uma Nova Classe Média no Brasil da Última Década? O debate a partir da perspectiva sociológica. *Revista Sociedade e Estado*, Brasília 27(2):387–407
- Scott J (2002) Social class and stratification. *Acta Sociol* 45:23–35
- Sobrinho GFX (2011) “Classe C” e sua alardeada ascensão: Nova? Classe? Média? Índice Econômico. *FEE (Fundação de Economia e Estatística)*, Porto Alegre 38(4):57–80
- Souza J (2010) *Os batalhadores brasileiros. Nova classe média ou nova classe trabalhadora?*. Editora da UFMG, Belo Horizonte
- Weber M (1971) Classe, Status, Partido. In: Velho G, Palmeira MGS, Bertelli AR (eds) *Estrutura de Classes e Estratificação Social*. Zahar Editores, Rio de Janeiro, pp 61–83
- Wright EO (1979) *Class structure and income determination*. Academic Press, New York
- Wright EO (2005) *Approaches to class analysis*. Cambridge University Press, Cambridge

Chapter 5

Demographic Transformations

Érica Tavares and Ricardo Antunes Dantas de Oliveira

Abstract The metropolis of Rio de Janeiro has always been one of the first areas of Brazil to show trends of demographic change, such as decreased fertility, new family structures, and population aging. The purpose of this paper is to describe the past and recent interactions in urban configuration and demographic dynamics of the metropolis of Rio de Janeiro, as well as analyze the prospects of urban and demographic transition in Brazil, highlighting the behavior of this metropolis compared to the national context. Various indicators on urban and demographic dynamics were used to address the relationship between urbanization processes and demographic transition.

Keywords Urbanization · Demographic transition · Population aging · Rio de Janeiro

5.1 Introduction

This article aims to describe the urban configuration (in terms of urbanization/metropolization) and demographic dynamics of the metropolis of Rio de Janeiro in past and recent times, as well as analyze the prospects of urban and demographic transition in Brazil, highlighting the behavior of this metropolis compared to the national context.

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It is assumed that an integral element of demographic dynamics is the dimension of change, reflecting the social relations of each historical moment of societies (Oliveira 2010). In Brazil, demographic transition has also interacted in a particular way with migration, for during the period of intense urbanization, some towns and cities attracted a large number of people to settle in those areas, especially those in search of work and social mobility (Silva 2013).

A further assumption is that urban transition is not merely a quantitative phenomenon of urban population outnumbering rural population, since it would then be restricted to the moment in which such outnumbering occurred in the 1960s. Urban transition throughout this entire period consisted of a combination of political, economic, social, and spatial processes that transformed the country and led to the establishment of an urban-industrial economy and society (Faria 1991).

The fast pace of urbanization is the hallmark of Brazilian urban transition, associated with demographic transition, not only for the high fertility rates, but also for the intense spatial mobility of the population, especially toward areas where the industrializing efforts were concentrated, in the Southeast Region, more specifically in certain urban agglomerations that became metropolitan areas.

In this context, the metropolis of Rio de Janeiro has always been one of the first areas in Brazil to show trends of demographic change, such as decreased fertility, new family structures, and population aging—although São Paulo became more prominent in terms of economic dynamics and roles in the national urban network. Therefore, this study investigates the elements that helped Rio de Janeiro sustain its leading position with regard to change in demographic dynamics.

For the period of rapid urbanization, the initial hypothesis is that the formation of modern society and its sociocultural matrix, coupled with the dynamics of the constitution of the urban phenomenon in Rio de Janeiro, were key elements that influenced the distinct demographic behavior of this area compared to other major urban spaces of the country. Prominent at this point is the status of the city of Rio de Janeiro as federal capital for many years.

Regarding the more recent period, despite a decrease in the rates of population growth and certain stability in fertility, mortality, and life expectancy trends, urban and demographic dynamics in the metropolis of Rio de Janeiro acquired new connotations in their relationship, expressed less in population numbers than in the meanings manifested in the population's behavior.

This text is divided into two sections. The first introduces the perspectives of demographic and urban transition from the viewpoint of the metropolis of Rio de Janeiro and also its historical contextualization within Brazil. The second section proposes to analyze several indicators of urban and demographic dynamics of the metropolis of Rio de Janeiro between 1970 and 2010, against the background of a few national economic cycles from the 1970s onwards: duration and decline of the import replacement model (1970–1980); the liberal model, with the open markets policy and the restructuring of production (1990–2000); the recent economic dynamics governed by the interaction between market and state, with social policies and relations between local and global dynamics (2000–2010).

With this proposal, it will be possible to produce and incorporate empirical evidence to the debate on the relationship between urban and demographic transition in Brazil and the role played by the metropolis of Rio de Janeiro¹ in this process.

5.2 Urban and Demographic Transitions and Trends of the Metropolis of Rio de Janeiro Within the National Context

Over the second half of the twentieth century, Brazil underwent urban, economic, and political changes related to the ensuing population movements toward the cities and the urban way of life (Durham 1973; Faria 1989, 1991; Brito and Souza 2005). Such processes brought about changes in patterns of sociability, access to information and services, the system of social and family values, participation in the labor market, etc. This new urban context—which afforded chances of access to health services, educational opportunities, women’s insertion in the labor market, dissemination of mass media, etc.—led to changes in demographic components, as fertility began to decline considerably in the country, life expectancy continued to increase, and mortality rates, which were already in decline, further decreased, especially infant mortality rates (Faria 1989; Alves 2002). These processes have led to an aging population, which is most evident in the metropolises.

In the case of the metropolis of Rio de Janeiro, a few peculiarities were observed compared to the country as a whole (Table 5.1). The indicators on age structure reveal an earlier reduction of fertility in Rio de Janeiro compared to Brazil, through the participation of the population aged 0–14 and distinctions in the participation of adults. The reduction process was obviously constant over those 40 years, but at the beginning of the studied period, the metropolis of Rio de Janeiro already had lower rates of children and higher percentages of adults.

The region also shows a higher share of the elderly, an age group in which the difference between 1970 and 2010 was higher in the metropolis of Rio de Janeiro, which suggests a more “advanced” dynamics in terms of a demographic transition. The differences in population growth also indicate this fact, because although population growth rates were identical in 1970, there are significant reductions in both the whole country and Rio de Janeiro, with the latter’s being more significant. Although explaining such differences is beyond the scope of this section, both the earlier reduction in fertility and emigration are among the defining elements of this process.

¹The term “metropolis of Rio de Janeiro” comprises the official Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ), including the city of Mangaratiba, according to the study on levels of integration by the Observatório das Metrópoles (2012).

Table 5.1 Demographic and urban indicators: Brazil and the metropolitan region of Rio de Janeiro (RMRJ)—1970 and 2010

Indicators	1970		2010	
	Brazil	RMRJ	Brazil	RMRJ
Population aged 0–14 (%)	42.1	34.1	24.1	20.9
Population aged 15–24 (%)	20.1	19.7	17.9	16.0
Population aged 25–59 (%)	32.7	39.6	47.2	49.9
Population aged 60 and over (%)	5.1	6.6	10.8	13.2
Population growth rate	2.48	2.48	1.24	0.87
Urbanization rate	55.9	84.3	97.0	99.5

Note Data for the RMRJ in 1970 were compiled from information on the existing municipalities at the time and which are currently part of the metropolitan area

Source Demographic Censuses—IBGE (www.ibge.gov.br)

Lastly, it is important to stress the distinctions in the urbanization process. As early as 1970 the metropolitan population was already almost entirely urban, i.e., in quantitative terms the urban transition had occurred long before, possibly in the late nineteenth century, based on the analyses by Duarte (1981) on urban structure in the State of Rio de Janeiro and by Abreu (1997) on the urban evolution of the city of Rio de Janeiro. Regarding the country as a whole, the first urban transition had just occurred, since little over half the population lived in urban areas in 1970. Forty years later it is observed that, regarding the whole country, the urbanization process is consolidated, with nearly 85% of the population living in urban areas, and, in the metropolis of Rio de Janeiro, the urban concentration is expanded to almost its entire population, with only 0.5% living in rural areas.

While at first the population dynamics strongly contributed to the formation of our cities, with the rapid urbanization and early constitution of metropolises, at a later period the urban way of life also brought about changes in demographic dynamics, indicating the close relationship between these two dimensions. The current context requires a deeper investigation into how these relations have developed, especially as we are in a phase of urban dynamics with a high degree of urbanization, large investment projects in various big cities, intense activity of the housing sector combined with public investment, widespread debate on the reduction of social inequalities, increased population working in urban occupations, etc. At the same time, Brazil is undergoing a singular phase of demographic transition: despite persisting social and spatial differences, fertility rates have fallen in all areas and social strata, population growth rates have decreased, family structures have been considerably transformed, and changes of residence have followed new courses and taken on new meanings.

In addition, the combination of urban and demographic transitions reveals the particularities of this process in the Metropolitan Region of Rio de Janeiro compared with the country as a whole. An age structure with a smaller participation of young people and a larger participation of adults and elderly people is linked to an earlier urbanization process, resulting from the combination of social, economic,

political, and cultural processes that express prior transformations toward the “modernization” of society. The challenge is to understand the meanings of these traits, especially concerning the relationship between demographics and the production of urban space, and the outlook for the near future.

5.3 The Constitution of Urban Society in the RMRJ and Demographic Dynamics

In the constitution of urban society in the State of Rio de Janeiro, the city of Rio de Janeiro, and later its “overflow,” the Metropolitan Region, has always been the dynamic hub. According to Duarte (1981), throughout the history of urban development in the state, the city was: a port for the export of agricultural products in the colonial period; the seat of Portuguese control over the gold of Minas Gerais; an exporting port and rallying point of the mercantile bourgeoisie during the period of primary-export economy; and a hub of industrial activity in the import replacement period. Within this context, the development of specific regions in the inland region of the State of Rio de Janeiro was marked by the control exercised by the mercantile capital installed in Rio de Janeiro.

This background established the control of the State of Rio de Janeiro by interests specifically located in its main city, which is not only significant within the state’s boundaries, but also in terms of the national urban network. The concentration of the most dynamic economic activities and of the population, spreading out to the metropolitan region as of the mid-twentieth century (Duarte op. Cit., Abreu 1997), summarizes the role of Rio de Janeiro in the state and, moreover, its national scope, despite the several crises in the recent history of the metropolis.

The first crisis concerned the loss of national economic hegemony, due, on the one hand, to the coffee crisis in the state’s crops, and on the other, to the disruption of international trade during World War I, which affected port operations and had impacts on local accumulation. Oliveira (2010) believes that the other two crises occurred for political reasons, but evidently had repercussions on the economy and population. Therefore, the second crisis would be due to the transfer of the federal capital to Brasília in 1960, and the third related to the merger of the state of Guanabara (created after the transfer of the federal capital) and the former State of Rio de Janeiro in 1976. Lessa (2000) adds a final, more recent crisis, related to the impacts of the restructuring process of the national economy, which deeply affected the metropolis by further reducing its industrial rank and leading to a greater concentration of the most dynamic activities of the services sector in São Paulo, removing them from Rio de Janeiro.

The evolution of the demographic growth of the city of Rio de Janeiro and the RMRJ as a whole compared to the total figures for the State of Rio de Janeiro and the country enables an examination of the demographic dynamics between 1970 and 2010. Chart 5.1 affords a deeper analysis of the demographic processes in

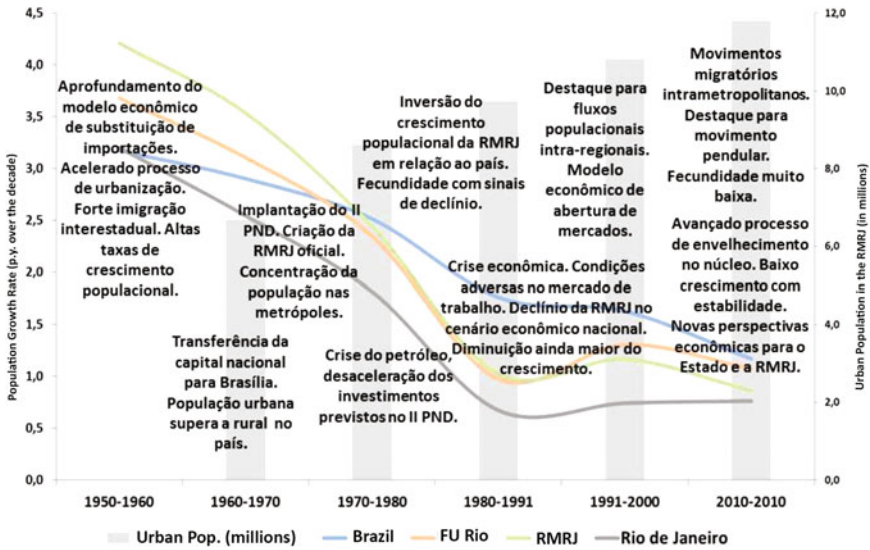


Chart 5.1 Population growth rate: Brazil, Rio de Janeiro Federation Unit (FU) and the RMRJ—1970/2010 (Legend translated to English in sequence: (a) Intensification of the import replacement economic model. Rapid urbanization process. Intense interstate migration. High population growth rates; (b) Transfer of federal capital to Brasília. Urban population surpasses rural population in the country; (c) Implementation of II National Development Plan (PND). Creation of the official RMRJ. Population concentration in the metropolises; (d) Oil crisis, reduction of II PND investments; (e) Inversion of population growth in the RMRJ compared to the country. Declining fertility rates; (f) Economic crisis. Adverse labor market conditions. Decline of the RMRJ in the national economic context. Increased growth reduction; (g) Prominent intraregional population flows. Open markets economic model; (h) Intra-metropolitan migration trends. Prominent two-way commuting. Extremely low fertility; (i) Advanced aging process in the core. Stable low growth rates. New economic perspectives for the state and the RMRJ). *Source* IBGE Demographic Censuses

relation to the different economic cycles of the period. Prominent features include the evolution of growth rates as well as the most striking demographic and economic processes.

Important links were recorded between the period of accelerated industrialization through import replacement and the consequences of the first demographic transition, with the decrease in mortality and the subsequent reduction in fertility, resulting in high population growth in the 1950s and 1970s. Also revealed is the intense rural exodus leading up to the first urban transition, with fertility rates still high in the cities.

Population growth was less pronounced in the city of Rio de Janeiro as early as the 1950s, but both the state and the RMRJ as a whole only present such behavior as of the 1970s, a period marked by the international crisis and ensuing slowdown in investments of the II National Development Plan (PND). The 1980s recorded a great disparity in population growth between Brazil and the State of Rio de Janeiro, the RMRJ and the city of Rio de Janeiro, marked by lower fertility rates and emigration flows originating in those areas.

The new economic outlooks of the late 1990s were accompanied by small variations in growth rates, albeit diversified among those four spatial scales. The country's growth rates as a whole remained in decline. Population growth in the state suffered a slight decrease, possibly due to composition effects, since the regions benefiting from investments in oil and gas recorded population growth (Oliveira 2010). The Metropolitan Region of Rio de Janeiro, in turn, showed a decrease following a slight increase in the 1990s. This occurred despite the small increase recorded by its core.

The information featured in the Chart above suggests a few links between population dynamics and economic processes. Although they cannot be directly established, the evolution of growth rates reflects the different economic moments of the state, the Metropolitan Region, and the city of Rio de Janeiro—the Metropolitan Capital. At the same time, however, the effect of urban transition on demographic transition cannot be ruled out, since the large flow of immigrants afforded access to values and behaviors that had an impact on the intensified process of fertility decline, which is essential to the reduction of growth rates.

In this context, the clear relationships between urbanization and population dynamics in the past were replaced by multiple specificities in the current reproductive and migratory behavior. This entails the need to assess their prominent aspects to interpret the demographic processes that are linked to what could be considered the second urban transition.

It is possible to highlight some of the aspects involved in shaping the socio-cultural matrix that influenced this process: the concentration of wealth produced in the country and especially in the State of Rio de Janeiro; the idea of progress and civilization stemming from the “European heritage” (Lessa 2000); the concentration of the bourgeoisie, not only for the region having been the commercial and financial center of the country, but also for the importance of the administrative apparatus of the former federal capital, besides the relevance of state activities that were preserved, or even increased, in Rio de Janeiro after the transfer to Brasília.

Therefore, the historical process described above is markedly economic and political, but its meanings regarding the relations between urban and population dynamics are also characterized by the sociocultural matrix established over the historical process.

5.4 Urban and Population Dynamics in the Rio de Janeiro Metropolitan Region: Synthesis from the 1970s Onwards

Changes in population dynamics are usually associated with the development of an urban culture, with the advance of urbanization, which can also be linked to the industrialization process, as was the case of Brazil. In terms of differences in urbanization, 97% of the population of the metropolis of Rio de Janeiro already lived in urban areas in 1970. This indicator increased over 40 years to 99.5%, a small evolution due to the already significant rate since the 1970s. In that same period, the state's urbanization rate was 87.9%, while the city of Rio de Janeiro, considered the core of the metropolis, had 100% of urban population.

Considering the percentage of workers employed in manufacturing (which can also be considered a proxy for urban-industrial society from the point of view of the population itself), it is observed that, in the 1970s, as early as the period of the import replacement economic model, the city, the state and the metropolis of Rio de Janeiro had around 15% of the population employed in manufacturing. In the metropolis of São Paulo, in the same decade, this percentage was around 33%. In 1980 there is an increase of about 3%, and over that decade, marked by the decline of the developmental model, the rates return to levels of 20 years earlier. During the 1990s, with the liberal model of open markets and production restructuring, the share of those employed in manufacturing is reduced even further, reaching less than 10% in 2010. The State of Rio de Janeiro starts showing higher percentages only compared to the metropolis and the city of Rio de Janeiro, due to the industrial dynamics of the inland region (Table 5.2).

In the case of the metropolis of Rio de Janeiro, there is an increase in urban population, while participation in manufacturing increases until the 1980s and decreases in the 1990s. Throughout this period, the metropolis experiences significant changes in population behavior. There is a considerable decrease in child population among the first age groups, as shown at the base of the age pyramid in Chart 5.2.

Table 5.2 Rate of urbanization and participation of the employed population in the manufacturing sector in the state, metropolis, and city of Rio de Janeiro: 1970–2010

Level of urbanization (%)	1970	1980	1991	2000	2010
State of Rio de Janeiro	87.9	91.8	95.3	96.0	96.7
Metropolis of Rio de Janeiro	97.0	98.3	99.2	99.3	99.5
City of Rio de Janeiro	100.0	100.0	100.0	100.0	100.0
Percentage of population employed in manufacturing	1970	1980	1991	2000	2010
State of Rio de Janeiro	15.2	18.1	15.4	11.2	9.5
Metropolis of Rio de Janeiro	15.3	18.2	15.1	10.6	8.4
City of Rio de Janeiro	15.1	17.3	14.2	9.2	7.1

Source Demographic Censuses—IBGE

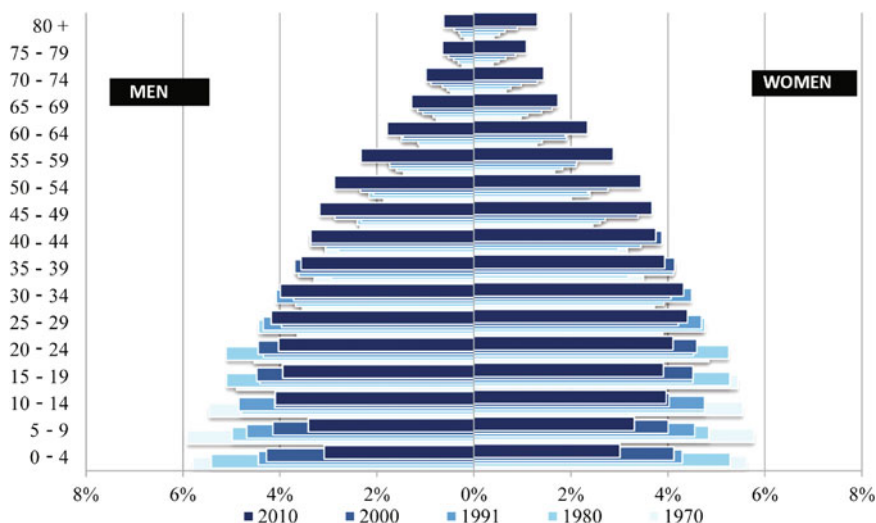


Chart 5.2 Age pyramid of the metropolis of Rio de Janeiro—1970–2010. *Source* Demographic Censuses—IBGE

The young population remains high during the 1980s, reflecting the impact of previous age cohorts, but also begins to decline in the period from the 1990s to the 2000s. Adults over 25 years start to gain importance. In 2010, the group aged 25–59 included almost 50% of the population of the metropolis, evoking the perspective of the demographic dividend, a special time when the greater weight of the adult population affords the country better conditions to generate income and wealth. The share of the elderly population also grows considerably, especially among women, a group who, despite a participation of about 13%, shows a significant growth rate.

As already indicated, a key variable in all this transformation in the age structure of the population was reduced fertility. Fertility rate is considered the most important dimension to understand population dynamics. It seeks to assess the reproductive status of women, since it measures the average number of children every woman should have until the end of her reproductive period, the current fertility regime being constant. This indicator is important in managing public policies for family planning and reproductive health. In general, these rates are considered to be closely related to the urbanization process, participation of women in the labor market, educational level, and use of contraceptive methods (Faria 1989; Alves 2002; Berquó and Cavenaghi 2004).

As in almost all areas, the Total Fertility Rate (TFR) of the metropolis of Rio de Janeiro decreased over the studied period. In 1970, it held a TFR of 3.78 children per woman, which was already considered well below the TFR rate for Brazil at that time, which stood at 5.8. While in many places the greatest reduction occurred over the 1980s, the metropolis of Rio de Janeiro already had, in the early 1980s, an

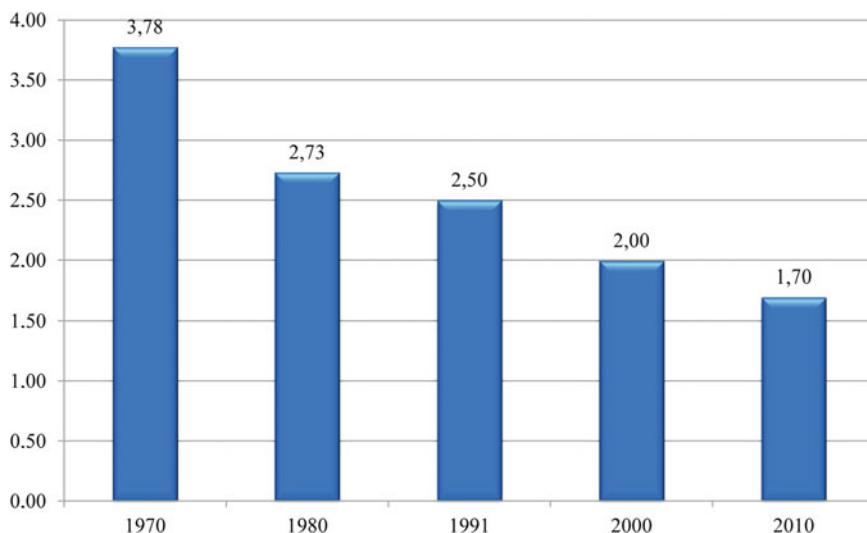


Chart 5.3 Fertility rate in the metropolis of Rio de Janeiro—1970–2010. *Source* Demographic Censuses—IBGE

average fertility rate of 2.73 children per woman. In 2000, fertility was already below replacement level, and in 2010 it reached 1.7—a very low level of fertility (Chart 5.3).

Analyzing the configuration of the workforce in the Metropolitan Region of Rio de Janeiro and its relations with unemployment in the 1990s, Martignoni et al. (2006) compare those relations with the characteristics of the metropolitan regions of Salvador and São Paulo. In this context, the authors highlight the relevance of demographic dimensions to understand the differences between the three regions during the second half of the century. According to the authors, the three analyzed metropolitan regions (São Paulo, Rio de Janeiro, and Salvador) showed significant changes in the age structure of their resident populations, demonstrating a new demographic pattern, although:

The RMRJ has the peculiarity of being spatially located in the state that since 1960 has the lowest fertility rate among all Federation Units. Thus, happening earlier, the demographic changes triggered a more premature process of population change than in other regions (Martignoni, Carvano and Jannuzzi op. Cit., p. 290).

Among the factors that explain the early drop in fertility in Rio de Janeiro are higher levels of education, the greater participation of women in the labor market, differences in access to media and health care, in addition to differences in the use of contraceptive methods. The authors identify these factors in Rio de Janeiro based on a report by BEMFAM (Family Welfare in Brazil) drawn up from elements of the 1997 National Survey on Demography and Health.

Rio de Janeiro had the second highest number of women with partners using some form of contraception, the highest percentage being in the Midwest Region, which, however, recorded a high percentage of sterilized women with partners. Access to effective contraception is one of the essential factors for the decline in fertility, according to Faria (1989), who highlights the importance of access to media, which is also analyzed by Faria and Potter (2002), who considers it responsible for spreading values and behaviors. Rio de Janeiro had the highest percentage of women with access to mass media in general, in addition to the important fact that about 75% of Rio women read newspapers at least once a week (Bemfam 1997 apud Martignoni et al. 2006).

In the same study, Rio de Janeiro had the lowest fertility rate among the analyzed regions (1.5 children per woman), the highest median age at marriage (22 years), and the longest period of education (8.2 years), much higher than the national average. All these factors contribute to lower fertility, which is corroborated by authors like Berquó and Cavenaghi (2004). For Martignoni et al. (2006), the early decline in fertility in Rio de Janeiro in the 1960s is explained by the elements above, associated with the formation of the sociocultural matrix in this space.

Given that the urban population in 1970 was already significant, and that the participation of the employed population in the manufacturing sector over the long period was eventually reduced (proxy indicators for urbanization and industrialization from the perspective of the population), it could be suggested that these variables were instrumental in leveraging the demographic transition in the country. However, in the declining phase of the import replacement model, it could be assumed that adaptation to the urban way of life and the quest to appropriate the city, i.e., changes in the individual and family strategies used to live in this great metropolis, were the factors that must have influenced the further development of demographic changes.

The significant decline in fertility is accompanied by a considerable increase in women's participation in the labor market. In 1970, only 26% of women over 15 years of age had some sort of occupation in the labor market in the metropolis of Rio de Janeiro, while men's share was 75%. During the 1980s and 1990s there was an increase of 30–40%, reaching 46% in 2010. Men's participation declined to a certain extent, and although it remains higher compared to women's, it is also worth noting that the gap has narrowed (Chart 5.4).

As a final point to be highlighted, despite the fact that migration is not always considered when it comes to demographic transition, this dimension is also very important to understand urban and population dynamics in the current context (Table 5.3). The reason is that if having fewer children can be considered a survival strategy in the metropolitan area, population mobility in this space can also be a means for people to locate themselves, settle in the area, and ensure conditions for reproduction.

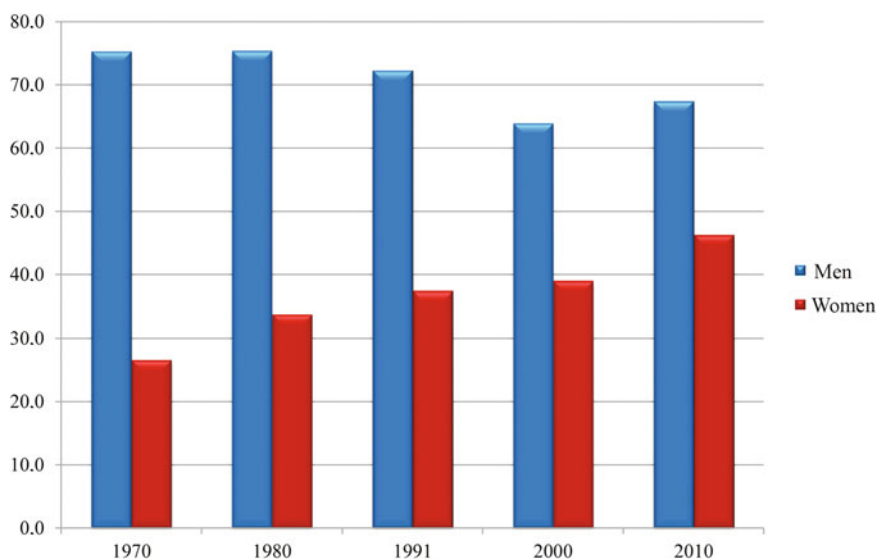


Chart 5.4 Participation (%) of men and women in the labor market in the metropolis of Rio de Janeiro—1970–2010. *Source* Demographic Censuses—IBGE

Table 5.3 Breakdown of immigrants in the metropolis of Rio de Janeiro—1980–2010

Migration flow in the 5 years prior to the research date	1980	1991	2000	2010
<i>Intra-metropolitan movement</i>				
Core–periphery	27.1	26.4	22.8	21.1
Periphery–core	3.4	4.5	5.3	5.6
Periphery–periphery	17.2	20.8	24.3	24.6
<i>Intra- and interstate movement</i>				
Core intrastate	2.8	3.3	3.2	3.8
Periphery intrastate	6.5	6.2	5.1	5.2
Core interstate	30.1	24.9	25.5	27.8
Periphery interstate	13.0	13.9	13.9	11.9
Total (100%)	859,043	451,883	598,257	471,457

Source Demographic census—IBGE

In 1980, the number of people who had moved their place of residence to the metropolis or within the metropolitan region was still very significant,² then it decreased in the following decades. More interesting is the change in the

²Data refer to fixed date migration. If migratory stocks were used, the numbers would be obviously greater, resulting from the intense migratory flows of previous decades. Owing to the difficulty in comparing data, only 5-year migration or less is used, as of 1980.

participation of immigrants per type of flow. In intra-metropolitan movements, i.e., the internal changes of residence, there is a considerable share of movements from the core, the city of Rio de Janeiro, to the periphery. Although this share has declined, this group still accounts for more than 20% of all immigrants in the metropolis. Since the 1980s it has been already observed that part of the intra-metropolitan migration has favored the peripheries, especially in the Metropolitan Region of São Paulo (Cunha 1990).

The migratory exit of people living in the periphery toward the core accounts for a small share, although it has increased over the period. The type of flow with greater participation is migratory exchanges within the actual metropolitan periphery. This periphery, which was previously regarded as a dormitory town, a place lacking in assets, resources, equipment, labor, etc., starts diversifying socially and economically, experiencing changes in its own region. As for movements from other municipalities in the state of Rio de Janeiro to the cities of the metropolitan region, participation is small, being slightly larger in the periphery than in the core.

Despite the decrease in long-distance movements, as evidenced by much of the literature on migration in Brazil (Cunha and Baeninger 2007), there is an inertia of previous migratory trends, since around 40% of immigrants are still those who come from other states in the country, with 27% of them executing the classic migration to the metropolis core. As shown by Silva (2013), this migration persists, albeit with a substantially modified profile, especially among those who come to the metropolis to reside in areas of the core deemed as superior.

5.5 Final Considerations: Recent Urban and Demographic Transition from the Viewpoint of Metropolitan Integration

As a result of the relationship between this urban and demographic transition, the metropolis of Rio de Janeiro reached the end of the first decade of the twenty-first century featuring a high level of integration to Brazilian metropolitan dynamics, which, in the case of the Metropolitan Region of Rio de Janeiro, can also be interpreted as integration dynamics between its municipalities. Demographic characteristics were essential to this integration and have always been important dimensions to evaluate the process of urbanization and metropolization in different territories. In a recent study of Brazilian metropolitan areas (*Observatório das Metrópoles* 2012), it was possible to evaluate the integration of these official metropolitan areas to the effective dynamics of the metropolization process in Brazil. To this end, certain dimensions of population behavior were essential, along with those related to economy, employment, and income.

By means of indicators on population, economic and functional size, degree of urbanization, density, occupation, and population mobility it was possible to group

Table 5.4 Population and urban indicators of the metropolitan region of Rio de Janeiro by level of integration—2010

Levels	Hub	Hub extension	Very high	High	Medium	Overall total
Municipalities (number)	1	7	5	4	3	20
Population (%)	53.2	35.6	7.3	2.2	1.7	100
Growth (% p.y.)	0.76	0.70	1.49	3.84	1.59	0.87
Urban density	7552.93	4370.83	1376.41	480.35	935.86	3759.35
Fertility rate	1.59	1.77	2.06	1.76	1.89	1.70
Urbanization (%)	100	99.7	97.7	94.9	91.6	99.5
Immigrants (%)	2.9	4.7	7.4	14.0	8.6	4.2
Entry two-way commuting (%)	15.6	13.2	7.7	6.4	10.0	13.9

Source 2010 Demographic Census—IBGE

the municipalities of each metropolitan area according to levels of integration³ to the dynamics of metropolization, ranging from the identification of the units' hubs (the hubs of each region) and extensions to levels of integration identified as: very high, high, medium, low, and very low. In the Metropolitan Region of Rio de Janeiro, only medium or higher levels of integration were identified, i.e., the region does not feature municipalities with low or very low levels of integration, which shows a fairly integrated metropolitan agglomeration (Table 5.4).

This integration is largely determined by population size, new forms of space occupation, and coordination between municipalities, aspects that are closely related to population dynamics. The hub of the Metropolitan Region, which is the city of Rio de Janeiro, holds more than 50% of the region's population, but population growth is low and population density is extremely high, with an almost 100% level of urbanization and nearly all workers in urban occupations. As for some of the demographic components of the hub, fertility is low, as we have seen, and so is the percentage of immigrants. Despite the increase in the number of people who live in Rio de Janeiro and work outside the hub, it is still the only municipality that combines low output rates with high rates of attraction for work.

The municipalities defined as an extension of the hubs constitute a new group in this method, compared to the previous study (Moura et al. 2009). In a way, they reflect the changes experienced by Brazilian metropolises in recent decades. In the case of the Metropolitan Region, this level includes some municipalities from the State of Rio de Janeiro Lowlands, Niterói and São Gonçalo that comprise approximately 35% of the region's population, particularly; population growth is

³The levels of integration consist of a classification of municipalities according to integration to the dynamics of the metropolization process in Brazil. The municipalities included are those which in 2012 were officially part of Metropolitan Regions (RMs), Integrated Development Regions (RIDEs), and Urban Agglomerations (UAs.) The following variables were considered for the year of 2010: population, growth, urbanization, density, economy, labor, two-way commuting.

also low, but population density is the second highest in the region. In terms of demographic dynamics, this group is effectively the closest to the hub, since its rates of fertility and participation of migrants are slightly larger than the core's, and urbanization levels are very high. This group, being an extension of the metropolitan hub, despite showing a high output of people to work in other municipalities through the two-way commuting, also receives a high number: they are receptors and evaders.

Municipalities with a very high level of integration—Itaguaí, Queimados, Magé, Itaboraí, and Mesquita—comprise about 7% of the region's population. Population growth is higher than in the previous groups (although the influence of the emancipation of Mesquita has been excluded from the table). Urbanization levels are around 98%. It is worth noting that this is the group of municipalities with the highest fertility—over two children per woman—and 7.4% of recent immigrants in the population in 2010, which suggests that these municipalities still experience considerable vegetative growth, associated with the arrival of new residents. But they also present a high output of people to work and/or study in other municipalities.

On the other hand, the municipalities with medium and high levels of integration have lower population percentages, although population growth rates are consistently higher. In the dynamics of Brazilian metropolization, these two groups are in an intermediate position of integration, a fact that rather complicates the understanding of their content with regard to a hierarchy in terms of levels of integration. In the Metropolitan Region, these municipalities present a fertility rate slightly below 2.0, though migratory participation is much higher than in the high level, with 14% of immigrants and population growth rate of 3.84% p.y. in the 2000s.

Thus, the more consolidated areas in terms of urban dynamics in the Metropolitan Region, expressed by the hub and its extension, already have a more stable population dynamics, with low growth and a greater tendency to decreased fertility and migration. The other municipalities, although already presenting a considerable downward trend in fertility, still have higher population growth rates and migration dynamics. While presenting residential attraction, these are also the places from which many people leave to work in another municipality, reinforcing the hypothesis of an urban transition that reflects accommodation mechanisms in the metropolitan space, guarantee of survival strategies, new family structures, and new forms of occupation of space with trends to population dispersion within their own metropolitan limits.

The trends of greater similarity in common characteristics or trajectories of demographic processes coupled with the marked integration among the metropolitan municipalities evidence the current level of coordination between demographic and urban transition. This highlights the links between “demographic evolution” and production of urban space.

In the Brazilian context, the Metropolitan Region of Rio de Janeiro records prior characteristics in relation to other parts of the country regarding the aforementioned links, and these characteristics are expressed in several indicators. The relevance of this fact is in expressing the specificities of local history, either in terms of the

“European heritage” regarding sociocultural formation or the successive crises that marked the reality of the metropolis throughout the twentieth century. As a final point, it is worth noting the challenges brought about by this long historical development, demonstrating that the nature of the connections between population and urbanization have changed, gaining relevance not so much for quantitative aspects as for resulting from the diversity of processes and issues, thus constituting fertile ground for new studies and perspectives.

References

- Abreu MA (1997) *Evolução urbana do Rio de Janeiro*. Iplanrio, Rio de Janeiro
- Alves JED (2002) *A polêmica Malthus versus Condorcet à luz da transição demográfica*. Escola Nacional de Ciências Estatísticas, Rio de Janeiro
- Berquó E, Cavenaghi S (2004) Mapeamento sócio-econômico e demográfico dos regimes de fecundidade no Brasil e sua variação entre 1991 e 2000. In: *Anais do XIV Encontro Nacional de Estudos Populacionais*. Associação Brasileira de Estudos Populacionais, Caxambu
- Brito F, Souza J (2005) *Expansão urbana nas grandes metrópoles. O significado das migrações intrametropolitanas e da mobilidade pendular na reprodução da pobreza*. São Paulo em Perspectiva, São Paulo, 19(4):48–63
- Cunha JMP (1990) *Migração Intrametropolitana em São Paulo: características de um fenômeno multiface*. In VII Encontro Nacional de Estudos Populacionais da ABEP, Caxambú, MG
- Cunha JMP, Baeninger R (2007) *Las migraciones internas en el Brasil contemporáneo*. *Notas de Población* 82:33–67
- Duarte H (1981) *Estrutura Urbana do Estado do Rio de Janeiro—uma análise no tempo*. *Revista Brasileira de Geografia* 43(4):477–560
- Durham E (1973) *A caminho da cidade. A vida rural e a migração para São Paulo*. Perspectiva, São Paulo
- Faria V (1989) *Políticas de governo e regulação da fecundidade: consequências não antecipadas e efeitos perversos*. *Ciências Sociais Hoje – ANPOCS*, 5:68–103
- Faria V (1991) *Cinquenta anos de urbanização no Brasil*. *Novos Estudos CEBRAP*, n 29, 98–119
- Faria V, Potter JE (2002) *Televisão, telenovelas e queda da fecundidade no Nordeste*. *Novos Estudos CEBRAP* 62:21–39
- IBGE—Instituto Brasileiro de Geografia e Estatística. *Censos Demográficos*. Available at: <http://ibge.gov.br>
- Lessa C (2000) *O Rio de todos os Brasis. Uma reflexão em busca de auto-estima*. Record, Rio de Janeiro
- Martignoni EM, Carvano LM, Jannuzzi PM (2006) *Força de trabalho e desemprego na Região Metropolitana do Rio de Janeiro nos anos 1990: o efeito dos fatores demográficos*. *Revista Brasileira de Estudos Populacionais*, São Paulo 23(2):287–299
- Moura R et al. (2009) *Classificação dos Municípios segundo Integração na Dinâmica da Aglomeração*. In: Ribeiro LCQ (Org.). *Hierarquização e identificação dos espaços urbanos*. Letra Capital/Observatório das Metrópoles, Rio de Janeiro
- Observatório Das Metrópoles (2012) *Níveis de integração dos municípios brasileiros em RMs, RIDEs e AUs à dinâmica da metropolização*. Relatório de Pesquisa. INCT Observatório das Metrópoles, CNPq, CAPES, FAPERJ, Rio de Janeiro
- Oliveira, ATR (2010) *Tendências recentes da mobilidade espacial da população no Estado do Rio de Janeiro*. *Revista Brasileira de Estudos Populacionais*. Rio de Janeiro, RJ, 27(1):89–113
- Silva ET (2013) *Estrutura urbana e mobilidade espacial nas metrópoles*. Letra Capital, Rio de Janeiro

Chapter 6

Family Transformations

Rosa Maria Ribeiro da Silva

Abstract The purpose of this chapter is to analyze the relationship between the structure of household units, their labor organization and income, and the inequality in income in different areas of the social space of the Metropolitan Region of Rio de Janeiro, from 2000 to 2010. In this context, it seeks to understand how the economic changes that occurred in Brazil over that decade, associated with demographic changes that have been taking place since the 1970s, affected the forms of organization of household units, the composition of living arrangements in different areas of the metropolis, the entry of its members in the labor market and their income. To what extent have these changes altered the patterns of inequality among household units in different areas of that metropolis? The work is based on information from the 2000 and 2010 Demographic Censuses.

Keywords Household units · Labor and income · Inequality of income · Metropolitan region of Rio De Janeiro

6.1 Introduction

In the last decade, the country underwent a series of economic and social transformations with a strong impact on the population's standard of living, especially among the lower classes. At the same time, it entered a more advanced stage of demographic transition, marked by continued decline in fertility, reduced mortality and aging population, increasing the weight of this segment in the working age as a whole. In terms of values related to family, marriage, male and female roles, and aging conditions, intense changes are still occurring.

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How have these changes affected the forms of organization of household units¹ in the Metropolitan Region of Rio de Janeiro, the entry of its members in the labor market and their levels of income? To what extent they have altered the patterns of inequality among the units and how this has occurred in the different areas of the metropolis are some of the questions that guide this discussion. The literature has shown that in addition to its role in socialization and transmission of cultural capital, the family is a unit of transmission and reproduction of economic capital (Bourdieu 2008; Smith and Wallerstein 1992). Using accumulated capital, its components gather, mainly by executing economic activities, the income needed to ensure its maintenance and social reproduction. To that extent, family and household unit are basic reference points to analyze living conditions and social inequality.

The organization of the household unit for labor takes place in concrete economic and social conditions that define not only the opportunities, but also the ways in which people enter the labor market, the main source of income for most of them. Thus, it is essential to situate this analysis in the economic and social context of the period in which it is inserted.

In the 2000s, the period covered by this analysis, the Brazilian economy experienced two distinct periods. Until 2003, the country was still in the stage of production restructuring and low economic growth rates that marked the 1990s and early 2000s. It was a period of reduction in formal employment, loss of jobs, especially in the industrial sector, rising unemployment, and increase in self-employment. These changes led to the deregulation of the labor market: for most workers, the protection of labor laws was lost and job instability increased (Dieese 2012; Pochmann 2012). This resulted in a reduction in labor income and *per capita* household income. From 2004 onwards, a new cycle of economic recovery begins, providing increased formal employment, reduced unemployment, and domestic market growth. At the same time, social policies for minimum wage appreciation and income transfer were introduced.

In each one of these steps, the labor market offers different opportunities for insertion according to people's gender, age, and position within the household group, and they respond taking into account both their needs as a group and the availability of each household member at the time. Such availability varies according to household structure, the life cycle stage of the family, and the role each member plays within the household group.

The assumption underlying this view is the existence of a level of coordination between economic production and social reproduction, permeated by the gender division of labor and gender relations within the family, as shown by

¹In this study, household unit refers to all persons residing in the same household and family refers to people united by ties of kinship and consanguinity residing in the same household, following the methodology of the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*—IBGE) in the 2010 Census. Neither household units nor families include people in the condition of boarders, domestic workers, and relatives of domestic workers, who, despite sharing the same household, do not live on the same household budget.

Barrère-Maurisson (1992). It is from this perspective that this study will interpret data on families and income in the Metropolitan Region of Rio de Janeiro in the 2000s and their impact on the social spaces in which they were inserted.

6.2 Household Units and Territory

In the early 2000s, the 3262 million existing household units in the metropolis of Rio de Janeiro were differently distributed within the five type areas in which it was divided, the main criterion being the socio-occupational composition of each of those territories² (Table 6.1).

The distribution of household units in the territory is not random, as shown in the literature on the subject (Rhein 1988, 1990; Bonvalet 1989). In addition to socioeconomic factors such as the socio-occupational category of heads of household and *per capita* household income, demographic factors, such as age, skin color, and type of household organization are associated with their location within the metropolis. Thus, the pattern of household unit composition was quite different between the areas of the Metropolitan Region of Rio de Janeiro, with consequences in size and composition, as well as in the organization of household workforce.

In addition to the position in the production structure and its impact on household income, Derosières and Thevenot (1992) consider that, being homogeneous categories of occupation, the socio-occupational categories also offer information on the social position of those who are part of them, and thus presuppose differences in lifestyles, defined by specific values, attitudes, and behaviors. Common lifestyles bring together people and families in certain areas of cities, influencing how they organize themselves to live.

As early as the beginning of the 2000s, the Upper type area stood out from the others due to its greater diversification in the composition of household arrangements. Only 38.9% of households, way below the metropolitan average of 50% (Table 6.2), consisted of couples with children, the most frequent and traditional form of household organization in Brazilian society. In this area, the majority of employed heads of household, totalizing 52.2%, were in the categories of high-level professionals and middle-level occupations, whose household arrangement profiles were more diverse, as seen in a study on families in Brazilian metropolitan regions (Ribeiro 2012). In 2010, in that same area, the percentage of heads of households in those categories reached almost two-thirds, 64.6%, an increase accompanied by even further diversification in the composition of their household arrangements.

In this type of area, the greater economic and cultural capital of its inhabitants, due to their socio-occupational composition, and thus their higher position in the social structure, favored the adoption of less traditional family values and behaviors. To that extent, not only would the effects of declined fertility have been

²See the chapter on “Spatial Transformations” in this book.

Table 6.1 Population and household units in the metropolitan region of Rio de Janeiro per type of area—2000–2010

Socio-spatial typology according to the districts	2000						2010						Growth	
	Population		Household units		Population		Household units		Population		Household units		Pop. (%)	UDs (%)
	Absol.	%	Absol.	%	Absol.	%	Absol.	%	Absol.	%				
Upper	1,550,816	14.3	541,059	16.6	1,723,147	14.5	656,594	16.7	1.5	1.0				
Upper middle	1,538,795	14.2	476,640	14.6	1,636,106	13.8	562,757	14.3	-2.8	-1.8				
Middle popular	4,639,877	42.8	1,361,915	41.7	4,801,930	40.4	1,557,659	39.7	-5.4	-4.9				
Working popular	2,426,889	22.4	685,659	21.0	2,822,824	23.8	877,869	22.4	6.3	6.5				
Popular	694,081	6.4	197,133	6.0	888,167	7.5	266,773	6.8	17.0	12.6				
Total	10,850,458	100.0	3,262,406	100.0	11,872,174	100.0	3,921,652	100.0						

Source IBGE/Microdata of 2000 and 2010 Demographic Censuses—Elaborated by R. Ribeiro. Observatório das Metrópoles/IPPUR/UFRJ

Table 6.2 Main sociodemographic characteristics of household units in the metropolitan region of Rio de Janeiro—2000–2010

Characteristics of household units	Socio-spatial typology according to the districts					Total
	Upper	Upper middle	Middle popular	Popular worker	Popular	
<i>2000</i>						
Couple with children (%)	38.9	47.8	51.7	55.5	55.4	50.0
White heads of household (%)	79.8	62.0	48.8	41.1	45.5	54.1
High-level heads of household (%)	40.0	16.3	5.6	1.7	3.3	11.9
Age of head of household	51.3	48.5	47.2	44.1	45.0	47.3
Children aged 15 or less (%)	47.1	51.2	54.6	62.7	63.2	55.8
Average number of people	2.8	3.2	3.4	3.5	3.5	3.3
Average number of children	1.0	1.2	1.3	1.5	1.5	1.3
<i>2010</i>						
Couple with children (%)	33.0	39.5	43.4	47.1	46.9	42.2
White heads of household (%)	74.7	54.8	41.4	34.8	39.4	47.3
High-level heads of household (%)	47.9	21.4	8.2	3.3	5.7	15.5
Age of head of household	51.8	49.2	48.3	45.4	46.5	48.3
Children aged 15 or less (%)	44.6	48.2	51.5	58.5	57.7	52.5
Average number of people	2.6	2.9	3.1	3.2	3.2	3.0
Average number of children	0.8	0.9	1.1	1.2	1.2	1.0
<i>2000/2010</i>						
Couple with children (%)	-15.3	-17.3	-16.0	-15.1	-15.4	-15.7
White heads of household (%)	-6.4	-11.6	-15.2	-15.4	-13.4	-12.5
High-level heads of household (%)	19.6	31.4	47.3	89.5	72.1	30.2
Age of head of household	0.9	1.3	2.4	3.1	3.3	2.1
Children aged 15 or less (%)	-5.1	-5.9	-5.8	-6.7	-8.7	-5.9
Average number of people	-5.9	-8.9	-9.0	-8.7	-9.2	-8.4
Average number of children	-20.2	-20.8	-19.7	-19.3	-20.4	-19.7

Source IBGE/Microdata of 2000 and 2010 Demographic Censuses—Special tabulation by R. Ribeiro. Observatório das Metrópoles/IPPUR/UFRJ

Table 6.3 Composition of areas by type of household unit—metropolitan region of Rio de Janeiro—2000–2010

Socio-spatial typology according to the districts	Types of household units					Total (%)	
	Couple without children (%)	Couple with children (%)	Mother with children (%)	Single person (%)	Other types (%)		
<i>2000</i>							
Upper	16.9	38.9	15.6	20.0	8.5	541,059	100
Upper middle	14.8	47.8	17.4	12.6	7.4	476,640	100
Middle popular	13.3	51.7	18.1	10.5	6.4	1,361,915	100
Popular worker	12.7	55.5	16.4	10.1	5.3	685,659	100
Popular worker	14.0	55.4	14.6	10.9	5.2	197,133	100
Total	14.0	50.0	17.0	12.3	6.6	3,262,406	100
<i>2010</i>							
Upper	19.2	33.0	14.2	23.1	10.6	656,595	100
Upper middle	17.5	39.5	16.4	16.6	10.0	562,757	100
Middle popular	15.7	43.4	17.5	14.5	8.8	1,557,658	100
Popular worker	15.4	47.1	16.2	13.4	7.9	877,869	100
Popular worker	17.2	46.9	14.8	13.6	7.4	254,975	100
Total	16.6	42.2	16.3	16.0	9.0	3,909,854	100

Source IBGE/Microdata of 2000 and 2010 Demographic Censuses—Special tabulation by R. Ribeiro. Observatório das Metrôpoles/IPPUR/UFRJ

experienced there before reaching other areas of the metropolis, but also, in addition, the trend of greater appreciation of individuality and freedom led many people to the option of living alone, which was facilitated by their higher income. Therefore, in the early 2000s, this type of area already presented 20% of single-person units (Table 6.3).

Given the positive relationship between income and age, the population of this area, the most appreciated in the Metropolitan Region, tended to be older. The average age of heads of households was 51.3 years, while the average age of people in this position in the metropolis was 47.3 years.

As a result of this set of features, household units in the **upper** type were smaller than in the others, 2.8 people on average, and had a lower average number of children, only 1 (one), with less than half, 47.1%, in the 0–15 years range.

In areas ranked lower in the socio-spatial hierarchy and with a greater presence of employed people in manual work categories,³ the importance of families composed of a couple and children increased, and diversification in the composition of household arrangements decreased. In the **popular worker** and **popular** type areas, in which little more than a third of employed heads of households were workers in

³See the chapter on “Spatial transformations” in this book.

the secondary sector, the category with the most concentrated profile of household organization in the couple with children format, 72.9% of cases, just over half of household units had that format, 55%. In these areas, which also had the youngest population, heads of household averaged 47.1 years, in the **middle popular** type, and 44.1 in the **working popular** type; the household units were larger, 3.4 or 3.5 members, and the average number of children was higher, 1.3 in the **middle popular**, and 1.5 in the **working popular** and the **popular**. Most of them, between 60 and 70%, were composed of families in the initial and intermediate periods of their life cycle, stages in which they are expanding, having more children or keeping them all at home given their young age. Thus, in these areas, most of the children living in the household, between 54 and 64%, were up to 15 years of age.

Over the decade, the aforementioned demographic transformations and the deeper changes in family values altered the forms of organization of household arrangements. In all areas there was greater diversity in the composition of these arrangements, with reduced importance of families consisting of a couple and children, no longer the majority in all of them, despite preserving a more significant presence than the metropolitan average in the **popular** type areas, between 43.4% in the **middle popular** and 47.1% in the **working popular**. In the **upper** type area, the pattern found at the beginning of the decade was even more marked by the reduced presence of couples with children, only a third of household units, and the increase of childless couples, people living alone, and other types of household units.⁴ The single-person units reached 23.1% of the total, coming close to the pattern of European capitals, where the average for this kind of household unit was 27.7% in 2010, according to data from the Organisation for Economic Co-operation and Development (OECD 2010).

As a result of the aforementioned changes, the average size of household units decreased in all areas, whether due to the reduction in the average number of children or the diversification of arrangements. Also recorded in all of them was a drop in the proportion of children up to 15 years of age, especially in the **popular** and **working popular** types, where the reduction in fertility rates supposedly occurred later. Even so, in these areas, between 57 and 59% of children were in this age group.

Besides the type of household arrangement, age of head, size of household units and number and age of children, an additional variable differentiated the metropolitan region areas: skin color. In the **upper** and **upper middle** type areas, both in 2000 and in 2010, most of the heads of households were white. In the **popular** type areas, however, the opposite was true. Both at the beginning and the end of the decade, the main concentrating areas according to skin color were, on the one hand, the **working popular** type, with a predominance of black heads of households, 58.9 and 65.1%, respectively, and on the other the **upper** type, where, in contrast, those who identified themselves as white largely predominated, 79.8

⁴These are arrangements composed of relatives who live together but have no marriage or filiation ties between them, or people living in the same household with no family ties.

and 74.7%. These differences indicate spatial segregation by skin color and/or race, as previously pointed out by Telles (1995).

Given the differences in their socio-occupational composition, income level, and skin color, the areas were also strongly distinguished by the cultural capital of their household units. Using as an indicator of such capital the percentage of heads of households with complete higher education, a huge difference was observable between areas. Cultural capital was heavily concentrated in the **upper** type region, where at the beginning and end of the decade 40 and 47.9% of heads of households had that level of education, respectively. In the **upper middle** type, those rates fell to less than half, while in the **popular** areas they were much lower, below 6% in 2000 and below 9% in 2010. In all areas there were significant advances in the level of cultural capital of the heads of households, especially in the **working popular** and **popular** types, but these advances were not enough to substantially alter the gaps between them.

6.3 Household Units, Work, and Income

Rio de Janeiro was one of the metropolises that most benefited from the growth of employment in the 2000s. During that period, this metropolitan region ranked second in increase of the average number of employed persons per household unit, after Belo Horizonte (Ribeiro 2012). Given the differences in the composition of household arrangements, cultural capital, and socio-occupational configuration between areas, the entry of household unit members in the labor market showed some variations. The **upper** and **upper middle** type areas had the highest percentage of employed unit members, 55 and 53.5%, respectively, in 2000, while in the **popular** types that percentage was close to 50%, indicating a greater facility of access to the job market by persons of the two former regions, thanks to their characteristics (Table 6.4).

Fostered by economic growth, employment grew 10.7% on average in all areas of the metropolitan region, with little variation. In all of them, the increase in the employment level of the household workforce was mainly due to the entry of spouses in the market, which increased from 39.2% in 2000 to 56% in 2010, four times higher than the average rate. Thus, their employment level surpassed that of children aged 16 and over. In 2000, the opposite was true. The latter had a small increase in the level of employment, rising from 48.8 to 51.6%, while the heads of households maintained their rate of entry in the labor market at the same level, 63%. Both at the beginning and end of the decade, these three members of household units accounted for approximately 92% of their workforce (Ribeiro 2015, p. 267–270).

In addition to the higher percentage of employed people, the **upper** and **upper middle** type areas also had a higher percentage of retirees and pensioners (15.4 and 10.4% in 2000). In the three **popular** areas, these percentages were much lower, below 7%. Such differences would be related not only to the age configuration of

Table 6.4 Socioeconomic characteristics of household units—metropolitan region of Rio de Janeiro—2000–2010

Socioeconomic characteristics	Socio-spatial typology according to the districts					Total
	Upper	Upper middle	Middle popular	Popular worker	Popular	
<i>2000</i>						
Level of occupation in the labor market (%)	55.0	53.5	50.5	49.6	49.5	51.4
Retired people (%)	15.4	10.4	6.9	4.7	6.4	8.1
People with income from work or retirement pay/pension (%)	70.4	63.8	57.4	54.4	55.9	59.5
Administrators and high-level professionals (%)	32.9	13.9	5.8	2.4	3.6	10.7
Administrator and high-level professional heads of household (%)	37.4	15.6	5.8	2.3	3.8	11.6
Average income from all work ^a	379,927	185,489	117,878	87,465	93,843	165,092
Average income from other sources ^a	10,7306	40,726	22,522	12,553	16,512	35,972
Difference between average incomes from work	2.3	1.1	0.7	0.5	0.6	1.0
Breakdown of total income from work (%)	39.0	17.2	29.8	10.7	3.3	100.0
<i>2010</i>						
Level of occupation in the labor market (%)	60.5	59.0	56.1	55.2	54.2	56.9
Retired people (%)	19.7	15.7	13.5	10.2	11.4	13.7
People with income from work or retirement pay/pension (%)	80.2	74.7	69.6	65.4	65.6	70.6
Administrators and high-level professionals (%)	39.2	17.9	8.6	3.9	6.1	13.8
Administrator and high-level professional heads of household (%)	42.3	18.8	8.3	3.5	5.7	14.4

(continued)

Table 6.4 (continued)

Socioeconomic characteristics	Socio-spatial typology according to the districts					Total
	Upper	Upper middle	Middle popular	Popular worker	Popular	
Average income from all work ^a	397,034	182,771	116,919	91,407	99,007	167,131
Average income from other sources ^a	134,448	45,309	25,526	14,741	20,284	42,756
Difference between average incomes from work	2.4	1.1	0.7	0.5	0.6	1.0
Breakdown of total income from work (%)	40.1	16.2	28.0	12.1	3.7	100.0
<i>2000/2010</i>						
Level of occupation in the labor market (%)	10.0	10.4	11.1	11.3	9.5	10.7
Retired people (%)	27.9	51.8	96.9	114.2	78.0	70.0
People with income from work or retirement pay/pension (%)	13.9	17.1	21.4	20.3	17.3	18.7
Administrators and high-level professionals (%)	19.4	28.8	48.5	62.7	68.3	29.8
Administrator and high-level professional heads of household (%)	13.0	20.1	43.0	53.6	50.4	23.9
Average income from all work (a) (%)	4.5	-1.5	-0.8	4.5	5.5	1.2
Average income from other sources ^a (%)	25.3	11.3	13.3	17.4	22.8	18.9
Difference between average incomes from work (%)	2.8	-6.2	-6.2	12.8	13.9	

Source IBGE/Microdata of 2000 and 2010 Demographic Censuses—Special tabulation by R. Ribeiro. Observatório das Metrôpoles/IPPUR/UFRJ

^aIncome values adjusted for 2010, according to INPC

these areas, but also to the level of labor regulation and social security of those employed in each one of them (Ribeiro 2012).

Over the decade there was a marked growth of retirees/pensioners in all areas, especially in the **popular** type areas, which reached 10.2 and 13.5%. Due to the increase in the percentage of both employed and retired/pensioned household unit members, the percentage of people with income from these sources grew in all

areas, especially in the **middle popular** and **working popular** types. Despite these increases, major differences persisted between them. At the end of the decade, 80.2% of people in household units of the **upper** area and 74.7% in the **upper middle** area, percentages above the metropolitan average, had income from at least one of those sources, while in the **working popular** and **popular** type areas this percentage was much lower, around 65%.

In the 2000s, the average labor income⁵ throughout the Metropolitan Region hardly changed in real terms,⁶ increasing from R\$ 1650.92 in 2000 to R\$ 1671.31 in 2010. Such a small variation is due to the fact that income had been falling in value since the mid-1990s, and only began to recover as of 2005 due to the growth of regulated labor and the increase of the minimum wage value. It appears that in the Metropolitan Region of Rio de Janeiro, the minimum wage increase, 69.3% in real terms, was more relevant to the growth of that income, while the increase in regulated work⁷ was small, only 7% (Ribeiro 2012).

Average labor income in each one of the areas reflected not only their socio-occupational composition but also the cultural capital and skin color of the household workforce. As shown by Ribeiro (2012), with data from the 2009 National Household Sample Survey (PNAD-IBGE) for the Metropolitan Region, each additional school year represented an 11% increase in the income from the main employment of people aged 25–59, while the fact of being dark-skinned reduced this percentage to 23.2%, and of being black to 19.8%. Thus, in the **upper** type area, where in 2010 39.2% of household unit members had higher category occupations (administrators and high-level professionals), the overwhelming majority, 74.7% of household units, had white heads of household, and almost half, 47.9%, had a higher education level, with average labor income reaching R\$ 3970.30. Moving from this area down to lower levels in the socio-spatial hierarchy, where both the presence of those professionals and the education level of the workforce were lower, and composition according to skin color revealed a growing percentage of mulattos and blacks, average labor income decreased, reaching R\$ 914.07 in the **working popular** type. This difference is reinforced by the fact that the average labor incomes of the high-and middle-level categories, in the **upper** type area, were at least 50% higher than those of people in the same socio-occupational categories in other areas. This difference may result from the composition of those categories in each one of them, but can also be due to the so-called “territory effect,” as shown by Ribeiro (2012).

The significant differences between the five areas that make up the Metropolitan Region of Rio de Janeiro, in both workforce composition and average income,

⁵Average income of all labor of household unit members, excluding pensioners and domestic servants and their relatives.

⁶2000 income values were adjusted to 2010 based on the National Consumer Price Index (INPC).

⁷Regulated labor relates to workers in formal employment, military and civil servants, and employers. Unregulated labor relates to workers with no formal contract, self-employed, unpaid workers and those working in self-consumption or building for their own benefit.

would suggest, as verified by Vetter (1981) and confirmed by Chetry (2015), a residential segregation of the economically active population (EAP) in this metropolitan region.

The evolution of average labor income over the decade was not the same in all areas, with a slightly higher increase in the **popular** type, 5.5%, while in the **working popular** and **upper** types it was 4.5%. In the other two types, **upper middle** and **middle popular**, there was a small reduction of such income, 1.5 and -0.8%, respectively. Such variations were due both to differences in the socio-occupational composition of these areas and income fluctuations in work categories in each one of them.⁸

Given the increases in both employment levels and average income of employed persons, the share of the **popular** and **popular working** areas in overall labor income increased more than in the others, 13.9 and 12.8%, respectively. However, in view of the low level of such income, participation remained low, 3.7 and 12.1%, respectively, when compared to the weight of the population in those areas. At the same time, an increase of 4.5% in labor income in the **upper** area, equivalent to that observed in the **working popular** area, resulted in a small increase in labor income concentration in that area, from 39 to 40.1%. It should be noted that its population share in the Metropolitan Region as a whole in 2010 was only 14.5%. The reason for this higher concentration of labor income in the **upper** area was the increased weight of high-level professionals in its composition, the only ones who increased their share in the total number of employed people, from 24.4% in 2000 to 33.1% in 2010, as well as in overall labor income, from 35.3 to 48.1%. In the **upper** area, this category had a real labor income increase of 5.2% (Ribeiro 2015, p. 274), contrary to the average of the Metropolitan Region of Rio de Janeiro.⁹

In 2000, labor income in the Metropolitan Region accounted on average for 70.5% of household income, and retirement pay/pensions and other kinds of income for 29.5%. In 2010, there was a slight increase in the weight of the latter types of income, which rose to 30.9% on average. Both at the beginning and end of the decade, retirement pay/pension and other types of income had a greater weight in the **superior** type area, 33.3% in 2000 and 37.5% in 2010. This area had a higher percentage of retirees and higher average labor income, resulting in equally higher retirement pay/pension values. That gave people with income from those sources greater capacity for saving, and consequently for investment, financial or other. In areas lower in the socio-spatial hierarchy, where labor income was lower and retirees/pensioners were scarcer, income from sources other than labor had less weight. Both at the beginning and end of the decade, other kinds of income accounted for little over 22% in the **working popular** type area.

⁸See Chaps. 4 e 5 of the book *Rio de Janeiro: transformações na ordem urbana (Rio de Janeiro: transformações in urban organization)*, edited by Luiz Cesar de Queiroz Ribeiro (2015). Available for free download at: <http://transformacoes.observatoriodasmetrosoles.net/>.

⁹See chapter on “Social Transformations” in this book.

The increase of these other types of income, 19.8% during the decade, was much greater than that of labor income. This increase occurred in all areas at different rates, being greater in the **upper** type, 27%, and **popular** type, 24.8%. Thus, its average value came closer to that of labor income, and its weight in household income as a whole increased in all areas, especially those two.

6.4 Household Units and *Per Capita* Household Income

During the 2000s, average labor income increased slightly, and although the growth of other types of income was quite significant, contributing to increase household income, their weight in the composition of this income was not enough to justify the sharp growth of 20.7% in *per capita* household income (Table 6.5). Demographic changes and transformations in household units were keys to this increase. Similar results were found by Gori Maia and Sakamoto (2014) for the whole country. Decline in fertility, aging population, and greater diversification of household arrangements favored a reduction in the size of household units, particularly the presence of children and adolescents.

Such changes, associated with the growth of the percentage of people receiving income, resulted in the decrease of the economic dependence rate,¹⁰ which fell from 1.1 in 2000 to 0.7 in 2010 for household units in the Metropolitan Region of Rio de Janeiro as a whole.

This rate was lower in the **upper** area, 0.6, in 2000, increasing progressively in areas lower in the socio-spatial hierarchy. In the latter, not only was the size of household units larger, due to the more pronounced presence of couples with children, but the percentage of children up to 15 years of age was higher, while the percentage of employed and retired people was lower. Thus, the rate of economic dependence in the **working popular** and **popular** areas reached 1.4 persons, more than double the **upper** area.

In all areas, with small differences, there was a reduction of these rates over the decade, which, as of 2010, were below 1 (one).

The study has shown to what extent both labor income and other types of income varied considerably between areas. Thus, due to its higher average income from both labor and other sources, and lower economic dependence rate, in 2000 the **upper** type area had the highest *per capita* household income, R\$ 3097.22, i.e., more than double the **upper middle** area. Moving from that area down the socio-spatial hierarchy to areas with lower income from labor and other sources and higher dependency rates, the *per capita* household income decreased, reaching R\$ 450.37 in the **working popular** type area, the poorest.

¹⁰Economic dependence rate is considered here as the ratio between the total number of people who are neither employed nor retirees or pensioners and the total number of employed persons and retirees and pensioners.

Table 6.5 *Per capita* household income indicators—metropolitan region of Rio de Janeiro—2000–2010

Indicadores da renda domiciliar <i>per capita</i> ^a	Socio-spatial typology according to districts					Total
	Upper	Upper middle	Middle popular	Popular worker	Popular	
<i>2000</i>						
Economic dependence rate	0.6	0.9	1.2	1.4	1.4	1.1
Average <i>per capita</i> household income ^b	3,09,722	1,25,941	70,406	45,037	52,146	1,11,774
Difference of <i>per capita</i> household income	2.8	1.1	0.6	0.4	0.5	1.0
Breakdown of <i>per capita</i> household income (%)	46.0	16.5	26.3	8.5	2.8	100.0
<i>2010</i>						
Economic dependence rate	0.4	0.6	0.7	0.9	0.9	0.7
Average <i>per capita</i> household income ^b	3,82,197	1,45,466	82,349	56,614	65,537	1,34,913
Difference of <i>per capita</i> household income	2.8	1.1	0.6	0.4	0.5	1.0
Breakdown of <i>per capita</i> household income (%)	47.6	15.5	24.3	9.4	3.2	100.0
<i>2000/2010</i>						
Economic dependence rate (%)	-36.1	-35.4	-35.7	-34.4	-33.4	-34.5
Average <i>per capita</i> household income ^b (%)	23.4	15.5	17.0	25.7	25.7	20.7
Breakdown of <i>per capita</i> household income (%)	3.5	-5.7	-7.5	11.3	12.4	

Source IBGE/Microdata of 2000 and 2010 Demographic Censuses—Special tabulation by R. Ribeiro. Observatório das Metrópoles/IPPUR/UFRJ

^aIncludes all household units

^bIncome values were adjusted for 2010 based on INPC

While over the 2000s the *per capita* household income increased in all areas of the Metropolitan Region, the intensity of this increase was quite diverse. Such variation supposedly reflects both the intensity of demographic changes and the impact of economic changes in each of them (Ribeiro 2015, p. 279–281).

As seen above, if labor income was concentrated in the **upper** type area, such concentration was even more intense with regard to the share of household income appropriated by household units in that area. That is due to the large difference in average income from both labor and other sources between this area and the rest, resulting from the previously analyzed factors. Between 2000 and 2010, although the *per capita* household income had a sharper increase in the **popular** and **working popular** areas, and they increased their share of total income by 12.4 and 11.3%, respectively, household income became even more concentrated in the

upper type area, 47.6% at the end of the decade against 46% at the beginning. Such concentration is even more significant, as already mentioned in relation to labor income, when compared to the weight of the population in this area, both at the beginning and end of the decade. The intensification of household income concentration in the **upper** type area between 2000 and 2010 is due to the significant increase in household units with heads in the category of high-level professionals, whose share in total households in that area increased from 26.1 to 34.9%, and in total household income from 36.4 to 49.7%, which represented a “gentrification” of the area. No increase was observed in the percentage of household units with heads in any other socio-occupational category in that area.

6.4.1 *Final Considerations*

The growth in employment and formal labor relations, resulting from the recovery of the Brazilian economy as of the mid-2000s, associated with a minimum wage appreciation policy, provided a small increase in labor income in the Metropolitan Region of Rio de Janeiro. For various reasons related to its social-occupational composition, the evolution of such income was not the same in all areas. In the **upper**, **working popular** and **popular** type areas there was an increase in average labor income, while in the other two, **upper middle** and **middle popular**, on the contrary, such income had a small reduction.

The portion of labor income appropriated by the employed members of household units was also very different between areas, reflecting not only their levels of employment, but mainly their socio-occupational composition. The **upper** area concentrated 39% of labor income generated in the Metropolitan Region in 2000, a share that increased to 40.1% in 2010. This area comprised 17% of employed persons. At the opposite end was the **popular** type area, where the percentage of total labor income appropriated in each one of those years was little over 3%.

While the increase of labor income was small, a significant growth of other types of income was observed in all areas, due to the increase of both retirees/pensioners and their income, which contributed to the increase in total income.

At the same time, over the decade the demographic changes that had been taking place in the country since the 1970s were intensified: reduced fertility, aging population, and diversification of household arrangements. These changes were responsible for the reduction in household unit size and number of children, especially those of a young age, and altered the composition pattern of domestic arrangements in the different areas of the metropolis.

The association of these changes resulted in a reduced rate of economic dependence in all areas of the metropolitan region, contributing to the significant increase in *per capita* household income.

That income increase occurred in all types of areas. In the **popular**, **working popular** and **upper** areas, where there were increases in income both from labor

and other sources, one could say they were enhanced by demographic factors, which enabled greater increases in *per capita* household income. On the other hand, in the areas where there was a decrease in average labor income—**upper middle** and **middle popular**—the increase in other types of income, alongside demographic factors, offset that disadvantage and enabled a growth, albeit less pronounced, of *per capita* household income.

If labor income was concentrated in the **upper** type area, household income was even more concentrated, revealing a huge difference in living conditions between areas, which the demographic and economic changes over the decade were unable to significantly change.

Two reasons potentially contributed to this greater concentration. On the one hand, the increase in other types of income in this area was quite significant, accounting for more than one third of its total household income by the end of the decade. However, what appears as most important is the “elitism” in the composition of this area, where household units with heads in the category of high-level professionals were the only ones to increase their weight and show a significant increase in their percentage of total household income. That would be a clear expression of the ongoing process of polarization in the territory social organization in that metropolis, as already pointed out in other chapters of this book.

References

- Barrère-Maurisson M-A (1992) *La division familiale du travail—la vie en double*. Presses Universitaires, Paris
- Bonvalet C (1989) Évolution des structures familiales et conséquences sur l’habitat en France. In: Haumont N, Segaud M (eds) *Familles, modes de vie et habitat*, L’Harmattan, Paris, pp 31–53
- Bourdieu P (2008) *Razões Práticas: sobre a teoria da ação*. Prós, Campinas
- Chetry M (2015) A segregação residencial nas metrópoles brasileiras: Rio de Janeiro em perspectiva. In: Ribeiro LCQ (ed) *Rio de Janeiro: transformações na ordem urbana*. Letra Capital, Rio de Janeiro, pp 193–196
- Derosières A, Thevenot L (1992) *Les Catégories Socioprofessionnelles*. Éditions La Découverte, Paris
- Dieese (2012) *A situação do trabalho no Brasil na primeira década dos anos 2000*. Departamento Intersindical de Estatística e Estudos Socioeconômicos, São Paulo
- Gori Maia A, Sakamoto C (2014) Changing family structure and impacts on income distribution: the swift demographic transition in Brazil. Paper presented at the Population Association of America, Annual Meeting, Boston. Available at: <http://paa2014.princeton.edu/uploads/142376>. Accessed May 2014
- IBGE—Instituto Brasileiro de Geografia e Estatística (2000) *Microdados de amostra. Censo demográfico de 2000*. IBGE, Rio de Janeiro
- IBGE—Instituto Brasileiro de Geografia e Estatística (2010) *Microdados de amostra. Censo demográfico de 2010*. IBGE, Rio de Janeiro
- OECD—Organisation for Economic Co-Operation and Development (2010) *Family size and household composition*. OECD Family Database
- Pochmann M (2012) *Nova classe média? O trabalho na base da pirâmide social brasileira*. Boitempo, Rio de Janeiro

- Rhein C (1988) La ségrégation démographique. In: Merlin P, Bonvalet C (eds) Transformation de la famille et de l'habitat—Cahiers, n 120. Travaux et Documents de l' INED, PUF, Paris, p 127–149
- Rhein C (1990) Sens et rôle des localisations dans les stratégies résidentielles. In: Bonvalet C, Fribourg AM (eds) Stratégies Résidentielles, Congrès et Colloques, Cahiers de l'INED. INED, Paris, p 313–331
- Ribeiro M (2012) Educação, Estrutura Social e Segmentação Residencial do Território Metropolitano - Análise das Desigualdades de Renda do Trabalho em Regiões Metropolitanas do Brasil. Doctoral thesis. IPPUR/UFRJ, Rio de Janeiro
- Ribeiro R Como Andam as famílias nas Regiões Metropolitanas Brasileiras—2002/2009. Relatório de Pesquisa. Observatório das Metrôpoles, IPPUR/UFRJ, Rio de Janeiro
- Ribeiro R (2015) Transformações domiciliares: arranjos, trabalho e renda. In: Ribeiro LCQ (ed) Rio de Janeiro: Transformações na ordem urbana. Letra Capital, Rio de Janeiro
- Smith J, Wallerstein IM (eds) (1992) Creating, and transforming households. The constraints of the world-economy. Cambridge University Press and Paris, Cambridge (Editions de la Maison des Sciences de l'Homme)
- Telles E (1995) Race, class and space in Brazilian cities. *Int J Urban Reg Res* 19(3):395–406
- Vetter DM (1981) A segregação residencial da população economicamente ativa na Região Metropolitana do Rio de Janeiro, segundo grupos de rendimento mensal. *Revista Brasileira de Geografia*, 4(43):587–603

Part II
Segregation and Inequalities

Chapter 7

Segregation and Population Displacement

Ricardo Antunes Dantas de Oliveira and Érica Tavares

Abstract The population dynamics in the metropolitan space is related to the social organization of the territory, in which the various elements of the urban structure—such as access to housing, the labor market, services, and mobility system, among others—influence the conditions of reproduction, movement and location of different social groups in space. The objectives of this work are to analyze some recent aspects of population movements in the Metropolitan Region of Rio de Janeiro and assess how this population dynamics helps to explain the changes in the social organization of its territory. Moreover, given the population aging that currently affects all areas of the metropolis, spatial mobility is considered an important element to understand the present metropolitan dynamics.

Keywords Population dynamics · Metropolis of Rio de Janeiro · Migration · Mobility

7.1 Introduction

The social organization of the metropolitan territory also encompasses the comprehension of its population dynamics, since aspects that are related to housing, labor market, displacement, access to health and education, among others, are closely related to the dynamics of the population—to the number of people, population density, mobility pattern, reproductive behavior, formation of families, age structure, among other aspects.

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Given this relationship, the objectives of this article are comprehending the latest aspects of the population dynamics in the municipalities of the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ) and its internal spaces and evaluate how such a dynamics contributes to explain the transformations that took place in the social organization of the metropolitan territory in recent years. The question that is set regards how the population movements in the territory contribute to identify and even understand the socio-spatial processes ongoing in the city and, consequently, the transformations in the urban order of the metropolis¹ of Rio de Janeiro.

Before analyzing the latest period, it is important to make some considerations about how the demographic dynamics in the urban-metropolitan evolution of the Metropolitan Region of Rio de Janeiro is comprehended, besides its connections with the core-periphery model that is typical of the very constitution of this space. The demographic dimension of the urban expansion of the RMRJ has been linked to migration and to vegetative growth (Martine 1972). Long distance migration has been massive in the Brazilian context during the second half of the twentieth century and its epicenter was the major cities of Southeastern Brazil (Martine 1987; Faria 1991). Both capital city (i.e., the core) and the surrounding municipalities have received substantial population contingents, with clear differences regarding social and economic profiles of migrants between different areas (Abreu 1999). Vegetative growth, in turn, has two dimensions in the context of population growth in the RMRJ: one refers to the fruitfulness of the “native” populace and, secondly, the fertility of migrants which, because of their age profile and reproductive behavior, impacts in important ways the population growth (Martine 1972).

By observing some elements of the recent urban and population dynamics in the state metropolis, it is possible to identify some trends in the more current population behavior, as well as some spatial differences, especially if the core and other metropolitan municipalities are considered (Oliveira and Tavares 2015). It is known that in all municipalities of the RMRJ, during the first decade of the current century, there was an increase in life expectancy, a decrease in fertility ratios and infant mortality, and a reduction in the dependency ratio, all of which confirms the perspective of a certain leveling of the evolutionary trends of the demographic dynamics. Despite this finding, the RMRJ has a variety of municipalities of various sizes, each with a different population growth. The connection between the cities—it is safe to say—has more to do with shared experiences of displacement, access to

¹The term metropolis as used in this paper assumes the meaning of “metropolitan centers that are characterized by leading roles in land management, large, strong relationships between the municipalities, and large area of direct influence,” according to a report by the *Observatório das Metrópoles* (2012). In the case of the metropolis of Rio de Janeiro, such spatiality corresponded to the official Metropolitan Region of Rio de Janeiro at the reference date of the study. The municipality of Mangaratiba was added to the analysis, to compare to previous studies. For this reason, the term metropolis corresponds to the metropolitan area of this text.

goods, services and opportunities for the population, and less with an integrated management of the metropolitan territory, due to such political-administrative subdivisions.

In the case of population dynamics, sociodemographic differences reinforce the expansive nature of the metropolitan dynamics toward the municipalities of the periphery. Also, if fertility rates are no longer as significant as they were in the past, residential mobility becomes a key component to understand the current urban and population dynamics.

The spatial division of socio-historical character, marked by the core-periphery relationship, is related to the demographic dynamics of the Rio de Janeiro metropolitan region. The core of the RMRJ has always been considered the city of Rio de Janeiro, exercising a central role in the state and metropolitan area in particular. However, changing trends were observed in the distribution of housing, integration into the labor market, educational opportunities, and the very embodiment of social and economic inequalities within the RMRJ. That is, in the internal space of the municipalities, there may also be different social dynamics. Therefore, this work will address the social organization of the territory in the center-periphery scale, considering as center the city of Rio de Janeiro, called herein the core, and periphery as the other municipalities of the RMRJ. At the same time, this scale is relativized considering the internal areas of the municipalities, based on a socio-spatial typology.

The methodological model used here for the analysis of social structure in the metropolis has as principle the centrality of work in the structuring and functioning of society. This methodology derives from studies such as those by Prêteceille and Ribeiro (1999) and Ribeiro and Lago (2000). The social structure is perceived simultaneously as a space of social positions and a space of individuals who occupy these posts, with social attributes unequally distributed and connected to their stories. By statistical procedures that incorporated these principles, it was possible to build a “topography” of the social space as a map in which the proximities and distances between occupations reveal similar or different structural properties.

From some general principles of division in capitalist society, a socio-occupational hierarchy (a proxy of the social structure) was outlined, composed of 24 socio-occupational categories (denominated CATs) gathered in eight major groups: (1) Executives; (2) High-level professionals; (3) Small employers; (4) Middle-level professionals; (5) Specialized tertiary sector workers; (6) Secondary sector workers; (7) Nonspecialized tertiary sector workers; (8) Agricultural Workers. By applying statistical techniques to the distribution of the population by such categories according to the districts of the RMRJ, a typology of metropolitan areas was produced—reaching different groups of areas with similar profiles, which resulted from the distinctions between the occupational structures and the processes of the social organization of space in each metropolis.

In the Metropolitan Region of Rio de Janeiro, the socio-spatial types were identified as “upper,” “upper middle,” “middle popular,” “working popular,” and

“popular.”² It is noteworthy that this typology is mainly based on the occupation of people and their dwelling places, that is, the space was consistently classified according to the place of residence of the employed population—which certainly presents itself as a good approximation of the social context of a place, referring to the more homogeneous characteristics of an area.

Therefore, the dynamics of the metropolitan population is understood from the lens of social organization of the territory seized by this socio-spatial typology (Ribeiro and Ribeiro 2013). The goal is to identify the sources and destinations of the metropolitan population movements, since, on the assumption of a certain leveling of trends in demographic behavior, changes of residence in the metropolis also gain importance, including when associated with daily movements, especially for work.

7.2 Metropolitan Movements of Residential Change

With the decrease in mortality and fertility rates due to social, economic, and cultural transformations that have emerged especially from the accelerated process of urbanization, many changes have occurred not only in the rates of population growth in all areas of Brazil, but also in the importance of demographic components of the distribution and population growth between the spaces. It should be emphasized that these changes in spatial distribution of the population result from births in a certain area, deaths, and the number of residents who arrive and leave through spatial mobility.

In addition to these classic dimensions of demographic analysis, other dimensions related to age structure and life cycle, new family arrangements, as well as dislocation conditions are also important for an analysis of the urban population dynamics. Accordingly, spatial mobility becomes a remarkable phenomenon to determine the changes in the spatial distribution of the population, both in the intra-metropolitan and inter-regional scales. Spatial mobility is a dimension of production of existence, because the changes in volumes, trajectories, and meanings of these movements in urban space can relate to both the search for work, housing, study, and health, and to socio-cultural aspects of individuals and of places of origin and destination. Migration, seen here as a change of residence between municipalities, is one of the dimensions of this process, since it is herein recognized that spatial mobility goes beyond the municipal level; therefore, this chapter will analyze migration in the metropolis scale, especially intra-metropolitan migration, as a residential mobility process.

With the prevalence of spatial mobility between urban areas, especially in short distance population movements, a relatively spatial condition that is similar

²The territorial cross section that was the basis for the development of this typology was the districts of the Metropolitan Region of Rio de Janeiro.

between origin and destination comes to exist, which makes an analysis that is focused merely on the great axes of movement inappropriate: an analysis that encompasses the diversity of these movements and its singularities is much needed. The movements are diverse in number of types, but at the same time they are singular in their explanation and qualification. In order to approach such peculiarities, it is necessary to study migration flows, understanding the dynamics of origins and destinations of population movements within the metropolis. The information available considers migration from fixed date: this cross section reduces the volume of immigrants to an analysis of those that migrated 5 years before the census date.

7.2.1 Migration Flows in or to the Metropolis

In order to understand the latest behavior of residence changes in the RMRJ according to the social organization of the territory, recent immigrants were distributed in each socio-spatial type by realized flows,³ which makes it possible to analyze only the people who carried out the residential mobility between municipalities and whose destination was the RMRJ. In chart 7.1, it is noted that the three intra-metropolitan movement flows are concentrated in the bottom of the distribution. In upper and upper middle areas, the share of intra-metropolitan movements is much smaller, around 23–27% of the total. In upper areas, there is a share of about 15% of people who came from another region of the very State of Rio de Janeiro, while most immigrants came from another state in the country, especially in the upper areas of the core—around 48,000 immigrants—comprising 47% of said group. In the upper middle areas, the distribution is similar; however, although it is lower in absolute numbers (about 35,000), the participation of people coming from other states is 66%—the highest among all socio-spatial types.

In the three types of popular areas, the intra-metropolitan movements are more expressive. The popular areas with a middle and working profile comprise about 57 and 63%, respectively, of the total. The intra-state movements are at a much lower level; however, around 30% of immigrants came from another state. The popular areas, on the other hand, concentrate the largest share of intra-metropolitan movements, over 75%. The main type of movement in terms of participation that

³By using the types of population flows in the metropolis according to socio-spatial typology, the methodology used follows the one presented by Silva (2013): (a) for the migration, the most disaggregated source that is observed is the municipality (or group of municipalities) and the destination will be the socio-spatial type of area in which the migrant was residing; (b) for the two-way commuting, which will be treated at the end, the analysis is reversed: the source is the socio-spatial type of area of residence and the destination will be the municipality (since we do not know the specific area in which the person will work in another city or even for those who work in the municipality where they reside). The goal is to verify which flows predominate in each type of area.

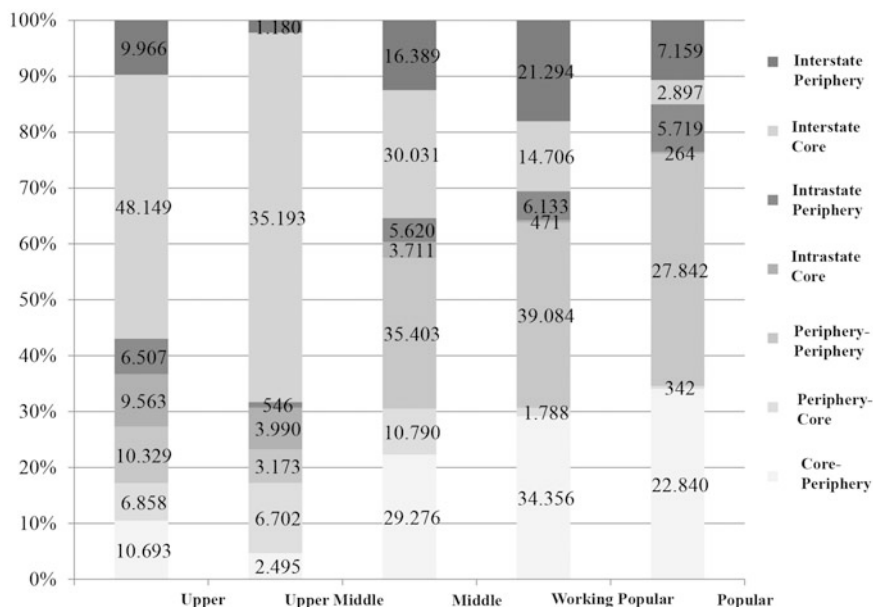


Chart. 7.1 Immigrant distribution in the RMRJ in socio-spatial types by flow—2010. *Source* 2010 Demographic Census

has occurred in these areas is migratory exchanges in the very metropolitan periphery (although in absolute numbers this movement is more expressive in middle popular and working popular areas).

This analysis reveals that as the location of the areas in socio-spatial hierarchy decreases, the share of intra-metropolitan movements increases, especially in the actual periphery or toward it. That is, people that changed residence toward middle popular, working popular and popular areas usually come, to a greater extent, from the very municipalities of the RMRJ. In contrast, people who move to areas of an upper or upper middle profile usually come from other states of the country. So there is a segmentation of flows in the metropolis according to the social organization of the territory.

The understanding of intra-metropolitan migratory movements provides a dimension that is closer to processes of residential mobility in the metropolitan region. Such movements underwent a few changes during the last decades: a decrease in terms of volume, although the expressive exodus coming out of metropolitan cores toward the other municipalities of the Metropolitan Region of Rio de Janeiro is still remarkable; migratory exchanges between these municipalities that have been named—quite generically—as periphery (“periferia”); a slight increase in people departing from this periphery to go live in the metropolitan core. By analyzing these movements according to socio-spatial types, it is possible to notice that these general trends in the scope of cities are also reproduced within the intra-urban space.

There was an increase in the share of the population that left the core and settled in the periphery, both in popular areas and upper areas. In this departure from the core to upper areas of another municipality, the attraction of the city of Niterói is certainly predominant. As noted earlier, certain expanding municipalities in the metropolitan periphery should be causing this increase in participation in popular areas during the decade (from 18.7 to 23%). Despite the declined participation from 2000 to 2010, the largest share of people in this flow in 2010 occurred in popular working areas (34.5%).

For those who left the periphery and went to live in the core the number is much smaller—about 26000 people in 2010, but most of the people who made such a move did so by migrating to middle popular areas (about 40%). During the decade, the share of people who made such a movement toward upper core areas increased, while there was a decrease precisely in middle popular areas. Note that this type of movement is not common, and, additionally, it is a movement that became more elitist regarding socio-spatial destination.

Migratory exchanges between municipalities of the metropolis, with the exception of the core, have remained concentrated in areas with a lower position in the socio-spatial hierarchy. Although their participation in popular working areas has decreased, such areas are still the prevailing destination when it comes to intra-metropolitan migration, and a substantial increment in this movement was noted in popular areas.

7.2.2 Profile of Migrating Workers and Their Settling Areas

When evaluating the profile of immigrants by flow and socio-spatial type destination according to the distribution of socio-occupational categories, it is possible to identify whether certain types of areas attract a particular profile of immigrants, that is, whether there is a relationship between the area of attraction (target) and insertion in the labor market by the population.

(i) Intra-metropolitan migration toward the core

While intra-metropolitan migration toward the core is less significant, it has still expressed a very striking behavior. There is always a much higher proportion in the upper or middle areas, that is, very few people that go to the core intend to migrate to working or popular profile areas. Moreover, among those going to upper and upper middle areas there is a predominance of higher education professionals and those occupied in medium categories; in the middle type, in turn, there is a predominance of medium and tertiary categories of workers among migrants. These observations actually suggest a strengthening of the social division of the territory.

(ii) Intra-metropolitan migration from the core to the periphery

For those who have made this move, there is a higher proportion in the middle and working popular areas of the periphery. Regarding the profile, among those who migrated to middle, working and/or popular profile areas, more than 80% of occupied people are employed in medium, secondary workers, tertiary, and non-specialized tertiary categories.

(iii) Change of residence in the very periphery

This movement was greater in popular working, middle, and popular areas, respectively. Among the few that moved to upper areas, the majority also belonged to middle categories or consisted of high-level professionals, even though with less participation in relation to previously observed flows. Also among those that went to middle, working, and/or popular profile areas, more than 85% of occupied people are employed in medium categories, as well as secondary, tertiary, and nonspecialized tertiary sectors. Therefore, the relationship between segregation and migration in these areas operates in reverse, that is, a reinforcement of the most popular standard, as it presents a higher participation of such categories among immigrants.

(iv) Migration from another state to the core

Overall, in the three intra-metropolitan flows analyzed, it appears that the strengthening of the social division of the territory is more evident to those who go to upper areas. Among the other types of intra-state and inter-state flows to the core or periphery, only the interstate flow bound to the core was selected here, as it is the most substantial flow in terms of volume. This means that between 2005 and 2010 about 75,500 people reached the city of Rio de Janeiro coming from another state—a number still quite significant. Employed immigrants who made this flow have a profile of both more superior and more popular categories. It is worth noting that the coexistence of this superior and popular profile becomes clearer in the upper areas, because while there is greater participation of high-level professionals and middle classes, there is also a considerable share of tertiary workers who migrate to upper areas coming from another state, especially workers from the nonspecialized tertiary sector. In the upper middle and middle popular areas, there is a closer distribution of interstate migrants occupied in the core, with a predominance of medium categories, secondary workers, as well as workers with tertiary and non-specialized tertiary occupations.

(v) Migration to the favelas

In the city of Rio de Janeiro, the districts that “more directly” correspond to some favelas are Rocinha, Jacarézinho, Cidade de Deus, Complexo do Alemão, and Maré. All these districts were classified as working popular. Besides those, in this socio-spatial type there are other two districts: Santa Cruz and the island of Paquetá. Along with the Guaratiba district, which was classified as popular, the cited districts correspond to areas of lower position in the socio-spatial hierarchy of the

municipality of Rio de Janeiro. In terms of migratory stock measured by the residence time in the city totalling 10 or fewer years, these districts had 12.7% of immigrants in relation to their total population in 2010. In Rocinha this value reached 18% and in Maré, 16.8%, which means that in those districts the migratory stock is relatively high.

For analysis of the origins of immigrants, one must consider the information for fixed date, which only considers the recent migration (last 5 years). About 12,000 people reached these same districts in the period, with 95% of the movement originating in another state of the country. That is, most of the migration toward the favelas has its origin in distant places. Approximately 53% went to Maré and 27% to Rocinha. It is also worth noting that the favela areas represent the most significant participations in all analyzed flows of specialized and nonspecialized tertiary workers.

7.3 The Spatial Mobility Processes: Moves to the Workplace

Along with the migration, commuting (chiefly *two-way*) also shaped the spatial mobility processes in the metropolis, delineating the metropolitan population movements and, in the case of this work, the intercity movements limited to the metropolis. Currently, it is considered that the changes of residence in the metropolis have not only a close connection with the conditions of access to housing, but also with the conditions (possibilities) of displacement, especially as a consequence of job location. Therefore, this part will discuss commuting to the workplace.

Internal commuting related to work in the RMRJ increased considerably in all types of intra-metropolitan flows. It is observed that, although in lower numbers compared with other types of displacement, the amount of workers who leave the core to work in the periphery almost doubled from 2000 to 2010. However, the largest number of workers still perform the movement from the periphery to the metropolitan core, a flow that even increased by more than 120 thousand people. This phenomenon is especially evident in large access roads that connect the core to other municipalities, such as the Rio-Niterói Bridge, Avenida Brazil and the *Linha Vermelha* that, in times of heavy traffic, have sometimes long jams. Complementary to this framework is the high contingent of workers who move between the municipalities of the metropolitan periphery, which also increased by more than 100,000 people from 2000 to 2010.

As noted earlier, municipalities that experienced a greater increase in the “commuting population” also considerably increased the number of households in the decade, being in areas with urban expansion, which probably do not have yet a dynamic local labor market that encompasses the population that intends to dwell there.

Table 7.1 Percentage distribution of the population performing two-way commuting by flow and by socio-spatial type—2000/2010

Socio-spatial type of housing (origin of two-way commuting)	Origin-destination of two-way commuting			
	Core-periphery	Periphery-core	Periphery-periphery	Total
<i>2000</i>				
Upper	17.3	8.6	4.6	7.9
Upper middle	22.7	3.4	3.0	4.0
Popular	59.9	88.0	92.4	88.1
Total (100%)	23,790	479,686	177,161	680,637
<i>2010</i>				
Upper	21.3	8.7	4.2	8.0
Upper middle	24.8	3.2	3.0	4.2
Popular	53.9	88.1	92.8	87.8
Total (100%)	46,680	604,660	283,354	934,694

Source 2000 and 2010 Demographic Census

If we consider two-way commuting in the internal areas of the metropolis, that is, from the social organization of the territory, it is observed in general that the higher output is always of the popular areas⁴ in the three types of flows. It should be emphasized that the expansion of the popular profile universe that took place in the midst of its diversification (Ribeiro and Ribeiro 2015) also reflected in changes of residence. For those who live on the outskirts and perform two-way commuting (both to the core and to other municipalities of the periphery), it is noted that the popular areas on the periphery remain the main origins of commuting (mainly middle and working popular, disaggregating the popular universe). At the same time, movements in search of work in the very periphery increased significantly (Table 7.1).

In order to correlate the intra-metropolitan migratory movements, which are a proxy of actual residential mobility on the metropolitan scale, with two-way commuting, it was also observed whether people who migrated, but remained living in the metropolitan agglomerate, move frequently to another city, especially between the area of origin and destination.

Among the employed intra-metropolitan immigrants, about 52% performed two-way commuting both in 2000 and in 2010—this information suggests enhanced dissociation between place of residence and place of work in the metropolis. The approach of spatial mismatch—a social and urban model characterized by spatial segregation (Ihlanfeldt and Sjoquist 1998)—relates precisely to the location of the different social groups in the city and alternatives regarding the place of housing and mobility, particularly conditions of movement in the space for the more socially disadvantaged segments.

⁴In this section, all three types of popular areas were grouped.

Among those who migrated from the core to the periphery in 2000 and 2010, almost 60% were swinging and almost 50% were working in the core, that is, they are people going to work in the place where they came from. This indicator shows that a considerable part of intra-metropolitan migration did not occur for reasons related to work, and offers significant evidence that it occurred for reasons of access to housing. Of those who did this movement in 2010, the largest share is in upper middle areas (71.6%), which in this case refers mainly to the city of Nova Iguaçu. The participation of commuting among employed immigrants in popular areas that work in the core remained around 59%. Among those immigrants who changed residence from the core to the periphery, those who work in the core presented a share about 10% greater in the more superior⁵ categories of the socio-occupational hierarchy used here. But those who work in the actual periphery have a larger share of the tertiary and secondary workers.

Those who migrated from the periphery to the core make up a smaller contingent and the “return” to work in the periphery is also not significant. Among those who migrated in the periphery, the participation of those performing two-way commuting is high in all socio-spatial types: in the total sum the rate of mobility in the decade remained at about 57%. We also see that the share of commuters in upper middle areas increased considerably (from 54.2 to 64.4%—Nova Iguaçu), while in popular areas it remained practically similar (from 59.4 to 58.8%). Furthermore, there was a slight reduction in the share of the ones who perform two-way commuting to the original city of migration (from 19 to 18.2%) (Table 7.2).

Therefore, in the context of intra-metropolitan migration there is still a great expressiveness among those moving frequently to the original city of migration. In the new urban setting with metropolitan expansion processes, urban mobility is a very important element of formation and consolidation of urban spaces—enabling residential retaining of some areas. The residential attraction in the periphery is probably related to access to housing, housing market, the role of the state with housing policies, and the actual socio-economic conditions of this population that has moved, but it is also possible that there is a connection with the conditions of mobility.

The periphery-periphery intra-metropolitan migration type is already the one with the greater volume of people. While regarding commuting to work, the destination is still predominantly the core, yet the movements in the very periphery have also gained share. If there is a population that migrates, but does not work in the city to which it moved, there is also a part that migrates, but works in this destination municipality. Therefore, one should think that the reduction in spatial mobility also needs to be considered from the population retention processes to work in peripheral municipalities, which, in fact, are already investigated for continuity or change in the periphery perspective, emergence and/or strengthening of sub-centers (Lago 2007, 2008; Rodriguez 2008).

⁵“More superior categories” refer to occupations such as executives, high-level professionals, small employers, and middle-level occupations.

Table 7.2 Mobility rate of employed intra-metropolitan immigrants (who perform two-way commuting)—2000/2010

Socio-spatial type of housing (destination of migration and origin of two-way commuting)	Origin-destination of migration			Total
	Core-periphery	Periphery-core	Periphery-periphery	
<i>2000</i>				
Upper	56.4	10.2	42.2	40.3
Upper middle	61.6	10.8	54.2	29.6
Popular	59.8	11.3	59.4	56.0
Total	59.4	10.9	57.8	52.9
Toward original municipality	51.2	7.4	19.0	31.2
<i>2010</i>				
Upper	56.9	9.9	45.6	39.2
Upper middle	71.6	13.6	64.4	36.1
Popular	59.1	12.5	58.8	55.7
Total	59.2	12.0	57.6	52.2
Toward original municipality	49.4	7.3	18.2	28.9

Source 2000 and 2010 Demographic Census

Despite this diversity, it is also important to assess the working conditions and occupational insertion in which that retention occurs. For the total employed population of the periphery (regardless of immigration status and, in this case, excluding the city of Niterói), data in Table 7.3 show the inclusion in the socio-occupational hierarchy and the average income in the main job considering the following groups: those who work in the periphery city where they live; those who work in another municipality in the periphery, and those working in the core.

In all the municipalities of the periphery, among those who work in their own city of residence there is a greater participation of the secondary and tertiary workers, followed by those working in medium categories—together, these categories encompass more than 70% of employed people in that group. The nonspecialized tertiary workers, who would be the most robust expression of a precarious occupational insertion, correspond to 17%—a figure similar to the group of those who work in another municipality on the outskirts and even lower than those working in the core. This group, which expresses the retention of workers in the periphery, in general has a lower average income among socio-occupational categories compared to those performing two-way commuting. Even if we considered Niterói,⁶ income averages are still lower compared to the others that perform two-way commuting, since the effect of Niterói only increases the average incomes for all groups, but differences remain.

⁶See Oliveira and Tavares (2015, p. 247).

Table 7.3 Distribution of employed intra-metropolitan immigrants of the periphery^a by workplace and Socio-Occupational Categories (CATs) and average income (R\$ 2010)—2010

Socio-occupational categories (CATs)	Works at the same municipality of residence		Works at another periphery municipality		Works at the core	
	(%)	Income	(%)	Income	(%)	Income
Executives	0.5	3665.71	0.5	6409.22	0.4	5369.70
High-level professionals	5.3	1707.53	7.4	1864.18	7.0	2237.12
Small employers	1.1	2263.22	0.6	2883.02	0.2	2620.39
Medium categories	19.2	1011.95	27.9	1197.72	28.7	1350.48
Tertiary workers	25.5	742.77	21.0	844.04	14.7	943.14
Secondary workers	29.4	861.74	24.7	1064.48	23.8	1069.19
Nonspecialized tertiary Workers	17.4	528.11	17.6	635.02	25.0	690.75
Agricultural workers	1.6	352.54	0.3	727.96	0.2	531.38
Total (100%)	1147,029	869.65	251,957	1076.33	506,867	1136.16

Source 2010 Demographic Census

^aExcluding Workers Residing in Niterói

For those who perform two-way commuting to work in another municipality in the periphery, there is a greater participation of medium categories and superior-level professionals in relation to the group that stays. That is, in general, the profile of socio-occupational inclusion is more superior, with income averages that are also higher.

As for those who work in the core, there is also a greater presence of medium and secondary categories of workers. However, nonspecialized tertiary workers have a greater participation in this group in contrast to only tertiary, showing that the other municipalities of the RMRJ provide nonspecialized labor for the metropolitan core. In general, the average income is also higher for those who leave the periphery to work in the core, especially for those categories having greatest involvement. As for executives, small employers, and agricultural workers, average income decreases; however, these categories do not actually have the profile to perform two-way commuting, which is evident by the participation of around 1% only among all the groups analyzed in Table 7.3.

This information reveals that, in fact, those who are able to traverse the urban boundaries established by the political and administrative limits of the cities in search of work also traverse other barriers of a social and economic character. Overall, those who perform two-way commuting from the periphery have better chances of occupational integration and higher incomes in virtually all socio-occupational categories, especially those going to the core. However, for those going to the core it is evident that they can operate different types of spatial mobility logic, as worked out by Silva (2013), whose research showed that there are workers who get a better position in the socio-occupational hierarchy and better

incomes, and there are those who live in precarious conditions, with not so different incomes than those who stay in the city and work in similar positions.

7.4 Final Considerations

The social organization of the territory of the Metropolitan Region of Rio de Janeiro has a close relationship with the processes related to population dynamics. It is observed that the RMRJ is one of the Brazilian regions in a more advanced process of population aging and that, despite the sociodemographic inequalities that still exist in its home territory, the aging process is widespread. That is why this chapter specially focuses on spatial mobility processes through metropolitan residential mobility. Although migratory volumes have also experienced a decrease, there is a plurality of movements and different social, economic, and even cultural logics operating on population movements in the space.

Regarding the flows that occurred, as the position of the areas in the socio-spatial hierarchy decreases, the share of intra-metropolitan movements increases, especially in the periphery itself or toward it, and movements from other states (Federation Units) decrease. Intrastate movements, on the other hand, are much more reduced. The main type of movement that has occurred in popular areas, in terms of participation, is migratory exchanges in the actual metropolitan periphery—the kind of metropolitan residential mobility that has increased in recent decades. So there is a segmentation of flows in the metropolis according to the social organization of the territory.

Residence changes toward the core have greater participation in the upper and middle areas, although this territory also has popular areas. Residence changes in the periphery, in turn, have increased participation in popular areas. At the same time, residential mobility by migration experienced increased participation in upper (more in the core) and popular (more in the periphery) areas. It was also observed that most of the migration toward the favelas, considering only the districts, is long distance.

Regarding the profile of immigrants and their relationship with the social context of the social area to which they moved, it is noted that, for the most part, the changes of residence between municipalities suggest a strengthening of the social division of the territory, because the workers employed in more superior occupations have greater participation in areas with this profile, the same being true for workers with a more popular profile.

Part of this residential mobility occurs in close connection with the possibility of daily commutes to work. On this commuting, it is clear that the popular areas on the periphery remain the main sources of commuting, with a significant increase in movements in search of work in the very periphery. Moreover, it is noted that among the employed intra-metropolitan immigrants, about 52% performed pendulous movements both in 2000 and in 2010, especially those moving frequently to

the city of origin of migration. Opposed to those who “return to work where they left from,” there is a group of workers who find employment in the periphery city of destination. The question observed is that, among the latter, inclusion in the labor market takes lowermost positions in the socio-occupational hierarchy and lower incomes in some socio-occupational categories, particularly those that concentrate a greater share of these workers.

Thus, the places of residence and work seem to remain crucial for the socio-economic conditions of the metropolitan population. Obviously, not considered here are physical and mental strain, displacement time, and financial resources spent to perform the two-way commuting—which also should “go into this account.” However, this information shows that, albeit by diversification processes, the logic of the core-periphery model still remains in the social organization of the metropolitan space.

Therefore, given the processes of change in the age structure that converge to a similar behavior even between different areas of the metropolis, it is suggested that changes of residence in the metropolitan space or toward it will also become increasingly important in understanding the changes in the social organization of the territory. Thus, an important connection between urban studies and demography is revealed, with significant potential within the understanding of the current metropolitan dynamics, considering both its changes and continuities.

References

- Abreu MA (1999) *Evolução Urbana do Rio de Janeiro*. Instituto Pereira Passos, Rio de Janeiro
- Faria VE (1991) Cinquenta anos de urbanização no Brasil. *Novos Estudos-CEBRAP* 29:98–119
- Ihlanfeldt KR, Sjoquist DL (1998) The spatial mismatch hypothesis: a review of recent studies and their implications for welfare reform. *Housing Policy Debate* 9(4):849–892
- Lago L (2007) Trabalho, moradia e (i)mobilidade espacial na metrópole do Rio de Janeiro. *Cadernos Metr pole* 18:275–293, 2^o sem
- Lago L (2008) O mercado de trabalho na metrópole do Rio de Janeiro: a ‘periferia’ que virou ‘centro’. In: XVI Encontro Nacional de Estudos Populacionais da Associação Brasileira de Estudos Populacionais. Anais... Caxambu
- Martine G (1972) Migration, natural increase and city growth: the case of Rio de Janeiro. *Int Migrat Rev* 6(2):200–215
- Martine G (1987) Migração e metropolização. *São Paulo em Perspectiva* 1(2):28–31
- Observatório das Metr poles (2012) Níveis de integração dos Municípios brasileiros em RMs, RIDEs e AUs à dinâmica da metropolização. Relatório de Pesquisa. Rio de Janeiro: INCT Observatório das Metr poles, CNPq, CAPES, FAPERJ
- Oliveira RA, Tavares E (2015) Transformações demográficas: os movimentos da população no território. In: Ribeiro LCQ (ed) *Rio de Janeiro: Transformações na ordem urbana*. Letra Capital, Rio de Janeiro, pp 221–254
- Preteceille E, Ribeiro LCQ (1999) Tendências da segregação social em metr poles globais e desiguais: Paris e Rio de Janeiro nos anos 80. *Revista EURE, Santiago de Chile* 25(76)
- Ribeiro LCQ, Lago L (2000) O Espaço Social das Grandes Metr poles Brasileiras. *Revista Brasileira de Estudos Urbanos e Regionais* 2(3):111–129

- Ribeiro MG, Ribeiro LCQ (2013) *Análise social do território. Metodologia para o estudo da estrutura urbana brasileira*. Letra Capital, Rio de Janeiro
- Ribeiro MG, Ribeiro LCQ (2015) Segregação residencial: padrões e evolução. In: Ribeiro LCQ (ed) *Rio de Janeiro: Transformações na ordem urbana*. Letra Capital, Rio de Janeiro, pp 163–192
- Rodriguez J (2008) Segregación residencial sociolaboral (SRS) y sus relaciones con la migración y la movilidad intra-metropolitanas en cuatro aglomerados urbanos de América Latina. Los casos de Ciudad de México, Santiago de Chile, São Paulo y Rio de Janeiro en el decenio de 1990. Workshop Spatial Segregation and the Labor Market, University of Texas-Austin, Feb 13–15
- Silva, ET (2013) *Estrutura Urbana e Mobilidade Espacial*. Letra Capital, Rio de Janeiro

Chapter 8

Segregation and Real Estate Production

Luciana Corrêa do Lago and Adauto Lúcio Cardoso

Abstract This chapter analyzes the socio-territorial pattern of the metropolis of Rio de Janeiro as a result of the dispute between housing production modes, in which the capitalistic mode imposes itself. Such a dispute emerges when auto-constructed popular spaces—as well as the commoditized ones—join the corporate circuit of appreciation. It examined trends in housing production by these agents in the last decade, starting with a more general analysis of the metropolitan totality and then privileging four trends of socio-territorial dynamics, in the district scale: elitization of the upper districts of the capital; formation of new concentrations of middle sectors; proletarianization of the inner city; and increasing social distance between favelas and peripheries.

Keywords Real estate dynamics · Urban segregation · Urban periphery · Favela · Socio-territorial distance

8.1 Introduction

In order to analyze the interactions between the social organization of the metropolitan territory and the forms of housing provision, it is assumed that in capitalist cities, entrepreneurial real estate production determines the metropolitan market dynamics through a constant search for an over-appreciation of the real estate that was produced. The basis of this over-appreciation lies in the socio-territorial differentiation, which demands a permanent reproduction of such differentiation, whether it is through “renovation” or “deterioration” processes of already consolidated areas, or through the incorporation of new areas for the real estate market. This logic defines and redefines the price of urban and peri-urban

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lands and, consequentially, the conditions of access to housing and to the city itself by all social strata (Ribeiro 1997). In such a way, the locational strategies of real estate capital have provoked disputes concerning the access to the city. In Brazil, the State has historically legitimated the ruling power of the entrepreneurial logic, both through public investments and mechanisms of urban regulation.

However, it is understood that the actions of the real estate sector are conditioned to the very socio-territorial structure resulting of those and of other disputing actions in the production of cities. That is, there is a mutual determination between the pattern of social organization of the territory and the real estate market, in which the built environment is the material foundation through which the agents (whether they are corporate or not) will define their locational strategies.

This chapter will deal with the socio-territorial pattern of the metropolis of Rio de Janeiro as a result of the dispute between housing production modes, in which the capitalistic mode imposes itself. The locational strategies of popular sectors have been, historically, circumscribed to spaces that were not yet commoditized by the entrepreneurial real estate sector. Such a dispute emerges when autoconstructed popular spaces—as well as the commoditized ones—join the corporative circuit of appreciation. Thus, this chapter will examine the trends of housing production by these agents in the last decade as one of the explanatory factors of the socio-territorial pattern of 2010. It will start with a broader analysis of the metropolitan totality and then prioritize four trends of the socio-territorial dynamics, in the district scale: elitization of the upper districts of the capital; formation of new concentrations of intermediate sectors; proletarianization of the inner city; and increasing social distance between favelas and peripheries.

8.2 Changes in the Real Estate Dynamics and the Reproduction of the Socio-Territorial Structure in the 2000s

In the 24 years of existence of the Housing Financial System (*Sistema Financeiro de Habitação*—SFH), a new pattern of spatial production was consolidated through the expansion of real estate incorporation as an entrepreneurial method of housing production. Consequentially, the appreciation of land values has ceased to be merely “store of value” of the speculator land owner, and started to base itself on the appreciation of capital. The small speculator, an urban actor that is spread through all social strata, has given way to the big real estate companies in the constitution dynamics of the built environment. An internal process of sector differentiation begins, thus, with an oligopolized segment, a competitive segment, and a third segment composed by micro- and small incorporators. In Rio de Janeiro, the built space has shifted under the impact of the entrepreneurial production of a substantial amount of apartment buildings concentrated in the South and North zones of the city and in the suburb of Barra da Tijuca (Ribeiro and Lago 1992).

Added to this type of dynamics are the programs that culminated in the removal of a large quantity of poor favela-dwelling families situated in the so-called “noble” areas, to housing projects located in the periphery of Rio. In this period, the process of socio-spatial segregation has been intensified in that metropolis, defining hierarchical real estate submarkets and consolidating the urban periphery as the reproductive spatial sphere of the poor.

After the mid-1980s, this dynamics of urban structuring started to change due to the end of the SFH, to the crisis of entrepreneurial production, and to the effects of the Brazilian economy’s stagnation on families’ incomes. The outcome to all of this was the strong fall of housing constructions, a fact which led the real estate financing to depend mainly on its buyers’ own resources, which, in turn, led—until the end of the 1990s—the entrepreneurial market to focus on the upper income layers of society. In Rio de Janeiro, the counterpart of this process was the resumption of the growth of favelas all across the urban fabric, whether by densification of existing ones, whether by the emergence of new ones, in the peripheral areas. Thus, the 2000s were inaugurated with a real estate dynamics that displayed a meager participation of the State as financier—and promoter—of access to housing. This context is reverted from 2005 onwards, with the retake of public expenditures in the housing and construction segment. The impacts of this new conjuncture on the social organization of the metropolitan space of Rio de Janeiro are analyzed below.

The socio-territorial structure of the city of Rio de Janeiro did not change significantly in the 2000s and even small changes can be seen as continuities of trends that started in the previous two decades. The fixity of the urban built environment ensures a certain resistance to major changes in the pattern of social organization of the territory, even in countries like Brazil, where the pace of renovation of the building stock is higher than that found in other countries such as England, France, and Argentina. However, the real estate dynamics (residential, commercial, and industrial), founded on relations between producer agents, urban real estate financiers, and consumers, showed changes in the last decade in response to redistributive social policies and the resumption of financing for real estate.

In general, redistributive policies have enabled large numbers of families to purchase market and residential property rentals. The market expands and the non-market forms of access to housing, such as courtesy housing, retrench. As the increase in the consumption capacity of families, especially those with lower income, was not accompanied by extensive programs of finance and housing subsidy, created only in 2009, there was a relative increase in rental housing, which had been declining since the 1940s. It is an interesting panorama: both home-ownership and rent grew relatively in the last decade. These trends will be examined further on.

From 2000 to 2010, the increase in *per capita* household incomes in all sectors of the metropolitan area of Rio de Janeiro enhanced, throughout the different social classes, the solvable demand for residential purchase as well as rent. Therefore, the

real estate market became more dynamic during that decade, both in the areas of renovation and expansion of real estate capital, as well as in popular areas subjected to forms of urban land appropriation other than legal ownership. However, by observing the pattern of metropolitan segregation, it is possible to infer that the market heating has not altered the already historical trend to elitization and concentration of the elites in certain spaces of the metropolis. It is a social and spatially segmented market that has started to incorporate new social segments that were, hitherto, incapable of long-term indebtedness.

The effects of this mutual determination between real estate dynamics and socio-territorial structure can be summarized in three main phenomena: the ever-growing elitization of “noble” areas; the social diversification of a large share of suburbs¹ and peripheries by a larger presence of upper level professionals and of intermediate categories; and, finally, the proletarianization of certain popular areas.

The elitization of upper areas of the metropolis can be identified in its trend to a higher social homogeneity, once the participation of superior professional categories (major employers, executives) in 2000 and 2010 is examined. In all upper districts located in the metropolis,² this participation has risen from 35 to 42%, while, in the remainder categories, such participation has fallen. This is a trend that has been slowly constituted since the 1980s; however, it is important to notice that these areas still hold a high level of social diversity, wherein more than half of the employed population there residing has middle or manual occupations.

Analyzing the concentration of income of each of the superior categories, in upper districts, it is possible to realize that only the public and private sector executives have concentrated even more in these areas. If, in 2000, 61% of the private sector executives lived in upper districts of the capital, the city of Rio de Janeiro, in 2010 this percentage rose to 73%! It is important to notice that these entrepreneurial executives have had an increase in their income that was far above the average of all the other socio-occupational categories. In that sense, the increase of the social distance between these executives and the rest of the employed population, regarding income, was followed by a strategy of territorial domination of certain neighborhoods of the metropolis. The concentration of the powerful classes (even if they are numerically small) in a restricted territory of the metropolis is substantial evidence to understand the spatial distribution of public resources and the urban regulation forms that guide the real estate sector strategies.

Data collected from the Real Estate Companies Executives Association (*Associação de Dirigentes de Empresas do Mercado Imobiliário*—ADEMI) on the real estate launches in the city of Rio de Janeiro for the 2000s attest the locational

¹This paper calls “suburb” a vast region located in the municipality of Rio de Janeiro, urbanized in the first half of the twentieth century to house the nascent industry and its workers. From the 1980s, most of the industries closed, the numerous existing shantytowns (favelas) have had a high population growth and the public, municipal and state powers excluded the traditional suburban area as an investment area.

²The city of Niterói, which contains some areas of high social profile, was not considered here because the census data were not broken down by districts.

strategy of the major companies of this sector: about half of the launches were located in merely four upper districts of the metropolis: Barra da Tijuca, Botafogo, Lagoa, and Tijuca.

In the same period, the so-called ‘upper’ districts have been going through a process of elitization, presenting a relative increase in the percentage of superior categories. It is important to emphasize this trend in two parts of Rio, namely: the areas around *Lagoa* (Rodrigo de Freitas Lagoon)—the most valued area of the metropolis—and Botafogo, areas in which, in 2010, respectively 53 and 51% of their residents were major employers, executives or highly skilled professionals. In the case of the neighborhoods in the South Zone of Rio, with population growth around zero, the elitization is largely due to the exit of medium, trade, and service categories of workers (in the case of Botafogo and Copacabana, especially domestic workers), due to real estate appreciation. In addition to the replacement of residential buildings with new commercial buildings, renovation of home inventory by developers (often with the construction of upscale buildings) is a good indicator of the trend to recover an area. In this case, Botafogo stands out among the consolidated upper regions of the metropolis, with 5400 real estate developments and launches in the 2000–2010 decade.

The elitization process of Barra da Tijuca followed a different dynamics, since it is an area of population expansion: it went from housing 1,74,000 residents to housing 30,00,00, with an expansion rate of 5.7% per annum. As an expansion front of the great real estate capital, the region has been the recipient of around 32,000 real estate developments, which corresponds to 37% of all real estate launches in the city. It can be inferred that the real estate sector has privileged the production of estate properties for the upper classes, but not exclusively. There were some estate development launches directed towards the intermediate classes.

However, the category of higher level professionals, way more heterogeneous in terms of income and status, if compared to the one of major employers and executives, was in 2010 less clustered in upper districts and relatively more present in their own districts. This is the second phenomenon to be highlighted herein: the majority of metropolitan districts of Rio de Janeiro, whether they are consolidated areas or areas of peripheral expansion, have become more socially diversified because of a greater presence of upper level professionals and, in some popular areas, of intermediate classes. Here, it would be essential to make a previous clarification about the definition of “popular territories”.

The popular territories of the metropolis of Rio de Janeiro have presented social and real estate dynamics that were much heterogenous, especially if we separate the favela territories from the ones located in the peripheral areas of said metropolis. “Favelas” are considered here the set of five great shantytowns—or complex of shanties that were institutionalized by the municipality of Rio de Janeiro as administrative regions, and that, because of this, were considered by the demographic censuses as district units. “Periphery” is considered here as areas that were historically classified as places in need of public services, larger stores and employment, even if, recently, this condition of lacking of resources has partially changed. Besides the peripheral cities, a portion of the West Zone of the city of Rio

de Janeiro is also seen as periphery, encompassing the districts of Bangu, Campo Grande, Jacarepaguá, Santa Cruz, and Guaratiba. Within the metropolitan area of Rio de Janeiro, only parts of the core city and the municipality of Niterói are not considered to be part of the so-called periphery.

In order to understand the combination of the processes of elitization of upper areas with the decentralization of the same areas, it is of paramount importance to introduce the broader phenomenon regarding the significant increase of higher level professionals in the country and, more specifically, in the metropolis of Rio de Janeiro, something that really began in the 1980s. The decentralization of the 2000s, that is, a relatively higher presence of these professionals in the suburban and peripheral areas, might be explained by a greater and relative growth of the “professionalization” of the employed mass in popular areas if compared to upper areas, since the degree of professionalization in upper areas was already substantially high in 2000. It is important to highlight that the category of upper level professionals is also very diverse, whether in regards to income or in regards to consumption patterns and habits. And such diversity is reflected in the space: in 2010, the average household income *per capita* of these professionals was R\$ 8951 in the district of Lagoa (South Zone), R\$ 6670 in Barra da Tijuca, R\$ 1973 in Campo Grande (a Rio de Janeiro neighborhood pertaining to the periphery, as shown above), R\$ 2084 in the city of Nova Iguaçu (metropolitan periphery), and R\$ 1589 in the municipality of Duque de Caxias (also part of the metropolitan periphery). The entrepreneurial real estate production is undoubtedly a factor that impels this segment to specific areas, in a process that generates yet new concentrations.

One can also think about the formation of new demands (capacity for debt in order to purchase own homes and/or pay rent) in peripheral areas, “dynamizing” the entrepreneurial production. This is the case of the districts of Jacarepaguá and Campo Grande, in Rio, and the central business districts of Nova Iguaçu, Caxias, Nilópolis, São Gonçalo, and Belford Roxo, all of which had already presented some social diversity in 2000, which was enhanced during the last decade. The percentage of upper and intermediate categories varied, in 2010, from 44% in Jacarepaguá to 32% in Caxias. The expansion of the real estate capital for these areas consolidates new frontiers to its reproduction. Jacarepaguá, benefitting from the relative proximity to the affluent neighborhood of Barra da Tijuca, stands out in the capital, with around 20,000 new developments in the last decade, between houses and apartment buildings. In regards to the peripheral municipalities, the major construction companies with the national presence have actively entered the real estate markets of Nova Iguaçu, Belford Roxo, and Caxias, while in Nilópolis and São Gonçalo local companies are the ones that prevail.

However, the business sector does not explain the social diversification of most peripheral areas, where the capitalist logic of housing production was incipient in 2010. In the capital, about 80% of the properties launched by the real estate business sector in the 2000s were located in the upper and middle districts.

The third phenomenon that deserves to be highlighted concerns the proletarianization of certain areas, in which a trend opposite to that of the rest of the metropolis was verified. These are areas with varied social profiles and in assorted locations: some of Rio de Janeiro's big favelas³; areas surrounding the center; and, finally, areas on the far outskirts of the metropolis. "Proletarianization" of an area is understood here as a relative increase in manual occupations and the relative decline of middle and higher occupations. Two processes that are not mutually exclusive can explain this trend: one is the exodus of residents from these areas executed by former residents that have ascended the labor market, motivated either by stigma or violence of the place, or even due to poor accessibility to the city. Another is the arrival of manual workers due to the devaluation of the area, in the case of central districts, and/or the informality and low costs associated with housing, in the case of favelas and suburbs.

It is also worth mentioning the ongoing changes in the central area of the capital of the state. The center and the Port area of Rio de Janeiro began to experience large public and private interventions from the first administration of Mayor Eduardo Paes, started in 2009. After two decades of renovation projects of the central area that were not deployed, the new coalition that sustains the current management, already in its second term, secured the huge investments needed to reform the so-called "degraded areas" in the heart of the city. Census data of 2010 still do not express these changes, especially in the port area. The table below expresses the reality that our managers call "degraded".

An in-depth examination of the trends in the social profile of all four districts that compose the central area of the city (Centro, Portuária, Rio Comprido, and São Cristóvão) reveals two opposite processes: the elitization in the center (*Centro*) and the proletarianization in the rest. The relative increase of superior categories in Centro was substantial, going from around 10 to 19%. In 2005 and 2006, said district received around 900 housing units that were launched by real estate companies aiming at the middle class.

São Cristóvão is a neighborhood that also started to receive enterprises oriented towards the intermediate sectors in the late 2000s; however, the social profile of this area presented, yet, a tendency to proletarianization, since the effects of the renewal of the housing stock on the social profile are in course, in a period that is ulterior to the realization of the census. It is worth remembering that, in 2010, 45% of this district's population lived in favelas.

The district of Portuária was the most proletarian among the central ones, in the year of 2010, with 74% of manual workers and a decrease in its social profile alongside a substantial population growth in the decade: 2.1% per annum. The percentage of the population dwelling in favelas was 43% and the average income of the heads of households presented a decrement. It was within this context of

³Five major favelas of Rio de Janeiro—Rocinha, Complexo do Alemão, Jacarézinho, Maré and Cidade de Deus—were institutionalized as Administrative Regions by the city and, therefore, appear as districts in the 2000 and 2010 Demographic Censuses. Data for other favelas were not broken down.

precariousness that the violent removal of the residents of *Portuária* took place. As a result, an urban renewal process is taking place in the area through a project named *Porto Maravilha* (Wonder Port).

8.3 The Conditions of Access to Housing and to Urban Services

All the trends pointed out above are present within a framework of changes in the conditions to access to housing and services, whether on the supply side or on the demand side. The first—and surprising—evidence is the inflection of the historical decrease in rent prices that began in the 1940s, when the ideology of owning a home started to impose itself through federal financing programs. The great inflection in all major metropolises occurred during the 1960s: in Rio de Janeiro, in the year of 1940, 66% of the metropolitan households were rented; in 1960, 51% and, in 1970, merely 36% (Ribeiro and Lago 1992).

Examining the condition of metropolitan household occupation in an aggregated way, one realizes that the relative increase of the percentage of people paying rent, that went from 15 to 18% during the 2000s, had, as a counterpoint, the relative decrease, of 7–5%, of those living in lent or ceded estates or in “other” unknown and undefined ways of living. The population’s participation in resident-owned houses had a small raise, going from 77 to 78%, corroborating the trend of own homes as the main mechanism of access to housing. Presupposing that the ceded and the “other” types of households are non-market ways of access, it is possible to infer that an expansion of the mercantile logic in the metropolis of Rio de Janeiro has occurred, to the detriment of others.

However, when homeownership is broken down into two categories (“completely paid” and “being paid”) it is possible to visualize, in a more accurate way, the real estate dynamics. In reality, there was a relative increase of people in paid households and a relative decrease of those still paying their mortgage. A possible explanation to this would be the paying off of long-term mortgages that were signed in the 1970s and 1980s, until the extinction of the SFH. In addition to this there is the absence, from 1986 to 2009, of a major housing financing policy that would reach the poorer classes, which might explain the decrease of households still being paid as well as the relative growth of rents. Next, it will be shown that these trends vary according to income classes and occupational categories.

Data on the occupation conditions of buildings according to income and work classes indicate that in the last decade the funding for the purchase of home ownership became more concentrated in the upper and middle classes categories: in 2000, 55% of employed persons living in households whose funding was not yet fully paid belonged to these two categories; in 2010, this percentage was 64%. Home financing for the higher categories remained at the same level (in 2000, 11% of these categories paid mortgages and in 2010, 10%) and there was a decrease in

the intermediate category (10% paid in 2000 and 7% in 2010). The Residential Leasing Program (*Programa de Arrendamento Residencial*—PAR), addressed to families with an income between three and six minimum wages, was released in the late 1990s and, in Rio de Janeiro, reached families with incomes between five and six minimum wages. The PAR therefore may explain the still significant percentage of intermediate categories paying mortgages in 2010.

To the poorer families with monthly borrowing capacity (reached during the decade due to the raise of the minimum wage, or previously acquired) was left, largely, the rental market or autoconstruction.⁴ All manual work categories presented, in 2010, mortgage payment percentages of 2 and 3%. Industrial workers (a category that historically presented the highest percentage of paid home ownership among all occupational categories) contributed to a significant rise in the percentage of rented households, that went from 15 to 19%, and a decrement in lent or ceded households, from 8 to 5%. The same phenomenon occurred with skilled service providers.

It is important to mention, yet, the shifts in situations of occupation of two popular categories with the highest rates of ceded domiciles: domestic workers and unskilled service providers (gatekeepers and night watchmen). The former (domestic workers) had, as a typical housing condition, during the 1960s and 1970s, a room at their bosses' house. This condition has been decreasing since the 1980s and, in the last decade, fell from 13 to 7%. It is interesting to notice that this drop was followed by a relative increase of paid own homes (from 63 to 69%), and, to a lesser degree, of rented homes (20 to 22%). Differently, the unskilled service providers, that also presented a decrease in ceded domiciles (partly by their own bosses), from 15 to 11%, had a relative increase merely in rented domiciles (from 16 to 21%).

By observing the universe of rented domiciles according to *per capita* income ranges, it becomes evident that a relative growth in rented housing has occurred throughout all ranges. However, such a phenomenon happened in larger proportion in the lower income ranges. Historically rent was, from the 1950s onwards, a condition of access to housing typical of middle and upper classes. However, the rise of this condition in the last decade has approximated the percentages of popular classes to those of the upper classes. In 2000, 12.7% of households with a *per capita* income smaller than the minimum wage were rented, while 20.5% of those households with *per capita* incomes greater than three minimum wages were rented. In 2010, the percentage of the poorer ones increased to 16.9%, and, of the wealthier ones, to 22%. Besides the fact that the increment in the minimum wage has made it possible for poorer families to acquire some sort of debt, the informal rent market and the rentier

⁴Since the second half of the 1990s, individual credit for buying a home on the market could be accessed by families with some financing capacity and formal employment relationship, through the Credit Chart Program (*Programa Carta de Crédito*). In some remote areas, this market remained and assured supply of homes for lower income groups.

activity have become a more relevant segment of income generation in popular areas, with an increase in the construction of buildings for this purpose. In short, the increase in purchasing power of the popular classes from redistributive policies has created demand and supply for the market of popular rent.

Generally, in the vast majority of the 86 municipalities that compose the metropolitan area of Rio de Janeiro—whether they are the most valued ones in the capital or the ones located in areas of favelas and peripheries—there was a relative increment of rented domiciles. The difference between them is the variation of own homes homeownership rates. In peripheral districts of middle or popular profiles, the percentage of homeownership continued to increase relatively during the last decade. In upper districts and in the capital's larger favelas there was a different trend: a slight decrease of homeownership. Here, two districts draw attention. Barra da Tijuca, the main area of expansion of real estate capital, has presented a decrease in homeownership from 71 to 66% and an increase in rented ones from 19 to 29%.⁵ One of the possible explanations to this would be a strong presence, in this real estate market, of investors acting as rentiers and guaranteeing, thus, a share of the demand of real estate developments. The other district that deserves a close inspection is Rocinha, the immense favela located in a valued area of the capital. The relative decrement of homeownership from 70 to 58% and the increment of rental housing from 30 to 39% indicate the relevance of rentier activities in the popular economy of this territory and the local control upon new informal occupations towards access to homeownership by newcomers.

This chapter will now examine possible changes in housing pattern in the past decade, understanding this pattern as an expression of social status and of the degree of construction modernization. The census data are limited in order to treat all dimensions involving the quality of housing. The indicators used are “house” and “apartment” (and for 2010, also “condominium/gated community or alley house”) and “number of rooms”. The intention is to relate the pattern of socio-territorial organization with differentiation strategies of housing patterns by the real estate sector and the reproductive strategies of the popular sectors.

To live in an apartment building in Rio de Janeiro became a status symbol for the middle class during the 1940s (Lavinás and Ribeiro 1997) and even with the expansion of buildings to neighborhoods with a more popular profile in subsequent years this pattern remained typical of the upper classes. As we descend in the social hierarchy, the percentage of employed people living in apartments descends as well. If, in 2010, 67% of executives lived in apartments, this percentage was of mere 9% among the class of skilled service providers. There is a clear marker between the upper and middle categories and the category of manual workers, living mostly (more than 80%, actually), in houses.

⁵Data relating to the occupation status of the employed heads of household.

The socio-spatial hierarchy accompanies this marker. The upper districts, including here the expanding Barra da Tijuca, presented the highest percentages of “apartments”: 90% in Botafogo, 85% in Lagoa, and 68% in Barra da Tijuca. In the districts of middle profile located in Rio’s suburbs—where a large quantity of popular housing projects, dating from the 1950s, 1960s, and 1970s are located—new real estate developments produced for the middle class in the 1980s and onwards have been built. In these spaces, we come across a mix of building patterns and of residents’ profiles in distinct apartments. This is the case of Méier, where 72% of executives, 67% of professional workers, 56% of middle categories workers, and 42% of manual workers residing there in 2010 lived in apartments. When we examine the districts of middle profile in the metropolitan periphery, the percentage of employed people in apartments is smaller throughout all social classes and, because of this, living in an apartment might have greater power of social distinction. Peripheral housing obeyed the standard of single-family houses of the National Housing Bank (*Banco Nacional de Habitação*—BNH).⁶ In the central district of Nova Iguaçu, where the production of high standard apartment buildings began in the 1970s (Furlanetto et al. 1987), 48% of executives, 29% of professionals, and 10% of the workers lived in apartments. In popular areas, apartments have little expression as the standard of housing; however, the favelas located in middle-class areas with no possibility of expanding the existing borders are experiencing a vertical integration process that is, in some cases, quite intense. The case of Rocinha is exemplary. A favela located near the Lagoa district, the most valued of the metropolis, with a growth rate in the last decade of 2.3% per annum, showed an increase in the percentage of households of the ‘apartment’ type from 22 to 38%.

It should be noted that in the last decade, all occupational categories, with the exception of executives, showed an increase in the percentage of houses and a decrease in that of apartments. In the case of professionals and medium categories, this increase may be explained by the expansion of gated community homes in the border areas of real estate capital. However, the variable used by the 2010 Demographic Census, which discriminates the domicile type as of “gated community or alley house”, does not allow us to prove this hypothesis. The percentage of this type was basically the same (6 or 7%) for all categories. Even in the districts of expansion of business production for the upper and middle classes, such as Barra da Tijuca, Jacarepaguá, Campo Grande, Downtown Nova Iguaçu, and Duque de Caxias, the percentage of “gated community or alley house” was higher in all categories. For example, in Jacarepaguá, 15% of professionals, 14% of medium category, 12% of workers and 11% of service providers lived in “gated community or alley house” in 2010. It is known that the dissemination of condominiums and gated communities is also occurring in popular areas, becoming the new standard of housing, since the launching of PAR in the 1990s. However, in 2010 the production scale of the housing projects financed by the My House My Life Program

⁶Brazilian public company dedicated to the financing and production of housing projects from 1964 to 1986.

(*Programa Minha Casa Minha Vida—PMCMV*)⁷ was still incipient. Arguably, the classification “gated community or alley house” is a broad one that includes small sets of twin houses that are ubiquitous in the periphery and in large favelas. In Favela do Jacarézinho, 6% of domiciles, in 2010, were part of the “gated community or alley house” type.

It will be examined, below, the level of urbanization in some districts with different social profiles, as an indicator of power inequality in spatial distribution of urban facilities and services. In this case, the data are for 2010 and the indicators selected were “paving”, “public lighting”, “afforestation”, “untreated open sewage”, “accumulated garbage” and “mobility”, available on the census basis of the total statistical universe. The aim is to relate the social profile of the selected districts to the degree of access to selected services, trying to capture the power of the upper classes to define the allocation of public resources in the territory.

There were three indicators that, in 2010, clearly discriminated good and poorly served districts: afforestation, paving, and mobility. Regarding afforestation, there is a distinction between the upper profile districts (Lagoa and Barra), upper middle profile (Jacarepaguá and Downtown Nova Iguaçu), and the other districts (middle and popular profiles). In the city of Rio de Janeiro, 98% of residents of Lagoa lived in an afforested district, while in Campo Grande, an area of peripheral expansion with a social diversity, only 56% lived in this condition. In the same municipality, the percentage was only 25% in the two favelas analyzed and in the Port Area (where 50% of households were in favelas). However, when paving is analyzed, the disparities between Rio’s districts are not crystalline. In the Rocinha and Maré favelas, over 90% of residents lived in households with paved surroundings,⁸ the same situation being observed in the Port Area. The same was verified in respect to the absence of accumulated garbage in the roads and untreated open sewage: the percentage of favelas, above 90%, was approximate to that of elitized districts. Only the Port Area jarred with others, evidencing a percentage of 79% of residents living without untreated open sewage in its vicinities, that is, 21% of the residents of this area in the center of the capital coexisted with untreated open sewage.

It is known that this situation of almost universal aspects of urbanization does not take into account the quality of equipment and services. In this case, Rocinha is exemplary: the fact that, according to the 2010 census, over 90% of residents lived without untreated open sewage and garbage accumulated in the surroundings does not mean that this favela possesses a net of basic sanitation and household garbage collection. Sanitation is an old demand of residents not yet met. What we see in Rocinha is a community collection system, with deposits at some points of the main

⁷Created in 2009, the My House My Life Program (*Programa Minha Casa Minha Vida—PMCMV*) aims to make housing affordable for families organized through housing cooperatives, associations, and other private non-profit entities. Linked to the National Housing Secretariat of the Ministry of Cities, it is directed to families whose gross monthly household income is up to R\$ 1600.00.

⁸The paving of traffic routes in the analyzed favelas reflect the urbanization policies practiced since the 1980s.

roads and the closure of sewage ditches with concrete lids, which does not avoid, absolutely, the release of strong odors. The match between very wide paving and sparse afforestation already shows the quality of the urbanization project in an area. It is common in popular areas for the government to “make amends for its shortcomings” in favelas during an election year, without really implementing measures to connect the needy areas to the city sewer and even less attention is given to the placement of trees on their sidewalks. Furthermore, the indicators say nothing about the alleys and staircases that are commonplaces in the hilly favelas, and that hinder mobility.

The metropolitan periphery is represented in the table by three districts: the downtown area of Nova Iguaçu, an important center of trade and services which concentrates the elite and the local middle class (Lago 2007); Cabuçu, a peripheral district in the same city; and Engenheiro Pedreira, located in Japeri, a municipality in the metropolitan border that stands out for presenting the worst social, economic, and urban rates. Comparing the two districts of New Iguaçu, it is observed that all indicators are significantly better in the downtown area than in Cabuçu. The low percentage of people with paving in Cabuçu calls attention: only 57%. However, in Engenheiro Pedreira the situation is even more precarious: only 40% of residents live in domiciles with paving in their surroundings. It is interesting that in areas of urban border going through recent urbanization processes and therefore with low population density, it is expected to find higher rates of afforestation. But that is not what it appears. The lowest rates of afforestation are in the farthest outlying districts, where such rates are similar to those of large favelas in the capital. The production of popular housing developments, besides not guaranteeing a basic standard of urbanization, such as paving, sidewalks, rainwater network, etc., requires the complete deforestation of the areas that will be deployed.

Finally, the indicator of mobility requires a careful reading of the data, in that it does not exactly follow the socio-territorial hierarchy. The districts of Lagoa, Portuária, Rocinha, and Maré presented high percentages (over 80%) of residents that would take up to 1 h to commute. The Rocinha favela borders the districts of Lagoa and Barra da Tijuca, where the majority of the favela residents’ jobs is located as well. The Maré favela, in the suburban zone, besides bordering the Avenida Brasil—the main expressway leading to Rio de Janeiro—is relatively close to the Downtown Rio area. Until the 1980s, when the favelization process expanded towards peripheral areas due to the retraction of the extensive production of popular housing projects (Lago 2000), the favelas of Rio expressed centrally the locational strategy of poor workers of residing close to job offerings.

In regards to farther districts, either the ones concentrating upper classes or the ones of popular profile, there is a certain convergence in the mobility percentages. In Barra, 68% of residents take up to one hour from their homes to their workplaces; in Campo Grande, this percentage is of 63%; and in Cabuçu, 55%. The absence of a proper mass transportation network with metropolitan coverage is

affecting the daily life of all social classes, although not to the same extent. The commuting times might be similar, but the transport conditions are not the same: automobiles with air conditioning systems, private bus lines attending specific gated communities, and overcrowded public trains or buses are all distinct mobility conditions that reproduce the inequalities of access to the city.

8.3.1 Final Considerations

The pattern of social organization of the metropolitan region of Rio de Janeiro did not show major changes in relation to historical trends in the last decade. The elites have sought to focus more on their limited areas of power, making them even more elitized. High-level professionals continued to increase their participation throughout the metropolis, focusing on some peripheral neighborhoods with the capacity to meet their class needs. The middle and lower classes followed by dividing vast suburban and peripheral areas, with expansion of this social mix. However, some dynamics related to the city, and more specifically to housing, have gone through changes provoked by redistributive policies implemented since 2003, which increased the power consumption of the social sectors with no previous debt capacity.

This ability, however, was not accompanied by the early resumption of housing finance policy for the popular classes, stopped with the end of the BNH. Housing production in the 2000s turned to families with more than five minimum wages. The relative increase of rented households, especially among the poor, then appeared as the big news of the decade. In the slums and suburbs, ceded housing gave way to the rental, through the expansion of informal rentiers' activities. However, the forecast is that a new inflection occurs as a result of the MCMV Program, launched in 2009 and responsible for the broad public financing subsidy for the purchase of a house by the popular classes. Recent research has indicated that the Program has been reproducing and deepening the historical pattern of urban segregation of the city of Rio de Janeiro to create new neighborhoods to relocate the popular classes. But not without conflict. Numerous reactions are underway by social movements fighting for the right to the city by occupying idle properties whose owners are awaiting a new wave of real estate revaluation.

References

- Furlanetto DA et al (1987) Produção imobiliária e espaço residencial da classe média na periferia metropolitana do Rio de Janeiro. *Revista Brasileira de Geografia* 49(2):27–56
- Lago LC (2000) Desigualdades e segregação na metrópole: o Rio de Janeiro em tempo de crise. *Revan/Observatório-IPPUR/UFRJ-FASE*, Rio de Janeiro
- Lago LC (2007) A periferia metropolitana como lugar do trabalho: da cidade-dormitório à cidade plena. *Cadernos IPPUR/UFRJ*, vol XXII

- Lavinas L, Ribeiro LCQ (1997) *Imagens e Representações sobre a Mulher na Construção da Modernidade de Copacabana*. In: Souza CF, Pesavento SJ (eds) *Imagens urbanas – os diversos olhares na formação do imaginário urbano*. UFRGS, Porto Alegre, pp 43–56
- Ribeiro LCQ (1997) *Dos cortiços aos condomínios fechados*. Civilização Brasileira, Rio de Janeiro
- Ribeiro LCQ, Lago LC (1992) *Crise e mudança nas metrópoles brasileiras: a periferação em questão*. In Leal MC et al (eds) *Saúde, ambiente e desenvolvimento*, vol 1. UCITEC-ABRASCO, Rio de Janeiro, pp 153–179

Chapter 9

Segregation and Occupational Inequalities

Luiz Cesar de Queiroz Ribeiro, Juciano M. Rodrigues
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Abstract The overall objective of this work is to capture some of the reflexes created by such processes in the relationship between the conditions of access to the labor market and the territorial dynamics of the metropolis of Rio de Janeiro. In other words, we intend to analyze the relationships between the processes of social division of the metropolitan territory and the conditions governing the access to opportunities in the labor market. We will seek to test to what extent the location of individuals and social groups in a socio-spatial structure characterized by tendencies to residential segregation and territorial segmentation impact on the quality of employment (occupational fragility) and on the possibilities of transforming the very job opportunity in resources from the labor market (income).

Keywords Segregation · Socio-occupational inequalities · Rio de Janeiro

9.1 Introduction

The Metropolitan Region of Rio de Janeiro has been losing importance in the national economy. This process has been occurring in the context of deconcentration of productive activities that depart from the traditional areas of economic polarization in the Southeastern area and head for the inland areas of the country. However, it is not a recent trend. It is inscribed in the long movement of the ongoing loss of the metropolis centrality since the city lost its status as federal

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government headquarters to Brasilia in the 1960s. In this regard, there was a crisis in the developmental model initiated in the 1980s whose distinctive trait was a succession of short periods of crisis and an economic expansion, which, in the 1990s, jointly with the effects of the policies of structural adjustment and insertion into globalization, produced specific effects on the metropolitan economy of Rio de Janeiro.

It is estimated that the GDP of the metropolitan region has been stagnated for 25 years. Several analyses on the reconfiguration of the national economy (Diniz 1993) have pointed to signs of its marginalized situation when compared to the dynamic territory that is being built in the southeast of the country. A recent work conducted by the Observatório das Metrôpoles (Observatory of the Metropolises) on the productive structures of the metropolitan regions facing the new trends of the territorial deconcentration of national economy highlights that Rio de Janeiro, although occupying the second position in the urban-metropolitan hierarchy of the country in economic and demographic terms, shows clear signs of marginalization in the territorial restructuring of national economy. Moreover, it shows some disparity between its potential productive capacity and its transformation into an economic dynamics which promotes development (Ruiz and Pereira 2007).¹

Therefore, we can state that the Metropolitan Region of Rio de Janeiro has been living for many years an impasse that prevents it from entering the competitive economic dynamics opened with the transformation of the development model. Many are the reasons for this situation, but the aim of this work does not include seeking an explanation for them. What matters to us is the fact that these changes and the impasse of the development of Rio de Janeiro resulted, on one side, on a tertiary economy divided between the formal and informal sectors with huge repercussions on the labor market. The labor market adjustment to these transformations has been conducted through the informality of the activities, the maintenance of high rates of unemployment, and the expansion of personal and household services.

The overall objective of this work is to capture some of the reflexes created by such processes in the relationship between the conditions of access to the labor market and the territorial dynamics of the metropolis of Rio de Janeiro. In other words, we intend to analyze the relationships between the processes of social division of the metropolitan territory and the conditions governing the access to

¹Research Report carried out as part of the project titled *Observatório das Metrôpoles: Territory, Social Cohesion and Democratic Governance* related to Metropolization, Intra-metropolitan Dynamics and National Territory. According to this study, the Metropolitan Region of Rio de Janeiro (MRRJ) concentrates 6.4% of the national population, 9.7% of the aggregate income and 10% of technological capacity. Indeed, these same indicators for the metropolis of São Paulo are as follows: 10.5, 18 and 22%, respectively. In terms of the productive capacity of the exporting and innovative enterprises the scenario is even more contrasting: while the Metropolitan Region of São Paulo owns 19% of the value of the industrial transformation of these enterprises, the Metropolitan Region of Rio de Janeiro has participated with just 5.8%.

opportunities in the labor market. We will seek to test to what extent the location of individuals and social groups in a socio-spatial structure characterized by tendencies to residential segregation and territorial segmentation impact on the quality of employment (occupational fragility) and on the possibilities of transforming the very job opportunity in resources from the labor market (income).

More specifically, we aim to capture the effects of the social context of the areas (residential segregation) and the difficulties of dislocation (mobility)—called spatial mismatch² in the American literature—on the opportunities mentioned above. In this sense, we will use data from the 2000 Demographic Census to assess these spatial configurations as mechanisms that influence on the labor market, using the micro-data and the weighting areas information as units of analysis.

The text is organized as follows. In the first section, we present the results of the test related to the hypothesis of residential segregation, and in the second are the results related to territorial segmentation. In each section, the analysis is organized in two phases: first, we describe the processes adopted to identify the residential segregation and territorial segmentation trends and the ways the association with each one of them determines the access to occupations considered fragile in terms of stability when compared to the remuneration differentials of the main occupation; then, we present the application results of the regression models designed to submit the empirical evidence to the causality test, controlling the residential segregation and segmentation effects on the variables mentioned according to other attributes that determine access to the labor market at individual and household levels. In the second part of the text, we assess the empirical results obtained seeking a dialogue with some of the literature that has been pointing the phenomena of the social division of the territory of the metropolises as independent variables in relation to the reproduction mechanisms of social inequalities.

9.2 Residential Segregation and Employment

In previous works, Preteceille and Ribeiro (1999), Ribeiro (2000) and Ribeiro (2001) showed that the territory of the metropolis of Rio de Janeiro is organized heavily in accordance with the system of distances and oppositions which inserts social groups in the social space. The upper classes which hold high amounts of the economic, social, and symbolic capitals dominate areas called “South zone” and part of the “North zone” of the city of Rio de Janeiro. Conversely, the popular

²This concept has origins in the works of Kain (1968, 1969) and it was designed to describe the effects on the access to employment opportunities and on the wages of African American workers resulting from the decrease in the choices of the place of residence on the grounds of racial discrimination and peripheral dispersion of jobs which were concentrated in central areas in the past.

classes are strongly present in popular spaces of the metropolitan periphery, both opposed to segments of the classic middle class which dominate the suburban spaces where social configuration is, however, less defined. Thus, we came to the conclusion that the metropolitan territory features a clear projection of the division lines of the city's society in such a way that living on one side of the city or on the other makes all the difference.

We can affirm that the social space of the metropolis of Rio de Janeiro features the self-segregation of the upper layers of the social structure. We will present our conceptual understanding of the term 'residential segregation'. As already discussed in another work (Ribeiro 2005), this is a category of analysis that always contains two dimensions: *conceptual*, related to theoretical principles chosen to explain social organization, and *practical*, related to normative concepts of society. In this sense, according to Bourdieu's (1997) notion of social space, we can identify two concepts: (i) segregation as difference in the location of a group in relation to another and (ii) segregation as unequal chances of access to material (services, equipment, etc.) and symbolic goods (prestige, status) and to the structure of opportunities (Kaztman 1999).

These two sides of residential segregation are inseparable, although we can separate them for purposes of analysis. Social groups are grouped in the territory in accordance with their affinities of lifestyles and cultural model, but especially due to relations of force established with other groups and with the public power, whose object is the selective appropriation of the territory as a location advantage that allows the reproduction of segregation power (Pinçon and Pinçon-Charlot 2000). The way we chose to operationalize our understanding of the segregation phenomenon is driven by the search for identification of the social composition of the pieces that make up the urban structure, which forms distinct social contexts resulting from the struggle for ownership of the city as a source of multiple resources. Once formed, these social contexts trigger reproduction mechanisms of the inequalities regarding the chances of appropriation of goods (material and symbolic) and opportunities.

9.3 How to Identify Social Contexts?

According to Ribeiro (2005), there are two methodological families of segregation quantification or measurement: one, which translates into synthetic indices, and another, which elaborates typologies. In this paper, we chose to use typology as a tool for classification and description that meets the objectives for the planning and categorization of sociological phenomena, allowing comparisons.

To express the social division of space in the MRRJ, we chose to classify the intra-urban areas. This means that we used a typological analysis having as variable the *average of home schooling of adults above 25 years of age* (School Climate) as variable.

We considered that such a variable allows the description of residential segregation in terms of concentration of people living in the family and in the district in situations of greater or lesser chance of access to resources that leverage their position in the structure of opportunities offered by the labor market. Such assumption is based on previous works on the subject, such as those of Kaztman and Rematoso (2005) and Ribeiro (2007), that showed the growing relevance of school qualification as a requirement for placement in the labor market and for the transformation of this position into new resources (labor remuneration).

As spatial units of analysis, we used the weighting areas of the 2000 Demographic Census (ADE)³ sample, because only the data collected in the most comprehensive questionnaire of the Census, therefore of the sample, allow us to create the variable mentioned above.

First, households were grouped into four schooling levels: (a) under 4 years; over 4 and up to 8 years; (b) 8–12 years; and, (c) over 12 years. Given the percentage of households in each level and in each of the 444 weighting areas, we started the construction of the typology.

The classification of areas through this typology was carried out applying the Factorial Analysis by Binary Combination technique, followed by the Ascending Hierarchical Classification. In the first phase, we reduced the size of the explanation of the distribution of indicators through the districts (in fact ADE's) in two dimensions (factors), having as criterion the 80% value of explanation of the factors variance). The coordinates of the factor(s) corresponding to this percentage were saved and used as a building element of district clusters. The Statlab hierarchical classification has provided three groups whose intra-classes variance was 23.2% and the inter-classes variance was 76.8%.⁴

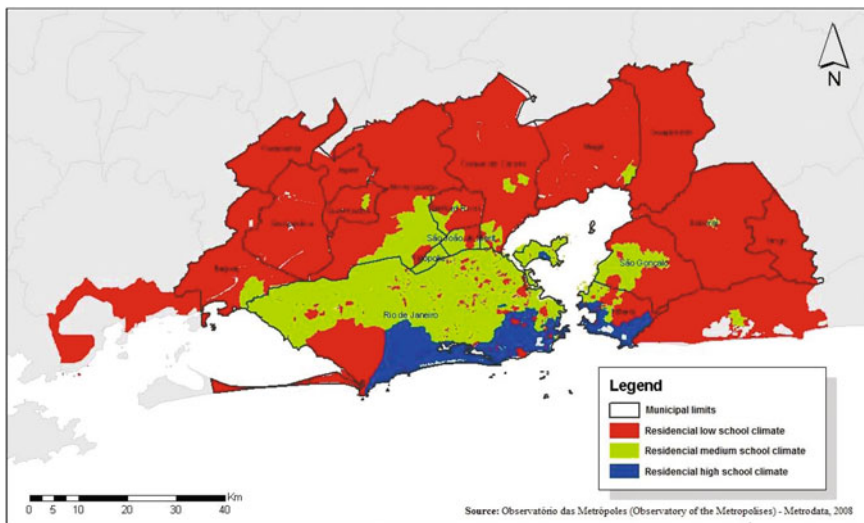
The result obtained by the procedure described above has offered us the grouped areas in three types (see Map 9.1). The first type is characterized by a high presence of low schooling domiciles and comprises 54% of the people residing in the MRRJ, as we can see in Chart 9.1.

Looking at this chart, we can observe that the second type, which includes 35% of the population, shows a profile with high and medium schooling domiciles marked by the presence of domiciles with school climate between 4 and 8 years. The third type is characterized as high social context territories, because it shows a high concentration of domiciles with high schooling where 10.5% of the metropolitan population lives. Therefore, we call the first type “high social context”, the second “medium social context” and the third “low social context”.

It is important to note that in the territories of low social status, the percentage of domiciles with school climate under 4 years of schooling is 35% higher than the

³In the original text it is *área de expansão demográfica* (area of demographic expansion) whose initials are AED.

⁴For such a procedure we used the Statab software.



Map 9.1 Types according to the school climate of the domicile—2000

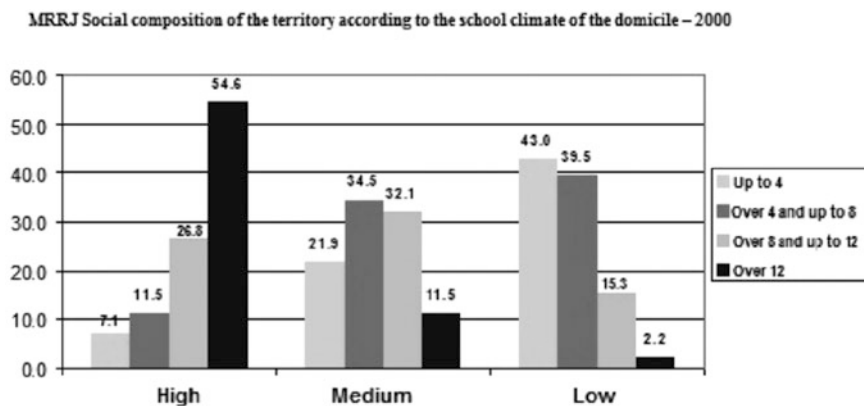


Chart 9.1 MRRJ Social composition of the territory according to the school climate of the domicile—2000. *Source* Elaborated by the authors with data from the 2000 Demographic Census

school climate in areas of high social context. On the other hand, in the latter the number of domiciles with educational level above 12 years of schooling is 52% higher.⁵

⁵These differentials and other indicators are in the table annexed.

9.4 Segregation Effects on the Risk of Occupational Fragility

In the MRRJ, occupational fragility⁶ reaches 36% of employed adults aged 25–59 years. The level of fragility among people in this age group varies territorially, but in the territories of high social status it is 10% less than in the territories of medium social status. When we compare the territories of high social status and the territories of low social status, this difference is even greater, exceeding 20%, because while the fragile occupation reaches a quarter of the people employed in the former, in the latter it is over 45% (Chart 9.2).

In the territories of low social status, the highest level of occupational fragility is due to the high presence of self-employed people and employees without labor card signed that do not contribute to social welfare, as we can observe in the chart below which, in addition to showing the overall fragility of the territories of low social status (46), shows the fragile occupations apart. Moreover, we can note that among the domestic employees the employees with no labor card signed predominate (Chart 9.3).

The data presented above indicate that the access to better conditions of employment is related to a certain association with housing location since we noticed substantial differences between spaces of high, medium, and low social contexts. In order to refine such analysis and clearly show the effect of territory on such conditions, we applied a logistic regression model to estimate this effect.⁷ In addition to the territory variables, we controlled the effects for the following variables: (a) Individual variables: years of schooling; age; color, migration, and gender; (b) Family context variables: *per capita* household income and school climate of the domicile; (c) District context variables: the socio-spatial typology described above. Description and hierarchy of variables are shown in Annex 9.2.

On the first analysis we sought to capture the risks of adults aged 25–59 years in situations of occupational fragility, according to housing location. The reading of Table 9.1 highlights the fact that living in areas that concentrate heavily people in households with low school climate is a situation of risk for having a fragile occupation. As it is shown, this risk is 18.2% greater compared to situations of people living in areas that, on the contrary, concentrate households with high school climate. Living in spaces considered as belonging to the medium type increases this same risk only by 6.3%. That is, controlling the effects of all other variables through

⁶For the purposes of this study, we grouped the adults aged 25–59 years on the basis of the occupations considered fragile. Therefore, we considered fragile the following occupations indicated by the Census variable “position in the main occupation”: (1) self-employed employee—not a social security contributor; (2) domestic employee with labor card signed; (3) domestic employee without labor card signed; and (4) domestic employee without labor card signed and who is not a social security contributor of the compulsory social welfare system.

⁷For a detailed description of the logistic model, see Annex 9.1.

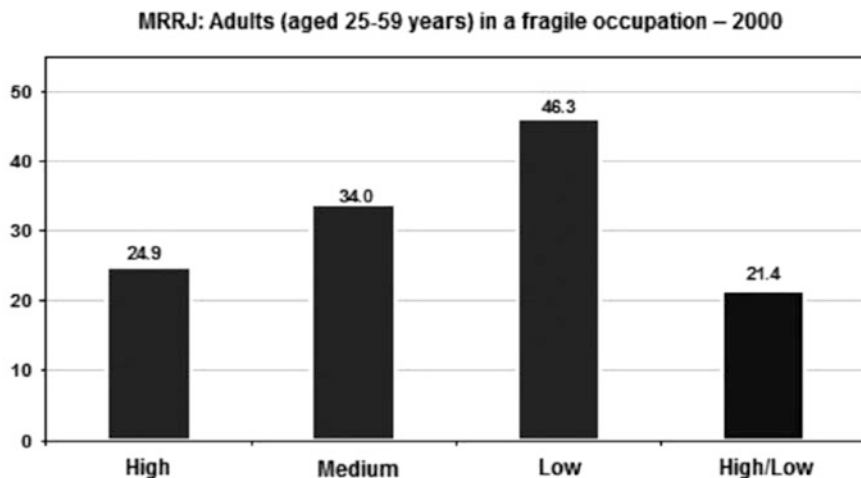


Chart 9.2 MRRJ Social composition of the territory according to the school climate of the domicile—2000

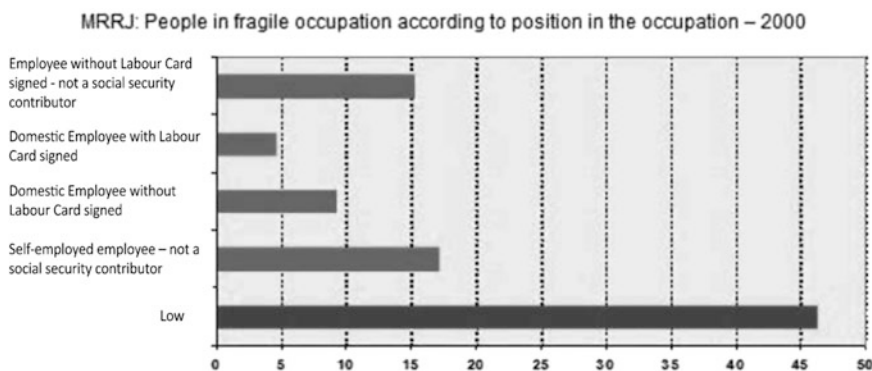


Chart 9.3 MRRJ: People in fragile occupation according to position in the occupation—2000. *Source* Elaborated by the authors with data from the 2000 Demographic Census

their reference levels, either individual or related to the household, which focus on the situation of occupational fragility, we were able to find a significant effect of the social contexts formed by the processes of residential segregation on the situation of fragility in the occupational position in the labor market.

Table 9.1 MRRJ: estimation of the effect of the typology of residential areas according to the school climate for risk of being in situations of occupational fragility, for people aged 25–59 years—2000

	Risk percentage (%)	Significance
0–4 years of schooling	26.4	0.00
5–8 years of schooling	31.6	0.00
25–25 years of age	20.9	0.00
30–34 years of age	20.5	0.00
Black and brown	20.0	0.00
Migrant	12.0	0.00
Female	0.6	0.00
Up to ½ minimum wage (MW)	68.8	0.00
From ½ to 1 MW	44.1	0.00
School climate up to 5 years	48.9	0.00
School climate from 5 to 9 years	26.9	0.00
Medium socio-spatial type	6.3	0.00
Low socio-spatial type	18.2	0.00

Source Elaborated by authors with data from the 2000 Demographic Census

9.5 Segregation Effects on Income Differentials

We also aimed to grasp the effects of place of residence on income differentials of employed people of 25–59 years of age. Indeed, the average remuneration in the main occupation is over 68% in the territories of high social context compared to those of medium social context. This difference is even greater when comparing high and low social contexts, contexts where the difference reaches 80%. As shown in Chart 9.4, the difference between the territories of medium and low social status is 39%. The difference of income between territories of high and low social contexts is remarkable.

In Table 9.2 are shown the results of the multiple linear regression model adjusted to the explanation of the variation in income from the main occupation for the same population of 25–59 years of age, considering the territory divided by the three types found and controlled by other individual and household factors which focus on the variation in the main occupation income. In this case, the social context has a greater weight on the variation in the main occupation income. In territories of low social context, the main occupation income decreases by 37.92% in relation to areas of high social context and the other individual and household factors are controlled. In territories of medium social context, there is a decrease of 34.56% in the main occupation income.

We noticed, therefore, that the occupational fragility and the main occupation income vary in the territory in accordance with the social context in which the



Chart 9.4 Income differentials in the main occupation of adults aged 25–29 years, according to the socio-territory context. *Source* Elaborated by the authors with data from the 2000 Demographic Census

Table 9.2 MRRJ: estimation of the effect of the socio-spatial typology according to the school climate of the domicile for the main occupation income for people aged 25–59 years—2000

	Explanation percentage (%)	Significance
0–4 years of schooling	–17.2	0.00
5–8 years of schooling	–14.0	0.00
25–29 years of age	–18.1	0.00
30–34 years of age	–5.5	0.00
Black and brown	–8.0	0.00
Migrant	–0.4	0.00
Female	–22.16	0.00
Fragile occupation	–16.8	0.00
School climate of the domicile over 5 years of schooling	–23.3	0.00
School climate of the domicile 5–8 years of schooling	–19.8	0.00
Medium socio-spatial type	–34.6	0.00
Low socio-spatial type	–37.9	0.00
Adjusted $R^2 = 47\%$		

Source Elaborated by authors with data from the 2000 Demographic Census

household is located, but at the same time this social context is a factor that determines to some extent the chances that the individuals have of achieving quality occupations and income from their work.

9.6 Residential Segmentation and Employment

As already mentioned, we will seek to test the effects of territorial segmentation on the forms of insertion of people in the labor market. The territorial segmentation is understood as a situation of distance between place of residence and employment location.

Segmentation can be generated by three mechanisms relating to mismatching between supply structures of households and employment, as pointed out by Katzman (2008). They are: (i) spatial distribution of the population in large cities, which in Latin America is characterized by a configuration where low-skill workers occupy the peripheral areas, which can be accentuated by intra-urban migrations; (ii) relocation of sources of work caused by changes in the spatial distribution of productive structure that may reflect policies aimed at a more efficient use of land, of changes in land price or changes that aimed at locational advantages through agglomeration economies; (iii) technological changes that imply changes in the skills required by companies which change the patterns of labor recruitment that can be located next to the productive establishments.

However, we cannot just consider that the implications on the access to the best employment conditions arise only from the distance or from the mismatching between employment and housing spaces of employed people or which comprise the economically active population (EAP)⁸ but also from the uneven distribution of conditions of accessibility generated by the transportation system.

For this reason, in this work we have adopted, as an indicator of segmentation, the capacity of mobility people have in the metropolitan territory. Namely, the phenomenon of spatial mismatch can also be generated as a result of changes in the provision of mobility, either due to the shortage of transport connecting the place of residence and the place of employment, or by changing the price of the dislocation.

This phenomenon is particularly important in Brazilian metropolises for two reasons. The first refers to the strong concentration of job offer in central areas and at the same time, we observe the growth of the population residing in the outskirts of the city, especially due to the increase in the price of housing and urban land, but also because of various forms of public intervention. The second reason results from the total public de-regulation of the transport system in Brazilian metropolises through the expansion of the so-called “alternative transport” and through the capacity of pressure exerted by the authorized contractors of this service on tariffs.

We know, for example, that the municipality of Rio de Janeiro concentrates 54% of the metropolitan EAP, while the concentration of formal job locations reaches 76%. We also know that there is a territorial concentration of job offer in the intra-urban scale in the municipality of Rio de Janeiro. As regards peripheral municipalities, we found clear disparities between the resident EAP and the jobs offered. Except for Niterói, in all other municipalities of the MRRJ, EAP is larger

⁸In Portuguese it is *população economicamente ativa* and its initials are PEA.

than the number of jobs offered in 2000. Nova Iguaçu, for example, which comprises 8.1% of the metropolitan EAP, participates with just 2.8% of all jobs.

These data indicate a clear mismatch—at the municipal level—between place of residence and the location of the jobs offered. It highlights, therefore, one of the configurations that characterize territory segmentation which, according to Kaztman (2008), may still involve access barriers to the opportunities offered by the labor market. The first of these implications would be the cost (time and money) in the search for jobs (or better jobs) and the daily transport to the workplace. Second, segmentation would constitute a barrier towards the visibility of occupational opportunities (information, contacts, and personal filters).

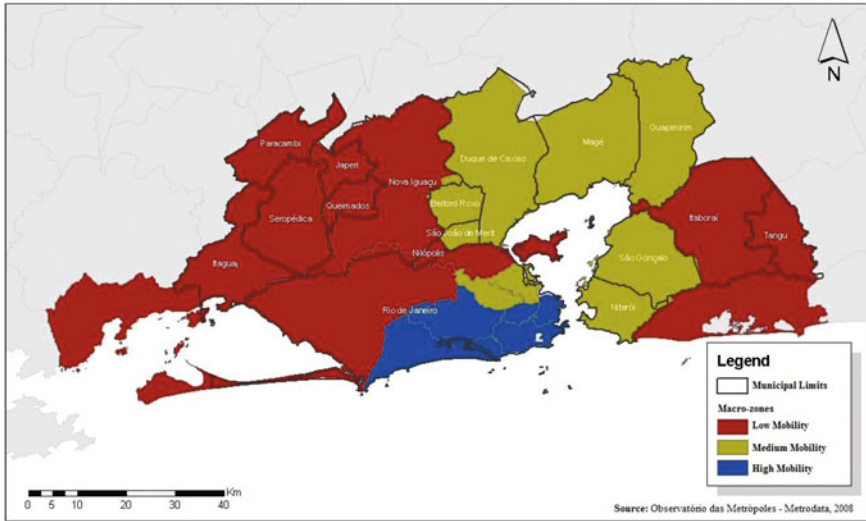
9.7 How to Measure Territorial Segmentation?

As our goal is also to investigate the possible linkages between district location in the structure of Metropolitan mobility and the insertion in the labor market of people residing in that area, we used a division of the territory different from that used in segregation tests, but also the technique of socio-spatial typology construction taking as variable the mobility index of the macro-zones defined by the MRRJ Plano Diretor de Transporte Urbano/PDTU (Master Plan of Urban Transport), which in turn was developed using data from Pesquisa de Origem-Destino 2002–3003 (Origin-destination Survey 2002–3003).

This survey was conducted from October 2002 to December 2003 and comprises a useful sample of 34,000 households where we interviewed over 99,000 people. For its implementation, the Metropolitan Region was subdivided into 485 areas called traffic areas, which constitute the smallest geographic level of representation of the information obtained. According to the survey, 19.9 million dislocations are made in the MRRJ in all modes of transport being 12.5% of these modes motorized. On the other hand, the survey reveals that 45% of the trips made daily have the workplace as destination. Other 32% of the trips are motivated by study. In the dislocation to the workplace, the use of collective transport is prevalent since 55% of the trips are performed through this mode.

We grouped the 17 macro-zones in three synthetic types using the mobility index as proxy, which was a procedure simpler than the typology used to identify the division of the city according to the social context of each area. We believe, therefore, that the socio-spatial typology built as representation of the segmentation level of the MRRJ territory is a better indicator as it expresses the capacity of dislocation of people inside the metropolitan territory according to their place of residence.

We classified the macro-zones into three types according to this indicator: 1—Macro-zones with high mobility (well above average); 2—Macro-zones with medium mobility (around the MRRJ average); and 3—Macro-zones with low mobility (well below the MRRJ average) (Map 9.2). The chart below brings the



Map 9.2 Tipology according to the degree of population mobility

average mobility of each type. The territories of high mobility feature an average index exceeding 2.34 trips/inhabitant/day while the territories of medium and low mobility feature 1.81 indices of trips/inhabitant/day and 1.5 trips/inhabitant/day, respectively.

This way of dividing the city for the purpose of analysis, although being less “refined” than the typology built from the school climate, also expresses the social division of the metropolitan space. We will now observe the very distribution of households according to the school climate.

We note clearly the larger presence of domiciles of high schooling (12 years of schooling and more) in the territories of high mobility. The difference between these territories and those with medium and low mobility is striking. While in the territories of high mobility, 38% of the households show high schooling, in the territories of medium and low mobility the percentage of households with over 12 years of schooling is 9.6 and 6.8%, respectively. Namely, there is a difference of people with high schooling that reaches 28% between high and medium mobility and over 30% between high and low mobility (Chart 9.5).

In territories of low mobility, the percentage of domiciles with school climate under 4 years of schooling is 30% higher than in areas of high status which, as we have seen, does not reach 14%. On the other hand, in territories of high mobility the percentage of households with high schooling (over 12 years) is 52% higher than in areas of low mobility where the numbers of domiciles in this condition does not reach 6.8% of the total amount (Chart 9.6).

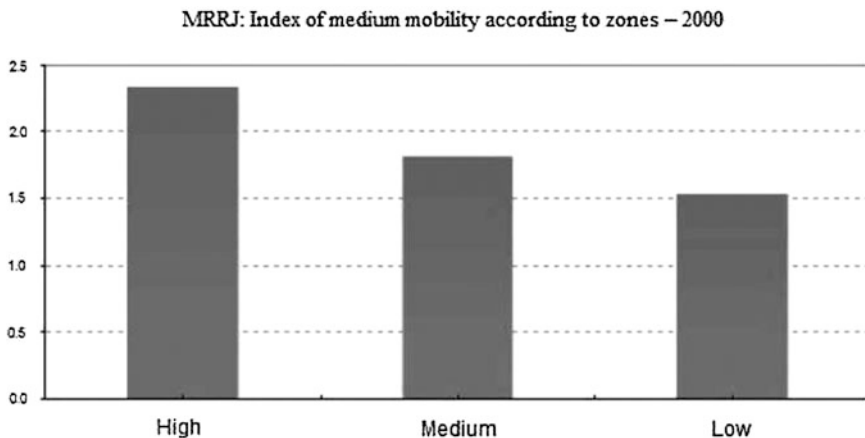


Chart 9.5 MRRJ: index of medium mobility according to zones—2000

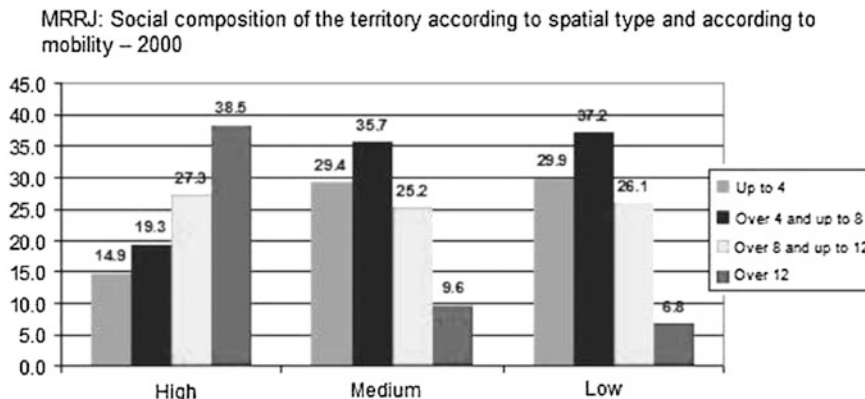


Chart 9.6 MRRJ social composition of the territory according to spatial type and according to mobility—2000. *Source* Elaborated by the authors with data from the 2000 Demographic Census

9.7.1 *Effects of Segmentation on the Risk of Occupational Fragility*

We have already mentioned that the percentage of fragility is 36% in the MRRJ. However, we noted clear differences when we looked at the city in order to understand its social division from the perspective of segmentation. In territories of low mobility, 39% of employed people are in this situation, that is, as we can see in Chart 9.7, the difference between spaces of high and low mobility is 11%.

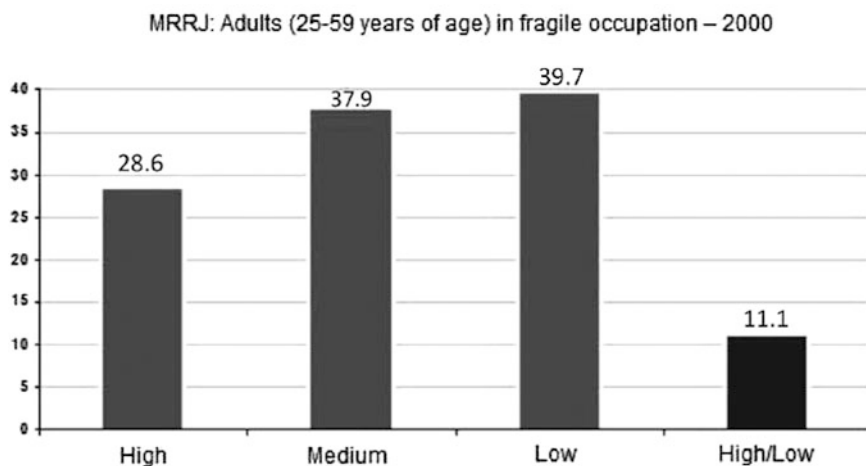


Chart 9.7 MRRJ: Adults (25–59 years of age) in fragile occupation—2000. *Source* Elaborated by the authors with data from the 2000 Demographic Census

It is worth noting, however, regarding fragility, there are no major differences between territories of medium and low mobility, as the difference does not reach two percentage points (Chart 9.7).

As it occurs in territories of low social context, in territories of low mobility fragility is caused by the predominant presence of persons exercising self-employed occupations and employees who do not have labor card signed and who are not social security contributors, with greater weight to the latter who represent 12% of the employed people, as we can see in the chart (Chart 9.8).

Table 9.3 shows the results of the logistic model considering the population aged 25–29 years, with the response to situations of occupational fragility as variable and using the typology of mobility. In general, individual level variables exert more influence on the risk of occupational fragility in this age group than the variables which classify areas. The risks of low and medium mobility areas also do not differ much among themselves.

Low mobility presents a risk of 6.3% in relation to areas of high mobility and the average mobility presents a risk of 6.1% for the situation of professional fragility. Thus, we can note a significant effect of the areas classified according to the typology of mobility on professional fragility, in accordance with the hypothesis of this work, controlling the other variables of individual and household levels which also have an effect on the situation of fragility presented here.

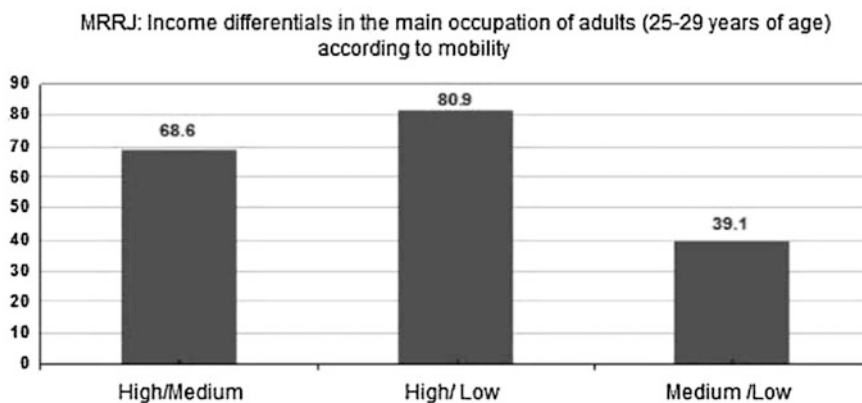


Chart 9.8 MRRJ: income differentials in the main occupation of adults (25–29 years of age) according to mobility. *Source* Elaborated by the authors with data from the 2000 Demographic Census

Table 9.3 MRRJ: estimate of the effect of typology of mobility for the risk of being in a situation of occupational fragility for people aged 25–59 years—2000

	Explanation percentage (%)	Significance
0–4 years of schooling	24.92	0.00
5–8 years of schooling	32.90	0.00
25–29 years of age	21.9	0.00
30–34 years of age	21.4	0.00
Black and brown	20.7	0.00
Migrant	13.3	0.00
Female	0.4	0.00
<i>Per capita</i> household income up to ½ minimum wage	70.1	0.00
<i>Per capita</i> household income up to ½ minimum wage to 1 minimum wage	45.2	0.00
School climate of the domicile over 5 years of schooling	53.6	0.00
School climate of the domicile 5–8 years of schooling	29.0	0.00
Medium mobility	6.3	0.00
Low mobility	6.1	0.00
Adjusted $R^2 = 45\%$		

Source Elaborated by authors with data from the 2000 Demographic Census—2000

Table 9.4 MRRJ: estimate of the effect of typology of mobility for the main occupation income, for people aged 25–59 years—2000

	Explanation percentage (%)	Significance
0–4 years of schooling	–18.08	0.00
5–8 years of schooling	–14.97	0.00
25–29 years of age	–10.70	0.00
30–34 years of age	–6.09	0.00
Black and brown	–9.63	0.00
Migrant	–0.96	0.00
Female	–21.8	0.00
Fragile occupation	–16.76	0.00
School climate of the domicile over 5 years of schooling	–27.11	0.00
School climate of the domicile 5–8 years of schooling	–22.99	0.00
Medium mobility	–22.79	0.00
Low mobility	–21.73	0.00
Adjusted $R^2 = 45\%$		

Source Elaborated by authors with data from the 2000 Demographic Census—2000

9.7.2 Effects of Segmentation on Income Differentials

When we compare territories according to the level of mobility, it is possible to note considerable differences between the types. We note, as shown by Chart 4.6, that these differences are similar to those found when we compare territories based on social context. The difference between the average remuneration in the main occupation of adults aged 25–59 years in territories of high and medium mobility, for example, is 68.6%. We note that the average remuneration in areas of high mobility is 80% higher than the average remuneration in territories of low mobility.

In Table 9.4 are the results of the multiple linear regression model adjusted to the explanation of the variation in income from the main occupation for the population aged 25–59 years, considering the typology of mobility and controlling by means of other individual and household factors.

With this analysis, we can see that the variables that indicate the type of mobility have a considerable weight in the variation in the main occupation income, as well as the variables of the school climate of the domicile. Thus, we showed that the social capital acquired at the domicile—here represented by the school climate of the domicile—and the mobility of the residential area make up the main factors that explain the variation in income from the main occupation. In areas of low mobility,

the main occupation income decreases by 21.73% in relation to areas of high mobility, while the medium type of mobility decreases by 22.79% of the income from the main occupation. Thus, the effects of these two areas for the variation in the main occupation does not differ much from each other, but there is a significant difference for variation in income in comparison with areas of high mobility. In this way, we clearly realize the effect of territorial segmentation, jointly operating with the social capital acquired in the domicile, on the income of individuals. That is, the more segmented a territory is, smaller are the gains from the occupation exercised.

9.8 Conclusion

The central objective of this study was to generate empirical evidence on the role of processes of residential segregation and territory segmentation on conditions for access to the labor market and on possibilities of transforming occupation into income, taking the metropolis of Rio de Janeiro as a case study. According to the technical and methodological strategy here adopted, the results achieved show relations of causality between the risks of access to fragile occupations and income differentials in the main occupation resulting from the social context of the place of residence and its position in the uneven structure of spatial mobility in the Metropolitan Region of Rio de Janeiro. The academic relevance of this exercise, apart from its possible methodological virtues, may be the strengthening of the need to consider the social organization of the urban space not only as a reflection of the structure of macro-social inequalities, but also as an independent variable in the relationship between trends to segmentation of the labor market, residential segregation, and territorial segmentation.

This is an issue which is relevant since the recent literature, devoted to the analysis of the impact of economic transformations on large cities, has been increasingly highlighting the role played by the phenomena of social division of territory on the explanation of the inequality of opportunities resulting from the combination of the effects of: (i) the labor market segmentation; (ii) the restructuring of the welfare system, which in turn results from the combination of trends to commercialization of social reproduction and from the retraction and social segmentation of the public consumption system; and (iii) of the weakening and precariousness of social structures in terms of family and community (district) in their ability to generate solidarity actions of resource mobilization for self-reproduction and utilization of the opportunities generated by social macro-structures.

The evidence presented here joins itself to a large number of other evidence resulting from other works produced by other researchers with the same purpose of investigating other metropolises. It remains open to discussion the issue on the mechanisms that connect the social organization of the territory and the access to

opportunities created by the labor market, particularly relating to the phenomena of residential segregation. Indeed, if today we have good supporting evidence in the literature on the relationship of causality between the different social contexts of the district on a series of phenomena that manifest themselves in individuals, households, and social groups, we have not much evidence of the its mechanisms. According to Small and Newman (2001) and Small (2004), there are neighborhood effects translated into two mechanisms: those relating to socialization and those that are instrumental. The former have to do with the existence in the social context of the district of a model of (i) social roles and (ii) normative efficiency, in addition to (iii) the presence of marginal subcultures. The socio-territorial closure of people living a long period of unemployment, or underemployment, and consequently poverty, certainly does not expose children to the situation in which the model of successful social role through work can serve as an example and incentive for schooling. We can rather expect the opposite, namely, the tendency to the formation of a subculture marked by other ethical and moral principles that do not encourage the effort via education and work. Moreover, there is a low regulatory efficiency in social interactions. The instrumental mechanisms are those related to the social and material conditions of the district which limit or block the individual action as, for example, the free flow of people (distance, violence, etc.). Other authors, such as Bourdieu (1993) and Wacquant (2001) in turn, based on a theoretical Marxist matrix, highlighted the mechanisms related to what they called “effects of place”, expressed by socio-spatial mechanisms through which the reproduction of social domination occurs. Each district is constituted by the distribution of the amount and composition of the various forms of capital (economic, social, cultural, and symbolic) of the social groups.

Annex 9.1

Description of the regression models used

1. Logistic regression model

As we are working with a dichotomous variable (whose values are: absence (0) or presence (1) of risk) such as the “occupational fragility”, we chose to use the logistic model as regression model since it is more suitable for this type of distribution of the response variable. The logistic regression model is given by the equation which is commonly known as logarithm of advantages, where β is the vector of the estimated parameters of explanatory variables and π is the probability of the individual in a situation of occupational fragility.

As the logistic regression model is applicable mostly to low-impact phenomena in the population, which is not our case, we performed a correction called “relative risk” (Zhang and Yu 1998), given by the formula $RR = OR / ((1 - \pi_i) + (\pi_i \times OR))$, being RR the relative risk and OR the odds ratio, given by the formula.

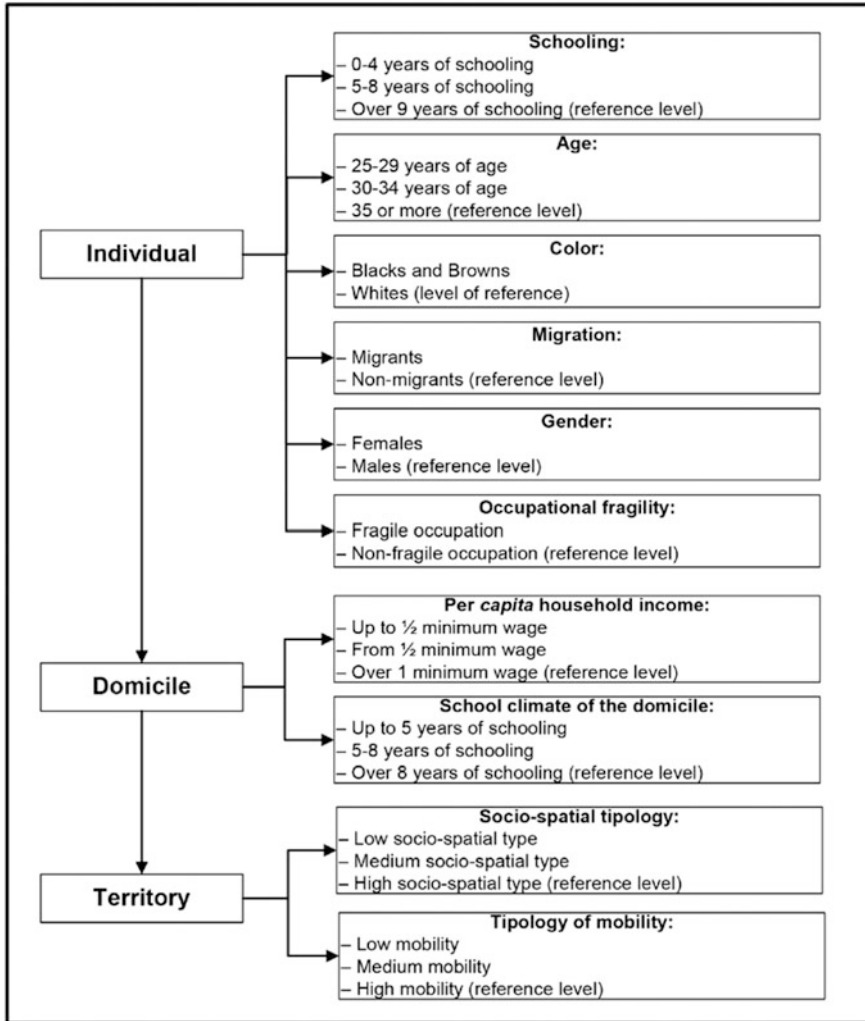
To test the significance of the estimated parameters, we will use Wald’s statistics that is given by, which, for large samples, is distributed as, or. With this correction, we prevent distorted estimates of the parameters. The results can be understood as percentage of the effect of an explanatory variable on the response variable in relation to the reference group that is given in the model, which is a contribution to risk if the sign is positive and a protection if the sign is negative.

2. Multiple linear regression model

For the explanation of the “income per hour worked” variable based on the selected explanatory variables, we used the multiple linear regression model since the response variable chosen has a continuous distribution. Due to its asymmetric distribution, we applied a transformation given by the logarithm. The multiple linear regression model is given by the formula, where y is the response variable, X is the matrix with the values observed by the explanatory variables, is the vector of parameters corresponding to the effect of each explanatory variable and is the matrix of random error (Charnet et al. 1999).

To test the model adequacy, we used the adjusted coefficient of determination (adjusted R^2) which is obtained by the formula, where n corresponds to the number of explanatory variables and p corresponds to the number of estimated parameters. The test of significance of the parameters is given by the expression. The least squares estimator of the parameters is given by. The result of the parameters estimation gives us a measure of the contribution of each explanatory variable for the distribution of the response variable. In the case of the transformation of the response variable by the logarithm we can tell of a relative contribution of each explanatory variable in relation to the variation in the response variable.

Annex 9.2



References

- Bourdieu P (1993) *The field of cultural production: essays on art and literature*. Columbia University Press, New York
- Bourdieu P (1997) Efeitos do lugar. In: Bourdieu P (ed) *A Miséria do Mundo*. Vozes, Petrópolis, RJ
- Charnet R et al (1999) *Análise de modelos de regressão linear com aplicações*. Ed. UNICAMP, Campinas, SP
- Diniz CC (1993) Desenvolvimento Poligonal no Brasil: nem desconcentração nem contínua polarização. *Revista Nova Economia*, Belo Horizonte, vol 3, no 1
- Kain JF (1968) Housing segregation, Negro employment and metropolitan decentralization. *Q J Econ* 82:175–197
- Kain JF (ed) (1969) *Race and poverty. The economics of discrimination*. Prentice-Hall International, London, England
- Kaztman R (1999) Activos y estructuras de oportunidades. *Estudios sobre las raíces de la vulnerabilidad social en Uruguay*, PNUD/CEPAL, Montevideo
- Kaztman R, Retamoso A (2005) Segregación espacial, empleo y pobreza en Montevideo. *Santiago del Chile*, n, *Revista de la CEPAL*, p 85
- Kaztman R (2008) Território e emprego: circuitos de realimentación de las desigualdades en Montevideo. *Seminário Labor Market and Urban Segregation*, University of Texas/Austin, USA—Grupo de Segregação Urbana/GESU/IPES/Universidad Católica do Uruguai/Observatório das Metrôpoles/IPPUR/Universidade Federal do Rio de Janeiro. Xerox copy
- Pinçon M, Pinçon-Charlot M (2000) *Sociologie de la bourgeoisie. La Decouverte*, Paris, France
- Preteceille E., Ribeiro LCQ (1999) Tendências da segregação social em metrópoles globais e desiguais: Paris e Rio de Janeiro nos anos 80. *Revista Brasileira de Ciências Sociais*, São Paulo, vol 14, no 40
- Ribeiro LCQ (2000) Cidade desigual ou cidade partida? Tendências da metrópole do Rio de Janeiro. In: Ribeiro LCQ (ed) *O Futuro das Metrôpoles: Desigualdade e Governabilidade*. Observatório das Metrôpoles/IPPUR-FASE/REVAN, Rio de Janeiro
- Ribeiro LCQ (2001) Segregação, Desigualdade e Habitação: a metrópole do Rio de Janeiro. In IX Encontro Nacional da ANPUR, 2001, Rio de Janeiro. *Ética, Planejamento e Construção Democrática do Espaço*. Rio de Janeiro: ANPUR, 2001.v. II. pp 944–958
- Ribeiro LCQ (2005) Segregação Residencial: teorias, conceitos e técnicas. In: Moyses A (ed) *Cidade: segregação urbana e planejamento*. Ed. da UCG, Goiânia
- Ribeiro LCQ (2007) A dimensão metropolitana da questão social: ensaio exploratório. Paper presented at the XXXI ENCONTRO NACIONAL DA ASSOCIAÇÃO DE PÓS-GRADUAÇÃO EM CIÊNCIAS SOCIAIS – ANPOCS, Caxambú
- Ruiz RM, Pereira BF (2007) *Estrutura e Dinâmica Espaço-temporal das Metrôpoles Brasileiras*. Observatório das Metrôpoles/IPPUR-UFRJ, Rio de Janeiro
- Small M, Newman K (2001) Urban poverty after the truly disadvantaged: the rediscovery of the family, the neighborhood, and culture. *Annual Review of Sociology*, Palo Alto, California, vol 27, Annual Reviews
- Small M (2004) *Villa victoria: the transformation of social capital in a boston barrio*, University of Chicago Press, Chicago
- Wacquant L (2001) *Os Condenados da Cidade*. Revan/Observatório, Rio de Janeiro
- Zhang J, Yu KF (1998) What's the relative risk? A method of correcting the odds ratio in cohort studies of common outcomes. *JAMA*, vol 280, no 19, pp 1690–1691

Chapter 10

Segregation and Educational Inequalities

Mariane C. Koslinski and Luiz Cesar de Queiroz Ribeiro

Abstract This article is intended to contribute to the understanding of the socio-territorial processes in school results, based on the following questions: (a) Is the center-periphery model sufficient for understanding of more complex processes, such as the Rio (Carioca) model of residential segregation?; (b) Is the school performance of the 4th and 8th grades (respectively 10 and 14 year old) students in the public education system associated with the socio-spatial organization of the city of Rio de Janeiro?; (c) Which mechanisms can be proposed as hypotheses or seem more plausible in explaining the relation between territory and school results in this urban context? In order to handle these questions, this chapter points out the importance of taking the social organization of the territory into consideration as a sphere that is also capable of limiting the overall increase in school effectiveness and of its role in the democratization of access to educational opportunities.

Keywords Segregation · Educational inequalities · Rio de Janeiro

10.1 Introduction

After the Second World War, in view of the dissemination of egalitarian values and growing social conflicts, various studies in the field of the Sociology of Education began to cover themes related to the capacity of education to promote mobility and greater equality (Karabel and Halsey 1977). These studies, given the context of universalization of basic education, have sought to understand the factors and

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processes that lead to the permanence and reproduction of educational inequalities, as well as those capable of promoting educational effectiveness and equity.

The first generation of studies was financed by governments that intended to expand and reform their educational systems. One of the most influential was that described in the *Coleman Report* (1966), which observed that the variance within a school is greater than that between schools, and concluded that differences in results are due more to differences in the clientele of the schools than to differences in the school characteristics (resources, equipment, programs, teacher qualifications).¹ The debate generated by this report caused reactions and criticisms in academic and government circles, due to the pessimism of its conclusions concerning the capacity of the school to reverse effects of the socioeconomic origin of families (Reynolds and Teddlie 2008; Soares 2002).

In response to these studies, there was a second generation of studies aimed at opening up the “black box” of the schools. Studies about “school effectiveness” and “school effect” began to be oriented by the objectives of demonstrating that “school makes a difference” and that it could exert an effect on educational opportunities. Such studies concentrated their efforts on the task of determining which school factors could lead to greater or lesser school performance. It is interesting to note that these studies have a pragmatic basis, given that they aim to identify the elements that could aid educational policies in achieving greater effectiveness and equity of results.

In the last two decades, with the exacerbation of the phenomena of ghettoization in the major cities, a third generation of studies has sought to conjugate the approaches of Urban Sociology and the Sociology of Education to deal with, besides family and school, factors related to the social organization of the territory and its possible effects on educational opportunities. In the studies about school effectiveness and equity, the possible effects of the social contexts formed by neighborhood units, constituted by processes of residential aggregation and segregation, gain significance. This theme raises the old concerns of classical sociology with regard to the contextual determinants of the trajectory of individuals in society, given the impulse of rapid, intense change that has taken place in the large cities, especially those in America, with the socioeconomic transformation driven by globalization and restructuring of industrial capitalism. The two main features of such change are the constitution of territories with heavy concentrations of the poor in economically stagnant areas, presenting evident signs of social disorganization, isolation from the rest of society, civic desertification, violent crime, reduction of normative effectiveness in social interaction, entailing enormous impacts on the social institutions located in these territories. A current line of research has emerged about the role of the neighborhood’s social context in the constitution of various

¹In Great Britain, the Plowden Report (1967) found similar results: school variables had less impact on the explanation of differences in school success in the primary schools when compared with factors linked to the attitudes and behavior of the parents (Forquin 1995).

mechanisms of reproduction of social inequalities,² in which those related to the functioning of basic schooling gained great significance.

This work is linked to the efforts of this third generation of studies and is intended to contribute to the reflection on the role of the phenomena of territorial segmentation and residential segregation in the reproduction of educational inequalities, taking the municipality of Rio de Janeiro as a case study.

This city presents a particular model of social organization of its territory, whose main feature is the combination of two principles of residential segregation. On the one hand, in the classical nucleus-periphery model, characteristic of the cities organized in societies marked by extreme social inequalities, physical distances and low urban accessibility territorially separate the social classes and groups from each other and from the urban assets that promote social welfare. On the other hand, the strong presence of *favelas* in the wealthy districts, which, in principle, should bring groups, social classes, and urban assets together in the territory, actually hierarchize the practices of interaction of such groups and filter the access to the urban assets through a series of political, institutional, and symbolic mechanisms that separate them.

We are, therefore, dealing with a city about which we can apply empirical analysis about what a vast amount of literature has been calling the neighborhood effect. Indeed, it seems pertinent in the context of the city of Rio de Janeiro to formulate the following question: will this social geography favor effective functioning or greater equity in the public education system, considering the alleged positive effects of heterogeneous social contexts on the learning of children? This question gains even greater significance if we consider that the city of Rio de Janeiro, due to its past as the nation's capital, has one of the most established public municipal systems of primary education.

This article is intended to contribute to the understanding of the socio-territorial processes in school results, based on the following questions: (a) Is the center-periphery model sufficient for understanding of more complex processes, such as the Rio (Carioca) model of residential segregation?; (b) Is the school performance of the 4th and 8th grades (respectively 10 and 14 year old) students in the public education system associated with the socio-spatial organization of the city of Rio de Janeiro?; (c) Which mechanisms can be proposed as hypotheses or seem more plausible in explaining the relation between territory and school results in this urban context?

In order to handle these questions, the first part of this article makes a brief review of the mechanisms related to the social contexts of the territory that seem more pertinent to the understanding of the educational outcomes of children and adolescents. The second part presents a discussion of the residential segregation model of Rio de Janeiro and the possible impacts of the presence of *favelas* in wealthy areas of the city on social isolation. The third part of the article presents the

²As there is extensive literature on the theme in the USA, we return to the bibliographic reviews made by Jencks and Peterson (1991) and Dreier et al. (2004).

results of empirical analyses conducted using hierarchical linear regression models with the purpose of producing evidence on the possible effects of the social contexts, generated by the principles of residential segregation mentioned above, on the educational inequalities of children attending public schools at the fundamental education level. The social contexts of the territories were identified through application of the model for construction of socio-spatial typologies developed in the Observatório das Metrópoles,³ which employs the techniques of factorial analysis and construction of clusters, using socio-demographic data from the Censo 2000 (2000 Census) as indicators. In order to assess the educational inequalities, we utilized the results of Prova Brasil 2005 (nationwide examination), employing various statistical controls, related to the socioeconomic origin of the students (Prova Brasil 2005) and the characteristics of the schools they attend (Prova Brasil 2005; Censo Escolar [School Census] 2005), on the school results. The analytical model was devised to reveal the possible effects of the social contexts of the territories, on macro- and microscales, in which phenomena of the social division of urban territory are materialized. Finally, the article points out the importance of taking the social organization of the territory into consideration as a sphere that is also capable of limiting the overall increase in school effectiveness and of its role in the democratization of access to educational opportunities.

10.2 The Neighborhood Effect: Impacts on the Supply and Demand of Educational Opportunities

Urban Sociology originated as a discipline under the influence of the classical works of the so-called “Chicago School”, which, examining the processes of residential segregation of ethnically and culturally homogeneous social groups, constructed conceptual and methodological references about the effects of social contexts of neighborhood on the processes of assimilation of individuals into the competitive social order. After the long period of eclipse of the influence exerted by the works of William I. Thomas, Florian Znaniecki, Robert E. Park, Louis Wirth, Ernest Burgess, Everett Hughes and Robert McKenzie, with the hegemony of Talcott Parsons’ sociology, the theme was resuscitated in the 1980s with the repercussion of the seminal work by Wilson (1987). His theorization about the effects that reproduce social disadvantages arising from territorial concentration of old black workers transformed into the excluded from the mainstream of the economy, resulting from the restructuring of production, exerted great influence on the carrying out of a series of studies based on the hypothesis that poverty in the

³Regarding the basis for this methodology, see Ribeiro (2004).

neighborhood affects the opportunities of the poorest.⁴ These studies sought to understand certain social outcomes based on a relation of causality between the individual (motivations, choices, social behavior, and situation) and the social contexts in which one resides, characterized mainly by the common properties of the residents.

For example, in the field of the Sociology of Education, whereas studies that attempted to explain inequality of educational results used to concentrate on factors related to the family and the school, as of the 1990s, we have observed a proliferation of studies that have begun to consider the neighborhood as a sphere that is also capable of exerting an impact on the distribution of educational opportunities.

Two key questions guide the vast amount of literature on the neighborhood effect that followed the study by Wilson (1987): (a) Do neighborhood conditions affect individual results, for example, those of school?; (b) Which mechanisms explain the relation between the characteristics of the district and individual results?

Diverse bibliographical reviews have been made with respect to the mechanisms that explain the negative impact of poor neighborhoods and/or the positive impact of affluent neighborhoods (Jencks and Mayer 1990; Ellen and Turner 1997; Brooks-Gunn et al. 1997; Sampson et al. 2002; Small and Newman 2001). Here we do not intend to make an exhaustive review of this bibliography, but rather explain how the models described by these works would help us to think about a possible neighborhood effect on educational results, as much on the side of demand as on that of the supply of educational opportunities. Thus, division of these mechanisms into three broader models seems pertinent: (a) model of collective effectiveness; (b) model of collective socialization; (c) institutional model.

The model of collective effectiveness returns to the thesis of social disorganization,⁵ which defends that poverty in the neighborhood produces socially disorganized communities, and, therefore, it presents higher crime rates (Small 2004). On the one hand, children who live in communities, where norms are clear and overseen by their inhabitants, present less probability of risk behavior. The social disorganization implies a lower density of social networks in the neighborhood, less involvement in voluntary associations and collective effectiveness, that is, the degree to which the neighbors are willing to supervise children and adolescents, and intervene in social situations for the collective good (Small and Newman 2001; Sampson et al. 1997).

More pertinent to the intended discussion are the models that are supported by the idea that the characteristics of neighborhoods influence processes of collective

⁴According to Wilson (1987), the conjunction of factors, such as structural changes in the economy, the growth of inequality and the selective exodus of families of the black middle and working classes to higher income neighborhoods and suburbs have led to a concentration of poverty within neighborhoods with poor minorities, and caused an atmosphere of scarcity of institutions, values, social role models that are necessary to achieve success in a post-industrial society.

⁵The theory of social disorganization comes up against various criticisms from authors who defend that the poor urban neighborhoods are not disorganized, but present alternative forms of organization (Small 2004; Wacquant 1996).

socialization. According to these models, the patterns and norms of behavior tend to be shaped by those with whom one has most contact and most often interacts. They are based on Wilson's (1987) argument of social isolation,⁶ which advocates that the concentration of poverty has created a socially disadvantageous atmosphere, given that the poverty of the district disconnects persons from relations and interactions with the middle class. Thus, for the author, living in a mixed-income neighborhood is less harmful than living in a neighborhood with a high concentration of poverty.

The first mechanism of collective socialization is based on what the literature usually calls the epidemic model, which arises from the question of how peers are mutually influenced. According to this model, if adolescents in a community present little interest in school, or have already abandoned school, and, often, engage in crime and other dangerous behavior, other adolescents will have a greater propensity to see these activities and behavior as acceptable. On the other hand, this model states that children and adolescents, who live in neighborhoods where most neighbors finish middle school and reach higher education, will feel compelled to do the same. Finally, if we compare the children and adolescents of similar families, we can expect that those brought up in poor neighborhoods will more frequently present risk behavior than those in more affluent ones⁷ (Jencks and Mayer 1990; Ellen and Turner 1997).

Another important mechanism of socialization is related to the social role models, which are based on the presupposition that children learn about what behavior is considered normal or acceptable from adults with whom they often interact in their neighborhoods. Thus, children that grow up in homogeneously poor or segregated neighborhoods are separated from middle-class social role models, in particular models of those adults who are successful due to their schooling⁸ (Wilson

⁶The studies based on the thesis of social isolation also state that when poor neighborhoods exert a negative impact on the social networks of the individuals. This factor is important, as the knowledge that the individuals possess about economic opportunities depends on their networks of friends, colleagues and acquaintances who are, at least in part, geographically based. Thus, in a neighborhood with few employed families, individuals experience social isolation that excludes them from job networks. Various studies argue that this mechanism has a special impact on adults (Small and Newman 2001; Ellen and Turner 1997). However, we can expect that the networks also affect access of parents to information about the quality of schools and the probability of enrolling their children in one of quality.

⁷Jencks and Mayer (1990) criticize the epidemic model, since it is based on the presupposition that bad behavior is contagious, and that each neighborhood, or school, has a single set of dominant norms, with which the children and adolescents comply. Such a perspective ignores the possibility that the individuals are not equally susceptible to the influence, as much of the neighborhood as of the school.

⁸Upon analysis of the process that led to the exodus of the middle and working classes from black districts in the North American context, Wilson (1987) observes that, previously, the presence of the middle class would have provided social role models that maintained alive the perception that education was a viable alternative. With the concentration of poverty, most of the adults with whom the adolescents establish contact are not working or present precarious forms of engagement in the employment market. "The net effect is that joblessness, as a way of life, takes on a different social meaning; the relationship between schooling and post-school employment takes on a different meaning" (Wilson 1987, p. 57).

1987; Ellen and Turner 1997; Small and Newman 2001). As a consequence, we may expect that children and adolescents in these contexts will prove to have less propensity to adopt the behavior and attitudes that would lead to success at school (high educational expectations and effort) as they would not be exposed to direct evidence that these attitudes and behavior are useful and desirable (Ainsworth 2002).

The mechanisms of socialization have special relevance to school results, as children and adolescents are more susceptible to such processes. For example, we can expect that the influence of peers, as opposed to that of the adults, grows in adolescence, when youths affirm their independence, as much in relation to the family as in relation to other adults with whom they have contact in school and in the community (Ellen and Turner 1997; Jencks and Mayer 1990).

Finally, the third model, called institutional or institutional socialization, is based on the presupposition that individuals can be affected by the quality of the services provided in their neighborhoods. Proponents of this model focus principally on quality, quantity, and the diversity of institutions present in a given community/neighborhood, capable of providing the needs of children and adolescents, such as libraries, schools, kindergartens, medical facilities, etc. Thus, the poor neighborhoods are deprived or inadequately equipped with quality institutional resources.

The institutional model, in a similar manner to the social role model, also concentrates on the way adults affect children and adolescents. However, in this model, the adults in question are not residents of the districts/neighborhoods, but work in institutions situated there.

The schools of elementary or fundamental level are of special relevance for the explanations of this model, as, at this level of education, children tend to frequent establishments located in their neighborhoods.

Various factors are mentioned to explain the difference in quality of schools located in more affluent neighborhoods from those where there is a higher concentration of poverty. The factors encompassed range from differences in terms of resources and infrastructure to the management capacity of the school administration. For example, the schools located in wealthier areas tend to receive better qualified and experienced teachers, and the poor neighborhoods are not only less capable of recruiting but also of retaining good teachers (Ainsworth 2002; Jencks and Mayer 1990). Besides this, the neighborhood exerts an impact on the expectations that teachers have regarding the future and the capacity of their students. According to Flores (2008, p. 152) "The adults, in these institutions, use distinct criteria of functionality based on interpretation of the cultural attributes and potential of their users".

Thus, the massive bibliography that discusses the mechanisms related to the neighborhood effect leads us to believe that the geographically defined social contexts, on the one hand, generate effects on the "demand for schooling", to the extent that they configure intermediate spaces of socialization between the family and the school. On the other hand, they also exert an impact on the "supply of schooling". The social division of the urban territory produces important

differentiations in the public education system through a complex interplay of the effects of physical and social distancing that incides on the actors and the school institutions, producing a social geography of the educational opportunities.

However, Jencks and Mayer (1990) warn of the difficulty in differentiating the effect exerted by these different mechanisms, given that all stem from the hypothesis that the socioeconomic status (SES) of the neighborhood exerts an impact on school results. It would be difficult to distinguish these models when looking at the schools, since the forms of measuring the socioeconomic status of the neighborhoods say little about these mechanisms.⁹ The authors further argue that these studies tend to attribute more weight to the explanations arising from the models of collective socialization than to the effect of the institutions or different social practices configured in them in different neighborhoods. It is worth noting that the preference for explanations that return to the collective socialization model is not based on empirical judgment, but solely on a hypothetical explanation of the relationship between individual behavior and their neighborhood. As a result, they underestimate the effect of an affluent or a poor neighborhood on the institutions configured there.

10.3 Residential Segregation, *Favelas*, and Urban Frontiers in Rio de Janeiro

As seen in the previous section, there is no convergence in the pertinent literature about the socio-territorial mechanisms related to the school performance of children and adolescents. In addition, there is no consensus regarding which characteristics of the neighborhood most affect individual results, or, more specifically, school results. This is a great challenge for research on the theme: to operationalize a variable capable of taking into account the social relations that have an influence on the various individual outcomes.

In the studies that focus on educational outcomes, we observe a great variety of forms utilized as expressions of the social relations in the district: (i) percentage of single-parent families in a neighborhood as an indicator of normative effectiveness (Ainsworth 2002); (ii) percentage of families with high economic status, percentage of adults who work in prestigious occupations, level of schooling of the adult population (to illustrate mechanisms of socialization or of isolation of the middle class and their social role models) (Duncan 1994; Garner and Raudenbush 1991; Flores 2008; Kaztman and Retamoso 2007); (iii) indicators of residential segregation, such as the index of dissimilarity, of exposure, of local Moran, to measure

⁹The work of Ainsworth (2002) consists of a few studies that attempt to empirically differentiate the influence of different mediating mechanisms. The author concluded that as much the collective socialization as the institutional mechanisms exert an impact on school results, although the former exerts a more accentuated impact.

the concentration of the population according to income, schooling and/or race (indicators to illustrate mechanisms of isolation from the middle class and their social role models, as well as to measure restriction of social networks) (Wilson 2008; Flores 2008).

Despite the evidence about the effect of the neighborhood on the school results of children and adolescents provided in the aforementioned studies, they do not reach agreement on the direction of this effect. For instance, while for some the wealthy neighborhoods exert a positive impact on school results, other studies emphasize negative effects due to the effect of relative deprivation, cultural conflict or competition for scarce resources.¹⁰ Still others defend that the effect of the neighborhood is very small in comparison to the effect of the family, the closest and most influential social context, especially for younger children.

Besides this, several studies about the neighborhood effect privilege socio-territorial configurations that denote a territorial segregation on a macroscale. For example, they use measurements that not only indicate the districts bearing similar characteristics (for example, similar socioeconomic status), but also whether these districts share geographical proximity.¹¹ Studies that utilize such measurements are based on the presupposition that the presence of contiguous areas with a low socioeconomic level, which create large enclaves, have a more marked impact on the social disorganization and social isolation, and, consequently, on various individual results.

As an example, we may cite studies that observe transformations in the social morphology of the urban contexts in Latin American cities and approximate them to the explanations about the processes observed by Wilson (1987) in the North American context. These transformations imply modification of the social composition of the districts, which become progressively more socioeconomically homogeneous and configure spaces isolated from one another. This residential segregation on a large scale, or of the center-periphery type in which poor neighborhoods and irregular settlements are constructed in peripheral areas, leads to a decrease in opportunities for interaction among persons occupying different positions in the social space of the city. (Flores 2008; Ksztman and Retamoso 2008).

However, the analyses that privilege residential segregation only at the macro level do not seem to be capable of taking account of the more complex urban context that goes beyond a model of the center-periphery type. This is the case of

¹⁰For example, with regard to relative deprivation, children and adolescents conceive their economic position comparing their standards with those of their neighbors and schoolmates. Thus, children with less socioeconomic status have worse results in schools or in districts where they interact with children of high socioeconomic status. These explanations are based on the presupposition that, when children do not achieve the desired standard or results (school success, finishing middle school and entering higher education) they create a common culture, or a deviant subculture, in order to deal with this shared failure (Jencks and Mayer 1990).

¹¹This is the case of the LISA index of spatial correlation, an index that measures “the extent to which area units inhabited by minority members adjoin one another, or cluster, in space” (Massey and Denton 1988, p. 293).

the Rio's (Cariocan) model of segregation, characterized by physical proximity and social distance (Ribeiro 2005; Ribeiro and Lago 2001). In this specific context, we observe the presence of *favelas* throughout the territory of the Rio de Janeiro municipality, plus a heavy concentration of these in the affluent areas of the city. However, this physical proximity does not imply social interaction among social segments that occupy socially distant positions.

Reading the maps¹² makes the principles of social organization of the city territory evident. They show an enormous periphery, forming a continuous territory, concentrating households with a weak educational atmosphere—areas in red—as opposed to the few spaces (in blue) that concentrate the households with a strong educational atmosphere. At the same time, the dark points indicate the location of the *favela* areas (what the nomenclature calls subnormal agglomerations) scattered throughout the city, but with an intense concentration precisely in the territories that aggregate the persons living in households with a high level of schooling and that also concentrate the public urban assets of higher quality.

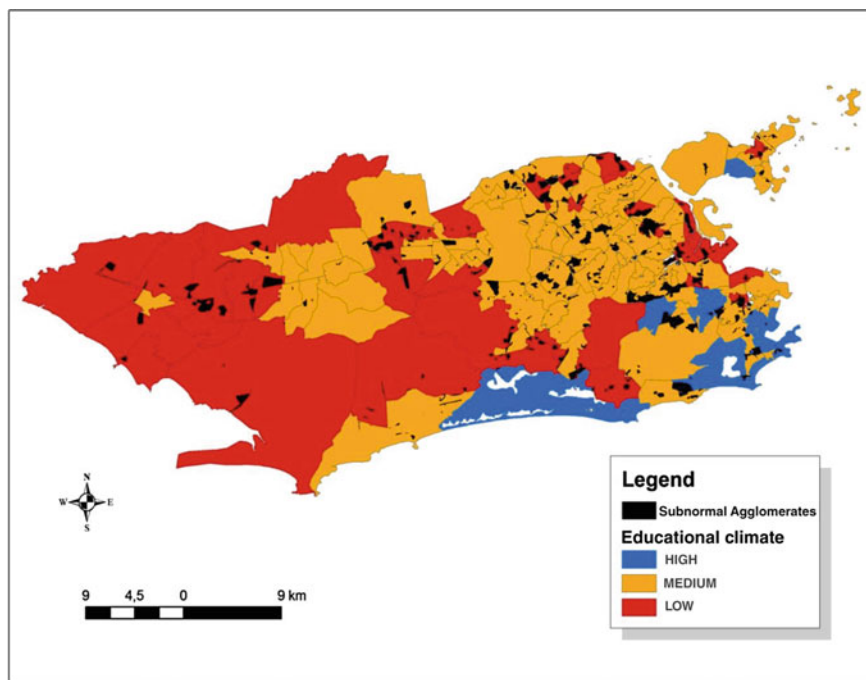
Attention is drawn to the fact that around 25% of the population dwelling in the elite areas lives in *favelas*. This fact is of great significance to understand the microscale of the phenomenon of the residential segregation in the city.

What are the *favelas* as a place in the social space of the city of Rio de Janeiro? Some recent studies about the *favelas* have fuelled a debate about the sociological pertinence of the *favela* versus the city distinction in the understanding of the model of social organization of the space in Rio de Janeiro. In effect, analyzing the evident improvements in the urban living conditions in the *favelas*—especially those related to housing—some authors (Preteceille and Valladares 2000) have pointed out the growing process of diversification of these spaces and their social approximation to the poor districts of the periphery. Such works criticize, explicitly or implicitly, the conception of the *favelas* as spaces that concentrate social segments submitted to the negative effects of residential segregation, among which are those related with the reproduction of poverty. At the limit, Preteceille and Valladares (2000) argue

¹²The map illustrates the socio-territorial division of the municipality of Rio de Janeiro based on the indicator of “educational atmosphere” resulting from a typological analysis created in the Observatório das Metrópoles, utilizing the average schooling of the adults over 25 in households. This variable describes the residential segregation through the concentration of households with adults with a greater or lesser level of education. The tracts from the 2000 Demographic Census were utilized as spatial units of analysis. The first step in devising the indicator of educational atmosphere was the grouping of the households into four schooling ranges: (a) under 4 years; (b) 4–8 years; (c) 8–11 years; (d) 12 or more years of study. The classification of the tracts by a typology was made based on the application of techniques of factor analysis by binary combination, followed by an ascending hierarchical classification (cluster analysis). In tracts with a strong educational atmosphere, we observe a predominance of households with a strong educational atmosphere; in the tracts with a medium level of educational atmosphere, we observe a predominance of households in the category 4–8 years of study and 8–11 years of study; and, finally, in the areas of low educational atmosphere, we observe a greater presence of households in the categories up to 4 years of study and 4–8 years of study.

the inadequacy of the concept of the *favela*. The results of our works in the Observatório das Metrôpoles, as well as those of other researchers, demonstrate, however, the pertinence of this distinction, to the extent that it is associated with the distinct patterns of social interaction among the *favela* residents and the institutions of the society, and even with other social groups. For example, studies about the labor market utilizing the data from the Censo 2000 (2000 Census), such as those of Ribeiro and Lago (2001), and Pero et al. (2005), showed the relation between socio-territorial segmentation and differences in workers' earnings, considering those with similar social demographic attributes. On the other hand, Andrade (2004), through a case study, provided evidence of the negative impacts on the possibilities of personal income for favela dwellers arising from the inherent uncertainty regarding property rights guaranteed by local informal mechanisms, that is, outside the standards of the official institutions. In the field of political relations, Burgos (2005) analyzed how the residents in favelas are, even today, submitted to mechanisms that weaken their citizenship by the permanence of clientelistic practices that are strongly present in the relations they maintain with public organisms and institutions. In the field of education, Alves et al. (2008) showed the disadvantages of children and youths, aged 7–17, in terms of greater gaps between age and school grades when they are residents in favelas in comparison with children similar in terms of individual and family attributes (Maps 10.1 and 10.2).

The results of the studies, conducted by the research group coordinated by Machado (2008a, b), regarding the impacts of criminal violence and police violence on the sociability of the favela residents, reinforce the pertinence of the favela versus district dichotomy to understand the dynamic of social organization in the territory of the city and its internal impacts on the social life of these territories and in the relations of its residents with the remainder of the city. The quotidian experience of this population is strongly marked by disorganization and social isolation arising from the territorial and symbolic confinement, from the mistrust of the internal social interactions and of those maintained with the social groups residing in districts in various levels of urban sociability, whose basis is the stigma arising from the criminalization of these spaces. But, one of the most important results of this research for the purposes of this article is the observation that researchers make about the change of approach of the public policies aimed at this territory. In the 1960s, it was oriented by the representation of the need to “subir o morro” [go up the hill into the favela] to anticipate the potential for contestation of the elite urban order. The latter was represented by the existence of the favela dwellers as a category conceived as being at the margin of a modernization process associated with accelerated urbanization, incapable, for various reasons, of including new city dwellers in the progress and development. At that moment, such understanding of the “problem of the favela” implied formulation of a diagnosis, whose solution was the extension to the marginalized territories of the “rights to the city”. The theme of “urbanization of the favelas” was directly connected with the political agenda, and was included in the public debate on allying modernization

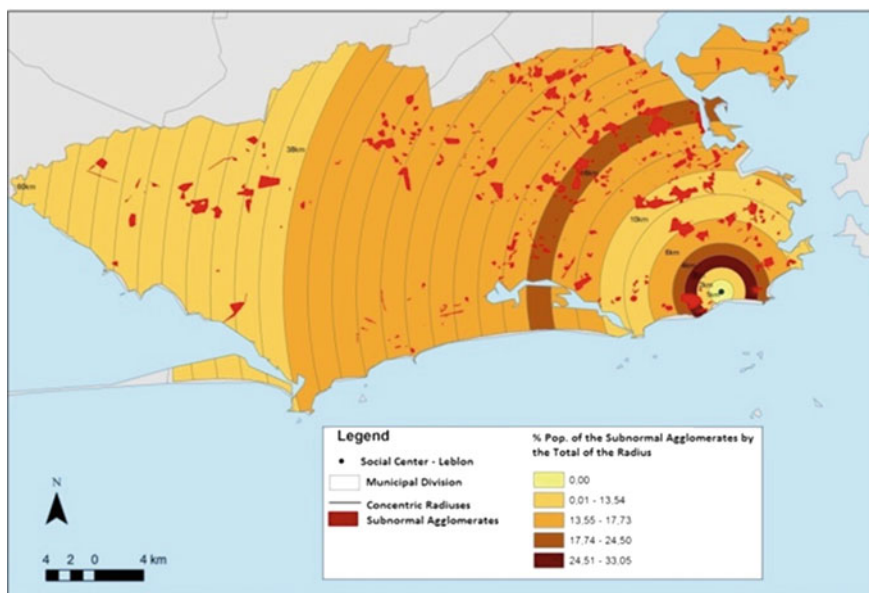


Map 10.1 Residential segregation

with democratization. In the 1980s and 1990s, the growing presence of representation regarding urban violence, resulting from the possibilities of contamination of this population by an ethic of the organized crime by the drug dealers, began to steer the debate about shantytowns. They began to be conceived as a threat to the social order and the theme of “urbanization of the favelas”, led to actions of containment of the epidemiological expansion of the culture of violence.

Moreover, following the reflections generated by the aforementioned innovative research, such change of orientation of public policy—which is broadly echoed by society—produces three important consequences: it dynamizes and increases the disorganizing dynamic of social life and isolation of this population; it transforms the previously flexible organized frontiers, based on a variable geometry, into hard univocal frontiers¹³; and, thirdly, it creates and legitimizes a salvationist

¹³Leite (2008) thus describes the concentration of the *favelas* in terms of the violence of the drug traffic, firearms, and constitution of an amply shared collective representation of the *favelas* as territories with criminality. “Constituted in the social perception as a violent territory of the city, the *favelas* are inhabited by a population that needs to take into account in their quotidian, on the one hand, this designation that encompasses them and that essentially demarcates their place in the city and their possibilities of access to citizenship assets, public institutions and services. On the other hand, it is necessary to consider the different modalities of presence and activity of violent



Map 10.2 Location of shantytowns

“ideology”, bearing a disciplinary project as a strategy for social control, which begins to be the distinguishing mark of the relations of the institutions of the city with these territories and their population. In other words, if the threats come from the “margins of the city” by the presence of violence and crime not regulated by the State, the policy of containment and expansion of State action seeks the recuperation of the legitimate monopoly over power, this action being combined with others originating from the “civil society” organized as salvationist devices for the innocent victims of the threats of being mobilized via the recruitment policies of these criminal organizations.

In this work, we assume, therefore, that, despite the clear tendencies towards inter- and intra-favela differentiation, besides the increase in their integration with some urban services, the favela-city dichotomy has not been eliminated as a distinctive feature of the Rio (Cariocan) urban order. In effect, between the favela and

(Footnote 13 continued)

crime and of the police in their places of residence. Both dimensions construct and reconstruct the frontiers between the district and the *favela* in Rio de Janeiro, as distinct physical and moral territories of the city. What is permanently at stake, in the case of the former, is the renewal of these frontiers with the intention of discursively territorializing the violence, involving an effort undertaken by means of diverse devices to encapsulate them in the “margins” of the city. The second dimension indicates that the sociability that is woven in the *favelas* incorporates violence as empirical data with which its population has to deal with the quotidian”. (Leite 2008, pp. 119–120).

the city, a regime of strongly hierarchized social interaction is maintained, and organized on the basis of the perceptions of the existence of separate, distant social worlds. This regime of social interaction is not made real only in quotidian practices, but also in the interactions with the city's institutions, that is, those that should form the basis of its action due to the values of the rights to the city, by means of the promotion of access to fundamental public assets of a universalized citizenship, in its conception and in the procedures by which access is obtained. We are referring to the institutions that were based on the countries where there has occurred construction of an effective nation-state, organized by universal notions and rules of incorporation into the political community. The school, without doubt, was one of these institutions. As we shall attempt to make evident below, the public schools are organized as institutions and organizations that are discriminating and discriminatory, especially when they are attended by lower strata segments that today are the object of this double policy of management at the margin: containment by violent action and salvationist social policy, encompassing disciplinary and pedagogic social control. If the population of these territories struggles every day against the disorganizing effects of the social life stemming from the presence of violent crime and the policy of containment, the act of counterbalancing the tendencies towards socio-territorial isolation is more difficult as it implies interaction with institutions, whose rules of functioning this population scarcely knows. It also becomes difficult to counteract isolation when the old practices of discrimination, experienced almost exclusively in the universe of personal interaction, gain the objectivity of institutional action by the fact that the dwelling place—the favelas—is a bureaucratized attribute of discriminating and discriminatory treatment.

The study by Small (2004) helps us to understand social isolation, even in a model of segregation in which rich and poor districts coexist side by side. In his study of a poor district of Latin origin close to an upper middle class district in Boston, the author shows the constitution of a spatial configuration in which the frontiers are fixed and precise.¹⁴ These fixed markers are composed of different landscapes and constructions in the poor and non-poor areas (characteristics of streets, houses, buildings, pavements, businesses, and services) and by spatialization of class, race, and crime (when a great proportion of the residents on each side of the boundary is of a different racial or class origin, and a certain number of practices, such as drug traffic, engagement in violent crime, occurs predominantly on one side of the frontier. This ecology ends up preventing the residents of the poor district crossing “an invisible wall” and this leads to the perception of the existence of two groups of people that are mutually exclusive, internally homogeneous and opposed. Thus, it reduced the possibilities of interaction with the middle-class neighbors. Therefore, the study by Small (2004) makes us propose that

¹⁴According to the author, in places where the frontiers are fluid, the residents can recognize the poor and non-poor by race or personal appearance, but these are not recognized in space. Thus, the groups cannot avoid the areas where other groups dwell, and the interaction between the groups becomes inevitable. However, when the spatial frontiers between these groups are fixed and precise, it becomes easier for the individuals of one social group to avoid the areas of another.

the frontiers between the “favela” and the “district” can be clearer and fixed, and the social distance among the different social groups more accentuated in the affluent areas than in the less wealthy or poorer areas of the city. In these areas, we can expect that the businesses, leisure areas and services used by these social groups will be better delimited (Ribeiro 2008). Concerning the impact of this socio-spatial configuration on educational opportunities, we can expect that children and adolescents in favelas in the wealthier areas of the city to be more easily identified and stigmatized by teachers and principals who do not recognize in them the attributes that they desire for their students. Thus, we may propose the hypothesis that, in these contexts, in which the frontiers are demonstrably fixed and clear, the neighborhood-effect mechanism, named an institutional model by the literature, exerts an impact on educational opportunities. In other words, we can expect that this socio-territorial configuration, typical of the Rio (Cariocan) model of segregation, exerts an impact on educational opportunities, not only on the demand side of education, but also on the supply side. This mechanism also finds theoretical support in the conception of Bourdieu’s (1997) “effect-of-place”, and his vision of urban space as the materialization of social space, with its hierarchies, segmentations and social distinction practices.

10.4 Some Evidence About the Municipality of Rio de Janeiro

In order to answer the questions posed by the work, analyses were made utilizing two-level hierarchical regression models. These models are suitable for educational analysis, as they possess a hierarchical structure: students are grouped in schools.¹⁵ In the analyses, we took into account the phenomenon of residential segregation, as much in its manifestation on the macroscale as on the micro.

The models presented seek to estimate the results in the mathematics tests of Prova Brasil 2005 (SAEB scale) for students of the 4th and 8th grades of public schools in the municipality of Rio de Janeiro. On the one hand, they include variables at the level of the student that are recognized by the pertinent literature as factors that reflect on the school performance of the students, such as the socioeconomic status,¹⁶ gender, color, and the school grade repetition variable, as an indicator of the students’ school trajectory.¹⁷

¹⁵Specifications of technical questions of this type of model are found in the works of Raudenbush and Bryk (2002) and Ferrão (2003).

¹⁶The socioeconomic status variable was created from the extractions of the first factor of a factor analysis by the method of main components, which considered the following variables: (a) Possession of goods; (b) Possession of educational resources; (c) Maximum education of the parents.

¹⁷The variables at the level of the student were calculated from micro data from Prova Brasil 2005.

Besides the socioeconomic status considered at the levels of the student and one of the school, the models also contemplate the collective effect of the socioeconomic status and the color composition of the students of each school. At school level, a variable that summarizes the availability of resources of pedagogic use in the schools was also considered.¹⁸

At the second level, the models also contemplate variables that characterize the territory, or the neighborhood, in which the school is located, based on the educational atmosphere variable. This variable was obtained from a typological analysis utilizing the average schooling level in households among the adults aged over 25 (Censo IBGE 2000). The tracts of the 2000 Demographic Census (Censo IBGE 2000) were utilized as spatial units of analysis. The schools were located in these territorial units based on geo-processing techniques.

In this case, we can think that the territory where the school is located is a proxy of the students' dwelling place,¹⁹ and, therefore, we may think of an effect of the territory via the functioning of mechanisms of collective socialization. But we could also think that the schools located in territories with different characteristics also possess distinct infrastructure, organization, and management.

Finally, we also include in our models the variable location of the schools up to 100 m from a *favela*, based on the presupposition that schools located in and very close to a *favela* would be "encapsulated" by these territories, and suffer a negative effect of the territory, especially due to the mechanisms related to the supply of education. Chart 10.1 presents a description of the variables used in the models and Table 10.1 presents statistics that describe these variables.

For the macro-analyses, all the schools and students of the Rio de Janeiro public system, for which there were data from Prova Brasil 2005, were considered. In the analyses at the micro-level, the models were applied considering only students and schools located in each of the territories characterized by the educational atmosphere variable.²⁰ For macro-analysis, considering students of the 4th grade, we obtained the following results (Table 10.2):

Model 1 is the null model. It estimates the proportion of the total variance of the scores in mathematics attributable to each one of the hierarchical levels considered (school and student). As it can be observed, the greater part of the difference in the students' scores is related to the characteristics of the students, and only 10.31% of the total variance can be attributed to the school. This fact can be explained by our working only with public schools, almost all of them belonging to the municipal system.

¹⁸This variable is constructed by a factor analysis with three variables related to the quantity of TV sets, overhead projectors and videocassette recorders, weighted by the number of classrooms. From this analysis the first factor was extracted.

¹⁹The work by Alves et al. (2008) in the municipality of Rio de Janeiro observed that 85% of the students in the first segment of primary education live up to 1500 m from the schools where they study. However, the schools with higher performance more frequently tend to receive students who live at greater distances from the school.

²⁰See Annex A with the model that served as a basis for the analyses on a macroscale.

Chart 10.1 Variables used in the models of analysis

Variables	Type	Description
<i>Dependent variables</i>		
Mathematical proficiency 4th grade	Continuous	Math scores—Prova Brasil, 4th grade, SAEB scale
Mathematical proficiency 8th grade	Continuous	Math scores—Prova Brasil, 8th grade, SAEB scale
<i>Independent variables</i>		
Level 1		
Brown	Dummy	Brown (1 = yes/0 = other)
Black	Dummy	Black (1 = yes/0 = other)
SES	Continuous	Socioeconomic status of student
Gender	Dummy	(0 = Female/1 = Male)
School grade repetition	Dummy	Student already failed once (0 = no 1 = once or more times)
Level 2		
SES_SCHOOL	Continuous	Socioeconomic status of school
Brown_Black_SCHOOL	Continuous	Percentage of blacks and browns in school
Equipment	Continuous	School equipment of pedagogic use
Weak atmosphere	Dummy	Location of the school in tracts with weak educational atmosphere (1 = yes/0 = other)
Medium level atmosphere	Dummy	Location of the school in tracts with medium level educational atmosphere (1 = yes/0 = other)
Favela 100 m	Dummy	Schools located up to 100 m from <i>favelas</i> (1 = yes/0 = other)

Table 10.1 Descriptive statistics of the variables used in the models

Variables	8th grade		4th grade	
	Mean	SD	Mean	SD
Math scores	250.38	45.02	191.21	38.58
Brown	0.46		0.51	
Black	0.16		0.16	
SES	0.01	0.98	0.02	0.98
Gender	0.50		0.51	
School grade repetition	0.33		0.30	
SES_School	-0.04	0.32	0.00	0.31
Brown_Black_School	0.64	0.09	0.67	0.09
Equipment	-0.27	0.61	-0.07	0.85
Low atmosphere	0.33		0.36	
Medium level atmosphere	0.58		0.56	
Favela 100 m	0.11		0.17	

Table 10.2 Hierarchical linear models estimating proficiency in mathematics—Prova Brasil 2005—4th grade

	Model 1	Model 2	Model 3	Model 4
<i>Fixed effects</i>				
INTERCEPT: β_0	191.63***	205.17***	203.75***	202.70***
<i>Student</i>				
BROWN: β_1		-1.33***	-1.29***	-1.17**
BLACK: β_2		-8.29***	-8.21***	-8.12***
SES: β_3		3.61***	3.62***	3.62***
GENDER: β_4		2.92***	2.90***	2.89***
SCHOOL GRADE REPETITION: β_5		-14.99***	-14.80***	-14.76***
<i>School</i>				
BROWN_BLACK_SCHOOL: γ_{01}				-18.35***
SES_SCHOOL: γ_{02}			17.89***	15.13***
EQUIPMENT: γ_{03}				2.78***
LOW ATMOSPHERE: γ_{04}		-11.60***	-9.61***	-7.87***
MEDIUM LEVEL ATMOSPHERE: γ_{05}		-6.52***	-6.63***	-5.86***
FAVELA 100 M: γ_{06}		-3.75**	0.01	-0.14
<i>Random effects</i>				
Level 2 (School): R_0	153.64	125.38	98.10	90.56
Level 1 (Student): E	1337.01	1263.08	1263.15	1263.15

Note $+p \leq 0.10$; $*p \leq 0.05$; $**p \leq 0.01$; $***p \leq 0.001$

In Model 2, the variables of Level 1 and those related to the vicinity of the school are introduced. For the level of the student, we observed trends compatible with findings already observed in other studies about school effect: white students have greater performance than non-white students; a higher socioeconomic status is associated with the best performances; boys have greater performance than girls, and the factor that presents a more accentuated negative impact is school grade repetition, a result that provides evidence that the student's school trajectory exerts a strong influence on his school outcomes.

In what concerns the educational atmosphere variable the strong level was used as the reference category in the models. The value of the coefficient γ_{04} indicates that the location of the school in a tract with a weak educational atmosphere, in comparison with the schools located in tracts with strong educational atmosphere, means an average decrease of 11.60 points in the mathematics scores of the students. This decrease is 6.52 points for the schools located in tracts with a medium educational atmosphere. On the other hand, the effect of studying in a school located in a *favela* or up to 100 m from one, leads, on average, to a decrease of 3.75 points in the students' test scores.

In Model 3, the socioeconomic status of the school variable is introduced. As observed in various studies that take into account diverse contexts, we noted a strong effect of this variable on the school result. The addition of one point to the socioeconomic status of the school is accompanied, on average, by an addition of 17.89 points to the students' scores. With the introduction of this variable, the coefficient referring to the location in or near the *favela* ceases to be statistically significant.

Finally, in Model 4, we observe that, when we introduced the variables related to the racial composition of the students and the presence in the school of equipment for pedagogic use, the coefficients, related to the educational atmosphere in the vicinity of the school, remain significant, although the effects decline: the location of the school in a tract with weak educational atmosphere, leads to a decrease of 7.87 points, and in a tract with medium level educational atmosphere, to a decrease of 5.86 points in the students' mathematics scores. In the analyses made on a microscale, the models were applied considering only students and schools located in each of the territories characterized by the variable, educational atmosphere (see Table 10.3).

In Model 1, variables were introduced related to the characteristics of the students, and to the variable related to proximity to a *favela*. In the analysis presented in the first column, only students and schools located in a strong educational atmosphere tract were considered. The value of the coefficient γ_{04} indicates that studying in a school located in or close to a *favela* presents a negative impact. The expected decrease in proficiency in mathematics is 14.08 points. This decrease is 4.37 points when we take into consideration only students and schools in tracts with medium level educational atmosphere, and it is not significant when we consider students and schools in tracts with weak educational atmosphere.

In Model 2, the variables related to SES, to color composition and to pedagogic equipment at the school were introduced. We observe that, controlling these variables, only in the model that considers schools located in strong educational atmosphere tracts, the coefficient of the proximity to a *favela* variable continues to be statistically significant. In other words, the proximity to a *favela* only has a negative effect on the proficiency of the students in wealthier areas of the city.

We also observe that as much in the schools located in strong educational atmosphere tracts as in those located in medium level and weak educational atmospheres tracts, the percentage of black and brown students in the school exerts a negative effect on the proficiency of the students. However, this negative effect seems more accentuated when we consider the schools located in a tract with strong educational atmosphere, that is, in the wealthier areas of the city.

Similar trends were found through the analysis considering 8th grade students (Table 10.4).

Table 10.3 Hierarchical linear models estimating proficiency in mathematics—Prova Brasil 2005—4th grade—by educational atmosphere

	Strong educational atmosphere		Medium level educational atmosphere		Weak educational atmosphere	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<i>Fixed effects</i>						
INTERCEPT: β_0	207.30	205.32	199.23***	198.61***	192.25***	191.50***
<i>Student</i>						
BROWN: β_1	-2.34 ⁺	-2.11	-2.27***	-2.12***	0.12	0.27
BLACK: β_2	-8.37***	-7.90***	-8.95***	-8.79***	-7.32***	-7.20***
SES: β_3	3.17***	3.21***	4.05***	4.07***	3.13***	3.14***
GENDER: β_4	3.28**	3.26*	3.38***	3.36***	2.24***	2.22***
SCHOOL GRADE REPETITION: β_5	-14.96***	-14.61***	-15.49***	-14.21***	-14.31***	-14.11***
<i>School</i>						
BROWN_BLACK_SCHOOL: γ_{01}		-60.08***		-14.21*		-15.52*
SES_SCHOOL: γ_{02}		20.54***		11.70***		18.86***
EQUIPMENT: γ_{03}		1.88		2.65***		3.91***
FAVELA 100 M: γ_{04}		-8.47*		-4.37**		-1.03
<i>Random effects</i>						
Level 2 (school): R_0	166.75	75.75	113.14	88.41	131.90	87.55
Level 1 (student): E	1317.29	1318.68	1265.26	1265.34	1250.05	1250.06

Note + $p \leq 0.10$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Table 10.4 Hierarchical linear models estimating proficiency in mathematics—Prova Brasil 2005—8th grade

	Model 1	Model 2	Model 3	Model 4
<i>Fixed effects</i>				
INTERCEPT: β_0	250.00***	265.29***	265.93***	264.91***
<i>Student</i>				
BROWN: β_1		-3.40***	-3.33***	-3.25***
BLACK: β_2		-7.82***	-7.73***	-7.68***
SES: β_3		4.61***	4.63***	4.63***
GENDER: β_4		6.80***	6.74***	6.74***
SCHOOL GRADE REPETITION: β_5		-21.22***	-21.21***	-21.12***
<i>School</i>				
BROWN_BLACK_SCHOOL: γ_{01}				-13.66 ⁺
SES_SCHOOL: γ_{02}			22.73***	20.33***
EQUIPMENT: γ_{03}				4.69***
LOW ATMOSPHERE: γ_{04}		-13.26***	-12.82***	-11.00***
MEDIUM LEVEL ATMOSPHERE: γ_{05}		-6.02***	-8.42***	-7.85**
FAVELA 100 M: γ_{06}		-7.41*	-3.85 ⁺	-3.18
<i>Random effects</i>				
Level 2 (School): R_0	217.49	187.34	138.53	130.08
Level 1 (Student): E	1806.35	1663.33	1663.33	1663.33

Note +p ≤ 0.10; *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001

Once again, we observe in the null model that the major part of the variation in mathematics proficiency is explained by the difference among students in the same school. Only 10.72% of the variance is due to the variability between the schools. In Model 2, in which variables related to the vicinity of the school are introduced, we observe that the location of the school in tracts with a weak educational atmosphere, means, on average, a decrease of 13.26 points in the students scores. This decrease is 6.02 points for those who study in a vicinity with a medium level educational atmosphere. The factor related to proximity of the school to a *favela* presents a negative impact: a decrease of 7.41 points. In Model 3, in which the SES of the school variable is introduced, the coefficients related to the educational atmosphere and proximity to a *favela* variables remain statistically significant.

In Model 4, upon introduction of the variables related to the proportion of blacks and browns in the schools and pedagogic equipment, we observe that the coefficients related to the educational atmosphere in the vicinity of the schools remain significant: the location of the school in tract with weak educational atmosphere implies a decrease of 11.00 points, and in a tract of medium level educational atmosphere, a decrease of 7.85 points in the students' mathematics scores. On the other hand, the coefficient γ_{06} referring to the proximity to a favela variable ceases to be significant when the other variables related to the school are introduced. Finally, the following results were obtained from analyses on a microscale, considering the school results for students in the 8th grade (see Table 10.5).

Again, the tendencies observed follow those observed for the models that estimate proficiency in mathematics of the 4th graders. In the model presented in the first column (Model 1—strong educational atmosphere), the value of the coefficient γ_{04} indicates that studying in a school located in or close to a *favela* implies an average decrease of 14.08 points in the students' school results. This decrease is 7.37 points when we consider only schools located in tracts of medium level educational atmosphere, and it is not statistically significant when we consider schools located in tracts of weak educational atmosphere.

In Model 2, we observe that, controlling other variables related to school, only in the model referring to the schools located in tracts with strong educational atmosphere does the coefficient of the proximity to a *favela* variable that remains statistically significant. In this territorial context, the proximity to a *favela* results in an average decrease of 10.27 points. Again, we observe that the percentage of the black and brown students variable in the school has a more accentuated negative effect on the model that considers students and schools located in tracts with strong educational atmosphere.

Table 10.5 Hierarchical linear models estimating proficiency in mathematics—Prova Brasil 2005—8th grade—by educational atmosphere

	Strong educational atmosphere		Medium level educational atmosphere		Weak educational atmosphere	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<i>Fixed effects</i>						
INTERCEPT: β_0	264.34***	263.58***	258.90***	258.31***	252.81***	252.05***
<i>Student</i>						
BROWN: β_1	-1.43	-1.21	-3.66***	-3.52***	-3.48***	-3.32***
BLACK: β_2	-8.24**	-7.96***	-8.33***	-8.19***	-7.02***	-6.86***
SES: β_3	3.86***	3.89***	4.93***	4.94***	4.30***	4.31***
GENDER: β_4	9.34***	9.24*	7.70**	7.64***	4.86***	4.81***
SCHOOL GRADE REPETITION: β_5	-21.74***	-21.53***	-20.87***	-20.75***	-21.66***	-21.63***
<i>School</i>						
BROWN_BLACK_SCHOOL: γ_{01}		-46.36 ⁺		12.56		-22.58 ⁺
SES_SCHOOL: γ_{02}		14.94*		23.21***		17.46***
EQUIPMENT: γ_{03}		-3.14		5.52***		6.61*
FAVELA		-13.64***		-3.84		-5.52
100 M: γ_{04}						-1.29
<i>Random effects</i>						
Level 2 (school): R_0	171.49	119.00	191.57	131.41	184.74	126.57
Level 1 (student): E	1738.52	1738.69	1683.08	1683.28	1616.34	1616.09

Note: + $p \leq 0.10$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

10.5 Conclusion

As mentioned previously, the city of Rio de Janeiro presents a particular model of social organization of its territory, combining the classical model of centre-periphery as well as places that present greater heterogeneity of social groups and classes, given the strong presence of favelas in affluent districts. The analyses made, as much on a macroscale as on a micro one, reveal the effects of this complex model of residential segregation on school outcomes.

In the analyses on the macroscale, we observe that the students who study in schools located in less privileged surroundings, which concentrate households in a weaker educational atmosphere, tend to present lower average performance. Considering that, roughly speaking, there is a greater predominance of tracts with strong educational atmosphere in Barra da Tijuca, Tijuca and the South Zone of the city, greater concentration of tracts with a medium level educational atmosphere in the North Zone, and a greater concentration of tracts with a weak educational atmosphere in the West Zone of the city, we can argue that the nucleus-periphery model is pertinent to the understanding of the neighborhood effect on educational results in the city. As in studies conducted in the context of other large cities, we propose as a hypothesis that the effects of social isolation also function as, and are exerting, a negative impact on the areas of greater concentration of poverty in the context studied.

However, the possible effect of the territory or of the neighborhood on school outcomes is not restricted to the center-periphery model. These analyses on the microscale showed that the location of the schools up to 100 m from favelas in wealthier areas also seem to exert a negative effect on educational results. The results found reinforce the idea that the favela-district dichotomy may still be thought of as a distinctive feature of the Rio (Cariocan) urban order, in particular, in the areas where the frontiers of the territory present clearer markers. Even if the ecology of the affluent areas with a strong presence of favelas physically brings together these different social groups, this does not mean, as previous studies have already indicated, greater social interaction among these groups (Ribeiro 2008). In other words, the physical proximity does not allow a beneficial impact of collective socialization in heterogeneous territorial contexts, as stated by much of the literature about the neighborhood effect. Thus, the relation between the proximity of the favela and the school results, in the affluent areas of the city, can be understood, as in the center-periphery model, on the basis of the mechanisms related to social isolation. On the other hand, this relation may also be understood via institutional mechanisms or by the supply side of education. We can suggest, as a hypothesis, that the schools near favelas are “encapsulated” by these territories; that they function and are organized in a peculiar manner, and that, for example, they present a school climate that is not propitious for the students to learn.

This work is restricted to the observation of a possible neighborhood effect on educational opportunities in a city that presents a complex model of residential segregation. Given this complexity, the work proposed, on the one hand,

multi-scale analyses, and, on the other, some mechanisms by which neighborhood affects education.

However, the studies on the effect of the socio-territorial organization of the cities on educational opportunities are still incipient in the researches that take into account the context of the Brazilian cities, and they present little penetration into the discussion of the sociology of education and urban sociology. Subsequent studies, as much of a quantitative nature as of a qualitative one, may contribute to the discussion of the effects of territory through more profound investigation of the mechanisms, by means of which neighborhood impacts on education.

References

- Ainsworth JW (2002) Why does it take a village? The mediation of neighborhood effects on educational achievement. *Soc Forces* 81(1):117–152
- Alves F, Franco C, Ribeiro LCQ, Ribeiro MG (2008) Segregação Residencial e Desigualdade Escolar no Rio de Janeiro. In: Ribeiro LCQ, Kaztman R (eds) *A cidade contra a Escola: Segregação urbana e desigualdades educacionais em grandes cidades da América Latina*. Letra Capital, Rio de Janeiro
- Andrade MIT (2004) Direitos de propriedade e renda pessoal. Um estudo de caso de comunidades do Caju. Masters Dissertation, Institute of Economy, UFRJ, Rio de Janeiro
- Brooks-Gunn J, Duncan GJ, Aber JL (eds) (1997) *Neighborhood Poverty: context and consequences for children.*, vol 1. Russell Sage Foundation, New York
- Bourdieu P (1997) Efeitos de lugar. In: Bourdieu P (ed) *A Miséria do Mundo*. Vozes, Petrópolis
- Burgos M (2005) Cidade, Territórios e Cidadania. *Dados*, vol 48, no 1, pp 189–222, Jan/Mar 2005
- Dreier P, Mollenkopf J, Swanstrom T (eds) (2004) *Place matters: metropolitics for the twenty-first century*. University Press of Kansas, Kansas
- Duncan GJ (1994) Families and neighbors as sources of disadvantage in the schooling decisions of black and white adolescents. *Am J Educ* 103:20–53
- Ellen IG, Turner MA (1997) Does neighborhood matter? Assessing recent evidence. *Housing Policy Debate*, vol 8, no 4
- Ferrão ME (2003) *Introdução aos Modelos de Regressão Multinível em Educação*. Komedi, Campinas
- Flores C (2008) Segregação residencial e resultados educacionais na cidade de Santiago do Chile. In: Ribeiro LCQ, Kaztman R (eds) *A cidade contra a escola? Segregação urbana e desigualdades educacionais em grandes cidades da América Latina*. Letra Capital, Rio de Janeiro
- Forquin JC (1995) A sociologia das desigualdades de acesso à educação: principais orientações, principais resultados desde 1965. In: Forquin JC (ed) *Sociologia da educação: Dez anos de pesquisas*. Vozes, Petrópolis, Rio de Janeiro
- Garner CL, Raudenbush SW (1991) Neighborhood effects of educational attainment: a multilevel analysis. *Sociol Educ* 64:251–262
- Jencks C, Mayer S (1990) Residential segregation, job proximity, and black job opportunities. In: Lynn LE, McGeary MGH (eds) *Inner-city poverty in the United States*. National Academy Press, Washington, D.C.
- Jencks C, Peterson P (eds) (1991) *The urban underclass*. The Brookings Institutions, Washington, D.C.
- Karabel J, Halsey AH (1977) Education research: a review and an interpretation. In: Karabel J, Halsey A (eds) *Power and ideology in education*. Oxford University Press, New York

- Kaztman R, Retamoso A (2007) Efectos de la segregación urbana sobre la educación en Montevideo. *Revista de la CEPAL*, no. 91
- Kaztman R, Retamoso A (2008) Aprendendo juntos. Desafios na educação a partir dos processos de segregação urbana. In: Ribeiro LCQ, Kaztman R (eds) *A cidade contra a escola? Segregação urbana e desigualdades educacionais em grandes cidades da América Latina*. Letra Capital, Rio de Janeiro
- Leite MP (2008) Violência, sociabilidade e risco nas margens da cidade: percepções e formas de ação de moradores de favelas cariocas. In: Luiz Antonio Machado da Silva. (Org.). *Vida sob cerco: violência e rotina nas favelas do Rio de Janeiro*. Rio de Janeiro: FAPERJ/Nova Fronteira, 115–141
- Machado LA (2008a) A Continuidade do Problema da Favela. In: Oliveira LL (ed) *Cidade: História e Desafios*. Editora da Fundação Getúlio Vargas, Rio de Janeiro
- Machado LA (ed) (2008b) *Vida sob Cerco: violência e rotina nas favelas do Rio de Janeiro*. Nova Fronteira, Rio de Janeiro
- Massey DS, Denton NA (1988) The dimensions of residential segregation. *Soc Forces* 67(2): 281–315
- Preteceille E, Valladares L (2000) A desigualdade entre os pobres—favela, favelas. In: Henriques R (ed) *Desigualdade e pobreza no Brasil*. IPEA, Rio de Janeiro
- Pero V, Cardoso A, Pero V (2005) Discriminação no mercado de trabalho: o caso dos moradores de favelas cariocas. *Coleção Estudo da Cidade*, Instituto Pereira Passos, Rio de Janeiro
- Raudenbusch SW, Bryk AS (2002) *Hierarchical linear models: applications and data analysis methods*. Sage Publications, Thousand Oaks, CA
- Reynolds D, Teddlie C (2008) Os processos da eficácia escolar. In: Brooke N, Soares JF (eds) *Pesquisa em eficácia escolar: origem e trajetórias*. Belo Horizonte, Editora da UFMG
- Ribeiro LCQ (2004) *Metrópoles Brasileiras: entre a coesão e a fragmentação, a cooperação e o conflito*. Revan, Rio de Janeiro
- Ribeiro LCQ (2005) Gueto, Banlieu, ferramentas para repensar a marginalidade avançada. In: Wacquant L (ed) *Os Condenados da Cidade*. Revan, FASE, Rio de Janeiro
- Ribeiro LCQ (2008) Proximidade Territorial e Distância Social: reflexões sobre o efeito do lugar a partir de um enclave urbano. *Revista VeraCidade*, Ano 3, no. 3
- Ribeiro LCQ, Lago LC (2001) A oposição favela-bairro MP Rio de Janeiro. *São Paulo em Perspectiva* 14(1):2001
- Sampson RJ, Morenoff J, Gannon-Rowley T (2002) Assessing “neighborhood effects”: social processes and new directions in research. *Ann Rev Soc* 28:443–478
- Sampson RJ, Raudenbush SW, Earls F (1997) Neighbourhood and violent crime: a multilevel study of collective efficacy. *Sci* 227:918–924
- Small LM (2004) *Villa Victoria: the transformation of social capital in a Boston Barrio*. University of Chicago Press, Chicago
- Small LM, Newman E (2001) Urban poverty after the truly disadvantaged: the rediscovery of family, neighborhood, and culture. *Ann Rev Soc* 27:23–45
- Soares JF (ed) (2002) *Escola eficaz: um estudo de caso em três escolas da rede pública de ensino do estado de Minas Gerais*. GAME/FaE/UFMG, Belo Horizonte
- Wacquant L (1996) Três Premissas Perniciosas no Estudo do Gueto Norte-Americano. *Mana* 2 (2):145–161
- Wilson WJ (1987) *The truly disadvantaged: the inner city, the underclass and public policy*. University of Chicago Press, Chicago
- Wilson RH (2008) A interação da forma urbana e a política pública: o caso da educação pública. In: Kaztman, R., Ribeiro, L. C. Q. R. *Cidade contra a escola? segregação urbana e desigualdades educacionais em grandes cidades da América Latina*. Rio de Janeiro: Letra Capital/FAPERJ

Chapter 11

Segregation and “Racial” Inequalities

Luiz Cesar de Queiroz Ribeiro and Filipe Souza Corrêa

Abstract This work aims to evaluate the relationship between the social context of residence and the color of the population to explain social inequalities arising from residential segregation in the Metropolitan Region of Rio de Janeiro (MRRJ). We seek to contribute to the reflection on the issue of Brazilian “racial” inequalities described by other researchers. In more precise terms, our interest is to investigate whether a Black or a Brown individual holds an unequal social status in terms of opportunities and access to certain elements of social welfare regardless of his position in the social division of the MRRJ territory or, on the contrary, whether the social context formed by the residential segregation processes represents the filter through which opportunities and urban social welfare are distributed unevenly among groups of color.

Keywords Segregation · Racial inequalities · Metropolitan Region of Rio de Janeiro

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11.1 Introduction: Positioning the Problem—Residential Segregation and the Brazilian Racial Issue

The previous question is relevant, on the one hand, to the extent that the literature on the impacts of economic transformations on large cities highlights the growing role of residential segregation in explaining the reproduction of social inequalities. This occurs on account of the articulation between the macro social mechanisms—labor market restructuring, family universe weakening, welfare social system privatization—, and the micromechanisms related to the social and territorial isolation of the groups most vulnerable to these changes. Various authors from different theoretical currents have sought to describe such reproductive articulation of inequalities using concepts, such as *neighborhood effect* (Katzman 2001), *territory effect* (Bidou-Zachariassen 1996), or *place effect* (Bourdieu 1997).

On the other hand, this article is a part of the debate on the so-called *racial issue* in Brazil which has suffered significant changes since the consensus in the 1930s about the existence of a “racial democracy” in the country. Indeed, since the second half of the 1970s, according to the empirical work of Hasenbalg (1979) and Silva (1978), the perception of the existence of reproductive mechanisms of racial inequality has been gaining legitimacy in the academic field and in society, despite the expansion of a competitive order in Brazil. For a wide range of authors,¹ it became evident that inequalities of social conditions and positions between Whites, Blacks, and Browns² cannot be assigned to survival—in a class society conformed by industrialization, urbanization and modernization—to the effects of the statutory order of our slave past as postulated in 1950s and 1960s by Bastide and Fernandes (1955) and Fernandes (1965). Currently, there is strong consensus about the existence of a *racism without racialism* in Brazil (Guimarães 1999), that is, of discriminatory practices in interpersonal interactions between Whites, Blacks, and Browns and structural mechanisms of discrimination in the access to resources that generate both social welfare and social opportunities, which, however, do not rely on an ideology founded on the existence of biological races and their natural differences.

The absence of such ideological component would have made racism invisible among us, especially if we consider that skin color as a criterion for racial classification and discrimination has been replaced by “social tropes” that relate to the marginalized condition and position held by Blacks and Browns in Brazilian society. Guimarães (1999) proposes to investigate how in each moment of our history and in each corner of the Brazilian social space these “social tropes” are

¹Due to the impossibility of presenting a complete review of reinterpretation of the theme of racism, we cite the systematization works designed by Antônio Sérgio Guimarães. See Guimarães (1999) and Guimarães and Huntley (2000).

²Brown people in Brazil are called *Pardos*, a term that has been used by the Instituto Brasileiro de Geografia e Estatística/IBGE (Brazilian Institute of Geography and Statistics) since 1940 to comprise multiracial Brazilians.

constructed, reconstructed, and used to maintain and reproduce racial inequalities. The results of this investigation would be crucial for the proper understanding of the paradox present in Brazilian society that legitimizes practices and mechanisms of racialization of a social hierarchy formed by the market and the social classes. In other words, this investigation would be on how other classificatory categories would appear as “symbolic substitutes to ‘Blacks’, as are, in Southeastern Brazil, the epithets of ‘*Baianos*’,³ ‘*Paraibas*’,⁴ and ‘*Nordestinos*’⁵” (ibid., p. 123).

Guimarães also proposes the investigation of three mechanisms that reproduce racial inequalities in an invincible way (ibid., p. 201). The first refers to socialization at school and in the community (neighborly relations), where are concentrated individuals with certain somatic and cultural characteristics socially devalued, transforming these values in individual attributes and contributing to the maintenance of a low self-esteem. The second mechanism acts in everyday life and is materialized in interpersonal relationships in which discriminatory or exclusion practices, although in the polished and discreet way that characterizes our culture of cordiality, keep at a distance the groups of Blacks and Browns or their “social tropes.” This mechanism certainly reinforces the first as it extends, to a social space wider than the space of socializing institutions, the experience of sociability that confirms social inferiority and devaluation. The third mechanism concerns institutionalized discriminatory practices that function in an impersonal way, based on the bureaucratized actions that occur in the market, such as prices of goods and services, the formal or tacit qualifications required, personal characteristics, diplomas, appearance, among others.

The city, the principles that organize its social space, the classification system that displays this space as a hierarchy, the sense of interactions between individuals in everyday life, the relations with the city institutions—police, bureaucracy, land market etc.—, the functioning of the socializing institutions, such as family, school, neighborhood, and community life of the district may function according to these three mechanisms. They can create “social tropes” linked to the territories of groups of individuals in accordance with the somatic and cultural attributes that are object of discriminatory practices. At the same time, the city may be the product and producer of institutionalized discriminatory practices; it can generate spaces of socialization that build the legitimacy of inferiority and of social devaluation; and it can also generate practices of sociability that confirm the inferiority and social devaluation of individuals based on their somatic and cultural attributes.

However, in Brazil, there are few works that seek to relate the theme of residential segregation with the theme of racial inequalities. This conjunction of themes is called *racial segregation*. For the purpose of systematization, we will consider

³*Baiano* is the person born in the State of Bahia.

⁴*Paraíba* is a Brazilian state. As general terms and used pejoratively, both *Baiano* and *Paraíba* are applied to people from the Northeastern part of Brazil.

⁵*Nordestino* is a general term for people born in the Northeastern (*Nordeste*) part of Brazil, one of its poor regions.

three works. In this argumentative line, one of the pioneering works in Brazil is the book of L.A. Costa Pinto titled *O Negro no Rio de Janeiro* that was published in 1953. In it, Costa Pinto highlights the coercive force of costume as the mechanism from which racial segregation was practiced in Rio de Janeiro, which was the Federal District at that time, in opposition to the mechanism of legal force as in the United States of America (USA). In this case, the residential segregation of Blacks in the city of Rio de Janeiro would be the result of an economic incapacity of a parcel of the population to choose their place of residence, a choice that would be the prerogative of a dominant group. This perception of racial segregation in Rio de Janeiro—away from the referential of extreme racial segregation in the USA—is based on the nonrandom difference of percentage of Blacks in the various areas of the city and, especially, in the overrepresentation of Blacks residing in slums and in the city periphery in comparison to the percentage of Blacks in the overall population.

Lately, Telles (2003) resumes the thesis of the existence of a “Brazilian way of racism,” reinforcing the hypothesis of a “racism without racialism” (id. 1993). He applies the techniques of the segregation indices disseminated since the seminal work of Duncan and Duncan (1955) and compares the patterns of the territorial distribution of Blacks and Whites in Brazilian and American metropolises. He comes to the conclusion that among us there is a “moderate segregation” (Telles 2003, p. 180) and that social distances between the “middle class” and the rest of the social strata, taking into account groups of colors, decrease as income increases, but in a different gradation when it comes to Whites, Browns, and Blacks. The latter tend to remain isolated from wealthy Whites, a fact that for Telles can produce impacts on the social composition of the territory:

[...] (they have) less access to resources, such as good professionals, better networking, better urban infrastructure, which in turn would generate social capital and better quality of life. The non-Whites and especially Blacks are more likely to have worse odds of life simply because they are farther from the middle class and live in concentrations of poverty. (Ibid. p. 180)

Another recent attempt to address the issue of racial segregation was made by Garcia (2009), whose analysis compared the situation of Blacks in two capitals—Rio de Janeiro and Salvador—to demonstrate that social inequalities expressed in the territory are in fact racial inequalities. In other words, according to Garcia’s perspective, social inequalities would not end up in the exploitation of classes and there is actually an imbrication between social structure and the naturalization of racial inequalities, which resulted in the so-called social-racial-economic stratification of individuals. In this sense, the overall empirical effort is concentrated on showing how the structuring of the metropolitan territory, seen through territorial inequalities in terms of housing condition, possession of urban goods (washing machine, telephone, automobile, and microcomputer) and distribution of collective consumption services, is correlated with the social-racial-economic stratification of individuals.

From these hypotheses, we propose to evaluate in the Metropolitan Region of Rio de Janeiro the differentiated effects of the social contexts of residence which are conformed by the social division of the metropolitan territory in the relationship between groups of color and social inequalities. This task becomes more complex if we consider that the social morphology of the main city shows, as a unique feature, the presence of slums in areas where are concentrated social segments that occupy the upper positions in the social structure.

11.2 The Social Context of the Place of Residence

To identify the social context in which individuals are inserted we considered as geographic units the weighting areas⁶ (WA) of the 2000 Demographic Census. Despite not forming neighborhood units in themselves—since their limits are defined by technical criteria used for the Census data collection—, the boundaries of the MRRJ weighting areas largely coincide with the geographical boundaries of the districts, a fact that allows us to speak of a *social context of the place of residence*.

In order to classify these areas, we created a typology that uses the variable of the *school climate of the domicile* built on the average years of schooling of individuals older than 24 years of age living at home.⁷ The choice of school climate as a variable for typology construction is justified by the possibility of description of residential segregation in terms of the concentration of people living in households and neighborhoods in situations of greater or lesser chance of access to schooling—a scarce opportunity in Brazilian society—as an enhanced resource of their placement in the social structure, which influences their chances of access to social welfare and opportunities (Kaztman 2001; Kaztman and Retamoso 2005; Ribeiro 2007).

The composition of the types of social contexts according to the school climate of the domicile can be seen in Chart 11.1. The first type is characterized by a high presence of domiciles with low school climate in which 36.2% of individuals show up to 4 years of schooling and 42.9% in the range of over 4 years and up to 8 years

⁶This territorial division was created by IBGE for disclosing the sample data and it follows statistical criteria. Each of these geographical units is “formed by a group of mutually exclusive census sectors created to implement procedures for estimate calibration using information known by the overall population” (IBGE 2002).

⁷This typology was built as follows: first, the domiciles were classified according to four levels of school climate: “up to 4 years of schooling”; “over 4 and up to 8 years of schooling”; “over 8 and up to 11 years of schooling”; and “over 11 years of schooling”. Then, we applied on this distribution a Binary Correspondence Factor Analysis (Fenelon 1981) from which we extracted two factors with the cut-off criterion value of 80% of the variance of the data explained by the factors. After saving the factorials loads obtained by this procedure, we conducted a Hierarchical Ascending Classification (ibid.), which resulted in three groupings with an intra-groups variance of 32.6% and an intergroup variance of 67.4%.

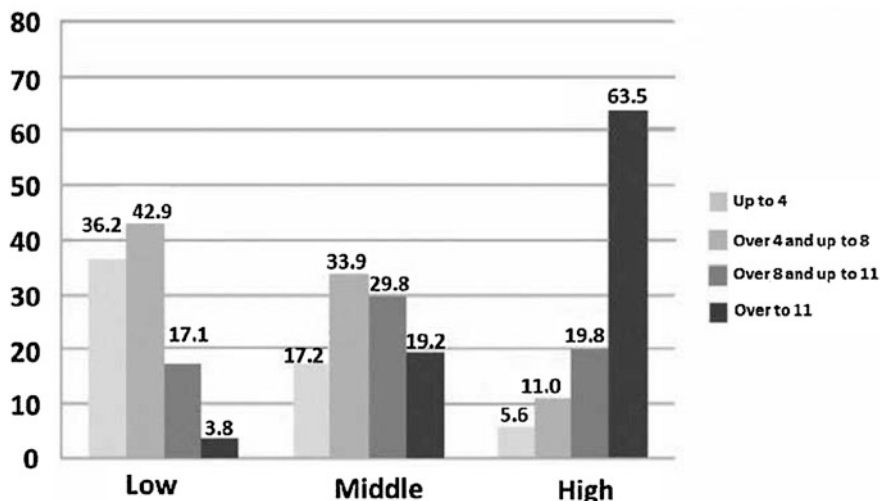
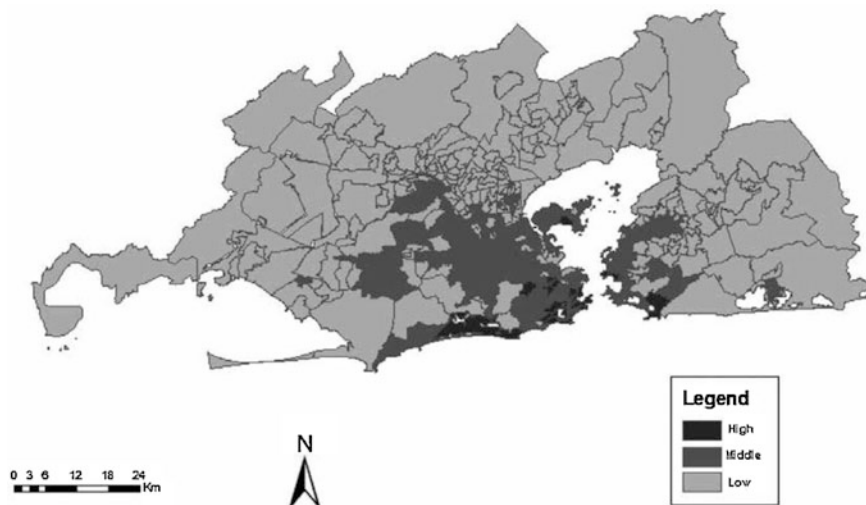


Chart 11.1 Percentage composition of ranges of the school climate of the domicile according to the social context of the place of residence in the MRRJ—2000. *Source* Elaborated by the authors with data from the 2000 Demographic Census (IBGE 2002)

of schooling. This type comprises 49.3% of the individuals residing in the MRRJ. The second type shows a predominance of middle school climate with 33.9% of individuals in the range of 4–8 years of schooling and 29.8% in the range of 8–11 years of schooling, thus comprising 42.7% of the population residing in the MRRJ. The third type consists of areas of high school climate as it presents a high concentration of domiciles in the range of individuals with over 11 years of schooling (63.5%) in which resides 8.0% of the MRRJ population. Based on this composition, we called the first type “low-status social context,” the second, “middle-status social context,” and the last, “high-status social context.”

The spatial distribution of the social contexts classified according to the school climate of the domicile is shown in Map 11.1. Based on this map, we realized that high-status contexts largely coincide with the areas of the cities of Rio de Janeiro and Niterói considered noble; middle-status contexts coincide with the suburban areas of the cities of Rio de Janeiro and Niterói and the central areas of some municipalities in the metropolitan region; and low-status contexts correspond to areas of the MRRJ periphery.

In the next topic we will explore the situation of color segments (Whites, Blacks, and Browns) for each of the social contexts of the place of residence in order to examine possible differences between them as regards two types of inequalities. The first type is related to the opportunities offered to them, expressed in the different chances of groups of color to reproduce the situation of their parents’ poverty by way of education and labor. This will be done through the use of indicators of young people and children’s vulnerability situation; delay and school evasion, and unemployment. The second type is related to well-being, assessed by differences in housing conditions.



Map 11.1 Social context typology of the place of residence in the MRRJ—2000. *Source* Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

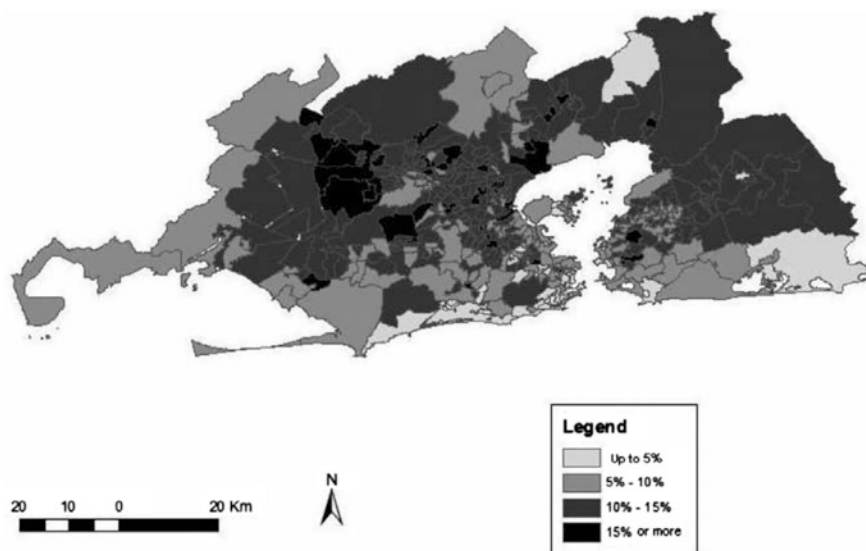
Table 11.1 Population composition according to color in the MRRJ—2000

Color	Percentage
White	53.1
Black	10.5
Brown	35.2
Other	0.5
Unknown	0.8
Total	100.0

Source Elaborated by the authors with data from the 2000 demographic census

11.3 The Colors of the Social Contexts in the Metropolitan Region of Rio de Janeiro: Can We Talk About Racial Division of the MRRJ Territory?

The color variable or the race variable of the 2000 Demographic Census is obtained based on the informant’s statement and subsequent insertion in the categories defined by the Census research plan. Thus, the MRRJ population presents itself as mostly White with a percentage of 53.1%. The individuals who declared themselves Blacks comprise a minor group of color which corresponds to only 10.5% of the population. Those who declared themselves Browns correspond to 35.2% of the population. The other categories of color correspond to 1.3% of the MRRJ total population; therefore, in our analyses we will focus on the white, black, and brown color categories (see Table 11.1).



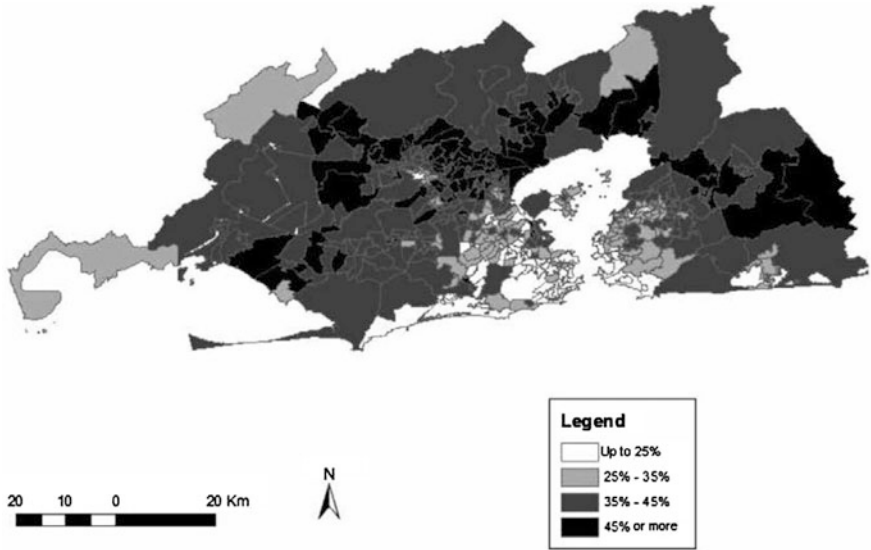
Map 11.2 Spatial distribution of the white color population in the MRRJ—2000. *Source* Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

Previously, we saw how the different social contexts according to the school climate of the domicile are distributed in the MRRJ space. It now remains for us to know how the groups of color considered in this paper (Whites, Blacks, and Browns) are distributed in these contexts. To this end, Maps 11.2, 11.3 and 11.4 present the distribution of groups of color according to four proportional ranges of concentration in the territory.

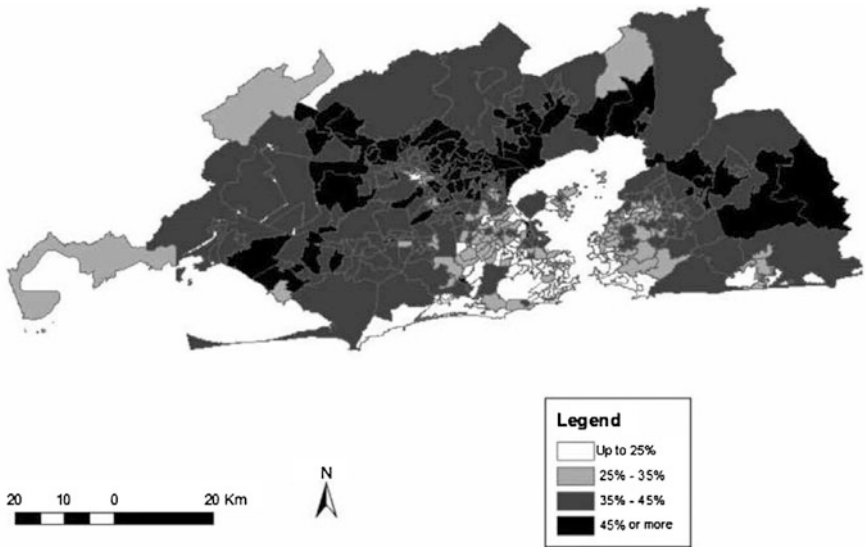
Map 11.2 presents the distribution of Whites according to the concentration ranges in the MRRJ. Table 11.1 shows that Whites comprise the largest group of color, corresponding to 53.1% of the metropolitan population; according to Map 11.2, most areas show percentages that revolve around this value. However, it calls our attention the high concentration of Whites in areas that form the center of the MRRJ social space: the South Zone of Rio de Janeiro, Barra da Tijuca, Great Tijuca, the Downtown area, and the oceanic region of Niterói.

Map 11.3 shows the distribution of the black color population according to the four concentration ranges. The low concentration of individuals declared Black is much clear in areas where the concentration of individuals declared White is higher than that observed in the overall MRRJ. We note that the range of 10–15% of Black people is distributed predominantly in the areas of Baixada Fluminense⁸ and the

⁸Baixada Fluminense is located in the periphery of the Metropolitan Region of Rio de Janeiro and comprises eight municipalities: Nova Iguaçu, Duque de Caxias, São João de Meriti, Nilópolis, Belford Roxo, Queimados, Mesquita and Japeri. With a population around three million people, its urban and social problems show a strong inequality compared to Rio de Janeiro, the main city of the metropolis.



Map 11.3 Spatial distribution of the *black color* population in the MRRJ—2000. *Source* Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)



Map 11.4 Spatial distribution of the *brown color* population in the MRRJ—2000. *Source* Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

concentration range over 15% tends to be located in the central regions of the municipalities of Baixada Fluminense and regions near the city of Rio de Janeiro.

The Brown population, as we can see in Map 11.4, presents a spatial distribution close to that of the Black population: areas with large concentrations of Whites correspond to areas of low concentration of Browns. However, due to the heterogeneity of the Brown group of color in this work, we considered separately Browns and Blacks and the category of white color as reference for comparative purposes.

To verify the relationship between the different social contexts of residence and the distribution of the groups of color we resorted to Table 11.2 that shows the composition of each context by color. As expected, we realized that social contexts have significant differences in composition in terms of two opposing social contexts: low and high. In high-status spaces 88% of the population is White, while in low-status spaces the highest concentration is of Blacks and Browns. Even in the low-status context the color white ceases to be predominant and shows a percentage equal to that of Browns. In the middle-status context, despite the fact that the white color shows a percentage lower than the observed in the high-status context, the percentages of Blacks and Browns remain below the MRRJ average as a whole.

However, when we analyze the distribution of each group of color among the social contexts, the relationship between racial segregation and residential segregation is clearer, especially if we consider the high-status context in relation to middle- and low-status contexts, as shown in Table 11.3.

In addition, we cannot disregard the fact that the spatial structure of the city of Rio de Janeiro is characterized by a considerable presence of slums embedded in its noble areas. But despite spatial proximity, it expresses a large social distance which is the hallmark of the *Carioca*'s⁹ residential segregation (Ribeiro 2005; Ribeiro and Lago 2001); in other words, we can say that, especially in the case of the slums located in the noble areas of the city, the scheme of interaction with its surroundings is still strongly hierarchical based on perceptions deeply rooted in two separate and distinct social worlds. Based on this idea, Ribeiro and Koslinski (2009) stated that despite social proximity, the boundaries between the "asphalt" and the "slum"¹⁰ located in wealthy areas of the city are more pronounced than in the rest of the city. The strong contrasts resulting from the territorial proximity of these spaces strengthen and institutionalize the collective representations of two distant and separated social worlds.¹¹

⁹*Carioca* as an adjective is related to the city of Rio de Janeiro; as a noun it relates to the person born in it.

¹⁰In Portuguese, slum is *favela* and slumdog is *favelado*, the individual that resides in a *favela*.

¹¹We estimate that within a 3-km radius from the most elite neighborhood of the city of Rio de Janeiro nearly over 33% of the resident population lives in areas regarded as slums.

Table 11.2 Color percentage according to social context—MRRJ—2000

Color	Social context of the domicile			Total
	Low	Middle	High	
White	43.6	59.3	88.0	53.8
Black	12.5	9.8	2.9	10.6
Brown	43.8	30.9	9.0	35.6
Total	100.0	100.0	100.0	100.0

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

Table 11.3 Percentage of individuals in each social context according to color—MRRJ—2000

Color	Social context of the domicile			Total
	Low	Middle	High	
White	40.4	46.8	12.8	100.0
Black	58.6	39.2	2.2	100.0
Brown	61.2	36.8	2.0	100.0
Total	49.7	42.4	7.8	100.0

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

Table 11.4 Composition of the social context according to the slum^a and non-slum classification—MRRJ—2000

	Social context			Total
	Low	Middle	High	
Non-slum	86.2	89.9	96.5	88.6
Slum	13.8	10.1	3.5	11.4
Total	100.0	100.0	100.0	100.0

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aCensus sectors classified as subnormal by the IBGE

Table 11.4 shows the percentage of individuals residing in slums in each of the social contexts. We applied the *subnormal agglomerate* variable of the 2000 Demographic Census to identify those individuals.¹²

In Table 11.5, considering only the non-slum area, we find that the difference in concentration of the color segments remains the same as evidenced in Table 11.2 when we compared the social contexts of residence. However, when we observe only the slum areas, the color composition of the high-status contexts changes; in this case, the percentage of Whites (31.8%) is smaller than in areas not classified as slums; and the percentage of Blacks (21.1%) and Browns (47.1%) is much higher than in non-slum areas (2.3 and 7.7%, respectively).

¹²This variable indicates that the domicile of the individual is located in a census sector that matches a “set (slums and the like) consisting of housing units (shacks, houses etc.), occupying, or having occupied until recently, land of foreign property (public or private) arranged generally in a disorderly and dense way, and needy mostly of essential public services” (IBGE 2002).

Table 11.5 Color percentage in the areas according to the social context and the slum^a or non-slum classification—MRRJ—2000

	Color	Social context			Total
		Low	Middle	High	
Non-slum	White	43.9	61.5	90.1	55.4
	Black	12.4	9.0	2.3	10.1
	Brown	43.8	29.4	7.7	34.5
	Total	100.0	100.0	100.0	100.0
Slum	White	42.2	39.0	31.8	40.8
	Black	13.4	16.9	21.1	14.9
	Brown	44.4	44.1	47.1	44.4
	Total	100.0	100.0	100.0	100.0

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aCensus sectors classified as subnormal by the IBGE

Table 11.6 Percentage of the population residing in slum^a, according to color and social context in relation to the overall MRRJ—2000

	Color	Social context			Total
		Low	Middle	High	
Slum	White	13.3	6.6	1.3	8.6
	Black	14.8	17.2	25.3	16.0
	Brown	14.0	14.3	18.3	14.2
	Total	13.8	10.1	3.5	11.4

Source Elaborated by the authors with data from the 2000 Demographic Census (IBGE 2002)

^aCensus sectors classified as subnormal by IBGE

First of all, we can say that there is a color of the spaces occupying the lower positions in the socio-spatial hierarchy. Both slums and low-status social contexts show a larger concentration of Blacks than the other social contexts. Here stands out the interesting fact that the population residing in slums has a larger concentration of Blacks and Browns in high-status spaces than in low-status spaces. We can say, on the other hand, that there is a social proximity between spaces of low-status social context and slums; namely, in spaces of low-status social context there is social proximity between slum and non-slum areas.

In Table 11.6, in which the reference population is the overall MRRJ population located in each of the social contexts of residence, the percentages of Whites, Blacks and Browns residing in slums in low-status contexts do not differ significantly from the average; conversely, in the middle-status context, the percentage of Blacks living in slums increases to 17.2%, while the percentage of Whites in the same situation decreases to 6.6%; and, in the high-status context, only 1.3% of Whites reside in slums, a percentage that increases to 25% in the case of Blacks. Namely, these results show that the perception of the slum as a predominantly “Black” space results from the effects on the social representations of the social morphology of high-status spaces: the strong contrast between spaces that concentrate heavily the white segments of the population holding the top positions of

the social structure and slum spaces. The same does not occur in slums located in low-status areas since there are no significant differences in the composition of color between slum and non-slum spaces.

We did not find “racialization” signs of the social hierarchy of the residence contexts. In a way, we can say that the distribution of color segments by the socio-spatial hierarchy of the metropolis of Rio de Janeiro is more a phenomenon of the territorial concentration of Whites of greater social status, therefore, of greater prestige and economic power, than a phenomenon of compulsory removal of “Blacks” from that space. That is, at the same time that Blacks and Whites are not separated in the low-status social contexts, we see that there is a relative “whitening” of the highest status positions. However, the difference in the color composition between slum areas and non-slum areas in high-status social contexts is clear.

In the current work, we have no conditions to investigate the advantages and disadvantages of the territorial insertion of slums in high-status social contexts for relationships between the color segments of the population. Nonetheless, from the data available it is possible to investigate whether this territorial proximity generates some advantages for the Brown and Black groups since the location in the city is associated with a smaller or larger control of resources that increase opportunities and access to social welfare. Thus, the main objective now is to answer the following questions: is this difference in the distribution of color segments in the metropolis followed by inequality in the levels of urban welfare and opportunities? Is this inequality more influenced by the color of the individual or by the social context in which he lives? To what extent?

We seek to answer these questions by analyzing inequalities between Whites, Blacks, and Browns in relation to housing conditions that determine the level of urban social welfare and opportunities for social inclusion. With regard to the first aspect, inequalities result from the action of the State in the distribution of collective services which complement the function of the household in social reproduction and the function of the residential real estate market which, through the filter of prices, distributes people in the territory and regulates access to conditions of housing comfort. With regard to the second aspect, that is, social inequalities, they result from inequities in the structure of opportunities and are analyzed taking into account four scenarios: (i) school delay of children in the 8–15 age range; (ii) school evasion of children in the 8–15 age range; (iii) *institutional disaffiliation*¹³ of men in the 14–24 age range; and (iv) maternity of young women without spouse in the 14–19 age range. The observation of these segments may reveal evidence of reproduction of social inequalities since labor market and school are mechanisms for access to opportunities which affect the future trajectory of children and young people with regard to social mobility.

As for sanitation services, we found that inequalities are markedly cut in the socio-spatial hierarchy, although it is possible to say that Black and Brown

¹³We will define this concept later.

residents in high-status spaces show neediness rate higher than Whites in the same context; however, the difference is larger among Blacks and Browns of high-status contexts in relation to Black and Brown residents in low-status spaces (see Table 11.7). Blacks, Browns, and Whites residing in these spaces show neediness rates remarkably higher than those found in high-status contexts. The government seems to “discriminate” by place of residence and not by color, generating or tolerating extreme inequalities of housing conditions and, therefore, different levels of urban welfare. We can think of two explanations for the greater advantage of Blacks and Browns residing in high-status contexts: the first is based on sanitation which, since it is a collective service, is distributed and made accessible via the location of social groups in the territory allowing housing proximity to benefit indistinctly White and non-White individuals; the second is based on the investments made in the last 20 years in the slums of Rio de Janeiro, followed by the relative abandonment of metropolitan peripheries where is located a large part of low-status contexts.

The evaluation of the indicator of housing density leads us in the same direction (see Table 11.7). At the upper top of the socio-spatial hierarchy there are sharp inequalities because the percentage of Blacks and Browns living in high-density housing conditions (10.7 and 10%, respectively) is larger than that of Whites (2.4%). But, at the same time, we can say that housing conditions become worse equally for Whites and Blacks as we go down the socio-spatial hierarchy scale. In relative terms, the Whites of low-status spaces are in a worse situation than that of Blacks and Browns living in high-status contexts. It seems correct to conclude that, in this respect also, the place of residence is more decisive in determining urban social welfare than color.

Now we come to the evaluation of inequalities of opportunities. As already mentioned, we chose some indicators that could translate mechanisms of production/reproduction of inequalities related to social contexts. They reveal circumstances in which children and young people may be in situations of social risk

Table 11.7 Indicators of housing inequalities according to social context—MRRJ—2000

Indicators of inequalities	Color	Social context			Total
		Low	Middle	High	
Extreme housing density ^a	White	18.2	8.6	2.4	11.7
	Black	26.5	18.7	10.7	23.1
	Brown	24.6	16.5	10.0	21.3
	Total	22.1	12.0	3.3	16.3
Lack of sanitation facilities	White	14.7	2.9	0.6	7.3
	Black	18.8	6.2	1.7	13.5
	Brown	17.5	5.3	1.7	12.7
	Total	16.5	3.9	0.7	9.9

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aDomiciles with over two people per dormitory

due to obstacles, in terms of family and neighborhood, in their opportunities of accumulation of resources which in the future would ensure them greater social welfare and higher social positions. Such opportunities are related to access to educational assets resulting from schooling and from the accumulation of experiences in the labor market.

First of all, we noted the significant differences between Whites and non-Whites in school delay of a year or more of children in the 8–14 age range, as shown in Table 11.8. In high-status context, in relative terms, the incidence of school delay of Blacks and Browns (59.9 and 47.8%, respectively) doubles that of Whites (23.7%). In this perspective, inequalities between Whites and Blacks seem to impose themselves to inequalities arising from the housing location. However, when we examine the situation of each segment, we find that Black individuals residing in high-status contexts enjoy advantages in school performance in relation to individuals residing in low-status contexts in the socio-spatial hierarchy where the school delay of Blacks is 70.9%, of Browns is 62.7%, and of Whites is 51.8%. As for school evasion, we find the same relationship, that is, despite the disparity between Whites and Blacks in high-status contexts, the incidence of school evasion in low-status contexts is considerably larger (Table 11.8).

Early maternity also involves decreasing the chances of social mobility to the extent that the adolescent is obliged—in most cases—to withdraw from studies, thus limiting her present and future employment possibilities. Early maternity is today one of the main causes of school evasion, because, according to Unesco, 25%

Table 11.8 Indicators of inequalities of opportunities according to social context—MRRJ—2000

Indicators of inequalities	Color	Social context			Total
		Low	Middle	High	
Children with school delay greater than 1 year	White	51.8	35.8	23.7	42.3
	Black	70.9	60.2	59.9	66.9
	Brown	62.7	52.8	47.8	59.2
	Total	59.1	44.0	27.4	51.6
Out-of-school children	White	24.0	12.9	6.1	17.6
	Black	40.6	29.2	28.0	36.3
	Brown	32.4	22.9	19.7	29.1
	Total	29.8	17.9	8.2	24.1
Single adolescent mothers	White	5.7	4.1	0.9	4.4
	Black	11.2	9.8	8.4	10.7
	Brown	7.6	7.0	4.4	7.3
	Total	7.2	5.6	1.5	6.2
Young people in institutional disaffiliation	White	8.0	6.0	4.5	6.7
	Black	10.7	8.8	11.8	10.0
	Brown	8.7	7.4	5.1	8.2
	Total	8.7	6.7	4.8	7.6

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

of pregnant young women in the 15–17 age range stop studying. Early maternity is strongly linked to family¹⁴ and social contexts in which different mechanisms act and influence the adolescent's behavior: lack of information on contraceptive practices; lack of access to the public health system; limits of socialization; exposure to traditional social roles. We observed, based on Table 11.8, that the incidence of early maternity in low-status contexts is higher than this incidence in contexts occupying the top position in the social hierarchy, as much for the overall population as for the White and non-White segments. What draws attention in this case is that the location of the residence appears to have little influence on the behavior of non-White teens. Conversely, the incidence of White teens' early maternity rises from 0.9% in high-status contexts to 5.7% in low-status contexts. As an explanatory hypothesis, we assume that, for adolescents without spouse, differences in context (family and social contexts) favor more Whites than non-Whites. In other words, the fact of living in low-status social contexts influence negatively more Whites, while for the non-Whites the risk of early pregnancy remains higher in all socio-spatial contexts.

The situation of the young male who does not study, does not work, and does not seek employment approaches the social condition Williamson (1997) called zero status and Alvarez-Rivadulla (2002) called *institutional disaffiliation*, since this youth is removed simultaneously from two possible social roles—worker and student—in this stage of the life cycle. Indeed, the fact of being in a disaffiliation situation may indicate the exclusion from social conditions in which this young individual acquires important assets for access to higher social positions, whether they stem from schooling or from the accumulation of occupational experience. In a limit situation, it may indicate a juvenile behavior no longer guided by moral normativity required by the dominant values and aspirations.¹⁵

Data analysis shows again important differences between both ends of the socio-spatial hierarchy, i.e., the rates of the young people of *zero status* or in a situation of *institutional disaffiliation* living in low-status spaces are higher than those of the young people living in high-status contexts. This difference is mostly noticeable in the segment of young Whites, which indicates that social contexts can have some influence on reducing their chances of disaffiliation. The same is not true with young Blacks, because the rates of those who are in high-status contexts are slightly lower than those in low-status contexts. In relation to this indicator, we can also state that place of residence has greater role in the access to opportunities than color, though this situation shows more influence on Whites than Blacks and

¹⁴Data processed by Itaboráí (2003, p. 179) indicate that 22.5% of teenage mothers in the 15–19 age range are socialized in rather poor environments as they live in domiciles with income up to two minimum wages (MW).

¹⁵It is important to consider the social contexts in the search for the sociological significance of the young individual who dropped out of school or work. As Saravi points out (2004), in Latin America *zero status* has been understood as a condition of vulnerability and risk since it stands for the possibility of decreased future opportunity of social welfare and of association with illicit activities.

Browns. However, the most striking result is that the incidence of disaffiliation among young Blacks is slightly smaller in middle-status contexts (8.8%) than in high-status contexts (11.8%). In this case, we can state that the slum located in high-status contexts is responsible for the high incidence of disaffiliation of young Blacks.

In order to test the effects of residential segregation *vis-à-vis* the effect of color on access to opportunities, we built a logistic regression model with dependent variables from each of the situations mentioned above. We chose the multivariate analysis because the indicators of inequality of opportunities set variables known in statistics as dummy, namely, categorical data for each individual in which value “1” identifies the individual who finds himself in one of the situations of inequality of opportunities, and value “0” in the opposite case. As control variables of the model, we considered the *per capita* family income in minimum wages and the school climate of the domicile. This procedure is important to control the relations we wanted to highlight such as inequality of opportunities \times color, and inequality of opportunities \times social and residential context.

In short, our aim is to submit the results of the descriptive analysis to the statistical test and verify whether or not and to what degree the division by color (White \times Black and White \times Brown) explains more the inequalities of opportunities than the social contexts, taking into consideration family (poverty \times non-poverty), domicile (low school climate \times high school climate), and dwelling place (high status \times low status). The estimated coefficients of the regression model, when they are higher than 01, express the relative risk of the individuals who are in one of the situations of inequality of opportunities set out above, that is, in relation to their reference groups. Each of the variables considered in the model has a value that represents the risk (or relative chance) of being in one of the situations of inequality of opportunities. We applied this model for the entire population of the metropolitan region and, at the same time, for each of the color segments. For the color variable, we considered the color white as reference and we estimated the risk for Browns and Blacks. For the social context variable, we considered the high-status social context as a reference and we estimated the effects of low-status and middle-status contexts. In the case of the *per capita* family income, we estimated the effect on individuals who are members of family groups which earn up to 1/2 minimum wage and from 1/2 to 01 minimum wage, taking as reference the group that earns 01 minimum wage or more. For the home context variable, we estimated the risk of individuals belonging to a domicile with school climate up to 4 years of schooling (low) and from 4 to 8 years of schooling (middle), with reference to individuals residing in domiciles with a school climate from 9 or more years of schooling (high).

In Table 11.9 we presented the results of the logistic regression model for the school delay variable of a year or more for children in the 8–14 age range. In the overall metropolis, division by color has greater importance than the place of residence in explaining inequalities of educational opportunities. It reaches more heavily Black children than Browns in relation to Whites, which could lead us to accept the hypothesis of the existence of effects of discriminatory practices with

Table 11.9 Estimate of the effect of the social context and color on the school delay of 01 year or more, considering children in the 8–14 age range—MRRJ—2000

	Relative risk			
	MRRJ	Whites	Blacks	Browns
Black	1.54	–	–	–
Brown	1.27	–	–	–
<i>Per capita</i> family income up to 1/2 MW	1.63	1.65	1.38	1.48
<i>Per capita</i> family income from 1/2 to 01 MW	1.34	1.38	1.22	1.25
School climate of the domicile up to 4 years	2.31	2.41	1.68	1.89
School climate of the domicile from 4 to 8 years	1.66	1.71	1.34	1.48
Low-status social context	1.26	1.30	1.10	1.03 ^a
Middle-status social context	1.13	1.15	0.99 ^a	0.95

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aNon-significant for $\alpha = 0.05$

racial background. Nevertheless, a much more important explanatory weight relies on the social conditions in which the child is socialized, which comprises family, domicile location with an emphasis on the school climate of the domicile, and poverty.

When we examined the results of the application of the model for the groups of color, we observed that these contextual conditions reach more White children than Black and Brown children, while for the latter the place of residence has little or no influence on the risk of school delay.

In Table 11.10, we present the results of the school evasion variable. The color brown represents a virtually null risk of school exclusion in comparison to the white color, but this risk is high for the Black child (1.36). As well as in the situation of school delay, the risk of school evasion suffers greater effect from social contexts in terms of family and domicile—represented here by the school climate and the *per-capita* family income—than by the color of the children. In addition, when we observed the effects of the place of residence, we found that the risk for children who live in a low-status context is 1.22 time higher than the estimated risk for those who live in a high-status context, which is a high value and not far from the value estimated for the black color (1.36). Noting the results of the application of the model separately for the color segments, we realized that White children suffer major disadvantages arising from the effects of living in unfavorable social contexts in terms of family, domicile and place of residence. What calls attention is the fact that White (1.48) and Black children (1.42) living in contexts marked by the low schooling of adults are exposed to high risks of school evasion in similar magnitudes for both groups of color. What appears as a novelty in this case, unlike what was observed with regard to school delay, is that Black children living in low-status

Table 11.10 Estimate of the effect of social context and color on school evasion of children in the 8–14 age range—MRRJ—2000

	Relative risk			
	MRRJ	Whites	Blacks	Browns
Black	1.36	–	–	–
Brown	1.07	–	–	–
<i>Per capita</i> family income up to 1/2 MW	1.98	1.85	2.20	1.98
<i>Per capita</i> family income from 1/2 MW to 1 MW	1.31	1.19	1.34	1.41
School climate of the domicile up to 4 years	2.34	2.53	1.58	2.29
School climate of the domicile from 4 to 8 years	1.28	1.38	0.95 ^a	1.22
Low-status social context	1.22	1.48	1.42	0.9 ^a
Middle-status social context	0.92	1.06 ^a	1.01 ^a	0.71

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aNonsignificant for $\alpha = 0.05$

contexts show a higher risk of school evasion than Black children living in high-status contexts. To Brown children, this effect of the place of residence is not significantly different among the different social contexts.

In the coefficients analysis, what draws our attention is the higher risk of school evasion for Black children from poor families (up to 1/2 minimum wage), when compared with those who live in domiciles with low school climate (up to 4 years of schooling). In the first case, the risk amounts to 2.20, and, in the second, to 1.34. This result indicates the strong relationship between poverty and school evasion for Black children, probably as a result of the need to complement the family income through child labor.

In Table 11.11, we present the results of the model that estimates the risk of pregnancy in single young women in the 14–19 age range. In the overall MRRJ, the range of up to 1/2 minimum wage (MW) of the *per capita* family income presents a risk of 5.45 times the estimated risk for the *per capita* family income of 01 minimum wage or more, whereas the risk for the range from 1/2 to 01 minimum wage represents 2.24 times the risk estimated for the same reference range which is well above the estimated values for the black and brown colors. This indicates that the risk of early pregnancy is strongly related to the social context created by the extreme poverty of the family to which the young woman belongs. Living in spaces that concentrate heavily adults with little schooling represents a higher risk for Blacks. However, when we observe the results of the model for each color segment, we realize that for the White young women the effects of the low and middle-status contexts increase to 2.30 and 2.62 times, respectively, the estimated risk in the high-status context, while for Black and Brown young women the effect of context has no significance. Thus, data show that the effects of different contexts are smaller

Table 11.11 Estimate of the effect of social context and color on unmarried mothers from 14 to 19 years of age—MRRJ—2000

	Relative risk			
	MRRJ	Whites	Blacks	Browns
Black	1.71	–	–	–
Brown	1.21	–	–	–
<i>Per capita</i> family income up to 1/2 MW	5.45	6.09	4.27	4.73
<i>Per capita</i> family income from 1/2 to 1 MW	2.24	2.27	1.81	2.24
School climate of domicile up to 4 years	1.37	1.51	1.16	1.26
School climate of domicile from 4 to 8 years	1.23	1.44	1.05 ^a	1.06
Low-status social context	1.80	2.30	0.97 ^a	0.94 ^a
Middle-status social context	2.09	2.62	1.06 ^a	1.12 ^a

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aNonsignificant for $\alpha = 0.05$

Table 11.12 Estimate of the effect of the social context and of color on the disaffiliation of young people in the 14–24 age range—MRRJ—2000

	Relative risk			
	MRRJ	Whites	Blacks	Browns
Black	1.15	–	–	–
Brown	0.98	–	–	–
<i>Per capita</i> family income up to 1/2 MW	3.12	3.08	2.78	3.17
<i>Per capita</i> family income from 1/2 to 1 MW	1.51	1.44	1.47	1.55
School climate of the domicile up to 4 years	1.32	1.47	1.12	1.25
School climate of the domicile from 4 to 8 years	1.15	1.24	0.94	1.12
Low-status social context	1.02 ^a	1.03 ^a	0.73	1.13
Middle-status social context	1.02 ^a	1.02 ^a	0.69	1.16

Source Elaborated by the authors with data from the 2000 demographic census (IBGE 2002)

^aNonsignificant for $\alpha = 0.05$

for Black and Brown young women and, at the same time, high for Whites. In addition, we note that the color variable has a large absolute weight in the constitution of the risk of early pregnancy in adolescents.

In Table 11.12, we present the results of applying the model to the institutional disaffiliation variable of young people in the 14–24 age range. The results show that this type of risk is little influenced by the social context of the place of residence because it only presents significant effect for Brown young women, being 1.13%

for low-social context and 1.16% for middle-social context. For White young women, the effect of the social context was not significant, while for Black young women the effect was of protection for risk in case they reside in low- or middle-social contexts in relation to high-social context, i.e., Black young women residing in high-social context have a higher risk of being in a situation of institutional disaffiliation. Reflecting on this result, it is important to remember that the weighting areas defined by the IBGE do not discriminate slum areas and that there is a strong incidence of this type of dwelling in the MRRJ in contexts defined herein as of high status. That is, in the process of the slumization of Rio de Janeiro the large number of *favelas* encrusted in noble areas of the city stands out, mainly by the occupation of hills and slopes.

As we saw in the descriptive part of this article, 25% of the Black population resides in *favelas*/slums located in high-status contexts, and Blacks account for 20% of the population in those slums. Such a strong presence of slums in those areas of the city affects the estimates for areas classified as high-status areas because, despite slums do not express the kind of total separation observed in American ghettos, social segregation between the slum area and its wealthy surroundings expresses the existence of social worlds with strong differences in their living conditions (income, education, housing comfort, etc.), of patterns of social organization (family type, size and composition, for example), and other conditions related to a complex and secretive system of interactions based on social stigma which are so deeply rooted that the everyday language has incorporated the term “*favelado*”¹⁶ as a category of the game of social distinctions founded on estate hierarchy, and such a term has been used legitimately by the media and public authorities in the current sociability.

It would be impossible, within the framework of this article, to develop arguments explaining the reasons for the fact that the territorial proximity of these social worlds juxtaposed does not create advantages for those who are at the bottom of the social structure, thus encouraging young people to search for social inclusion via school and/or work. In other words, the co-presence in the space of those social groups does not seem to arouse fully positive dimensions of the sociological phenomenon known as “pair effect”.

Subsequent studies may show how the presence of slums in noble areas of the city affects the institutional disaffiliation of Black young people, a situation that does not happen to Browns. However, we assume that we are facing unexpected effects of changes in the young people expectations about their place in society arising, as much from exposure to the mass media and the increase in the level of education, as from the socialization process resulting from the interaction with young people residing outside the space of slums and occupying higher social positions. These are two mechanisms that generate incongruities between the social status expected by young Blacks residing in slums and the social status effectively carried out through the structure of existing opportunities (Lensky 1954). Young people refuse the occupation they can have access to since it is usually an

¹⁶As we mentioned earlier, *favelado* is slumdog in English.

occupation related to manual and informal labor and to personal or household services. This occurs because they see this occupation as socially devalued after having achieved levels of education higher than those of the adults of their reference group. Besides, they are not encouraged to continue their schooling because public schooling is socially devalued and because they do not acknowledge this via as being able to allow them to achieve their expectations of social ascension.¹⁷

11.4 Conclusions: Do Urban Frontiers Have Colors?

The primary motivation of this study was to generate some empirical evidence that would reflect the hypothesis of the “racialization” of the structure of inequality expressed in the territory through residential segregation taking the metropolis of Rio de Janeiro as a case study. We sought to conduct our reflection on this hypothesis in two debates present in the Brazilian academic world: on the one hand, the debate that is guided by hypotheses disseminated by the international literature on contemporary trends of increasing connections between the macro mechanisms of reproduction of social inequalities and the micro-mechanisms of residential segregation in large cities, and, on the other hand, a national debate about the “racial” dimension of social inequalities.

We do not want that the analysis undertaken here might be seen as a demonstration of the lack of relevance of “race” in the processes of production and reproduction of social inequalities through the mechanisms which organize socially the territory, distributing people, resources and opportunities from the social structure and its historic “racialization.” We want, first of all, that our findings point to the complexity of the issue. In this sense, in accordance with the results described, we reached conclusions which we now present and which dialogue with the inquiries exposed at the beginning of the article.

First, the self-declared color of individuals has strong influence on the risks of the social disadvantages examined in our analysis and that are related to the access to urban social welfare and to the structure of opportunities, reaching mostly the Black segments. Nevertheless, we noted that color does not fully explain the reproduction of inequalities. The empirical results of our work point to the strong relevance of contexts in which children and young people are socialized and acquire tangible and intangible resources necessary to the access, present and future, to the city resources. In this scenario, we can highlight results from the prior acquisition of parcels of the economic and school capital by family groups comprising children and young people. We also noted that such access is conditioned to the social context conformed by place of residence despite the fact that we deal with social

¹⁷Sansone (2003) explored the hypothesis that the behavior of the young people from the popular strata facing the institutions of society, especially the behavior of the so-called Blacks, is guided by the effects of status incongruity.

facts (school delay, school evasion, early pregnancy, and institutional disaffiliation) that are highly dependent on more immediate contexts (family and home). Besides, we found no evident signs of similarity between the inequalities produced by stratification according to color and the inequalities resulting from the social organization of the territory in terms of the spatial distribution of individuals and the chances of access to urban welfare and opportunities. Whites, Blacks, and Browns, living in contexts with large concentration of adults with low schooling, face urban conditions of life that are worse than those experienced by Blacks and Browns from higher status contexts.

These comments allow us to call into question the hypothesis present in the literature about the existence of the phenomenon of “racial” segregation in the city (Pinto 1998; Telles 2003; Garcia 2009). But, in spite of not finding signs of the “racialization” of the inequalities generated by the effects of the social organization of the territory, we found differences in the constraints imposed on Whites, Browns and Blacks in their chances of accessing opportunities. This fact results from the observation that Whites are more negatively affected in their chances of taking advantage of opportunities due to family, domicile, and urban contexts which are less unfavorable than the contexts of Browns and, particularly, of Blacks. The latter, in turn, would be less affected since their color already is disadvantageous from the starting point and the fact of living in more favorable contexts does not seem to change this situation. Moreover, this fact may mean that the historic social inequalities between groups of color in Brazilian society can be articulated with those arising from the formation of urban social environments not much favorable to use of opportunity structures. Accordingly, in future research, it would be interesting and useful to consider the mechanisms of discrimination described by Guimarães (1999) which, acting on the socialization of individuals, everyday life and functioning of institutions, naturalize “racial inequities” while transforming them in their “social tropes.”

References

- Alvarez-Rivadulla MJ (2002) Asentamientos irregulares en Montevideo: la desafiliación resistida. FCS/UdelaR. Documentos de trabajo, Serie Monografías, n, Montevideo, p 18
- Bastide R, Fernandes F (1955) Relações raciais entre negros e brancos em São Paulo: ensaio sociológico sobre as origens, as manifestações e os efeitos do preconceito de cor no município de São Paulo. Anhembi, São Paulo
- Bidou-Zachariassen C (1996) Classes populaires et classes moyennes en centre rénové. In: Haumont N (ed) *La Ville: agrégation et ségrégation sociales*. Paris, France, L’Harmatan
- Bourdieu P (1997) “Efeitos do Lugar”. In: Bourdieu P (ed.) *A Miséria do Mundo*. Petrópolis, Vozes, RJ
- Duncan OD, Duncan B (1955) A Methodological analysis of segregation indices. *American Sociological Review*, Chicago, v. 20, n. 2, p. 201–217, Apr
- Fenelon J (1981) *Qu’est-ce que l’analyse des données?*. Lefonen, Paris, France
- Fernandes F (1965) *A integração do negro na sociedade de classes*. Nacional, São Paulo

- Garcia AS (2009) *Desigualdades raciais e segregação urbana em antigas capitais: Salvador, cidade D'Oxum, e Rio de Janeiro, cidade de Ogum*. Garamond, Rio de Janeiro
- Guimarães ASA (1999) *Racismo e anti-racismo no Brasil*. São Paulo: Editora 34
- Guimarães ASA, Huntley L (2000) *Tirando a máscara: ensaios sobre o racismo no Brasil*. Paz e Terra, São Paulo
- Hasenbalg CA (1979) *Discriminação e desigualdades raciais no Brasil*. Graal, Rio de Janeiro
- IBGE—Instituto Brasileiro de Geografia e Estatística (2002) Departamento de Estudos de população. *Censo demográfico de 2000: documentação dos microdados da amostra*. Rio de Janeiro: IBGE
- Itaborá NR (2003) Trabalho feminino e mudanças na família no Brasil (1984–1996). *Revista Brasileira de Estudos de População*, Rio de Janeiro 20(2):157–176
- Kaztman R (2001) Aislamiento social de los pobres urbanos: reflexiones sobre la naturaleza, determinantes y consecuencias. *Siempre/Unesco*, Buenos Aires
- Kaztman R, Retamoso A (2005) Segregación espacial, empleo y pobreza en Montevideo. *Revista de la Cepal*, Santiago del Chile, n. 85, Apr
- Lensky GE (1954) Status crystallization: a non-vertical dimension of social status. *Am Sociol Rev Wash* 19(1):405–413
- Pinto LAC (1998) O Negro no Rio de Janeiro: relações de raça numa sociedade em mudança. UFRJ, Rio de Janeiro
- Ribeiro LCQ (2005) Segregação residencial: teorias, conceitos e técnicas. In: Moyses A (ed) *Cidade: segregação urbana e planejamento*. Goiânia, UCG
- Ribeiro LCQ (2007) A dimensão metropolitana da questão social: ensaio exploratório. In: Encontro Nacional da Associação de Pós-graduação em Ciências Sociais, 31, 2007, Caxambu. Anais... Caxambu-MG: Anpocs
- Ribeiro LCQ, Lago LC (2001) A oposição favela-bairro no Rio de Janeiro. São Paulo em Perspectiva 14(1):144–154
- Ribeiro LCQ, Koslinski MC (2009) Fronteiras Urbanas e Oportunidades Educacionais: o caso do Rio de Janeiro. Work presented at the 33rd Annual Meeting of ANPOCS, Caxambu-MG, Oct
- Sansone L (2003) *Blackness without ethnicity: constructing race in Brazil*. St. Martin's Press, New York
- Saravi GA (2004) Entre la evasión y la exclusión social: jóvenes que no estudian ni trabajan. Una exploración del caso argentino. *Nueva Sociedad*, Buenos Aires, n. 189, p. 68–84, Jan./Febr
- Silva NV (1978) *White-Non-white income differentials: Brazil 1960*. Doctoral Dissertation (Doctorate in Sociology)—Ann Arbor, University of Michigan
- Telles E (2003) *Racismo à brasileira: uma nova perspectiva sociológica*. Relume-Dumará; Fundação Ford, Rio de Janeiro
- Williamson H (1997) *Youth and policy: contexts and consequences, young men, transition and social exclusion*. Ashgate, England

Part III
Citizenship, Public Policy and
Metropolitan Governance

Chapter 12

The Favela in the City-Commodity: Deconstruction of a Social Question

Luiz Cesar de Queiroz Ribeiro and Marianna Olinger

Abstract The favela as a social question presupposes a discursive field and action open to passion and reason, centered around a set of aporias sustained by arguments with which they simultaneously intend to become acquainted, judge, and propose, or, to be coherent with what has been enunciated above, propose, judge, and become acquainted. Thus, the main goal of this chapter is to understand the various conjunctures in which the favela enters the public debate must seek to elucidate the relations inherent between the explanation/assessment of its existence and its problems with the propositions of action.

Keywords Favela (slums) · Social question · Public debate

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12.1 Introduction

The emergence, consolidation, and expansion of the *favelas*¹ in Rio de Janeiro, and the related debate about the virtues and vices of their existence in the city's social space, synthesize, in an eloquent manner, the various stages of metamorphosis of the Brazilian social question.² Each of them begins with the appearance of new propositions for the model of action regarding such territory, justified by the construction of social representations that defend and/or condemn the existence of *favelas*. For such, cognitive, normative, political, more or less erudite, arguments are mobilized, in different institutional ambits. Therefore, as a social question, the *favela* presupposes a discursive field and action open to passion and reason, centered around a set of aporias sustained by arguments with which they simultaneously intend to become acquainted, judge, and propose, or, to be coherent with what has been enunciated above, propose, judge, and become acquainted.

This is the starting point for this article. The understanding of the various conjunctures in which the *favela* enters the public debate must seek to elucidate the relations inherent between the explanation/assessment of its existence and its problems with the propositions of action. Here, however, we do not aim to reconstruct these conjunctures. It would be impossible to do so in this brief approach that only develops the oral communication presented in the seminar from which a book resulted. We center our reflection on the present conjuncture, which we consider as a hypothesis, constituting the final stage of the *favela* as a social question and the deconstruction of the aporia formerly established by the imposition of a set of instrumental and pragmatic justifications—which withdraw the debate from the political field, and thus from the conflict, and insert it into the domain of market logic. Expressed more simply, our argument is: if, before, the debate about the *favela* used to involve taking a position by means of value judgments that did not differentiate explanation, evaluation, and action, in the current conjuncture the *favela* is conceived by the model of action that seeks to ensure the conditions of its valuation as a mercantile asset which, if well connected to the city, is transformed into a commodity. Therefore, in course, there is disimpassionment of the understanding/judgment/action of the *favela*, its place in social space and in the collective imaginary of the Cariocas (Rio de Janeiro citizens), whose main consequence is the displacement of the historic dualities of the *favela* as a social question, such as that regarding urbanization versus removal, for example.

¹In Brazil, the definition of *favela* is a little controversial. For census purposes, according to the Instituto Brasileiro de Geografia e Estatística—IBGE (Brazilian Institute of Geography and Statistics), *favelas* are “subnormal agglomerations” constituted of shacks/huts and houses, occupying or, until recently, occupied, land belonging to others, whether public or private, generally featuring a dense, disorderly layout, the majority lacking essential public services. <http://www.ssrede.pro.br/ibge%20estatisticas.pdf> accessed 8th March 2009.

²In this text, we assume the following concept of the social question: “a challenge that interrogates, brings into question, the capacity of a society to exist as a whole linked by relations of interdependence” (Castel 2009, p. 30).

This process of deconstruction has been carried out by the utilization of practices that Pierre Bourdieu called symbolic violence, practiced by the mobilization by diverse actors of cognitive normative arguments that remove from the debate about *favelas* the misunderstanding as a discursive-practical possibility.

Due to this hypothesis, despite the modest objectives of this article, we are obliged to begin with a brief reconstruction of the trajectory of the *favela* as a social question. Next, we propose to identify the moments in which there occurred conjunctures of dispassionment of the debate about the *favela* and the dissemination of social representations that reinterpreted it as a problem or prevented its incorporation into the status of merchandise with great potential value.

12.2 The *Favela* as a Social Question: Theoretical Tension and the Practice of Duality

As of the second half of the twentieth century, the *favela* imposed itself as a social question in the Rio de Janeiro context when it became one of the central axes of public debate, as much in the political ambit as in the academic. From a rereading of the history of this period, since that time until nowadays, it is possible to perceive the role of the State, the human and social sciences, the means of communication, to cite some of the actors involved in the construction and “metamorphosis”³ of this question. In becoming the center of an intense political and academic debate, the *favela* came to represent one of the main symbols of threat to social cohesion in the Brazilian urban context,⁴ which, since then, has attempted to counter the risk of its fracture, as a challenge that puts into check the capacity of the society to exist as a whole linked by relations of interdependence. The vision of an atomized society—of efficient producers and rational consumers—in the face of the apparent disorder of the *favela*, used to provoke disquiet, that the representations of society as an organism would have to be overcome.⁵ The focus of the debate used to take place much more in the urgency to assuage its very presence, to the point of making the question invisible, crystallizing it in the periphery of the social structure, even though it would not cease to question the integrity of society.

In the Rio de Janeiro context, the *favela* social question and the problems that it presents for the city, whether they be real or imaginary, enunciated by discourses almost always constructed inwards from the outside, end up evincing frontiers of a

³In *Metamorphoses of the social question*, Castel made a re-reading of the historical transformations from the 18th century to today, highlighting what is new and, at the same time, permanent, borne by its principal crystallizations, that is, present the metamorphosis regarding the previous question, which was to find out how a subordinate, dependent social actor become a fully social subject.

⁴Although the debate is firmly founded in the Cariocan (Rio) context, the political status of the city as the capital of the Republic.

⁵Topalov (1996) discusses this process in the European context.

social formation that returns to its center—in other words, the conditions for those that lie at the margins, in this case the *favela*, always depend on the condition of those that are at the center.⁶ The definition of the State by means of practices of exception (Oliveira 2003; Agamben 2004) and the maintenance of margins as a necessary component for the existence of the center (Das and Poole 2004) seem to be echoed in the Brazilian context, where the integrated and the marginal belong to the same whole, whose unity is problematic. In this panorama, the conditions for the establishment and maintenance of this unity—the integration (or not) of the *favela* to the rest of the city—constitute the duality between removing or integrating,⁷ which, at different moments, and by means of distinct arguments, legitimized the policies for the *favelas*.

The tension encountered in the theme of social housing in Rio de Janeiro was already central in the life of the city at the end of the nineteenth century, when *cortiços*⁸ were presented as the principal threats to, on the one hand, public health, and, on the other, the capitalist project, with the need for matching the workforce to the new model of industrial production, which engendered an increase in worker productivity, and, therefore, implied reorganization of their way of life (Abreu 2008). The existence of the *cortiços* was considered an obstacle to urban reform, which, as of the twentieth century, became firmly founded on the discourse that preached the perils of the *cortiços* versus the need for changes in lower class habits to meet the needs of industry. With the closure of the *cortiços* (1891), allied to the abolition of slavery and the growth in migration between the countryside and the city, as of the end of the nineteenth century, the problem of social housing changed from the form—the *cortiço* (with emphasis on the conditions of hygiene and health)—to the place, with the occupation of the hills, Providência and Santo Antônio. If, formerly, the obstacle was the *cortiços*, at this point the *favelas* imposed themselves as the center of the difficulty.

The reforms that permeated the first half of the twentieth century, accompanied by intensification of the removals, also gave rise to the first resistance movements, with discourses that defended the urbanization of the *favelas* as opposed to removal as an option, marking the clear theoretical tension and practical duality in confronting the question (Santos 1979; Vaz 2002; Valladares 2005; Abreu 2008). With the onset of the military dictatorship in 1964, the thesis of urbanization lost force, returning to a position of centrality in the dispute only after the 1980s, when the *favela* began to be the object of interest in political life, which was renewed at the end of the dictatorial era (Valladares 2005; Burgos 2004; Abreu 2008). At the beginning of the 1990s, the thesis of urbanization became hegemonic, without, however, eliminating other positions that disputed the field where the old theories

⁶Understood here as the decision center.

⁷Integration of the *favela* to zones without *favelas*, understood as urbanistic intervention processes that sought to broaden access of these territories to the predominant urban infrastructure in the latter.

⁸Collective rented housing (tenements), traditionally occupied by the poorer social strata in urban centers until the end of the 19th century.

of marginality (Perlman 1977; Kowarick 1974) remained in this scenario by means of successive reappropriations by the academic, journalistic and political spheres.

12.3 Forces of the Construction of the Urbanization Thesis

The period of transition from dictatorship to democracy—at the end of the 1970s and beginning of the 1980s—was marked by major political disputes, where the land tenure question—urban and rural—was central in the formation of coalitions that determined the treatment of the subject in the 1988 Constitution. In the preparation for the return to democracy, the *favela* became a valuable political territory. The creation of the Programa Promorar (1979) (Housing Program) by President João Figueiredo, followed by the election of Leonel Brizola as Rio de Janeiro State governor (1982), and the municipal administration of Saturnino Braga (1986–1988), inaugurated a period of negation of the removal discourse, replaced by a new form of public authority relation with the *favelas*. With the 1988 Constitution, the emergence of the social function of land as a legal figure opened the way to a new period in the question of the *favela*, when the discourse of urbanization would become hegemonic. In 1992, the Plano Diretor da Cidade [City Master Plan] already incorporated the instruments brought by the Constitution, consolidating the idea of a global program of integration of the *favelas* to the city (Burgos 2004).

If, on the one hand, the new Constitution opened the way to renewed discussion of land occupation, privileging the social function of land, which legitimized the discourse focused on urbanization, land tenure regularization, and improvements in the *favelas*, on the other, the same period was marked by the recrudescence of violence in these spaces (Misse 1999, 2003), lacking the duality in discourse and in practice. In this scenario, no longer there were discussions about the need for urbanization and integration, although discriminatory security policies justified the *cidade partida* (divided city) discourse, once again putting the integration of Rio de Janeiro society in check (Ventura 1994). On the one hand, society was divided between *favela* dwellers and non-*favela* dwellers; on the other, social movements, strengthened in the wake of the movement that approved the 1988 Constitution, sought democratic, integrating solutions for Brazilian social questions, among which was the *favela*. The social urban movements of the 1980s in Rio de Janeiro played a crucial role in the legitimization of the discourse that would lead to the hegemony of the urbanization in the city for another two decades.⁹ The election of

⁹The movements for urbanization and legalization of clandestine and irregularly occupied land, the experience of the Núcleo de Legalização dos Loteamentos da Promotoria Pública (Land Legalization Nucleus of the Public Prosecution Dept.), and the constitution of the Cadastro de Loteamento e Favelas da Prefeitura (City Hall Register of Land Division and *Favelas*), as the first administrative act of recognition of these territories, were determinants in the legitimization of the urbanization discourse.

Cesar Maia (1992) consolidated the period begun in the 1980s, and the urbanization of *favelas* was presented as a possible solution to the *favela* social question. Not without contradictions, if we analyze the other urban policies in the same period,¹⁰ the proposal to integrate the *favelas* into the middle/upper class districts was presented as a solution to the city's problems, making the urbanization thesis in the political field preponderant.

Just as the urban social movements of the 1980s were crucial for the construction and consolidation of the political discourse that legitimized urbanization as a policy for the *favelas*, academic forces also performed an important role in this construction. In the second half of the 1970s, influenced to a great extent by the work of Padre Lebrez and research by the Sociedade de Análises Gráficas e Mecanográficas Aplicadas aos Complexos Sociais (SAGMACS) in Rio de Janeiro, various researchers dealt with the theme *favela*, as a social question. In the first works by Padre Lebrez in the city, we can clearly perceive that there is an attempt to rupture the hegemonic discourse of removal in existence since the 1950s. With his humanist conception, he had a strong influence on the training of progressive urbanists, and on the decomposition and recomposition of the representations, initiating at the academia a new field of studies, based on the social sciences, exclusively dedicated to the *favela* question. The theses developed by researchers in that period, before which the majority had been constructed by catering to the needs of an industrial order established in the first half of the century, opened the way to a new area of studies (Santos 1979; Blank 1979; Valladares 1979; Perlman 1977), fundamental for the change in the representation of the urban question—of the *favela* as a social question in Rio de Janeiro.

12.4 The Deconstruction: The *Favela* as a Business

In the second half of the 2000s, with changes in the political game in Rio de Janeiro city and state, we observed the gradual deconstruction of the discourse that had dominated the previous two decades. The removals, denied in the previous period, returned to the scenario. If, previously, public health and beautification of the city

¹⁰Despite the discourse strongly supported by the “integrating” housing policy and “urban order”, the new mayor ignored the Master Plan, approved in 1992, and created a Strategic Plan, with a focus on the attraction of foreign capital to the city, promoting mega projects—such as the construction of the Yellow Line highway, the Rio City Project, the Interlinked Operations, the candidature of the city to host the Pan American Games, besides the strong resistance to utilization of City Statute instruments (Cardoso 2007). In this aspect, if, on the one hand, the Cesar Maia government, once and for all, consolidated the discourse that defends the permanence of the *favelas* and their improvement by local state programs, this government also inaugurated a period in which the city would become the object of major capital through the possibility of holding great events.

sustained the thesis of removals, now public security¹¹ and the environment sustained the old/new thesis. The new period was marked by the articulation of two apparently contradictory discourses: on the one hand, removal, on the other, integration of the spaces where removal was not viable, no longer sustained in the right or the threat of disintegration of the social tissue, but in the creation of a new consumer market. The integration previously sustained by the political and academic discourses now gained strength by means of the markets, inaugurating a phase where the *favela* became the object of major projects.

In this new phase of metamorphosis discussed here, a series of symbolic violence is activated in order to reconstruct legitimate representations of the world, and base new practices on redefinition of categories in the discourses about the *favela*. If the holding of the Pan American Games in the city in 2007 was the starting point to legitimize a series of truculent policies against *favelas*, the announcement of the hosting of the World Cup in 2014 and the Olympic Games in 2016 consolidated a new phase in the debate, placing new actors at the center of the question.

Considering that the *favela*—its way of life, or its permanence in certain areas of the city—is the main cause of social ills, an idea is created that the populations of these spaces can do nothing more to adapt themselves to the determinations of the center, progressively excluding sectors directly impacted by the interventions, which are defined in progressively less evident decision-taking spaces. Thus, a residue appears that legitimizes the permanence of truly disciplinary and organizing devices necessary to rationalize the question and incorporate the *favela* into a possible whole, ideal for the *development* of the city. Although one can consider these features *archaisms* or *resistance* of the dominant groups to a certain *modernization*, is perceived as an articulated multiplicity in social systems, and apparently originating from different historical periods, that coexist. The permanence of these features has a close relation with the spatial inequalities of the accumulation of capital, of the transformations of the productive and urban forms, and, therefore, also of the power structure (Harvey 2006, 2008).

The preparation of the city to host the 2014 World Cup and the 2016 Olympics intensifies the contradictions between discourse and practice. A new city project has emerged,¹² in which part of the *favelas* must be removed (whether due to

¹¹Although the violence in Rio de Janeiro assumed alarming proportions since the end of the 1980s, the housing and security policies were implemented independently in 2007, the year the Pan American Games were held in the city. On the one hand, the municipal government treated the issue as one of integration, facing the problem through *cortiço* upgrading programs. On the other, the state government remained responsible for security policies independently of other urban interventions.

¹²In 2008, the international financial crisis of December 2007 made the Federal Government announce it would strengthen the Accelerated Growth Plan, with the allocation of investment funds to *favela* urbanization on a scale never seen before in the city. The “new” city project seemed to be being designed: while the federal and state governments invested massively in large urbanistic projects in *favelas* near the high value areas of the city, and for the areas that must appreciate in value due to the holding of the mega events, the municipal government is undertaking city “clean-up” and “organization” projects.

environmental or human risk, or the need to use spaces for preparation of the city for the Games—a redefinition of the property occupation in some areas) and another part must be urbanized, which necessarily includes some rate of removal, so as to facilitate the maintenance of security and execution of works. In the new discourse, urbanization and removal coexist, as seen in the 1960s and 1970s, now dressed up differently. The context is different, and the arguments that legitimized the discourses too.

In the construction process of the new discourses and practices, at each step, new problems arise associated to the *favela* to be tackled, and thus, new actors and new modalities of intervention emerge. Every step, in turn, produces transformations in the discursive field itself, delimiting, a priori, what is legitimate/illegitimate for debate. The central thesis here is that the *favela* has its representation based in the field of social action relative to the values until the first half of the 2000s, which began to change due to the preparation of the city for the mega events and possibility of large-scale investments, forming the basis of representation in the field of rational instrumental action, simultaneously causing disenchantment and depoliticization of the *favela* debate.

12.5 Symbolic Violence: The *Favela* Against the Environment and Urban Peace

The new coalition of interests, marked by the alliance between the federal, state, and municipal governments, through the Programa de Aceleração do Crescimento (Accelerated Growth Program), which, on the one hand, articulates a strategy of continuity of investment in improvements for the *favelas* and, on the other, legitimizes an aggressive strategy to exercise control over violence in the city.¹³ As if the physical or psychological violence—whether committed by criminal groups or public forces—suffered by *favela* dwellers were not enough, symbolic violence (Bourdieu 1998) comes into play, and it is strengthened. In this context, the combat of violence and degradation of the environment justifies the emergence of the old

¹³In May 2007, little more than a month from the holding of the Pan American Games, the state and national security forces conducted an operation in one of the largest *favelas* in the city, resulting in 19 fatal victims in just one night. From that point on, the security forces spent months on guard at one particular *favela* (schools in the area were closed for the three months), making a demonstration of force, almost exemplary, with the aim of containing any action that could adversely affect the Games. At that moment, the focus went well beyond that event, given that the city was a candidate to host the 2014 World Cup and also the 2016 Olympics, thus justifying any type of violence against these communities, once again, seen as “a threat to integration”.

removal practices,¹⁴ in parallel to the discourse of the valuation of the *favela* territories as mercantile assets, in a city itself transformed into a commodity.

Leite (2008), in discussing risk and violent sociability, by means of the vision of Rio de Janeiro *favela* dwellers, highlights the existence of a widely diffused perception in the city, where the *favelas* are the territory of violence, and the population is to some degree connivent with the primary agents of this violence: the drug traffickers. The insecurity and fear thus end up marking the social perception of the *favela* dwellers, leading to their criminalization and growing socio-spatial segmentation of the city (Mello 2001; Leite 2008), in addition to the redefinition of public policies and social projects aimed at such populations and territories, favoring a security policy based on direct confrontation of the drug traffickers, a fact symbolized in a “war” against *favelas* and their residents (Cano 1997; Dowdney 2002; Ramos and Lemgruber 2004).

On the other hand, climatic incidents, such as rain, flooding, and landslides are also enlisted to justify the new wave of removals. When invited by the press to provide explanations, the public authorities invariably justify the tragedies as the consequences of extraordinary climatic events, outside the foreseeable patterns, but also, and above all, as a result of the supposed irrationality of the behavior of the poor, who “invade” areas subject to evident environmental risks, “choosing” to inhabit these spaces. The supposed choice of these people and their habits (such as disposing of their rubbish on the slopes) is largely responsible for aggravating the risks to which they are exposed. In the face of the threats of devaluation of their electoral capital, the authorities launch emergency operations. Engineers, firemen, police, and other technical emergency corps are mobilized, in an exceptional manner, by the public authorities to decrease the damage and, in some way, calm the population’s natural sentiment of abandonment. However, such operations only strengthen the discourse of culpability of the victims, and, in the face of public opinion, legitimize the need to remove these populations from the so-called “risk areas”. The new “removalist” discourse, which had already been maturing since the holding of the Pan American Games, gained strength with the landslides that have occurred in various Rio de Janeiro *favelas*, which left dozens of fatalities, besides hundreds of homeless, in the heavy rain at the beginning of 2010. With consternation, the authorities addressed the public to announce that there was no alternative but to remove the people, despite a range of dissonant discourses questioning removal as the sole alternative to the vulnerability in certain areas.

¹⁴In January 2009, in his first month in government, the mayor, Eduardo Paes, had already published four decrees aimed at containing the expansion of *favelas*. These decrees accompanied the new program launched by the City Hall to bring “order” to the city. The program soon gained public sympathy, which gave rise to a major campaign for “control” over the expansion of the *favelas*, as well as removal of some or parts of some, established for a long time, with emphasis on the South and West Zones—the latter had already been the focus of removalist proposals since 2007, when works were underway for the Pan American Games (*O Globo* newspaper headlines: “Mayor issues decrees to contain *favela* expansion” [1/12/2009] and “Mayor will impose new eco-limits on *favelas*” [1/16/2009]).

It is, in effect, no novelty to anybody that the urban space was and continues to be appropriated in ways totally contrary to public regulation, master plans, laws about the use and occupation of urban land, building codes and postures. A veritable *laissez-faire* reigns in our cities, producing not only territories with poverty, but also ones inhabited by high-income social segments. In Rio de Janeiro, for example, 69.7% of the areas in the municipality occupied above the 100 m contour—totaling 11.7 million m²—are in the hands of the middle and upper classes, according to data from the Instituto Pereira Passos (IPP), the City Hall's planning and information body, and only 30% of this vast territory unsuitable for residential purposes is occupied by *favelas*. In compensation, 73.5% of the *favela* residents inhabit areas above the 100 m contour, exposing a dramatic inequality in territory, also expressed in the social distribution of the risks arising from urban precariousness.

Therefore, if it is true that the catastrophes are generated by freak climatic incidents, their effects result from a very usual management pattern in our cities, where the planning, regulation, and routine actions are replaced by a standard of operations by exception, making public administrative organs fragile. In this picture of urban management, the foreseeable problems caused by the equally foreseeable climatic events can only be responded with emergency action, which decisively contributed to the reproduction of precariousness of our improvised cities. However, what remains after the tragedies is a strengthening of the discourse that has legitimized a new wave of removal policies. Serving as protection for exactly what, or for whom, is perhaps one of the great questions to be elucidated.

If, on the one hand, the existing interventions have made it seem increasingly necessary to negotiate with the *favela* populations about those to be performed in the future, in practice, interventions decided in advance—beyond the reach of the spaces for participative democratic decision, so that such interventions are completely associated with interests of capital—symbolically deny the asymmetries of the relation established between the State intervener and the beneficiary communities. In this context, the economic capital, represented by State investments in urbanistic interventions in *favelas*, does not act, unless in the euphemized form of symbolic capital. And such reconversion of the capital, which is the condition of its efficacy, is in no way automatic, requiring work and incessant care, indispensable to establishing and maintaining the relations of domination.

The entry on to the scene of new economic interests in the urban capital accumulation linked to the recent business opportunities the megaevents propitiate and possibly to the world economic crisis begun in 2007, which constrained the growth of a good part of the capital from developed countries, will directly impact Rio de Janeiro city's policies. Thus, the present programs of urbanization and removal of *favelas* concomitantly gained prominence in the dispute over the new "city project".

On the one hand, there appears to be reconversion of the city's political model as a machine for growth (Molotch 1976) for the city into a machine for entertainment (Clarck and Ferguson 1983); on the other, the limits of the already developed markets place the *favela* as an unprecedented space for exploration by markets in constant need of expansion. This new city project appears to be the materialization

of the disputes for control over what is going to be destroyed and integrated to the city, in such a way that capital continues to grow permanently (Harvey 2004). If the city has always been as much a force for viability as an expression of the capitalist dynamic, now, once again it has to recreate itself, or be recreated, to render the continuity of the capitalist project viable. The fundamental difference is that in the previous context, the city was taken over by coalitions of classical political and economic interests which designed urban policies oriented by their own interests whose effects on employment and income generation legitimized the coalition. Now the political and economic interests seem to be merged. The actors of the policies come from the market itself and are legitimized by the mobilization of traditional political resources (party, clientelism, etc.), but also by the strategies of use of the city as political marketing. The expression of this double path of construction of the consensus that legitimates the current political power over the city is the Cabral-Paes alliance. It masterfully articulates the two forms, maintaining almost symbiotic relations between the market and the party. It is no longer possible to know who is at the service of whom. On the plane of the modalities of public policy, another expression is the marvelous, harmonious coexistence of philanthropic clientelism of the social organizations of local councilors and deputies and the market policy, translated in the public-private partnership in order to make urban investments. The first feeds the political-electoral market, and the second, the market of accumulation in urban space. The two forms of political action are united by the mercantile utilization of public funds. As a consequence, the urban policy ceases to be a fragile, unstable combination among the aims of the public provision of services, the public regulation of the use and occupation of land, and the private accumulation in the city, and becomes the direct generator of the conditions for private accumulation of wealth and power. The private interests become direct protagonists of the policy, a fact present in the interventions based on the public-private partnership, in the models for financing urban projects based on the "sale of shares" in the future profits of the projects.

However, for this model to become viable, important guarantees are necessary due to the massive amounts of fixed capital for long periods. In this context emerges the need for a set of guarantees, in part provided by macroeconomic policies (such as inflation control and exchange rate policy), in other words, the guarantee of an adjustment policy already in existence in Brazil since 2003, allied to a set of local urban policies, which minimize the threats of devaluation arising in the territory. In Harvey's (2006) analysis of the transformation of urban governance in the late capitalism, he describes how the concepts of innovation and entrepreneurship were appropriated by local governments as of the 1980s, as an alternative to confronting the difficulties faced by the capitalist economies after the 1973 crisis.

In this process, entrepreneurship mostly focused on investment and economic development by means of speculative construction instead of improvements of conditions in the specific territory, symbolized in the transformation of the city into a business linked to the entertainment circuit, also made the transformation of the *favela* question imperative. However, the transformation of the *favela* in such a perspective brought the need for construction of new representations for these

spaces, where the deconstruction of the discourse of the *favela* as an enigma of social cohesion, by means of allusion to the themes of violence and environment, was the basis for construction of the discourse of the *favela* as a commodity, marked by *disimpassionment* and *depoliticization* of the matter.

12.6 *Favela in the Urban Businesses*

The *favela social question* in Rio de Janeiro has undergone a metamorphosis throughout the last few years. At times, the *favela* had to be removed, at others, urbanized; at times, a problem, at others, a possibility, the *favela* was, and still is, subject to and the object of interventions of every kind, regardless of the agency of its inhabitants. What we see today in the city of Rio de Janeiro is that in the places where citizenship has been affirmed and universalized, the egalitarian standard in the procedures for the provision of services and regulation practices of the use and occupation of urban land became necessary for the constitution of a technical bureaucracy to exercise the important role of rationalization of the policy; in places where this does not happen, other grammars¹⁵ prevail, whose common denominator is the predominance of the particular immediate interests in the functioning of the public apparatus (Nunes 1997).

The existence of universalism of procedures implies institutionalization of the political action field and introduction of general interest engendered by a bureaucracy as a mediator in the game of private interests. In other words, the existence of this bureaucracy is fundamental to the adoption of universalism of procedures that allows the administration to function with little influence of the immediate, particularistic political game. As various analysts of the relations between the State and society in Brazil have already shown, the constitution of bureaucracies with these characteristics occurred only in the areas of interests of fractions of modernizing capitalist classes as a way of protecting the pieces of the State that ensure the general conditions of capital accumulation. In the other sectors of State action, as a rule in those whose function it is to meet the needs of social reproduction, the grammars of the particularistic interests prevail. In the current organization of the so-called Federative Pact, the city and town halls assumed these latter functions. For such, since the beginning of the 1980s, significant portions of the fiscal resources manipulated by the Brazilian State have been decentralized. In practice, in the absence of vigorous political institutions capable of constituting citizenship, the decentralization feeds different particularistic political logics—whether founded on

¹⁵Here, the term, ‘grammars’ refers to the work carried out by Edson Nunes (published in English under the title *Bureaucratic insulation and clientelism in contemporary Brazil: uneven state-building and the taming of modernity*), in which he identifies four institutionalized patterns of relations that structure the ties between the society and the State in Brazil (denominated ‘political grammars’), articulated in a fluid, combined manner: clientelism, corporativism, bureaucratic insulation and universalism of procedures.”

clientelism, patrimonialism, corporativism, or entrepreneurship—that coexist in the organization and functioning of the urban administration, blocking the adoption of instruments for public planning and management of currents of affirmation of the logic of universalism of procedures.

In the context of dismemberment of the public machine by the coexistence of diverse political logics, articulated by coalitions controlling decision centers that function according to interests that command each one of them, the disimpas-sionment and depoliticization of the discourse further limits the political space as the arena for claims on the part of those who have no participation, a space not accessed by the majority in a system of dominant rights (Oliveira 2006). As the debate is depoliticized, constructing the idea that this is not a political discussion, but rather a “rational/instrumental” one, and that, therefore, it must be decided on the basis of purely technical analyses, the political debate is emptied, becoming politically irrelevant for the dominant classes and inaccessible to the dominated. Since it is irrelevant to the point of view that these large questions, the major decisions are taken outside the representative system and not within reach of the institutions that the democracy created to channel the claim on the part of those who have no stake at all. The reduction of the political power to economic power, annulling the separation between the fields of the two powers, is what the liberalism itself elevated as a fundamental principle. In view of this scenario, it remains for us to question who commands the interventions in Rio’s favelas today. After all, whose territory is the favela?

References

- Abreu MA (2008) A evolução urbana no Rio de Janeiro, 4th edn. IPP, Rio de Janeiro
- Agamben G (2004) Estado de exceção. Boitempo, São Paulo
- Blank G (1979) “Brás de Pina: experiência de urbanização de favela”. In Valladares, Lícia do Prado (Ed.), *Habitação em questão* (93–124). Rio de Janeiro: Zahar Editores
- Bourdieu P (1998) O poder simbólico, 2nd edn. Bertrand Brasil, Rio de Janeiro
- Burgos MB (2004) Dos parques proletários ao Favela-Bairro: as políticas públicas nas *favelas* do Rio de Janeiro. In: Zaluar A, Alvito M (eds) *Um século de favela*. FGV, Rio de Janeiro, pp 25–60
- Cano I (1997) *Letalidade da ação policial no Rio de Janeiro*. Rio de Janeiro: ISER, 1997
- Cardoso AL (2007) A política de urbanização de *favelas* no município do Rio de Janeiro. In: Cardoso AL (ed) *Habitação social nas metrópoles brasileiras: uma avaliação das políticas habitacionais em Belém, Belo Horizonte, Porto Alegre, Recife, Rio de Janeiro e São Paulo no final do século XX*. Porto Alegre, Coleção Habitar/Finep, pp 276–323
- Castel R (2009) *Metamorfoses da questão social: uma crônica do salário*, 8th edn. Vozes, Petrópolis, RJ
- Clarck TN, Ferguson LC (1983) *City money: political process, fiscal strain and retrenchment*. Columbia University Press, New York
- Das V, Poole D (eds) (2004) *Anthropology in the margins of the state*. School of American Research Press, Santa Fe
- Dowdney L (2002) *Crianças do Tráfico: Um Estudo de Caso de Crianças em Violência Armada Organizada no Rio de Janeiro*. Rio de Janeiro: 7Letras

- Harvey D (2004) *O Novo Imperialismo*. Edições Loyola, São Paulo
- Harvey D (2006) *A produção capitalista do espaço*. Annablume, São Paulo
- Harvey D (2008) The right to the city. *New Left Review*, London, n. 53, pp 23–40
- Kowarick L (1974) Capitalismo, dependência e marginalidade urbana na América Latina: uma contribuição teórica. *Estudos Cebrap*, São Paulo, n. 8, Apr.-Jun, p. 79–96
- Leite MP (2008) Violência, risco e sociabilidade nas margens da cidade: percepções e formas de ação dos moradores de *favelas* cariocas. In: Silva LAM (ed) *Vida sob cerco*. Nova Fronteira, Rio de Janeiro, pp 115–142
- Mello MA (2001) Selva de Pedra: apropriações e reapropriações dos espaços públicos de uso coletivo no Rio de Janeiro. In: Esterci N, Fry P, Goldenberg M (eds) *Fazendo Antropologia no Brasil*. DP & A, Rio de Janeiro, pp 205–228
- Misse M (2003) O movimento, a constituição e reprodução das redes do mercado informal ilegal de drogas a varejo no Rio de Janeiro e seus efeitos de violência. *Eduerj*, Rio de Janeiro
- Misse M (1999) *Malandros, marginais e vagabundos. A acumulação social da violência no Rio de Janeiro*. Doctoral Dissertation. Rio de Janeiro, Instituto Universitário de Pesquisas do Rio de Janeiro (IUPERJ)
- Molotch H (1976) The city as a growth machine: towards a political economy of place. *Am J Sociol* 82(2):309–332
- Nunes E (1997) *Gramática Política do Brasil: Clientelismo e Insulamento*. Zahar Editores, Rio de Janeiro
- Oliveira F (2003) *Crítica à razão dualista e o ornitorrinco*. Boitempo Editorial, São Paulo
- Oliveira F (2006) A dominação globalizada: estrutura e dinâmica da dominação burguesa no Brasil. In: Basualdo EM, Arceo E (eds) *Neoliberalismo y sectores dominantes. Tendencias globales y experiencias nacionales (265–291)*. CLACSO, Consejo Latinoamericano de Ciencias Sociales. Buenos Aires: Aug
- Perlman JE (1977) O mito da marginalidade: favelas e política no Rio de Janeiro. Paz e Terra, Rio de Janeiro
- Ramos S, Lemgruber J (2004) Urban violence, public safety policies and responses from civil society. *Social Watch Report*, 2004. Montevideo: Instituto del Tercer Mundo
- Santos CN (1979) Velhas novidades nos modos de urbanização brasileiros. In: Valladares LP (ed) *Habitação em questão*. Zahar Editores, Rio de Janeiro, pp 17–48
- Topalov C (1996) Da questão social aos problemas urbanos: os reformadores e a população das metrópoles em princípios do século XX. In: Ribeiro LCQ, Pechman R (eds) *Cidade, Povo e Nação: a gênese do urbanismo moderno*. Civilização Brasileira, Rio de Janeiro, pp 23–52
- Valladares LP (ed) (1979) *Habitação em questão*. Zahar Editores, Rio de Janeiro
- Valladares LP (2005) *A invenção da favela: do mito de origem a favela.com*. Rio de Janeiro: Editora FGV
- Vaz LF (2002) *Modernidade e moradia: habitação coletiva no Rio de Janeiro, séculos XIX e XX*. Rio de Janeiro: 7 Letras

Chapter 13

Political Culture, Citizenship, and the Representation of the *Urbs* Without *Civitas*: The Metropolis of Rio de Janeiro

Luiz Cesar de Queiroz Ribeiro and Filipe Souza Corrêa

Abstract The aim of this paper is to provide theoretical and empirical elements that allow us to reflect on the political culture as a condition for the exercise of active citizenship in a metropolitan context marked by a historical dynamics of segregation. Therefore, we sought to highlight the importance of taking into account, the dimension of urban inequalities in order to understand the distinct political cultures held by metropolitan citizens. For this purpose, we used data collected in a survey on political culture applied in 2006 in the Metropolitan Region of Rio de Janeiro (MRRJ). Also, aiming to illustrate the impact of socio-spatial differentiation on the political behavior of metropolitan citizens, we used spatialized information from the election results for State Legislature, in 2006, in the metropolitan area of Rio de Janeiro. Data analysis indicates a significant internal differentiation according to the indicators of political culture used, and that this distinction largely corresponds to the socio-spatial differentiation of the metropolis. So, first, we confirmed the importance of taking into account the urban dimension in the analysis of political culture in metropolitan areas, and, second, the analysis of election results indicated possible connections between the political culture dimension, understood in its socio-spatial differentiation, and the dynamics of political representation.

Keywords Citizenship · Political culture · Socio-spatial segregation · Social inequality · Metropolises

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13.1 Introduction

This article chimes with several investigations, conducted across various fields and with distinct perspectives that have attempted to understand Brazilian political behavior and its relationship with the construction of citizenship. Articles and books recently published in the fields of political sociology and political science have converged around an analytical focus on the relationship between citizens and institutions, on understanding the values that justify citizens' attitudes and civic dispositions toward political behaviors. Such analyses have also converged in identifying individuals' distrust in democratic institutions as a striking feature of these values and attitudes, and thus seeing this as a foundation in the constitution of an ethos similar to amoral familism (Reis 1995) and of a behavior characterized by a social hobbesianism (Santos 1993). Those authors identify, in Brazil's social and cultural environment and in the operation of our political institutions, the foundations of the rationality of a political behavior guided by selfishness, individualism, and a rejection of collective actions that take place outside each individual's close personal relations.

Rennó (1999, p. 107) states that an approach called adaptive cultural rationality enables one to consider the way in which citizens' political culture interferes with their immediate rational judgments for political behavior. According to this perspective, the logic of distrust appears in the Brazilian scenario as an adaptive rational response to the constraints and incentives created by social and institutional contexts characterized by: (i) the existence of high levels of violence in the relationships among groups of individuals and even in the relationship between individuals and the institutions that should provide public security; (ii) strong distrust from the population about the State's real capacity to administer Justice; (iii) ineffectiveness of public policies to meet even the most basic demands of the population; and (iv) persistent social disparities within society, both objective and subjective, feeding the collective perception of distant and hierarchical separate worlds. All these elements converge to create and diffuse a feeling of insecurity and uncertainty. This, in turn, generates a cultural environment dominated by distrust, both in interpersonal relationships and in the relationships between individuals and institutions, which considerably raises the costs of sociopolitical participation. Therefore, structural, cultural, and institutional causes are identified by these authors as foundations in the constitution of a logic of distrust, something that not only guides the political behavior of Brazilians, but also blocks the development of an active citizenship and, hence, an obstacle to the consolidation of full democracy in Brazil.

13.2 City, Citizenship, and Political Culture in Brazil

The main objective of this article is to contribute to a deepening of the debate over the relationship between citizenship and political culture, by exploring the urban dimension of the mechanisms that purport to explain the political disparities between metropolitan citizens. Our starting point is the empirical evidence of a low degree of political and interpersonal trust across the metropolitan population of Rio de Janeiro. This can be clearly seen in survey data on political culture and citizenship that made use of the indicators of the International Social Survey Programme (ISSP) (<http://www.issp.org>). The study was conducted by the Observatório das Metrôpoles in partnership with the Instituto Universitário de Pesquisa do Estado do Rio de Janeiro (IUPERJ) and the Instituto de Ciências Sociais (ICS) of Lisbon, Portugal. The main goal was to identify the perceptions, values, and practices linked to the exercise of citizenship and to identify democratic dynamics in the metropolises of Rio de Janeiro and Lisbon. In the metropolis of Rio de Janeiro, we were able to submit the questionnaire to a large sample. This allowed us not only to explore the indicators for the whole of the region, but also to disaggregate the data into a number of large areas, and thus uncover any differences in the political and civic culture across Rio, a metropolis known for its social and geographical diversity. For this study, 1010 people were interviewed in the Metropolitan Area of Rio de Janeiro. They were divided according to a systematic probabilistic sorting of census tracts, weighted according to the total number of households for each selected tract. The sample was structured through quotas relating to sex, age, and schooling, with a margin of error of 5%. This produced a final sample in which 52.7% were women and 47.3% were men. All were over 18 years old, with 31.1% aged between 18 and 29 years old; 32% between 30 and 44 years old; 21.7% between 45 and 59 years old; 12.7% between 60 and 74 years old; and 1.7% were over 75 years old. Generally, the schooling level of interviewees was low, with a prevalence of people that had not finished high school (68.5% of the sample). The theoretical model of civic culture was taken as a reference, but the researchers were not able to identify the expected correlation between trust (either interpersonal or political), civic culture, and political mobilization of the metropolitan citizens. The result has encouraged us to reflect upon the urban foundations of this truncated connection of the political culture in the metropolis of Rio de Janeiro.

Reflecting on the establishment of the Republic in Brazil, José Murilo de Carvalho (1987) stresses out that this historical transformation has resulted in a separation between political society on the one side and urban society on the other in Rio de Janeiro. The result has been an impoverished cultural politics in terms of civic virtues, characterized by distrust in interpersonal relations and in institutions; by administrators' detachment from the people they are supposed to serve; and by the fragmentation of the associative formations. For Carvalho, this historical genesis has produced today's social reality, as it is responsible for the development of a

political culture and for the creation of political institutions that reproduce such dissociation based on a “city scarcity”, a metaphor coined by Carvalho (1995).

Before moving further, it is important that we highlight the relevance of the city for the consolidation of the very bases of citizenship, as opposed to social submission. According to Weber (2009, p. 427), the Western city was always characterized by the substitution of the hierarchical solidarity based on the bonds of belonging to groups of clans for a horizontal solidarity operating through on territorially based contractual associations.

This loss of statutory privileges generated a relative social leveling. As a result, according to Weber, the Western city has constituted a collective experience centered on the valorization of individuals who are free and equal and in the existence of political and social institutions that provide feelings of autonomy and integration into a city community. During the social and political history that began with the blossoming of the urban phenomenon during the Middle Ages, the city, in its very essence, has produced the most significant forms of civil society (Ansay and Shoonbrodt 1989).

By contrast, the findings of Cardoso (1975) and Morse (1975) suggested that the processes of urbanization that took place in Latin America have not accomplished the social changes described by Weber. This means that the urban experience was not able to create social and political institutions that were based in a sense of civic community, even though it produced a cultural medium that was favorable to the spreading of values such as freedom and moral equity. Based on such an interpretation Cardoso coined the expression “city without citizenship” (Cardoso 1975, p. 162).

Thus, the “scarce city” is the spatial manifestation of social and political conditions that reproduce an ethic which both orients and legitimates social behavior based on a privatist attitude and on the search for the materialization of private interests at any cost. This is the case whether it is in the interaction between social groups, in the interactions between individuals and such groups, and even in the interactions between social groups and the government. The marginalization of a fair share of the population from city rights or citizenship rights (from the Latin word, *civitas*) maintains the strong social disparities with regard to the city rights. Therefore, we can conclude that what primarily constitute the disparities between individuals in the city are the inequalities in access to all those elements that compose urban welfare (such as transportation, sanitation, housing, etc.); and to opportunities to improve quality of life (such as education and employment).

The hypothesis that we will attempt to construct in this study is that the obstacles to access of resources can be attributed to the insertion of a large part of the metropolitan population in various networks of personal subordination existing in Rio de Janeiro society, which also favor the maintenance over time of political institutions that reproduce the dissociation (from “clientelistic party machines” to welfare entities kept by members of parliament).

This political culture is at the root of both the behavior of the controlling agents of circuits of crime and contravention, and of the permanent personal subordination of those individuals that are devoid of power. They operate through mechanisms

and conditions that reproduce relationships of hierarchy and patronage, in an attempt to integrate in a subordinate and selective fashion those that are at the margin of this “scarce city”. Such relationships become necessary, as the city’s marginalized—who nonetheless hold formal political rights—are called to validate a representative system that is incapable of universalizing private interests.

In other words, through hierarchy and patronage, the marginalized population come to be part of this “scarce city”, but this insertion happens at the expense of a subordination to the “owners of the power”, and through fragmenting dynamics of social cohesion, since the city’s scarcity provides uneven chances for individuals to have their interests and demands satisfied. Therein, the circuit closes: those at the margins of the city must also establish among themselves a power differential in order to ensure a portion of the accumulation of the scarce urban resources (like transportation, sanitation, paving, housing, education, etc.).

In the very composition and in the reproduction of the scarce city, three elements play an important role and act mutually reinforcing ways. The first relates to the historical-geographical formation of the city. The hilly terrain over which the city extends, combined with its social history, has produced distinct and distant social worlds, visible in the geographical separation of elite and popular strata that accelerated after the demographic explosion of the late nineteenth century. The second element relates to the social geography of the city and the way it has, over many years, fed the intense social disparities that are expressed most clearly in urban inequalities. This social geography has developed through a “total tolerance” policy approach to the illegality of land ownership, with the tacit acceptance, by various governments, of processes of “favelization” and construction of illegal and clandestine subdivisions around the outskirts of the city. The precarious urban conditions to which a large portion of the Rio de Janeiro’s metropolitan population has been subjected are a token of failure to universalize basic rights of citizenship that are necessary to protect and empower individuals in their dealings with powerful groups. The effects of this social geography on the reproduction of power have been catastrophic. Drawing on the work of Bendix (1996), we can state that the legitimacy of the public authority in the city of Rio de Janeiro is not based on the consent of subordination to the State in exchange for the protection of the citizens’ public rights—in this case, the urban rights—that would place the individuals (and groups) sheltered under the relations of power. The importance of the maintenance of the illegality and even of the irregularity of land ownership in the fragile civic culture of the Brazilian cities has not, yet, been properly reflected upon by the field of political sociology. By “fragile civic culture”, we mean the low level of consciousness of civic duty (and rights) regarding the general interests of society, embodied in the State. On the contrary, the State had to search for other forms of legitimacy based on the binomial submission favor dynamic between the popular classes and government agents. Finally, the third element is violence as a form of sociability that, according to author Carvalho (1995), derives from the fragile legitimacy of the State. The following excerpt synthesizes this author’s ideas very thoroughly.

Based, thus, on this frame of reference, I will highlight a political dimension of the question of violence, paying less attention to the conjunctural risks that such a phenomenon might introduce in the democratic functioning of any given government, and more to the problem of the ever growing empowerment of the social organization regarding the political and institutional background. I mean that the violence in big Brazilian cities is related to the low legitimacy of the political authority of the State, whose “congenital privatism” has excessively narrowed the dimension of the polis, condemning basically the entire society to the condition of barbarians. The term “scarce city” refers to this, i.e., the residual dimension of citizenship and, therefore, to its lack of competence to articulate the social appetites of an organized political life—which, in the realm of political ideas, characterizes the “liberal-democratic city” (Carvalho 1995, p. 4).

To summarize, in the context of the “scarce city”, the State is not guided to use its consented authority to bring about the generalization of a stable and universal social pact. On the contrary, social experience is organized based on an intense fragmenting of different judgments. In this way, Rio de Janeiro’s political evolution and the pattern of social ethics that derives from it might be presented as a plot with a varied array of meanings between individuals and selected groups of the State sphere that, although recently providing a small degree of social integration, it has not inscribed representative politics as the most appropriate arena for the resolution of the marginalized population’s demands. As advocated by Carvalho (1995, p. 4), the result of this process can be translated currently by two easily identified practices, the first being society’s “apathy” toward acting in the public sphere. The second is that the needs of the poor, assumed to be captured within webs of urban clientelism, are now enacted not only by the traditional agents, but also by segments of State bureaucracy, churches, and nongovernmental organizations (NGOs). The action of these groups in the context of great need tends to confirm strategies of a perverse rationality, since these are guided toward the persistence of such clientele bonds. It is based on this frame of reference that we turn to reflect upon some relative statistical data relating to disparities in the preconditions for the exercise of citizenship and for the varied intensity with which modalities of citizenship are exercised inside the carioca metropolis.

13.3 Scarce Political Culture in the Fragmented Metropolis

One of the explicative dimensions of the hypothesis of “city scarcity” as put forth by Maria Alice de Carvalho is the rise of a political orientation tilted much more toward individualistic resolution of conflicts than toward the shared resolution of said conflicts. In the present case, this predatory political orientation is based in the very socio-spatial organization of Rio de Janeiro. Based on this perspective, we consider that more thorough analysis of the several possible internal variations of

political culture in this metropolis might aid us to reflect upon the effects of this fragmented socio-spatial organization on the production of patterns of behavior, belief, values, and attitudes to politics. The hypothesis we put forward is that segregated areas of the metropolis are more prone to the emergence of a culture of distrust, whether it is in the various social interactions between individuals or in the interactions of those individuals with political institutions; or in the maintenance of political practices that are guided less to formal political representation and more to the negotiated resolution of needs relating to infrastructure and/or urban welfare.

In order to do this, we will analyze how this socio-spatial organization is configured in the carioca metropolis in terms of: income levels, according to the mean distribution of the average family income per capita in the internal areas of the metropolis; schooling levels, according to the mean distribution of the average school years per adult in the households of the area; and the distribution of the needs of a network of public services and facilities (Corrêa 2011, p. 101).

First, the average of the different levels of family income per capita by margin weighted areas of the IBGE's (Brazilian Institute of Geography and Statistics) 2000 Demographic Census (Censo Demográfico de 2000, IBGE) was calculated. Then, in order to more easily visualize the distribution of family income per capita in the metropolitan space we divided this distribution into quartiles. This allowed us to classify four areas, according to income levels ("low", "medium-low", "medium-high", and "high"). The spatialization of income quartiles of family income per capita by weighted areas of the RMRJ (Rio de Janeiro Metro Area) indicates that, in spite of the growing economic dynamism of the cities of the Baixada Fluminense region (composed of twelve municipalities that display high incidence of poverty and violence), such as Nova Iguaçu and Duque de Caxias, the spatial distribution of income still presents a marked core-periphery pattern of organization. That is to say, despite some income increases in the most central areas of the cities of the Metropolitan Periphery, the majority of these areas present an income level that is medium-low or low (Fig. 13.1).

Next, we present the metropolitan areas' breakdown according to household adults' (individuals of 25 years of age or more) average years of study. This variable is known as household educational environment. Recent studies on residential segregation and social disparities have highlighted this variable's capacity to synthesize territorial social disparities since it presents significant results for children and adolescents' school performance and young people's chances of gaining access to high-quality and well-paid jobs (Ribeiro and Koslinski 2010; Ribeiro et al. 2010; Zuccarelli and Cid 2010). The spatialization of the household educational atmosphere quartiles indicates the asymmetry of the distribution of this variable in the different areas of the metropolitan space since the average of the educational environment in the lowest quartile (5.05 years of study) is practically half of the average of the educational atmosphere in the highest quartile (10.17 years of study) (Fig. 13.2).

In order to identify the spatial distribution of need for infrastructure services and facilities a composite index was created. This index aims at distinguishing the percentage of people in the weighted areas living in households with shortage of at

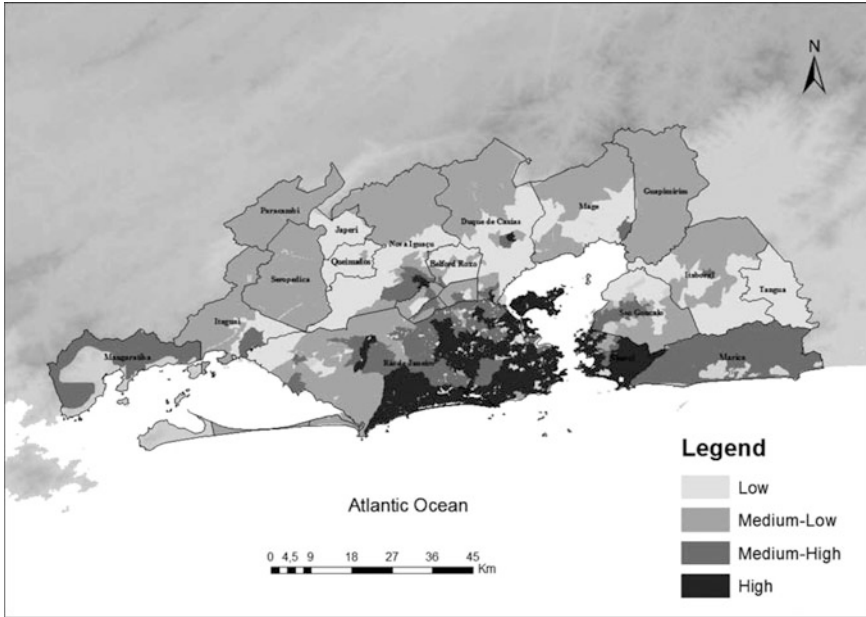


Fig. 13.1 Weighted areas of the MRRJ according to family income *per capita*. Source Corrêa (2011)

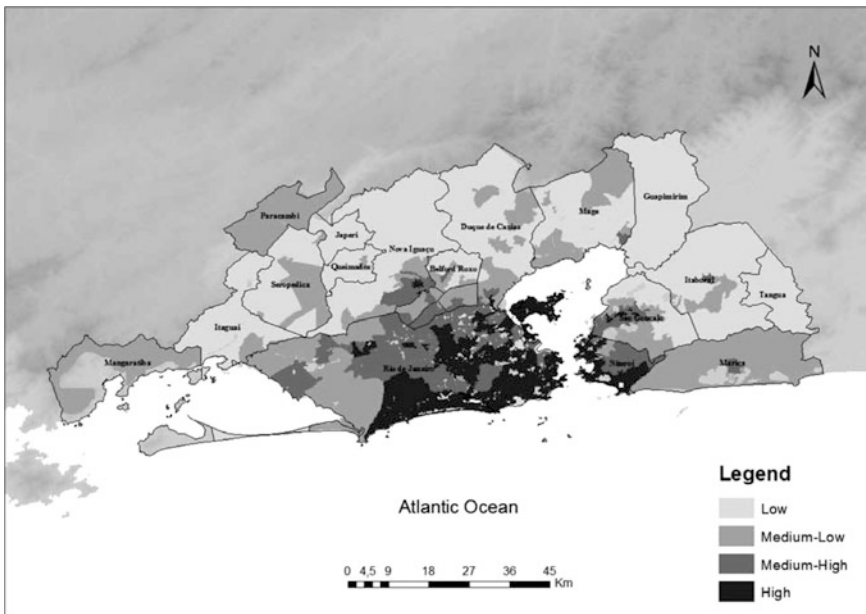


Fig. 13.2 Weighted areas of the MRRJ according to levels of average household educational environment. Source Corrêa (2011)

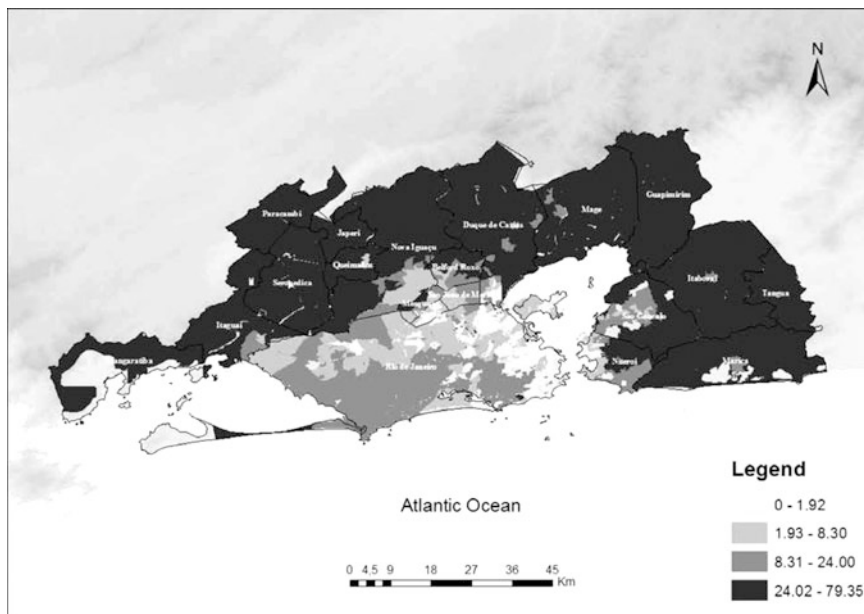


Fig. 13.3 Weighted areas of the MRRJ according to shortage of infrastructure index quartiles. *Source* Corrêa (2011)

least one of the following infrastructure services: water supply, sanitary sewage, and garbage collection.¹ Based on this index (Fig. 13.3) it was found that, in the year 2000, 25% of the weighted areas of the Rio de Janeiro Metro Area display a level of shortage that varied between 24.02 and 79.35% of people residing in households with any of the aforementioned shortage situations. Once again, the most needy areas in terms of infrastructure are located mostly in the peripheral cities of the Rio de Janeiro Metro Area. In some cities, all the tracts have a percentage of 24.02% or more people residing in households with some type of shortage of infrastructure services.

From this characterization of the metropolitan space of Rio de Janeiro based on socioeconomic variables such as income, school years and the level of shortage of infrastructure services, it is possible to perceive that this socio-spatial organization is characterized by a marked social fragmentation. This mirrors the analysis of Preteceille and Ribeiro (1999), Ribeiro (2000), Ribeiro and Lago (2001) on metropolitan social structure based on socio-occupational categories, showing that the Rio de Janeiro Metropolitan Area is strongly organized according to a system of

¹The construction of such index is important for two reasons: first, because it allows the identification of the areas of the MRRJ that present the most critical situations in terms of access to minimal conditions of infrastructure; Second, because it reveals juxtapositions of different shortages in a single area, in cases where areas suffer more from one type of shortage than another.

social distances and oppositions that fragment the different portions of society across the physical space of the metropolis. According to those authors, the upper classes of the carioca metropolis—i.e., the groups of individuals who share large amounts of social, cultural and economic capital—are located almost exclusively in the area of the “South Zone” of the city of Rio de Janeiro, while the popular masses are located predominantly in the peripheral spaces of the metro area, and in part of the “West Zone” of the city of Rio de Janeiro. Both are distant, in one or another way, from the middle segments of the social structure that are located chiefly in the suburban spaces in which the social configuration is less well defined. In other words: there is a clear projection of the dividing lines of the society of Rio de Janeiro in its physical space, in such a way that to live in one or another part of the metropolis demonstrates one’s position in the city’s social structure. It is this dynamic of constant spatial separation of different social groups on the one hand, and aggregation of social groups that are alike on the other hand, that the above-mentioned authors call residential segregation (or socio-spatial segregation). According to those authors, such processes of auto-segregation or compulsory segregation of social groups in space are typical traits of the urbanization model of large cities. However, it produces even more perverse consequences in Brazil’s case since, according to Ribeiro (2004, p. 34), the outcomes of this model of socio-spatial segregation reflect the country’s hybrid social order. This consists of a social logic that distributes resources of power according to a scale of honor and social prestige, alongside an economic logic which is competitive and individualistic and which distributes resources of power according to the individual’s autonomy and capacity. Therefore, this spatial order reflects the outcomes of a social order that, at its root, is highly hierarchical and uneven and entrenches this logic in the functioning of government in the various spheres and organs in which it acts upon socio-spatial planning. The outcome of this is the reproduction of the power inequalities through the reproduction of social disparities, a hypothesis that will be detailed further on. Before that, though, a return to an approach of the political culture is needed, which is now studied in an intrametropolitan perspective.

Disaggregating the indicators of political culture is the first step in the quest for evidence concerning the relationship between a fragmented socio-spatial organization and the patterning of the differentiated patterns of behaviors, beliefs, values, and attitudes regarding politics. In order to do this, the data collected in the aforementioned survey were divided into three areas according to the following criteria: (a) the social structure of such areas; (b) prevailing forms of occupation, land use, and housing production; (c) concentration or shortage of urban social welfare; and (d) the connections with the metropolis’ central areas. This division resulted in the identification of the following areas: (1) *Core*: Made up by the neighborhoods of the South Zone of the City of Rio de Janeiro, and also Barra da Tijuca, the Greater Tijuca and Niterói, it is where the major part of the upper layers of the metropolitan social structure can be found, which confers to this area a strong social power, exercised via the ability to connect with the political power through mechanisms such as a presence in the media and activation of social networks; the

Table 13.1 Interpersonal trust in the areas of the MRRJ

	People will try and take advantage ^a				People are trustworthy ^b		
	Core	Suburb	Periphery		Core	Suburb	Periphery
Almost always	38.6	37.4	53.2	Almost always	7.0	2.4	4.5
Sometimes	34.6	32.3	22.7	Sometimes	20.0	10.6	17.1
Sometimes fair	16.7	23.2	16.6	Sometimes one cannot be too cautious	30.4	40.8	25.5
Almost always fair	10.1	7.1	7.6	Almost always one cannot be too cautious	42.6	46.3	52.9
Total	100	100	100	Total	100	100	100

Source Observatório das Metrôpoles's Study, IUPERJ, ICS-UL, ISRP, 2008

^aDo you think people will try and take advantage whenever possible or do you think they'll try and act fairly?

^bDo you think people can be trusted, or, on the contrary, one can never be too cautious?

(2) *Suburb*: Where most of the denizens can be classified as middle-class or blue-collar, mingled with favela areas; and the (3) *Periphery*: which includes the West Zone of Rio de Janeiro and the Baixada Fluminense. These peripheral regions contain the largest share of the poor population in the metropolis, and are characterized by the presence of local power dynamics, such as the hegemony of familistic structures that exercise local power in the Baixada Fluminense.

When the interpersonal trust indicators were disaggregated, the feeling of distrust appeared much more strongly in the Periphery than in the Core and the Suburb.² In the Periphery, more than half of the population believes that people will almost always try and take advantage in any situation. While a more abstract dimension of trust presents more moderate differences between areas, we can nonetheless see that more than half of the population of the periphery also believes that almost always one can never be too cautious with people in general. This means that, if distrust in social interactions is something prevalent in the metropolis, it is more intense in the most peripheral areas, which corresponds to one of the main pieces of evidence in support of the "scarce city" hypothesis (Table 13.1).

²It is important to highlight that the frequencies of the indicators of political culture presented in this section serve just to illustrate the variation in responses that compose the indicators when the internal divisions of the MRRJ are considered. For a greater statistical control of these comparisons, the average of the indicators (and respective tests of Variance Analysis) was used, so as to identify the significant variations between the data that were found for different areas (see Appendices).

Table 13.2 Trust in politicians in the MRRJ predefined areas

	People from the government will do what is right ^a			Most politicians seek to obtain personal advantages ^b		
	Core	Suburb	Periphery	Core	Suburb	Periphery
Totally agree	7.1	11.2	8.7	65.8	63.3	67.6
Partially agree	16.4	6.2	6.3	17.5	20.1	9.9
Neither agree nor disagree	13.7	8.9	15.4	9.6	4.6	13.4
Partially disagree	19.5	29.3	33.1	4.8	7.3	5.9
Totally disagree	43.4	44.4	36.6	2.2	4.6	3.2
Total	100	100	100	100	100	100

Source Observatório das Metrôpoles's Study, IUPERJ, ICS-UL, ISRP, 2008

^aUsually, one can trust that people from the government will do what is right

^bMost politicians got into politics in order to obtain personal advantages

When the assessment asked about trust toward politicians, the results indicate that there is a generalized feeling of distrust about the ethics and efficiency of rulers among the three areas of the MRRJ, especially when the more specific question, of whether rulers will pursue personal advantage, is asked. A closer analysis of the data indicates that the denizens of the MRRJ's Core tend to be more demanding of efficient behavior by politicians in general than their counterparts in the Suburbs and in the Periphery; however, an analysis of the answers' mean has not presented significant differences (Table 13.2).

In spite of the existence of evidence to support the logic of distrust in the attitudes of the inhabitants of the metropolitan area of Rio de Janeiro, paradoxically this group has a high, although internalized, degree of that which authors call "civic virtues", i.e., they use as reference those values that are expected of those who feel integrated to a political community. The positioning of the metropolitan citizens regarding behaviors considered civic is much more indicative of a group concerned with the general welfare of needy people (of Brazil and of the World) than that of a group which has a political positioning consistent with labor unions, associations, or political powers (or even environmentally and ethically conscious consumption). Nonetheless, it is interesting to observe, in this case, that there is a higher portion of civic importance for such behaviors in the Periphery than in the Core of the MRRJ, which is something that relativizes the polarization between the two areas, in terms of civic culture. In a certain way, this result indicates the trend to a lesser appreciation of civic behaviors in the Core of the MRRJ, something that is consistent with the perspective of "social hobbesianism", since it largely indicates much more individualistic behavior (Table 13.3).

Table 13.3 Civic virtues in the areas of the MRRJ

	Importance Scale ^a											
	Core				Suburb				Periphery			
	Less important	Important	Very important	Less important.	Important	Very important	Less important	Important	Very important	Less important	Important	Very important
Help people in Brazil that live in a worse condition than yourself	5.7	17.0	77.3	3.1	14.7	82.2	4.9	10.1	85.0			
Help people in the world that live in a worse condition than yourself	8.3	21.4	70.3	5.8	17.8	76.4	3.2	11.8	85.0			
Obeys laws and rules	10.0	20.5	69.4	8.1	20.9	70.9	6.3	17.5	76.2			
Try to understand the opinion of people with ideas that are different from yours	8.8	18.5	72.7	11.3	27.2	61.5	7.6	18.2	74.1			
Keep updated with governments' activities	17.1	16.7	66.2	10.1	31.9	58.0	9.6	17.7	72.7			
Never evade taxes	11.0	18.4	70.6	15.9	21.3	62.8	9.0	19.5	71.5			
Be willing to perform military service if drafted	24.1	25.9	50.0	23.4	21.9	54.7	15.4	16.4	68.1			
Always vote in political elections	18.3	20.4	61.3	13.1	25.0	61.9	16.8	20.2	63.0			
Choose products for political, ethical or environmental reasons	21.2	34.1	44.7	32.9	34.5	32.5	14.8	32.5	52.7			
Participate in associations, unions and political parties	23.3	30.8	45.8	25.1	42.7	32.2	18.3	34.1	47.7			

Source: Observatório das Metrópoles's Study, IUPERJ, ICS-UL, ISRP, 2008

^aThere are many diverging opinions over what should be done in order to be a good citizen, in a scale from 1 to 7, in which 1 means less important and 7 means very important, what importance do you attach personally to each of the following aspects?

According to the classic hypothesis of civic *communitarianism* (Putnam 1996), the feeling of belonging to a civic community is contradictory, as it coexists with a higher degree of interpersonal and political distrust. Based on this paradox, it is possible to test two explanations: the first is that such a paradox confirms the existence of a dissociation between civil society and political society, as mentioned by Carvalho (1987). The second explanation is that there is an identification of a “civic cynicism” as a pattern of the predominant behavior among the metropolitan citizens of Rio de Janeiro. The basis of this behavior is the appreciation of a behavior that is both consistent with democratic ideals and highly distrustful of politicians—a direct result of the precarious functioning of institutions and of the “fight of all against all” for scarce goods, according to the social hobbesianism idea that was put forth by Santos (1993). Similarly the high level of distrust in interpersonal relationships supports the thesis of amoral familism—a diffusion of overly individualistic and even predatory social behavior that values the family dimension to the detriment of the public sphere—as adapted to the Brazilian reality by Reis (1995).

A method to test this first hypothesis is to verify the existence of a relationship between manifestations of civic virtues and citizen engagement in acts of sociopolitical participation. According to what was predicted by the specialized literature, it must be expected that the more intense the feelings of political duties and obligations with a community, the bigger its activism in social (associativism) and political (political mobilization) spheres.

An analysis of Table 13.4 indicates, though, the low insertion of the metropolis’ citizens in those classic civic associations that provide the formation of a social capital constituted by the insertion in social networks founded on strong bonds (Granovetter 1973). Only religious participation—a mode with high doses of communitarianism but one that fails to translate this social integration into political behavior that is consistent with a broader democratic perspective—presented considerable levels. However, there is a higher incidence of a feeling of belonging to the associative forms of greater political potential (political parties, unions and syndicates, guilds and professional associations) in the Core of the MRRJ, whereas membership of religious organizations increases in the Periphery. This suggests the existence of a marked intrametropolitan segregation of associative forms of political participation (Table 13.4).

The data that refer to political mobilization also indicate a low level of mobilization for political purposes by the residents of the MRRJ. The modes with the highest participation rate were “plea or petition signature” and “participation in

Table 13.4 Associativism in the areas of the MRRJ

	Association affiliation and belonging ^a								
	Core			Suburb			Periphery		
	Yes	Ever	Never	Yes	Ever	Never	Yes	Ever	Never
Political Party	5.4	11.2	83.5	3.8	9.2	86.9	3.3	5.3	91.4
Union or syndicate, guild, professional association	11.0	20.2	68.9	8.4	16.5	75.1	9.0	10.4	80.6
Church or another religious organization	30.1	21.0	48.9	29.9	27.6	42.5	40.4	20.9	38.8
Sports, cultural or recreational group	14.8	19.1	66.1	6.5	18.8	74.6	8.8	7.6	83.6
Other voluntary association	10.8	9.9	79.3	4.9	12.2	82.9	4.6	4.6	90.8

Obs. The percentage that refer to responses (i) and (ii) were grouped together in the “Yes” category, whereas the percentage that refers to response (iii) corresponds to the category “Ever”, and the percentage that refers to response (iv) corresponds to the category “Never”

Source Observatório das Metrôpoles’s Study, IUPERJ, ICS-UL, ISRP, 2008

^aOften people participate in groups and/or associations. For each of the following groups (a) political party, (b) union or syndicate, guild, professional association, (c) church or another religious organization, (d) recreational, cultural, or sports group and (e) have another voluntary association, respond if you (i) actively participate; (ii) belongs to, but do not participate; (iii) have ever participated; or (iv) never participated

rallies or political meetings”, both of which, according to Azevedo et al. (2009, p. 710) are characterized by a low engagement cost. A signature is seen as a transient event, while so-called *showmícios* (concert-rallies), which are largely responsible for the high percentages of both modes, are seen as embodying a trivialization of politics and loss of political meaning. However, it is interesting to note that the three last modes of political mobilization (“Give money or try to fundraise for a public cause”, “Contact or appear in the media to express its own opinions” and “Participate in an internet forum or discussion list”) have presented participation rates that were significantly higher in the Core of the Metro Area of Rio de Janeiro than in the other two areas, as did “boycotting products” and “participating in demonstrations”. Hence, it is also possible to state that there is strong evidence to support the existence of a segmentation in modes of political mobilization, chiefly those that demand a higher sociopolitical engagement (Table 13.5).

Therefore, it remains to be seen how these trends and contradictions in the emergence of a civic culture in the MRRJ are related to the predisposition for individuals’ political mobilization in the different areas of the Rio de Janeiro Metropolitan Area. In Chart 13.1, the effects of the results of some of the

Table 13.5 Political mobilization in the areas of the MRRJ

	Participation in political mobilizations in the last years ^a					
	Core		Suburb		Periphery	
	Yes	No	Yes	No	Yes	No
Sign a petition or a plea	38.9	61.1	36.9	63.1	35.3	64.7
Boycott or buy given products because of political, ethical or environmental reasons	20.9	79.1	15.0	85.0	14.4	85.6
Take part in a manifestation	26.3	73.7	19.5	80.5	14.9	85.1
Participate in a rally or political meeting	24.6	75.4	20.8	79.2	22.0	78.0
Contact, or try to contact a politician or government employee to express your opinions	10.9	89.1	7.8	92.2	8.3	91.7
Give money or fundraise for a public cause	11.4	88.6	3.8	96.2	5.5	94.5
Contact, or appear in, the media to express your opinions	8.3	91.7	2.7	97.3	2.2	97.8
Participate in an internet forum or discussion list	9.2	90.8	6.1	93.9	2.2	97.8

Obs. The percentage that refer to responses (i) and (ii) were grouped together under the “Yes” category and the ones that refer to responses (iii) and (iv) were grouped together under the “No” category

Source Observatório das Metrópoles’s Study, IUPERJ, ICS-UL, ISRP, 2008

^aListed below are some modes of political and social action that people might engage in. Please indicate, for each of the following: “(a) Sign a petition or a plea; (b) Boycott or buy given products because of political, ethical or environmental reasons; (c) Take part in a manifestation; (d) Participate in a rally or political meeting; (e) Contact, or try to contact a politician or government employee to express your opinions; (f) Give money or fundraise for a public cause; (g) Contact, or appear in, the media to express your opinions; (h) Participate in an internet forum or discussion list;” having, as response options: (i) performed over the last year; (ii) performed in previous years; (iii) never performed but could perform it; and (iv) would never do it

conditioning variables of the level of individuals’ political mobilization are presented. The objective, though, is not to exhaust the explanatory possibilities of political mobilization, something that would escape the goals of this article, but to collect empirical evidences of the importance of considering the socio-spatial diversity of the MRRJ. In other words, according to what was verified in the descriptive analysis presented above, not only do the indicators of political culture

Chart 13.1 Constraints⁸ of political mobilization in the areas of the MRRJ

	Core	Suburb	Periphery	
1st block	0.201***	0.138*	0.102**	
Schooling	(0.024)	(0.024)	(0.021)	
2nd block	0.141*	N/K	0.215***	
Primary socialization	(0.042)	(0.036)	(0.024)	
3rd block	N/K	0.210**	N/K	
Secondary socialization	(0.049)	(0.047)	(0.032)	
4th block	0.129*	N/K	0.161***	
Interest in politics	(0.037)	(0.036)	(0.024)	
5th block	0.140*	N/K	0.150***	
Civic virtue	(0.029)	(0.025)	(0.017)	
6th block	N/K	-0.155**	-0.099*	
Interpersonal trust	(0.052)	(0.043)	(0.029)	
7th block	N/K	N/K	N/K	
Political trust	(0.037)	(0.029)	(0.021)	
8th block	0.291***	0.307***	0.272***	
Associativism	(0.062)	(0.064)	(0.045)	
R ² adjusted (%)	35	32	29	
Amount of cases	1.010	1.010	1.010	
Accrual in R ² adjusted (%)				
	1st block	12	9	5
	2nd block	11	7	10
	3rd block	2	7	2
	4th block	1	0	2
	5th block	4	0	3
	6th block	1	4	1
	7th block	1	0	1
	8th block	7	8	7

Note Values are standardized regression patterns (betas) statistically significant: * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$; N/K = $p > 0.05$

Source Observatório das Metrópoles's Study, IUPERJ, ICS-UL, ISRP, 2008³

vary between individuals, but so, it was hypothesized, are those variables articulated differently according to the spatial origin of such individuals.

³Besides the previously presented variables, the following political mobilization requirements were added: the (1) schooling was gained from the respondent's declared educational level, according to the following bands: (i) no schooling, (ii) low schooling level, (iii) above low schooling level, (iv) secondary school level, (v) above secondary school level, (iv) holder of higher education diploma; the (2) primary socialization, composed by the answers' mean to the following questions: "When you were 14/15 years old, how frequently did you hear about politics in your house?" and "And in school/college/university, how frequent do you, or did you, talk about politics?", given the following responses' options: (i) frequently, (ii) sometimes, (iii) rarely, (iv) never; the (3) *secondary socialization* composed by the answers' mean to the following questions: "Nowadays, excluding the media (television, radio and newspapers), how often do you hear people talking about politics in the following situations: (a) in the workplace, (b) in meeting with friends, (c) at your house or in a relative's house, (d) in associations' meetings, (e) talking to neighbors", given the following responses' options: (i) frequently, (ii) sometimes, (iii) rarely, (iv) never; and (4) an *interest in politics* composed by the answers' mean to the following questions: "Would you say

Hence, Chart 13.1 shows that political trust is invariably not significant in its effect upon political mobilization, mostly because this feeling of distrust toward politicians permeates the entire society in fairly high levels. On the other hand, the interpersonal trust in the Suburb and Periphery presents an inverse and significant correlation toward political mobilization. On a different note in the Core of the MRRJ, schooling and associative experience have greater weight in explaining the degree of individual mobilization, while in the Periphery indicators that address primary socialization and interest in politics present greater explanatory power than level of schooling. To summarize, the data indicate that if distrust is indeed a demotivating element, other political culture variables nonetheless exist that can compensate for such an effect. It follows from this that if these variables such as schooling, associativism, and level of interest in politics are also distributed in an uneven fashion in the territory then it should be considered that the aforementioned demotivating effect of the distrust culture will be mediated, to some extent, by the individual's place of origin, i.e., by the different levels of civic culture that this relation with the territory provides (Chart 13.1).

Besides this fragmentation of interpersonal trust and civic trust that are taken by the literature as a basis for a more active political behavior, recent evidence points to something that can be considered one of the most direct outcomes of this differential for the constitution of the metropolis' political culture. Next, empirical evidences will be provided to help illustrate the impacts of this differentiated configuration of political culture across the metropolitan population upon their political behavior, in this case, the vote. The hypothesis considered is that the voting choice in proportional elections takes into consideration the political culture of individuals as mediated by their experience in the territory, which would provide different ways to relate with the representative forms of power.

By way of example, a more in depth analysis of the electoral results for the State Congress across the metropolis points to a significant difference in the number of competitors for the vote among the different areas of the metropolis. From data on the territorial distribution of the degree of competitiveness for votes⁴ in the polling stations of the MRRJ, Corrêa (2011, p. 99) has conducted a classification of the intra-urban areas.⁵ This classification resulted in four types of area with an intra-group variance of 38% and an intergroup variance of 62%, a satisfactory result in

(Footnote 3 continued)

that you have an interest in politics?" given the following responses' options: (i) very interested; (ii) interested; (iii) not really interested; and (iv) not interested at all.

⁴From the polling stations that were geocoded in the MRRJ, the *effective number of candidates index* (N^{cand}) was set up for each area. The objective was to produce an estimate of the average number of candidates acquiring a meaningful number of votes, so as to make them competitive in the area of that particular polling station. This allows the identification of the level of competitiveness per vote for each area. Such an index is calculated according to the following formula, $N_i^{\text{cand}} = 1 / \sum_{j=1}^n P_{ij}^2$ in which P_{ij} is the proportion of votes that a candidate received in the polling station; and n is the number of candidates that have received at least 1 vote in the polling station.

⁵Weighted Areas of the IBGE's 2000 Demographic Census.

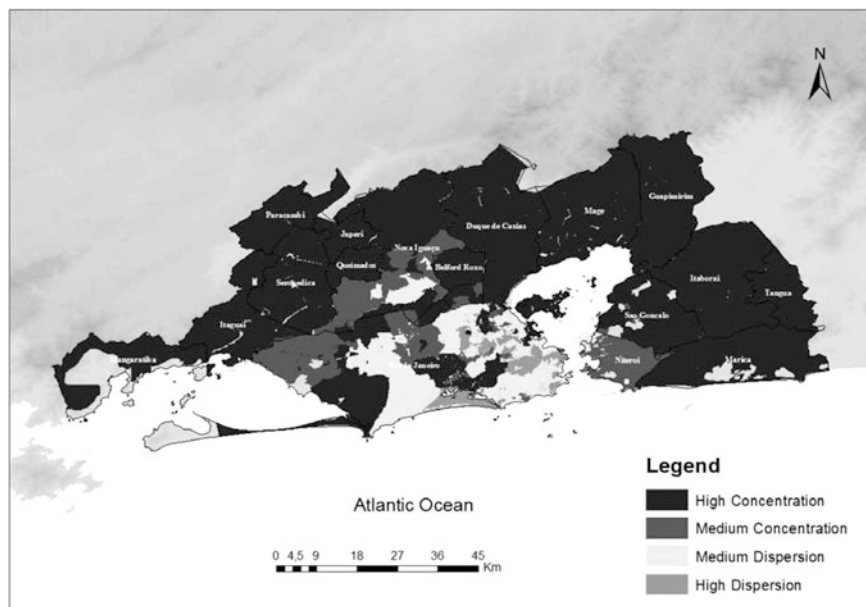


Fig. 13.4 Weighted areas of the MRRJ according to competitiveness level for an election race for State Congressman. *Source* Corrêa (2011)

terms of groups' classification, in the sense that they are sufficiently coherent internally and sufficiently different from one another.

From the spatialized result of the level of competitiveness in the electoral race for State Congressman in 2006 (Fig. 13.4), it is possible to infer that there is a disparity in the distribution of such competition for votes among the areas of the MRRJ. What draws attention in this result is that those areas that are classified as highly concentrated electoral markets correspond, to a great extent, to the Periphery of the MRRJ, while the areas classified as highly dispersed are circumscribed only to the main city of the Rio de Janeiro Metro Area.

Multivariate analysis of the data collected by the 2000 Demographic Census (Corrêa 2011, p. 114) indicates a strong link between these differences in the competitiveness level and the distribution of socioeconomic characteristics across the population of the metropolitan area of Rio de Janeiro. To summarize, the results indicate that there is a significant and considerable relation between the hierarchization of the intra-urban areas—identified by the uneven distribution of individuals in the metropolitan space with a high concentration of resources, such as income and schooling, and by the unequal distribution of public infrastructure services⁶—and electoral competitiveness.

⁶The *concentration of resources* is measured from the percentage per area of individuals whose per capita family income is more than five times the minimum wage and whose average schooling

According to the theoretical perspective of the geography of vote (Ames 2003; Carvalho 2003), as a candidate's votes gets more territorially concentrated, the bigger are the incentives for it to assume a parliamentary behavior guided by parochial interests and, inversely, the more dispersed it gets, the bigger are the incentives for it to assume a parliamentary behavior guided by universal interests. According to Corrêa's classification (2011), when only those who obtained more than 50% of their votes in the interior of the metropolitan area were considered, 31 out of 50 metropolitan members of Congress present a voting profile identified with an incentive to that which Carvalho (2009) has called "metropolitan parochialism", i.e., the maintenance of electoral strongholds in the interior of the metropolis.

The strength of concentrated voting in the interior of the city of Rio de Janeiro was previously featured in a study by Kuschnir (2000). According to this author, based on a survey conducted since the 1980s, at least a third of the City Council of Rio de Janeiro was elected based on geographically concentrated votes. However, what has been highlighted in Kuschnir's study is the existing connection between geographical concentration of Rio de Janeiro's councilors and members of Congress and the existence of assistance centers to the population that members of Congress maintain: the so-called "social centers" (Kuschnir 2008). In such places various "public services" that are relevant to the general population are offered, as put forth by Kuschnir :

It is vital that we point out that these Social Centers often have an intimate relationship with the ruling power, and receive the label of "public utility" by indication of the legislative houses and with the Mayor's or Governor's sanctioning. This assures these centers tax exemption, and eventually joint contracts with both municipal and state governments, providing services such as daycare centers, medical services and professional training centers. There are denouncements that state that several of these Centers work as disreputable entities that raise public financing through overpricing in the purchase of equipment, medications and other service (CAMPOS 2004). Although some end up suffering sanctions during the electoral period, it is noteworthy that they operate freely in the remaining times of the year (Kuschnir 2008, p. 7)

In this situation, it is clear that the process of enshrining social centers as "public utilities"—the foremost mechanism of legitimizing such entities—interferes with members of Congress performing their duties of actually maintaining such social centers. On the other hand, it is paramount to point out the existing link between Congress members' vote and the presence of their respective social centers, as can be seen in the example provided by Kuschnir (2008, p. 5) of the correspondence

(Footnote 6 continued)

time of the household's adults is above 11 years. The *infrastructure shortage* is measured from the percentage of people in each area living either: in households with no access to safe drinking water through the public system or through boreholes or wells; with no access to the public sewage system or to cesspools; or in which there is no collection of garbage through the public garbage collection service (Corrêa 2011, p. 114).

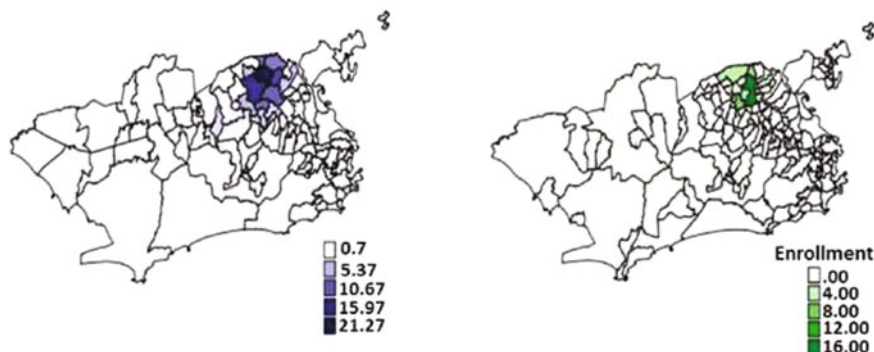


Fig. 13.5 Spatial distribution of a Congressman's votes and of users of a social center that was kept by this Congressman. *Source* Kuschnir (2008)

between areas with prevalence of votes and geographical distribution of users of social centers' (Fig. 13.5).

13.4 Conclusion

In conclusion, based on the empirical evidence listed in the previous section, we can affirm the plausibility of the hypothesis that the metropolitan area of Rio de Janeiro is organized in such a manner that it reproduces pronounced urban disparities, and that the social differences observed in this area are the basis for the development of distinct sociopolitical conditions across the metropolitan population.

In this regard, the different ways in which individuals experience the territory in their daily lives and the different levels of attention from government to the immediate needs of the different areas of the city, promote different forms of configuring the political culture of individuals. This will, later on, impact upon their political behavior, chiefly their level of political engagement, and in the various ways through which this behavior manifests itself. Rather than offering an explanation for the maintenance of the logic of distrust in the metropolis of Rio de Janeiro, this article intended to evidence the importance of considering the dimension of urban inequalities in the understanding the political disparities among metropolitan citizens. In other words, it is possible to consider that the maintenance, within the metropolitan space, of severe disparities regarding the access to urban welfare—something that is confirmed in the distribution of levels of shortage of infrastructure services, in access to opportunities for improving of quality of life and in the distribution of household income per capita—marginalizes a considerable part of the metropolitan population from the *right to the city*. This means that the direct result of this segregating and exclusionary logic of metropolitan organization, is the marginalization of a large part of the metropolitan population

regarding their rights as metropolitan citizens (an efficient public transportation network; access to basic sanitation services and safe, potable water; public sewage, and garbage collection; access to reasonable and dignified housing; access to an adequate system of health services; education; leisure and culture, etc.). This, in turn, strengthens and legitimates the disparity of conditions for the exercise of citizenship (*civitas*), a relationship that is well translated by the metaphors of the “scarce city” or “city scarcity” put forth by M.A. de Carvalho. Finally, when these unequal conditions of urban welfare are connected with the functioning of the Brazilian political and representative democratic system, what we see is that the use of political representation as a means of bargaining the personal subordination the urban poor through political and clientelistic mechanisms and the functioning of entities of assistencialism kept by members of Congress. The example of the office of State Congressman Natalino, who was elected in the 2006 poll with votes concentrated in Rio de Janeiro’s West Zone because of his involvement with a militia in the region. At that moment, it raised serious questions about the perverse results that this double shortage of rights (of both *the right to the city and of city rights*) on the quality of the democracy that is practiced in large metropolises displaying a similar socio-spatial organization.

Appendices

Averages of the indicators of political culture according to the areas of the MRRJ (Charts 13.2, 13.3, 13.4, 13.5 and 13.6).

Chart 13.2 Average of interpersonal trust in the areas of the MRRJ

	Core	Suburb	Periphery	ANOVA
People will always try to take advantage*	1.98 ^a	2.00 ^a	1.79 ^b	$F(2, 968) = 5.52;$ $p = 0.004$
<i>N</i>	228	254	489	
People are trustworthy**	1.91 ^b	1.69 ^a	1.73 ^a	$F(2, 992) = 4.58;$ $p = 0.01$
<i>N</i>	230	255	510	
Index	1.95 ^b	1.84 ^{a,b}	1.75 ^a	$F(2, 995) = 6.67;$ $p = 0.001$
<i>N</i>	230	257	511	

Scale 1—minimal to 4—maximal

Note Different letters represent statistically different groups—Duncan a $p < 0.05$

Source Observatório das Metrópoles’s Research, IUPERJ, ICS-UL, ISRP, 2008

*Do you think that people will always try and take advantage whenever possible, or do you think they will be try and be just?

**Do you think you can trust people, or that, on the contrary, one can never be too cautious?

Chart 13.3 Average of political trust in the areas of the MRRJ

	Core	Suburb	Periphery	ANOVA
Government people will do what is right ^a	2.24	2.10	2.17	F (2.977) = 0.71;
<i>N</i>	226	259	495	<i>N/K</i>
Most politicians seek to obtain personal advantages ^b	1.60	1.70	1.67	F (2.983) = 0.07;
<i>N</i>	228	259	494	<i>N/K</i>
Index	1.93	1.90	1.93	F
<i>N</i>	228	260	498	(2.978) = 0.53; <i>N/K</i>

Scale 1—minimal to 5—maximal

Note Different letters represent statistically different groups—Duncan a $p < 0.05$

Source Observatório das Metrôpoles's Research, IUPERJ, ICS-UL, ISRP, 2008

^aUsually, one can trust that people from the government will do what is right

^bMost politicians got into politics in order to obtain personal advantages

Chart 13.4 Average of indicators of civic virtues in the areas of the MRRJ

	Core	Suburb	Periphery	ANOVA
Always vote in political elections	5.31	5.44	5.41	F (2.984) = 0.27;
<i>N</i>	230	252	505	<i>N/K</i>
Never evade taxes	5.79 ^b	5.38 ^a	5.88 ^b	F (2.985) = 6.15;
<i>N</i>	228	258	502	$p = 0.002$
Obeys laws and rules	5.78 ^a	5.87 ^{a,b}	6.08 ^b	F (2.992) = 2.93;
<i>N</i>	229	258	508	$p = 0.05$
Keep updated with governments' activities	5.54 ^a	5.42 ^a	5.88 ^b	F (2.984) = 5.83;
<i>N</i>	228	257	502	$p = 0.003$
Participate in associations, unions and political parties	4.75 ^b	4.23 ^a	4.96 ^b	F (2.972) = 9.89;
<i>N</i>	227	255	493	$p = 0.001$
Try to understand the opinion of people with ideas that are different from yours	5.93	5.57 ^a	6.01 ^b	F (2.980) = 5.72;
<i>N</i>	227	257	499	$p = 0.003$
Use environmentally correct products, even if expensive	4.75 ^b	4.17 ^a	5.19 ^c	F (2.955) = 18.92;
<i>N</i>	226	252	480	$p = 0.001$
Help people in Brazil that live in a condition that is worse than yours	6.17	6.36	6.39	F (2.991) = 1.95;
<i>N</i>	229	258	507	<i>N/K</i>

(continued)

Chart 13.4 (continued)

	Core	Suburb	Periphery	ANOVA
Help people in the World that live in a condition that is worse than yours	5.86 ^a	6.13 ^b	6.44 ^c	<i>F</i> (2.991) = 12.74;
<i>N</i>	229	258	507	<i>p</i> = 0.001
Be willing to perform military service if drafted	4.82 ^a	4.93 ^a	5.57 ^b	<i>F</i> (2.980) = 11.98;
<i>N</i>	228	256	499	<i>p</i> = 0.001
Index	5.48 ^a	5.36 ^a	5.79 ^b	<i>F</i> (2.988) = 13.59;
<i>N</i>	230	259	512	<i>p</i> = 0.000

There are many diverging opinions over what should be done in order to be a good citizen, in a scale from 1 to 7, in which 1 means less important and 7 means very important, how much importance do you attach personally to each of the following aspects?

Scale 1—not important to 7—very important

Note Different letters represent statistically different groups—Duncan a *p* < 0.05

Source Observatório das Metrópoles’s Research, IUPERJ, ICS-UL, ISRP, 2008

Chart 13.5 Average of indicators of associativism in the areas of the MRRJ

	Core	Suburb	Periphery	ANOVA
Political Party	0.25 ^b	0.18 ^{a b}	0.13 ^a	<i>F</i> (2.991) = 4.17;
<i>N</i>	224	260	510	<i>p</i> = 0.01
Union or syndicate, guild, professional association	0.49 ^b	0.36 ^a	0.30 ^a	<i>F</i> (2.995) = 5.08;
<i>N</i>	228	261	509	<i>p</i> = 0.006
Church or another religious organization	1.00 ^a	1.07 ^a	1.28 ^b	<i>F</i> (2.1000) = 5.72;
<i>N</i>	229	261	513	<i>p</i> = 0.003
Sports, cultural or recreational group	0.56 ^b	0.36 ^a	0.29 ^a	<i>F</i> (2.999) = 10.00;
<i>N</i>	230	260	512	<i>p</i> = 0.000
Other voluntary association	0.38 ^b	0.24 ^a	0.16 ^a	<i>F</i> (2.965) = 8.83;
<i>N</i>	222	246	500	<i>p</i> = 0.000
Index	0.55 ^b	0.44 ^a	0.44 ^a	<i>F</i> (2.1002) = 4.00;
<i>N</i>	230	261	514	<i>p</i> = 0.02

Oftentimes people participate in groups and/or associations. For each of the following groups, (a) political party, (b) union or syndicate, guild, professional association, (c) church or another religious organization, (d) recreational, cultural or sports group and (e) have another voluntary association, respond if you (i) actively participate; (ii) belong to, but do not participate; (iii) have ever participated; or (iv) never participated

Scale 0—never took part to 3—participate actively

Note Different letters represent statistically different groups—Duncan a *p* < 0.05

Source Observatório das Metrópoles’s Research, IUPERJ, ICS-UL, ISRP, 2008

Chart 13.6 Average of the indicators of Mobilization in the areas of the MRRJ

	Core	Suburb	Periphery	ANOVA
Sign a petition or a plea	1.24	1.12	1.06	N/K
N	229	260	510	
Boycott or buy given products because of political, ethical, or environmental reasons	0.83 ^b	0.56 ^a	0.59 ^a	$F(2.976) = 8.64$; $p = 0.000$
N	225	254	500	
Take part in a manifestation	0.95 ^b	0.72 ^a	0.72 ^a	$F(2.996) = 7.60$; $p = 0.001$
N	228	261	510	
Participate in a rally or political meeting	0.89	0.74	0.80	N/K
N	228	260	509	
Contact or try to contact a politician or government employee to express your opinions	0.67 ^b	0.44 ^a	0.60 ^b	$F(2.992) = 6.96$; $p = 0.001$
N	229	257	509	
Give money or fundraise for a public cause	0.62 ^b	0.36 ^a	0.56 ^b	$F(2.992) = 11.35$; $p = 0.000$
N	229	261	505	
Contact or appear in the media to express your opinions	0.63 ^b	0.46 ^a	0.46 ^a	$F(2.998) = 7.42$; $p = 0.001$
N	230	261	510	
Participate in an Internet forum or discussion list	0.69 ^b	0.44 ^a	0.47 ^a	$F(2.994) = 10.80$; $p = 0.000$
N	229	261	507	
Index	0.81 ^b	0.60 ^a	0.66 ^a	F
N	230	261	513	$(2.1001) = 10.74$; $p = 0.000$

Listed below are some modes of political and social action that people might perform. Please indicate, for each of the following: "(a) Sign a petition or a plea; (b) Boycott or buy given products because of political, ethical or environmental reasons; (c) Take part in a manifestation; (d) Participate in a rally or political meeting; (e) Contact, or try to contact a politician or government employee to express your opinions; (f) Give money or fundraise for a public cause; (g) Contact, or appear in, the media to express your opinions; (h) Participate in an internet forum or discussion list;" having, as response options: (i) performed over the last year; (ii) performed in previous years; (iii) never performed but could perform it; and (iv) would never perform it

Scale 0—Would never perform it to 3—have performed in the last year

Note Different letters represent statistically different groups—Duncan a $p < 0.05$

Source Observatório das Metrôpoles's Research, IUPERJ, ICS-UL, ISRP, 2008

References

- Ames B (2003) *Os Entraves da Democracia no Brasil*. Editora FGV, Rio de Janeiro
- Ansary P, Shoonbrodt R (1989) *Penser la Ville: Choix de Textes Philosophiques*. Éditions des Archives Architecture Moderne, Brussels, Belgium
- Azevedo S, Santos Junior OA, Ribeiro LCQ (2009) Mudanças e Permanências na Cultura Política das Metrôpoles Brasileiras. *DADOS—Revista de Ciências Sociais*, Rio de Janeiro, vol 52, no 3, pp 691–733
- Bendix R (1996) *Construção Nacional e Cidadania*. editora da Universidade de São Paulo, São Paulo

- Cardoso FH (1975) A Cidade e a Política: do compromisso ao inconformismo. In: Cardoso FH (ed) *Autoritarismo e Democratização*. Editora Paz e Terra, Rio de Janeiro
- Carvalho JM (1987) *Os Bestializados: o Rio de Janeiro e a República que não foi*. Companhia das Letras, São Paulo
- Carvalho MAR (1995) *Cidade Escassa e Violência Urbana*. Série estudos. Rio de Janeiro, Iuperj, no 91
- Carvalho NR (2003) E no início eram as bases: Geografia política do voto e comportamento legislativo no Brasil. *Revista de Geografia*, Rio de Janeiro
- Carvalho NR (2009) Geografia política das eleições congressuais: a dinâmica de representação das áreas urbanas e metropolitanas no Brasil. *Cadernos Metrópole*, São Paulo, vol 11, no 22, July–Dec, pp 367–384
- Corrêa FS (2011) *Conexões eleitorais, Conexões territoriais: as bases socioterritoriais da representação política na metrópole fluminense*. Master thesis (Master degree on urban and regional planning)—Instituto de Pesquisa e Planejamento Urbano e Regional, Universidade Federal do Rio de Janeiro, Rio de Janeiro
- Granovetter MS (1973) The strength of weak ties. *American Journal of Sociology* 78:1360–1380
- Kuschnir K (2000) *Eleições e Representação no Rio de Janeiro*. Relume-Dumará/ NuAP-MN-UFRJ, Rio de Janeiro
- Kuschnir K (2008) A cidade dos políticos: gabinetes, escritórios e centros sociais. In: 32º ENCONTRO ANUAL DA ANPOCS. Anais Caxambú
- Morse RM (1975) *A Evolução das Cidades Latino-Americanas*. Cadernos CEBRAP, v 22. CEBRAP, São Paulo
- Preteceille E, Ribeiro LCQ (1999) Tendências da segregação social em metrópoles globais e desiguais: Paris e Rio de Janeiro nos anos 80. *Revista Brasileira de Ciências Sociais*, vol 14, no 40
- Putnam RD (1996) *Comunidade e Democracia: a experiência da Itália moderna*. Editora FGV, Rio de Janeiro
- Reis EP (1995) Desigualdade e solidariedade, Uma releitura do ‘familismo amorral’ de Banfield. *Revista Brasileira de Ciências Sociais*, no 29, ano X, pp 35–48
- Rennó LR (1999) Instituições, Cultura Política e Lógica da Desconfiança numa Cidade Brasileira. In: Baquero M (ed) *Desafios da Democratização na América Latina*, pp 103–134. Ed. Universidade/UFRGS, Porto Alegre
- Ribeiro LCQ (ed) (2000) *O futuro das metrópoles: desigualdades e governabilidade*. Editora Revan/FASE, Rio de Janeiro
- Ribeiro LCQ (2004) *As metrópoles e a sociedade brasileira: futuro comprometido?* In: Ribeiro LCQ (ed) *Metrópoles: entre a coesão e a fragmentação, a cooperação e o conflito*. São Paulo, Editora Perseu Abramo/FASE/Observatório das Metrópoles
- Ribeiro LCQ, Koslinski M (2010) *Fronteiras Urbanas da Democratização das Oportunidades Educacionais: o caso do Rio de Janeiro*. In: Ribeiro LCQ, Koslinski M, Alves F, Lasmar C (eds) *Desigualdades Urbanas, Desigualdades Escolares*. Letra Capital/Observatório das Metrópoles, Rio de Janeiro
- Ribeiro LCQ, Lago LC (2001) A oposição favela-bairro no Rio de Janeiro. *São Paulo em Perspectiva* 14(1):144–154
- Ribeiro LCQ, Rodrigues JM, Corrêa FS (2010) Território e Trabalho: segregação e segmentação urbanas e oportunidades ocupacionais na região metropolitana do Rio de Janeiro. In: Lago LC (ed) *Olhares sobre a Metrópole do Rio de Janeiro: economia, sociedade e território*. Letra Capital/Observatório das Metrópoles, Rio de Janeiro
- Santos WG (1993) *Razões da desordem*. Rocco, Rio de Janeiro
- Weber M (2009) *Economia e Sociedade: fundamentos da sociologia compreensiva*, 2nd edn. Editora da UnB, Brasília (v. 2)
- Zuccarelli C, Cid GV (2010) *Oportunidades Educacionais e Escolhas Familiares no Rio de Janeiro*. In: Ribeiro LCQ, Koslinski M, Alves F, Lasmar C (eds) *Desigualdades Urbanas, Desigualdades Escolares*. Letra Capital/Observatório das Metrópoles, Rio de Janeiro

Chapter 14

Local Democracy and Metropolitan Governance: The Case of Rio de Janeiro

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Abstract Having as basis the metropolis of Rio de Janeiro, this chapter is designed to contribute to the debate around the issue of a certain political atrophy that marks the Brazilian metropolitan territories. Despite the metropolis of Rio de Janeiro standing as the second economic metropolis of the country located in the geo-economic space of the Brazilian Southeast which concentrates the most dynamic urban agglomerations of the country's economy, there is no current institution in this territory capable to assume its governance.

Keywords Local democracy · Metropolitan governance · Rio de Janeiro

14.1 Introduction

Brazil is now an urban country: over 80% of its population lives in cities. It is also a country of large urban agglomerations. Its urban network has 13 cities with over one million people in a global scenario where only China, India, and Indonesia have over 10 cities of this size. In addition, in Brazil, over 12 large urban agglomerations have metropolitan functions and regroup nearly 70 million people, that is, 36% of the national population. These features are a result of an urbanization process that occurred simultaneously to the metropolisation of the cities of São Paulo and Rio de Janeiro and to the rural exodus of nearly 36 million inhabitants between the 1950s and 1980s.

These metropolitan territories constitute major economic actors since they concentrate over 64% of the national technological capacity, forming a hierarchy of the

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Brazilian urban network nodes that structure national economy. At the same time, these cities embody the challenges of consolidating Brazil's development, particularly those relating to the precariousness of urban and environmental conditions. Hence, the construction of metropolitan governance must simultaneously consider the imperatives of economic competitiveness and bring a solution to huge traps. For example, according to data provided by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*)/IBGE in 2010, of 6329 "non-standard agglomerates" (*aglomerados subnormais*), i.e., sets having over 50 units of adjacent dwellings marked by precariousness of housing and infrastructure, 88.2% are located in metropolitan areas with over one million inhabitants. These areas are also characterized by the precariousness of the wastewater treatment system resulting either from a lack of adequate forms of effluents collection or lack of collected residuals treatment. They are also areas marked by recurrent floods that are consequences of the irregular occupation of areas at risk characterizing the growth of metropolises, and sources of serious social and economic damage.

Despite their economic and social importance, Brazilian metropolises are territories marked by a certain political atrophy. Note, however, that this phenomenon does not seem to constitute a Brazilian historical feature. Many works that assessed experiences of governance in metropolises in the Americas (Wilson et al. 2011; Rojas et al. 2005) and Europe (Lefèvre 2009; Seixas and Albert 2010) agree on the existence of obstacles to the construction of effective institutions capable of promoting policies in a scale adapted to these territories. In the metropolises, policies are mostly on a global or local scale since the metropolitan territory as a whole lacks the necessary conditions for a coordinated action of private actors, civil society, and the public sphere, that is, a coordinated action designed by a logic of cooperation or conflict. This implies a genuine paradox: metropolises are the contemporary scale of the spatial fix (Harvey 1985) and are, at the same time, politically atrophied territories. How can we understand this paradox?

The first prerequisite needed to overcome the political atrophy of the metropolis is the existence of institutions capable of involving the economic, political, and social actors in legitimate collective actions addressed to the development of these major cities and their contemporary issues. This legitimacy comprises three dimensions: functional, social, and political (Lefèvre 2005). The first refers to the division of functions of the metropolitan government between the different government spheres and levels existing in the major cities and the institution created to perform them. According to Lefèvre (2005), the overall models of metropolitan governance experienced to date have a deficit of functional legitimacy evidenced in the adoption of solutions that do not clearly define the responsibilities of the metropolitan institutions established, which leads to the ambiguity of their functions. Besides, in cases where such definition exists, the functions of the metropolitan government do not benefit from the delegation of authority and corresponding resources. Social legitimacy is essential to make the metropolitan institutions build roots in society. This legitimacy would be achieved by registering such institutions into systems of collective action and by the existence of a social identity as reference for the metropolitan territory. In this regard, we also observe a

certain deficit of legitimacy in metropolitan institutions tested in many countries and resulting from the most diverse models. This presupposes that metropolitan institutions work as relevant instances and arenas of expression and resolution of conflicts. The deficit of political legitimacy seems to be the major obstacle to the construction of institutions addressed to the governability of metropolises since this implies the delegation of important portions of the power formed by the countries' political system. It is as much the power to represent the general interest, related to the organization and functioning of the metropolis as a social and economic space, as the power to regulate individual and collective actions on behalf of this same general interest.

Thus, it is the debate on the conditions and obstacles for the construction of a sovereign public authority in the metropolises what is at the core of the discussion. In this sense, the reflections of Bendix (1996) on the establishment of the Nation State seem useful. Large cities are governed by the non-coordinated action between the three levels of government¹ and by the free play of private interests (material and ideological) that are fragmented and in competition, resulting from the lack of a social order based on the encounter of diverse interests and a system of solidarity capable of ensuring social cohesion. Such a social order presupposes the existence of a consensus between public and private actors as regards the general interests that must be preserved by the government of these territories. Instead of a social order that would result in institutions of governance, priority is given, in the management of cities, to cooperative actions based on the model of what Weber (2003) identified as "unions of interest," characterized by the fragmentation and the transitional aspect of the cooperation between actors.

Analyzed from this perspective, the major challenge in fighting the political atrophy of the metropolis is the adaptation of the political regimes and political geography of the Nation States to the new territoriality shaped by the rising economic importance of these spaces on national and global levels.² The legal and political strength of municipalities, present in varying degrees in different countries, tends to be identified as a major obstacle to the construction of the governability of the metropolises. Actually, in most cases, municipalities are instances of government with a strong social and political legitimacy found in regimes that are unitarily organized. This obstacle achieves greater importance in the contemporary period, insofar as decentralization processes carried out in various countries participated to improve, at the local level, institutions and mechanisms of participatory democracy (Jouve 2005).

Having as basis the metropolis of Rio de Janeiro, this chapter is designed to contribute to the debate around this issue. It stands as the second economic metropolis of the country and comprises 19 municipalities on a territory of 5318.9 km² for a population of nearly 11.5 million people. Located in the geo-economic space of the Brazilian Southeast which concentrates on the most dynamic

¹In Brazil, the three levels of government are: federal, federated States, and municipal.

²For a more elaborate treatment of this issue, see Brenner (2004).

urban agglomerations of the country's economy, it faces competition from two other major metropolitan poles—São Paulo and Belo Horizonte—when it comes to secure public and private investments. There is no current institution in this territory capable to assume its governance. On the contrary, institutional fragmentation predominates in the metropolis where cooperative actions between different levels of government, which could eventually organize themselves in the form of the “union of interests” mentioned earlier, contain the seed of serious consequences for both the present and the future of this territory and its population. We will attempt to determine to what extent this fragmentation results from the combination of factors induced by the model of local government in force in Brazil with factors from historical, sociological, and geoeconomic specifications that characterize the Metropolis of Rio de Janeiro.

This chapter is organized into four parts. The first presents Brazilian federalism and pays particular attention to the institutional aspects unfavorable to cooperative action between the different governmental bodies and spheres. The second presents the way local democracy is developed in Brazil within the framework of a compartmentalized federalism model. The third shows how the lack of governability of the metropolis led to a serious environmental problem in its consolidated urban periphery, known as Baixada Fluminense. This periphery is a densely populated territory which has over three million people, or over 30% of the population of the State of Rio de Janeiro, divided between eight municipalities. On account of historical, geographic, and environmental reasons, this part of the metropolitan periphery is subject to significant and frequent floods that bring dramatic consequences for its population. However, such events could be solved—or at least minimized—if there were a metropolitan institution with legitimacy and ability to articulate the municipal urban land policies and the wastewater sanitation policy within the State jurisdiction. As we will point out in the third part of this chapter, the lack of this institution is due to the aforementioned fragmentation that prevents the urban periphery from being transformed into a political space with sufficient elements for the construction of a public authority endowed with functional, social and political legitimacy. Finally, the last part will address the presentation of some considerations on the political rationality that underlies this situation, similar to that known in literature under the term “Tragedy of the Commons,” in which metropolitan actors are subject to various incentives to act selfishly on the basis of their own interests in order to meet their individual needs.

14.2 Metropolises in Brazilian Federalism

In Brazil, the issue of the governability of metropolises emerged almost concurrently with the phenomenon of metropolisation. Indeed, it is at the end of the second half of the 1970s in the context of accelerated industrialisation and population explosion of large cities, including Rio de Janeiro and São Paulo, that nine metropolitan areas were created by the federal Government which was under the

military *coup*³ at that period. They function not only as planning and management units that comprise different public bodies subordinated to their respective States, but also as representatives from municipal governments forming their deliberative councils. These bodies should promote cooperation between different levels of government for the provision of services considered of general interest: wastewater sanitation, transport and road network, exploration of water resources, etc. However, the Federal law that created these institutions subordinated the rules governing the occupancy of urban land, under municipal jurisdiction, to their compatibility with the provision planning of these services, besides conditioning the municipalities' access to federal resources, including loans, to this planning.

At that time, the initiative of the federal government expressed its technical design of public planning and its power to make institutional changes. The technical elites that have dominated the bureaucracy of the federal government since 1964 intended to conduct the reform of the Brazilian State to increase rationality, so that it could assume its role of planner of the national development with the greatest efficiency. As part of this reform, the military created a new model of intergovernmental relations based on the principles of a hierarchial cooperative federalism through a system of division of competences and resources whose implementation entailed the accession of the municipal governments and the federated States to the guidelines and priorities of planning and management set vertically.⁴

Brazilian bodies of metropolitan planning and managing ran into crisis from 1979 as they were deprived of their technical capabilities and their bases of political legitimacy after receiving strong criticism of their technocratic character, and especially of their association with the authoritarian regime. The erosion of these institutions of metropolitan governance took place in a historical context dominated by the effects of the developmentalist model crisis initiated by the oil shocks, which resulted in the reduction of the Brazilian State capacity to resort to international loans to finance the accelerated pace of industrial growth. During the 1980s, Brazilian society experienced a long process of re-democratization during which an important role would be played by the older municipal ideologies present in Brazilian political culture. These ideologies had been renewed by a certain ideal of local democracy based on the direct participation of citizens in public management.

The institutional fragility of the bodies created in 1979, such as the instances of metropolitan governance, reached its peak in 1988, the year when the constitutional reform hierarchically replaced the cooperative federalism by the "compartmentalized federalism" (Abrúcio, Sano and Sydow 2010). The latter dedicates the virtues of a participatory local democracy as a strategy for the State democratization, as well as the promotion of the universalization of urban services and territorial

³The Federal Complementary Laws No. 14, June 8, 1973 and No. 27, November 3, 1975 and the Complementary Law of the Federated State No. 94, of May 29, 1974 established the metropolitan areas of Rio de Janeiro, São Paulo, Belo Horizonte, Curitiba, Porto Alegre, Salvador, Recife, Fortaleza, Goiânia and Belém.

⁴The best example of this project is the creation of the Participation Funding of the Federated States and Municipalities created in 1963 and included in the Constitution reform of 1967.

distributive justice in the distribution of costs and benefits of public intervention. As we shall see, this constitutional reform has been accompanied by the creation of a series of legal and planning instruments that strengthen the municipality as a self-governing instance of formulation of urban policies, thus starting the era of “autarchical municipalism” (Daniel 2001). This federalism led to the creation of a political environment of competition between the municipalities characterized by few incentives to the establishment of lasting and systematic cooperative relationships between different levels of government—Union, Federated States and Municipalities.

This type of relationship is expressed acutely in metropolitan areas through a fragmented management not only of public policies but also of the administration systems of urban services. Nonetheless, these obstacles do not result directly from the federal model adopted in 1988, but from the articulation of these characteristics compartmentalized with the localistic dynamics present in the Brazilian political system in which the federated States still play a central role. The control of municipalities over the construction and reproduction of political representation is a strategic element for them. Similarly, for the municipalities, political alliances with the federated States—at the expense of inter-municipal alliances—are all strategies for short-term political gains. Intergovernmental cooperation and coordination decisions, horizontal and vertical, run counter both to the satisfaction of various interests and to a short-term political calculation. These two phenomena are reinforced by the existence of significant asymmetries in the metropolitan structure that, in most of the country, are monocentric and polarized by a powerful municipality center around which peripheral municipalities revolve.

14.3 Local Democracy in Compartmentalized Federalism

The new Constitution of Brazil has privileged the decentralization of public action at the municipal level. It has also put into action various participation mechanisms of civil society in the definition, monitoring, and control of public policies. The participatory process is, indeed, the cornerstone of the government system of the country which establishes that power may be exercised either by the elected representatives, through universal suffrage by direct and secret ballot, or by direct participation, through plebiscite, referendum and popular initiative laws (Santos Junior et al. 2004). As regards the permanent institutional channels of direct participation, the Constitution of 1988 highlights the role of the Public Policies Sector Councils attending the three levels of the country’s administrative structure: federal, federate States, and municipal level (Gohn 2004). Created in the 1990s, the said councils are mostly thematic and are associated with specific social policies. Their personnel are members of the government and representatives of civil society organizations, have unpaid volunteer mandates, and may be replaced at any time by the social organizations they represent.

The Federal Constitution of 1988, promulgated in a context of social rights assertion, also sought to guarantee the principle of the cities' social function, urban equity, and of a better distribution of offices and benefits of the urbanization process. Aiming to reach this objective, the text affirmed the role of municipalities in urban management and created the Urban Development Master Plan—mandatorily developed by cities comprising over 20 thousand people—as the essential instrument of urban policy. Thirteen years later, in 2001, with the creation of the City Statute—the Federal law that regulates the articles of the Constitution dealing with urban policy—the Urban Development Master Plan will enhance its role as a basic instrument for urban development and expansion policy, insofar as the City Statute extends its mandatory nature to all cities in metropolitan areas and urban agglomerations.

The main objective of the Urban Development Master Plan is to define the social function of the city and urban property in order to (i) ensure access to urban and regularized land to the overall segments of society, (ii) guarantee the right to housing and urban services to all citizens, and (iii) to implement a democratic and participative management. Municipalities have designed their Master Plans as laws regulating the use and occupation of the soil in accordance with the basic principles of the City Statute. However, despite the technical quality and good political intentions present in many Master Plans, municipalities have faced many difficulties to implement them, that is, to enforce what has been approved as law. The reasons for this failure are many: prevalence of the interests of large economic groups, especially those related to real estate production and building, in addition to the weak administrative and institutional capacity of the municipalities to effectively control the process of occupancy and development of their urban territory.

As regards inter-municipal relations, crucial to give coherence to the urban development of the metropolitan territory, it is noted that in most cases the Master Plans adopted by the municipalities in the metropolitan regions are unable to seize the theme in depth. The issue of the relations between metropolitan municipalities seems treated secondarily, and there are few references to agreements and instruments of inter-municipal cooperation.

Thus, the lack of metropolitan management and the low degree of cooperation between the municipalities located in metropolitan areas impact negatively on sector policies whose territorial scope exceeds municipal administrative boundaries, as is the case of management policies of most urban infrastructures (public transportation, sanitation), including those regarding urban waters management, especially rain and floods waters. Water management works on the principle of "watershed," a territorial scale which generally exceeds the municipality boundaries. Therefore, it implies a strong articulation and integration of actions between the different institutional levels present in the basin territory. This integration concerns the systems and activities directly related to the use of water in the basin, especially the access to drinking water, the treatment of waste water, the fight against floods, the distribution of water for industries, water to produce energy, as well as the systems that have an indirect impact on water such as waste collection. It also concerns the integration between instances that share responsibility for territory

development (municipalities and federated States), which includes planning instruments for the process of urban development put into action by these different instances so as to avoid the emergence of problems such as the degradation of water resources or flooding.

14.4 Fragmented Governance: Territory Management Versus Water Management

The Metropolitan Region of Rio de Janeiro was not established by the Federal Law No. 14 of 1973, but by an Act of the federal government of 1974 which decreed the merger of the States of Rio de Janeiro and Guanabara. It was a geopolitical strategy of the military government to strengthen the former national capital and reduce the federal imbalance caused by the industrial concentration in São Paulo. The institutionalization of the Metropolitan Region of Rio de Janeiro has been accompanied by the creation of FUNDREM (Foundation for the Development of the Metropolitan Region) which was responsible for the planning and coordination of the actions carried out by the municipal governments and the federated States in the management of land occupation and provision of general interest services. However, FUNDREM did not distinguish itself as an institution of metropolitan governance. Its low functional legitimacy and the fragility of its political legitimacy prevented it from working as an arena for cooperation between the government of the federated State and municipal governments. It was abolished in 1989 by an Act of the governor and no political player stood up in its defense. Since then, public policy management is inscribed into a framework of fragmented actions, marked by noncooperation and conflict between the different levels of government.

At the same time, the Metropolitan Region of Rio de Janeiro is affected by an emancipation process of many districts that are transformed into municipalities, in addition to the establishment of municipal governments that are poorly qualified, technically and politically, to implement an effective urban management. On the other hand, it is historically characterized by important polarization around its main municipality. Indeed, the Municipality of Rio de Janeiro predominates in terms of population, budgetary resources, concentration of economic activities, infrastructure and services network, and is also one of the most expressive cities of the country on both the cultural and political levels. This polarization around this main municipality will continue, despite the fact that from the 1990s other municipalities such as Niterói and Duque de Caxias began to play an increasingly important role in the economic development of the State of Rio de Janeiro and the Metropolitan Region. As regards the Municipality of Rio de Janeiro, it has never acted as initiator or protagonist of any integration or cooperation between the metropolitan municipalities. On the contrary, throughout the last few decades it kept a position of constant competition with the other municipalities of the Metropolitan Area. This situation was caused mainly on account of the discrepancies between the political

parties in power in various municipalities, as well as between the representatives of the Federal and federated State governments.

Such configuration has failed, so far, to encourage inter-municipal cooperation. Indeed, on one hand, the federated State is not involved either in the definition of a metropolitan planning or in the deepening of the relationship between the municipalities integrating this territory and, on the other, these same municipalities have failed to create the instances needed to their cooperation or consultation. Most of them confront their problems in isolation whether in negotiations with the federal government or with the federated State.

The Metropolitan Area overlaps the territory of the Iguaçú/Sarapuí basin, an area of 727 km² in which are completely contained the municipalities of Belford Roxo and Mesquita, certain parts of the municipalities of Nilópolis, São João de Meriti, Nova Iguaçu, and Duque de Caxias, all located in the region of Baixada Fluminense, and a part of the West Zone of the Municipality of Rio de Janeiro. This watershed is characterized by the recurrence of flood and overflowing phenomena, sources of material losses and exposure of the population to diseases, which can, in some cases, cause death in families living on the banks. It is estimated that about 180 thousand people live in the flood-prone areas of the basin.⁵ Nevertheless, it is difficult to accurately estimate the number of the affected individuals and the damage caused by these floods. For example, it is important to include in this evaluation the citizens' impossibility to reach their work places, as well as the interruption of the traffic and trade along the flooded tracks.⁶

The exposure of Baixada Fluminense to flooding results in part from the basin topography of the Iguaçú-Sarapuí rivers which consists of two landform units: Serra do Mar⁷ and Baixada Fluminense. There is a significant difference in altitude (1600 m) between the highest point of the mountain area, the peak of Tinguá, and the valley. The climate is hot and humid, and during the rain season, in summer, heavy rainfalls—in the order of 1700 mm/year—turn rivers into torrents that flow into the valley with a strong power of erosion. Upon reaching the plain, they lose their speed and leave their beds causing extensive flooding.

However, these natural factors could be controlled if there were a planning for land occupation at an appropriate level, using the watershed as a territorial unit of reference for flood management. The origins of the problems aforementioned are traced back to the fragmentation of the regulation of soil occupation, which is inscribed in a logic of electoral localism and satisfaction of clientelist interests that impairs the capacity of the municipalities' influence on urban reality and subordinates it to the political co-option interests at local level. In this context, even if those municipalities have Urban Development Master Plans they are unable to guide the urbanization process to minimize the problem, either because control instruments are not enforced or because territorial planning instruments are poorly designed.

⁵See Carneiro (2008).

⁶See "Laboratório de Hidrologia e Estudo do Meio Ambiente da COPPE/UFRJ—PNUD" (1996).

⁷The term *Serra do Mar* literally means "mountainous area of the sea."

Similarly, there is no articulation between the various Urban Development Master Plans, as they are designed in a logic based on the recognition of municipal administrative boundaries.

The consequences of this fragmentation on the occupation and use of the basin soil are numerous: deficit of urban infrastructures and of services for treating wastewater and collection of solid waste, disorderly and illegal occupation of the banks and floodplains, and proliferation of illegal or built subdivisions on the sidelines of urban and environmental legislation.

The instruments of planning and regulation of the use and occupation of the soil developed at the local level suffer a certain fragility and a lack of articulation. Note that there is not, at the level of the Metropolitan Region of Rio de Janeiro, instruments of territory planning or mechanisms for inter-municipal coordination and cooperation able to avoid the aggravation of flooding problems caused by the disorderly expansion of the urban fabric and the occupation of the soil in the watershed of the Iguaçu/Sarapuí Rivers. The government policy of the federated State goes precisely in the opposite direction, insofar as it is based on projects that do not interact between them and that establish, therefore, competing goals regarding the needs of the basin territory. This is the case, for example, of the drainage projects of the Iguaçu basin and the construction of a beltway known as “Metropolitan Arch,” with strong impact on the territory of Baixada Fluminense.

The first case is the Project of Flood Management, Urbanization and Environmental Recovery of the Basins of the Iguaçu, Botas, and Sarapuí Rivers that remained unheeded for nearly 10 years, created with funding from the federal government in the context of its Program of Growth Acceleration (Programa de Aceleração do Crescimento) (PAC) initiated in 2007. This project is based on an integrated vision of the basin but it had to be reduced due to limited resources and emergency actions relating to the sustainable urban drainage. With a budget of over 200 million of reais,⁸ it covers the overall six municipalities of the watershed listed previously which are also part of the Metropolitan Region of Rio de Janeiro. Its main achievements are the desilting of watercourses, recovery of degraded shorelines, planting of green areas, construction of cycle tracks and coastal parks, channel development, meso-level drainage works, and relocation of riverside populations.

The construction of the Metropolitan Arch, benefiting from the same federal government program, aims to consolidate a new road axis through the Metropolitan Region of Rio de Janeiro from East to West at the intersection of a railway station and five federal bus stations and connect many large-scale industrial poles which are settled in the region. At a cost of around 1 billion of reais, this new road axis aims the introduction of new vectors of urban expansion to unserved municipalities, as those of the Iguaçu/Sarapuí Basin. However, the announced urban expansion toward the watershed unoccupied areas may lead to the intensification of environmental degradation and soil sealing, which will result in the acceleration of the

⁸*Real* is the actual Brazilian currency.

already high rate of flooding and in the waste of resources that remained tied up for a long time on account of a project of flood contention in the region. Thus, it seems clear that, despite its position as leader of a project addressed to a greater metropolitan articulation, the government of the federated State does not contribute, indeed, toward such articulation, as seen at the level of municipal governments.

In addition, a project of drainage or flood management in an area such as a watershed must imperatively create articulations with policies of environmental sanitation like the establishment of networks of collection and treatment of wastewater, or effective programs of collection of household waste that are under the responsibility of the various municipalities concerned. Obviously, the latter must create articulations between themselves and with other federal entities and other instances involving civil society and private actors, as is the case of Sector Councils. This lack of articulation not only prevents the solution of existing problems, but also it aggravates conditions that are already critical and which characterize Baixada Fluminense.

In the opposite direction to the situation described, we argue in this chapter that the strategy used both to deal with the problem of flooding and with the promotion of a long-lasting urban development of the area consists of a revival of mechanisms of metropolitan governance, which could be based on the following aspects: (1) articulation of the three spheres of government to create mechanisms of metropolitan governance; (2) regulation and control of the use of the soil at the regional level; (3) review and adequacy of municipal master plans in accordance with the requirements of urban control and expansion, aiming to ensure public safety and environment protection; (4) implementation of compensatory measures for a long-lasting drainage to control the flow of water in the upper part of the basin by establishing physical boundaries to the expansion of the urban perimeters of the metropolitan municipalities.

To do this, it is fundamental that the municipalities, in joint action with the federated State, provide a legal regulation appropriate to these areas by applying the urban and fiscal measures to address the first cause of this expansion, namely the housing deficit. Only this set of articulated strategies will be able to ensure the maintenance of nonurbanized areas in the basin, so that to prevent the issue of flooding in consolidated urban areas.

14.5 Conclusion

To conclude this chapter, we would like to propose some reflections of a general nature regarding the substantive issue around which our analysis of the *fluminense*⁹ metropolis is organized. As we have seen, the latter is characterized by the complete lack of practices of metropolitan governance, including sector policies, as illustrated

⁹*Fluminense* is the adjective related to Rio de Janeiro.

by the case of the policy of environmental sanitation. It is an extreme manifestation of the paradox mentioned in the Introduction: considering that the city is the second metropolis of the country in terms of economic weight, the lack of mobilization of political forces around a project of metropolitan governance does surprise us. Indeed, it is true that, in general, Brazilian metropolises are characterized by the fragility of their institutions of governance. In many cases there were experiments of construction of mechanisms for coordination and cooperation between municipal governments and those of the federated States. This is particularly the case of the cities of São Paulo, Belo Horizonte and Recife, where the governments of their federated States have sought to develop plans of metropolitan development in partnership with municipalities, civil society, and private actors. Although these experiments have not led to the creation of a public authority with the necessary legitimacy to act on behalf of the general interest of the metropolises, they attest to the mobilization of political forces to meet the challenges of metropolitan governance. It is also likely that these initiatives correspond to the resumption, since 2005, of urban investments—regarding sanitation, transportation, housing, etc—on the part of the federal government, as part of a national development strategy. As these investments were made through public programs managed through inter-governmental partnerships, it is likely that they are selective incentives for public actors develop relationships of cooperation and collaboration.

This being said, in the Metropolitan Region of Rio de Janeiro the situation of institutional fragmentation still remains. How this paradox can be explained? To what extent is it linked to the specific effects of the national political model, between compartmentalized federalism and local democracy? The difficulties of transcending the institutional fragmentation of the metropolis of Rio de Janeiro can be explained by the combination of sociological and geoeconomic factors resulting from a fragmented political dynamics that leads to the fragmentation of interests.

The first factor is strongly linked to the effects of dependency that have marked the social and political formation of the metropolis, created from the merger of the former State of Guanabara and the State of Rio de Janeiro in the context of a geopolitical reform carried out by the military in 1974 and endorsed by the Complementary Law No. 20. The creation of the State of Guanabara date of the transfer of the national capital to Brasília with the transformation of the former Federal District of Rio de Janeiro. More than two states merging, it was the juxtaposition of two cultures and two distinct political grounds. The State of Guanabara is dissolved in the Municipality of Rio de Janeiro, and some municipalities that belonged to the former State of Rio de Janeiro integrated its periphery. Many of them were established in recent times, following the emancipation of former districts developed to cope with the intense migration generated by the industrialization after World War II. The municipalities on the periphery have seen the reproduction and routing of municipal governments based on a model of private appropriation of power control. Hence, this shows that an urban society can be very quickly built without forming a political society.

It is this historical context that allowed the formation of a privatist political order in the metropolitan periphery, controlled by personal networks that transform

municipalities into electoral machines based on the selective distribution of resources.¹⁰ In this political order, the management of urban land has a fundamental importance, insofar as the legalization of irregular and even illegal land divisions has turned into a powerful bargaining chip. The municipal elites of the periphery have therefore no interest to delegate their management power in that territory or to contain the growth of urban occupation. Conversely, the political elites of the former Federal District have never sought the articulation with the municipalities of the metropolitan periphery. This situation is explained by the aforementioned historical reasons and the fact that the Municipality of Rio de Janeiro has an electorate sufficient to elect representatives to the Legislative Assembly and the House of Representatives. Moreover, the elites of the municipality of Rio de Janeiro have always sought their conditions of reproduction in the privileged relations with instances and bodies of the federal government, which resulted from their close proximity to national elites, a factor derived from the history of the former Capital of the Republic.

The second factor highlights the geoeconomic segmentation of the metropolis in the political dynamics. The municipalities of the periphery have some electoral weight, but as they concentrate significant contingents of destitute population they are unable to turn it into an actual political power. In their great majority, they do not have a sufficient tax base to exercise the autonomy recognized in the Constitution of 1988, which makes them highly dependent on decisions of resource allocation made by the government of the federated State. Thus, a relationship of mutual support is established between the municipal elites and the federated State elites through the bias of coalitions of interests not much favorable to metropolitan interests. In the present case, related to environmental sanitation problems, the elites at the head of the government of the federated State have no interest in a project of water management that will reduce the power of control over the use and occupation of the urban soil owned by the municipal elites. The latter, dependent on resources that cross the government of the federated State, adopt practices of inter-municipal competition not much favorable to the establishment of a water management plan.

Finally, it is important to mention the fragility of the associative dynamics prevailing in the municipalities of the periphery and its consequences on the ability to dominate local elites. The spaces and instruments used by the population for participating in municipal management—established by the Constitution of 1988—are controlled by the social elites that comprise segments that are most privileged in terms of education and income,¹¹ that is, segments which are far from representing the majority of the population of Baixada Fluminense.

In this context, Sector Councils operating in these municipalities seem to have been extinguished when we consider either the action of the groups that compose them or their deliberative capacity, even though this capacity is defined legally. In

¹⁰See on this argument the work of Siqueira Barreto (2004).

¹¹See Ribeiro and Santos Junior (1996) and Santos Junior et al. (2004).

practice, the activity of these councils is limited to the application of the federal recommendation that created them, and has no impact de facto on the policies that are ruled by them. They operate as legitimators of a certain rationality related to local democracy as it was proclaimed in our last Constitution in force, fulfilling the elites' aspirations, as it has always been. Hence, what is shown in this scenario is the fact that spaces and instruments for participation are better consolidated at the federal level than in the municipalities, and that the State of Rio de Janeiro has no City Council in which it would be possible to develop to some degree a democratic management that will favor the metropolis.

Consequently, the institution of spaces and instruments of metropolitan governance constitute a pressing challenge in the case of Rio de Janeiro in the same way as the fulfillment of the ideal of local democracy, mainly in the municipalities of Baixada Fluminense. These are two major challenges which must be dealt with jointly, otherwise the existing problems will reach greater proportions, which already reverberate so tragically on the living conditions of the local population, as is the case of floods.

References

- Abrúcio FL, Sano H, Sydow CT (2010) Radiografia do Associativismo Territorial Brasileiro: tendências, desafios e impactos sobre as regiões metropolitanas. In: Klink J (ed) *Governança das Metrôpoles: Conceitos, Experiências e Perspectivas*. Annablume, São Paulo, pp 21–48
- Bendix R (1996) *Construção nacional e cidadania*. Edusp, São Paulo
- Brenner N (2004) *New state spaces: urban governance and the rescaling of statehood*. Oxford University Press, New York/Oxford
- Carneiro PRF (2008) *Controle de Inundações em Bacias Metropolitanas, Considerando a Integração do Planejamento do Uso do Solo à Gestão dos Recursos Hídricos*. Estudo de caso: bacia dos rios Iguaçu/Sarapuí na Região Metropolitana do Rio de Janeiro. Doctoral dissertation. IX, 296 p. (Doctorate in Civil Engineering). Coordenação dos Programas de Pós-Graduação de Engenharia da Universidade Federal do Rio de Janeiro (COPPE/UFRJ), Rio de Janeiro
- Daniel C (2001) *Autonomia Municipal e as relações com os estados e a União*. In: Hofmeister W, Carneiro JMB (eds) *Federalismo na Alemanha e no Brasil*. Fundação Konrad Adenauer, São Paulo
- Gohn MG (2004) *Empoderamento e participação da comunidade em políticas sociais*. *Saúde e Sociedade* 13(2):20–29
- Harvey D (1985) *The urbanization of capital*. Johns Hopkins University Press, Baltimore
- Jouve B (2005) *La démocratie en métropoles: gouvernance, participation et citoyenneté*. *Revue française de science politique* 55:317–337
- Laboratório de Hidrologia e Estudo do Meio Ambiente Coppe/UFRJ-PNUD (1996) *Plano Diretor de Recursos Hídricos da Bacia dos Rios Iguaçu/Sarapuí, com Ênfase no Controle de Inundações*. Rio de Janeiro: SERLA
- Lefèvre C (2005) *Governabilidad democrática de las áreas metropolitanas. Experiencias y lecciones internacionales para las ciudades latinoamericanas*. In *La Governabilidad de las aglomeraciones metropolitanas de América Latina y el Caribe*. Taller Internacional, Washington, D.C., Dic. Available at: www.iadb.org

- Lefèvre C (2009) *Gouverner les Métropoles*. Paris, France: L.G.D.J.-Dexia. (Coll. Politiques Locales)
- Ribeiro LCQ, Santos Junior OA (1996) *Associativismo e participação social: tendências da organização popular no Rio de Janeiro*. Rio de Janeiro, Observatório de Políticas Públicas e Gestão Municipal: IPPUR/FASE
- Rojas E, Cuadrado-Roura JR, Fernández Güell JM (eds) (2005) *Gobernar las metrópolis*. Banco Interamericano de Desenvolvimento, Washington
- Santos Junior OA, Ribeiro LCQ, Azevedo S (2004) *Governança democrática e poder local: a experiência dos conselhos municipais no Brasil*. Revan, FASE, Rio de Janeiro
- Seixas J, Albert A (eds) (2010) *Urban governance in Southern Europe*. *Análise Social. Revista do Instituto de Ciências Sociais da Universidade de Lisboa*, v. XLV, 4th Quarterly, Nov 2010
- Siqueira Barreto A (2004) *Um Olhar sobre a Baixada: usos e representações sobre o poder local e seus atores*. *Campos, Curitiba* 5(2):45–64
- Weber M (2003) *Economia e sociedade*. Transl. Regis Barbosa and Karen Elsebe Barbosa, vol 1. Editora UNB, Brasília. 422 p
- Wilson R, Spink PK, Ward PM (2011) *Governança metropolitana nas Américas*. *Cad. Metrop., São Paulo*, vol 13, no. 25, pp 15–44, Jan/Jun

Chapter 15

Entrepreneurial Governance: Neoliberal Modernization

Orlando Alves dos Santos Junior

Abstract In this article, it is argued that several changes are underway in the city of Rio de Janeiro related to what has been called neoliberal entrepreneurial governance, involving a process of creative destruction of urban structures, institutional arrangements for the management, and regulation of urban space. In particular, one must consider the context of the city's preparation to receive two sports mega-events, the 2014 FIFA World Cup and the 2016 Summer Olympic Games. Supported by a coalition of economic, political, and social interests, this project seems to hit specifically the urban configuration of certain areas, notably Barra da Tijuca, the Port Area and the South Zone, pointing toward the deepening of socio-spatial inequalities in the city of Rio de Janeiro. In this sense, one can say that the current changes go toward something that might be called neoliberal modernization.

Keywords Neoliberal city · Entrepreneurial governance · Neoliberal urbanization · Urban conflicts · Sports mega-events

15.1 Introduction

The argument of this article is that several changes are currently underway in the metropolis of Rio de Janeiro, namely in the core city itself. Such transformations shift toward something that has been denominated neoliberal entrepreneurial governance, involving a process of destruction/creation of urban structures, of institutional management arrangements and of regulation of urban space. Taking as a basis the conception of neoliberalization as a process, the hypothesis would be that the rising adoption of urban entrepreneurialism would attain specific spaces of the city of Rio de Janeiro, through an interactive process with the political logics that

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mark the trajectory of the metropolis, in order to promote a new cycle of commodification of the city.

Particularly, one must consider the context of the preparation of Rio de Janeiro to host two sports mega-events: the 2014 FIFA World Cup and the 2016 Olympics. There seems to exist strong evidence that the above-mentioned events are associated with profound changes in urban re-structuring and in its pattern of urban governance, sustained by a coalition of economic, political, and social interests that conduct these projects. In other words, these mega-events would constitute vehicles through which the commodification of the city would be taking place. The process seems to hit specifically the urban configuration¹ of certain areas, notably in Barra da Tijuca, the Port Area and the South Zone, pointing toward the deepening of socio-spatial inequalities in the city of Rio de Janeiro. Ongoing changes appear to be largely legitimized discursively by the realization of these mega-events and the supposed social legacy that they would be able to provide to the city. In this perspective, the Rio de Janeiro City Hall's so-called "Olympic Project" includes the interventions planned for the city, incorporating, under that mark, both those related to the 2014 World Cup and those related to the 2016 Olympic Games, allowing one to interpret these changes as a project of neoliberal modernization.

This chapter is structured in four parts. The first discusses the emergence of neoliberal entrepreneurial governance in developed countries, and its dissemination in and adoption by the city of Rio de Janeiro, taking into account its specificity. Next, it seeks to discuss the neoliberal urbanization in Rio de Janeiro from the process of destruction/creation involving (i) urban renewal and neoliberal urbanization (second section), and (ii) institutional arrangements and urban settings of management (third section). Finally, in the concluding remarks, there is this process as a way of formation of a new structured coherence that would create new conditions of production and reproduction of capital, and new conflicts that emerge there.

15.2 The Emergence of Entrepreneurship Governance in the Political Context of Rio de Janeiro

The neoliberalization processes would express the progressive replacement of the ideas and policies linked to what might be called social liberalism² or Keynesian policies by the ideas and policies of neoliberalism. At first, one needs to consider

¹The notion of urban setting is used to express a specific spatial configuration, as defined by Harvey (2013), of an arrangement involving productive forces and social relations in a given space.

²David Harvey names "embedded liberalism" the existing policies before neoliberalism (Harvey 2008).

that social liberalism was also manifested differently in different countries and national contexts. But it is possible, in a very synthetic way, to characterize it as the combination of principles of classical liberalism, especially the focus on the individual and the emphasis on the market, with a redistributive nation-state which would play the part of intervening to ensure some of the fundamental economic conditions for the exercise of the defense of individual liberties. Among the accepted and justified interventions were policies regarding public housing and urban zoning, antitrust laws, food security, and minimum income. In summary, the most important argument to justify these interventions was based on the idea of the imperfection of self-regulated markets, which could jeopardize the functioning of society without the intervention promoted by governments (Hackworth 2007).

As pointed out by several authors, there is a direct relationship between the rise of neoliberalism in the core countries and the emergence of a new pattern of governance that is characterized by urban entrepreneurship (Harvey 2005; Hackworth 2007); the term “governance” here is being used to designate a new pattern of interaction between government, society and market (Santos Junior 2001). Thus, along with the diffusion of neoliberal principles, a “reorientation of urban governances’ attitudes (...) in more developed capitalist nations” would be taking place, in which “the ‘administrative’ approach that was so typical during the 1960s” would be replaced by “initiatory and ‘entrepreneurial’ forms of action during the 1970s and 1980s” (Harvey 2005, p. 167). In fact, the author refers to a pattern of governance that is intimately associated with the adoption of principles of neoliberalism³ in the scope of local governments. That is why said patterns are here being denominated as neoliberal entrepreneurial governance.

Although this process has been recognized initially in the core countries, there is also the transformation of urban governance of Brazilian cities in view of neoliberal entrepreneurial governance, marked by specificities like all other cities. Indeed, neoliberalism can be considered, as argued by Hackworth (2007, p. 11), as “a highly contingent process that manifests itself, and is experienced differently, across space. The geography of neoliberalism is much more complicated than the idea of neoliberalism.”

In this sense, the concept of an “actually existing neoliberalism,” as formulated by Theodore et al. (2009), seems to be useful; such a denomination is explained if one understands that neoliberalism should not be conceived as a finished system, but as a process of socio-spatial transformation. Thus, the authors propose a context of “contemporary processes of neoliberalization as catalysts and expressions of a process of creative destruction of the existing political and economic space, one which occurs in multiple geographical scales” (Theodore et al. 2009, p. 3).

³It is understood, with Harvey (2008, p. 2), that “(...) Neoliberalism is in the first instance, a theory of economic policy practices that states that human well-being can best be promoted through the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, free markets and free trade. The state’s role is to create and preserve an appropriate institutional framework for such practices.” In this sense, neoliberalization as a process would express a set of practices aimed at the commodification of cities.

Neoliberalization therefore, would be characterized by a dynamic that would involve the destruction/creation of institutions, regulatory frameworks and urban structures appropriate to the dynamics of capital accumulation in a deregulated market, functioning based on neoliberal principles.

To understand this process, in a special way, one must take into account

(...) the interactions, path dependent and contextually specific, that occur between the inherited regulatory frameworks, on the one hand, and the emerging projects of neoliberal reforms oriented to the market, on the other. Namely, projects whose appearance and substantive connections define them as significantly neoliberal (Theodore et al. 2009, p. 3).

Urban governance, a characteristic of policies from “Keynesianism” or social liberalism, could be characterized by an administrative standing, such as put forth by Harvey (2005), as it was based on a rationally planned and coordinated development addressed to the territory as a whole, founded on a specific alliance of classes that composed the coalition of power in which it sustained itself. In a certain way, therefore, it is correct to affirm that such an administrative approach, as a pattern of relationship between the government, the Market and society, would be similar to the political grammar identified by Nunes (2003) as a universalism of procedures, which is typical of the Modern State, marked by the impersonality and by democratic mechanisms that take hold of the government in its totality.⁴

First, one needs to recognize the particularities of social liberalism or of Keynesianism in Brazil—if it is indeed possible to classify the public policies that took place in Brazil from the 1950s to 1980s as such. Similarly, the kind of urban governance that prevailed in most Brazilian cities could hardly be characterized as administrative or as marked by universalisms of procedures.

As argued by Ribeiro and Santos Junior (2013), this process of neoliberalization would take place in a national context marked by an apparent paradoxical implementation of redistributive policies by the federal government, but in a pattern that could be identified as neoliberal Keynesianism (Ribeiro and Santos Junior 2013). However, these redistributive policies are developed in the context of municipalization and decentralization of social policies, in which the municipalities begin to assume increasing responsibilities in their management. In this context, neoliberal policies seem to emerge strongly at the local level, especially in metropolitan areas. The result of adopting this set of national and local policies seems to characterize, in effect, a standard of national governance that could be called *neoliberal Keynesianism*.

But for a neoliberalization process to take place at the local level, it is necessary to set a new pattern of management in cities, based on self-regulated market and

⁴Nunes (2003, p. 17) defines political grammars as “(...) institutionalized patterns of relations (...) that structure the relationship between society and formal institutions (...)” And understands that only the universalism of procedures “(...) clearly reflects the logic of the modern capitalist market.”

private property as the only mechanisms of access to land and to the urban equipment needed for social reproduction. The concept of neoliberalization expresses exactly the expansion of commodification in the spheres of reproduction of life, previously anchored to rules or social and cultural conventions that restrict the full operation of the self-regulated market (Harvey 2008, 2012; Theodore et al. 2009). Unlike what is commonly believed, neoliberalization would not mean the end of any public regulation of the market, given that the reproduction of capital requires a stable and secure space for its movement, which requires the existence of regulatory institutions that work according to its logic.

Neoliberalization enables the identification of this process as a new commodification cycle, inasmuch as the development of capitalism would be marked by periods of adoption of social protection and by periods of liberalization toward the market (Polanyi 2000). In this perspective, neoliberalization expresses exactly a new process of weakening or destruction of these institutions and policies related to the rights and social protections and their replacement by other policies which are anchored to market logics.

But this new commodification cycle is also a process traversed by disputes and social class struggles whose transformation does not evolve in a coherent way, but involves several contradictions. Indeed, neoliberalization processes take place in a different and heterogeneous way, under the various territorial scales and considered institutions (Theodore et al. 2009). At the same time, this process is also conditioned by the effects of the path dependence of institutions and regulatory authorities. Thus, the changes experienced by different social contexts not only depend on the starting point (degree of regulation and social protection achieved in the previous phase), but also on the concrete processes and the results obtained in processes of neoliberalization and of resistance. As such, one must take into consideration the historical and ideological bases that exist in each social context. Thus, the societies that have constructed social welfare regimes that were culturally entangled might have developed collective postures and positioning around the universalization of access to certain spheres of social reproduction that can translate into resistance, more or less extensive, to the new round of commodification.

Bringing the discussion to the case of the metropolis of Rio de Janeiro, it may be said that this new commodification cycle of cities would result in the incorporation of certain areas and urban services partially decommodified to capital appreciation circuits. This chapter considers partially decommodified areas and urban services to which access was not determined entirely by the average market prices, whether because of its irregular or illegal character (in the case of urban land and telephone services, water, and electricity), whether because it is linked to a familiar or semi-artisanal production process (in the case of services related to food, construction, culture, and transport). Indeed, one could perceive a process of intensification of elitization taking place in the city, or more specifically, in certain areas of the city. This process would take place, either by forced transfer of assets under the ownership or control of popular classes to the control of sectors of the real estate capital, or by creating new urban services and equipment that would be managed by the private sector, such as in the area of transportation, sports and leisure.

As sustained by Ribeiro and Santos Junior (2013), it all points out to the inflection process toward the entrepreneurial governance that would be propelled and legitimated by the context of the realization of the mega-events of the FIFA World Cup in 2014 and of the Summer Olympics in 2016. Therefore, it would be appropriate to discuss the process of destruction/creation and how it would be manifested in the context of the city of Rio de Janeiro, identifying urban structures, structural arrangements, and regulations that would be transformed into different type of spaces.

A thorough analysis of the investments associated with the World Cup and the Olympiads suggests that the urban project of renewal and re-structuring of the city is based on a threefold axis of priorities: (i) the South Zone, enhancing and strengthening the centrality⁵ that is already typical of this space; the Port Area, reflecting the investment in revitalization and renewal of an area that is considered to be decaying; and Barra da Tijuca, that expresses the construction of a new centrality. The analysis of investments held indicates that this process is also funded on a threefold axis of policies: urban mobility, mainly through the implementation of the BRT,⁶ BRS,⁷ and VLT⁸ transportation systems as well as the subway system; housing, upon an intense process of real estate appreciation of the aforementioned areas, followed by processes of removal of squatters and poor residents due to a series of “gentrifying” interventions; and public security, the core of this policy revolving around the implementation of the Pacifying Police Units (*Unidades de Polícia Pacificadora*—UPPs), by the state government.

Therefore, the hypothesis sustained here is that the processes of destruction/creation of urban structures, structural arrangements, and regulations, in the perspective of neoliberalization, would have been implemented, chiefly in three areas of the city: Barra da Tijuca, Port Area, and the favelas of the South Zone of the city—processes which will be discussed in the following sections of this article.

⁵Centrality is defined here as the hubs of business and economic importance that exert an influence on a particular surrounding area, which can be considered as its periphery. In this sense, centrality refers to a command role on capital accumulation processes and social reproduction, and is associated with the intensity of flows of money, goods, and people. In addition, the central areas are distinguished by their multifunctionality, focusing, among others, trade and business centers, public and private management activities, schools and networks of universities, health institutions, transport services, tourist areas and cultural centers and premium residential areas (Corrêa 1995; Gluszevicz and Martins 2013).

⁶BRT—Bus Rapid Transit (*Ônibus de Trânsito Rápido*)—High speed bus system, with separated and exclusive lanes.

⁷BRS—Bus Rapid Service (*Ônibus de Serviço Rápido*).

⁸VLT—acronym in Portuguese: *Veículo Leve sobre Trilhos*. In English, Light Rail Vehicle (LRV); a newly established tram system.

15.3 The Neoliberal Urban Renewal of the City of Rio de Janeiro

Through investments made in systems of urban mobility, expressways, viaducts, tunnels, and infrastructure networks, it is possible to apprehend that a set of deep urban transformations is underway in Barra da Tijuca, in the Port Area, and in the South Zone of the city of Rio de Janeiro. The majority of said investments is funded by resources associated with the preparation of the city to host the sports mega-events, especially the 2016 Summer Olympics.

With regards to investments in mobility, it is clear that Barra da Tijuca is benefiting from the Transcarioca, Transolímpica and Transoeste BRT systems; Barra da Tijuca and the South Zone are benefiting from the extension of Line Four of the subway that connects both neighborhoods; and the Port Area is benefiting from the VLT⁹ system. With the exception of the Transcarioca BRT, which was financed with resources from the World Cup, all the remaining investments are associated with the city's preparation to host the XXXI Olympiad.

The Barra da Tijuca neighborhood is also benefiting from other infrastructure investments associated with the Olympics, especially the following interventions: (i) sanitary sewage works in Lagoa da Tijuca and in the Olympic Axis and sanitation works of Restinga de Itapeba, all of which in the scope of the Sanitation Program of Barra da Tijuca; (ii) duplication of lanes in the *Elevado do Joá* (Joá Overpass), along with the construction of a transport complex composed of tunnels, bridges, and overpasses; (iii) works in the road system of Barra, with the duplication of two of its main avenues—Salvador Allende and Abelardo Bueno; and (iv) the construction of the Olympic Park, erected in an area of 12.7 million square feet,¹⁰ where once existed the Racing Circuit of Rio. The organizing committee's prediction is that the renewed area will be posteriorly transformed into an area with parks and housing spaces aimed at attracting potential residents of middle and high income.

Besides the VLT, the Port Area was also host to one of the largest ongoing interventions in the city, the Urban Operation Trust of the Port of Rio de Janeiro Special Urbanistic Interest, created by Supplementary Law No. 101-2009, comprising an area of 53.8 million square feet. The execution of the Porto Maravilha works is conducted by the largest public–private partnership (PPP) of the history of Brazil, signed between the Urban Development Company of the Region of the Port of Rio de Janeiro (CDURP), a mixed capital enterprise created by the city, and the successful public bidding concessionaire, Porto Novo PLC (formed by the construction company OAS LTDA, Construtora Norberto Odebrecht PLC and Brazil Carioca Christiani-Nielsen Engenharia PLC). Porto Novo will manage, through administrative concession, services, and works of revitalization, operation, and

⁹Cf. note n. 8.

¹⁰1 m² = 10.7639 ft².

maintenance of the Area of Special Urbanistic Interest in the Port of Rio de Janeiro for a period of 15 years. Within this urban renewal project, actions are to be implemented regarding the modernization of urban infrastructure, environmental sanitation, computer and telecommunications networks, among other services.

The South Zone seems to present a more complex situation, since it has already been constituted as an area of centrality and is not a stage for any major urban interventions. However, in addition to the extension of Line Four of the subway, it should be noted that investments, both public and private, are being made in the urbanization of slums. The Babilônia and Chapéu Mangueira hills, situated in the neighborhood of Leme, are benefited by the *Morar Carioca Verde* program, which provides various investments such as public lighting, water and sanitation networks, and housing construction. But other investments have also been and are being conducted in the favelas of Pavão-Pavãozinho and Cantagalo (located between the neighborhoods of Copacabana and Ipanema), Vidigal (Leblon), and Santa Marta (Botafogo),¹¹ all located in areas of great real estate valuation. These favelas are not the only ones to receive urbanization programs, but there is strong evidence that interventions in progress associated with the pacification policies (UPPs) have different impacts on the favelas of the South Zone.

Although there is investment in other areas of the city, the hypothesis is that these three areas—Barra da Tijuca, the Port Area, and South Zone—are experiencing such neoliberal urbanization processes (Theodore et al. 2009), which makes it necessary to evaluate the transformations that come through. In particular, it seems crucial to consider some aspects.

First, it would be necessary to reflect on the neoliberal spatial adjustment, as proposed by Harvey (2005, 2008, 2012), in the city of Rio de Janeiro. The ancient urban setting, among other characteristics, seemed to be marked by the abandonment and devaluation of the central area; the complex relationship between physical proximity and social distancing in the coexistence of slums with the south zone of the city and the significant devaluation of the environment of the slums in these areas; the housing boom, directed to the middle and upper classes toward the most prized area west of the city, Barra da Tijuca and Recreio; and finally, the process of heterogeneity of the metropolitan periphery, with the emergence of residential areas of well-structured middle class spaces, accompanied by the continued expansion of *favelas* and precarious neighborhoods.

It seems possible to identify changes in this spatiality that are heading toward four urban settings: (i) the intensification of the appreciation and elitization of Barra da Tijuca, which becomes progressively an area not merely of real estate expansion, but a services and business center; (ii) the appreciation of the central area with a

¹¹The favela complex of Pavão-Pavãozinho and Cantagalo benefited from works of the Growth Acceleration Program (*Programa de Aceleração ao Crescimento*—PAC), launched in 2008, which carried out several works of urbanization and sanitation, resettled residents in new housing and implemented an elevator to facilitate access of the residents with a lookout at the top of the favela. The Santa Marta hill has also benefited from the PAC urbanization works, after installation of the first Pacifying Police Unit (UPP) in December 2009.

view to attract residences aimed for the middle and upper classes; (iii) the enhancement of the environment of the South Zone favelas and of the favelas themselves, particularly their areas privileged by the location, which would attract a segment of the middle classes; and (iv) the continued expansion in the metropolitan periphery, both in the perspective of the growth of favelas as well as of the diversification of residential cores addressed to the middle and upper income residents.

What is important to highlight is that these changes in spatiality and the emergence of this complex urban setting would not be a result of randomness, but would be the local expression of neoliberal spatial adjustment promoted by the neoliberal entrepreneurial governance that, in a different way, impacts the cities of core countries (Hackworth 2007).

Second, in the case of Rio de Janeiro, one can see the active role of government in promoting the observed changes, not limited to enabling the urban renewal projects to be promoted by the private capital. In this perspective, the Rio de Janeiro City Hall appears as the main promoter of urban renewal projects being implemented, acting in different ways, involving the coordination or preparation of projects, the direct financing of various interventions, the granting of tax incentives and tax exemptions for the attraction of private enterprises, the adoption of new institutional arrangements for management of urban space and changes in previously existing legislation, particularly those related to construction parameters. In this process, one cannot fail to mention the participation of other government spheres, both federal and state government administrations, particularly with regards to direct investments and financing of interventions, such as the works of mobility of BRTs, VLT, and the subway. Third, the transformations in urban settings linked to Barra da Tijuca, the Port Area and the South Zone would be associated with real estate valuation processes, gentrification, and social elitization.

The idea of gentrification introduced here is based on formulations by Smith (1987, 2006), seeking to highlight three key aspects. First, the class dimension. In this case, it is argued that what is underway, at least potentially, is a change of agents that are holders of urban land ownership in the locations that were being targeted for urban renewal, replacing the popular classes by segments of the middle and upper classes.

Second, the differential land rent. Here the idea is to draw attention to the difference in the price of existing urban land between certain areas, resulting from its relative depreciation in relation to nearby central areas, making these very attractive areas in view of their potential.

Finally, gentrification as an urban renewal strategy. In this sense, the gentrification process would not be designed only as a result of the logic of the real estate market, but as a class strategy of the ruling coalition, involving a particular interaction between public and private agents in which policies are adopted and actions are implemented to promote gentrification.

For these three aspects, it seems interesting to work with the hypothesis of the occurrence of gentrification processes in the city of Rio de Janeiro. However, due to the recognition that this phenomenon is quite complex and differentiated in different

contexts (Janoschka et al. 2014), it is possible that the gentrification processes are also differentiated where they are occurring, given the specific characteristics of each urban setting considered, either in the Port Area, in Barra da Tijuca, and the South Zone. The question to be considered concerns the role that the municipal government has played in this process. As observed by Hackworth (2007) in the context of North-American cities, the City Hall of Rio de Janeiro seems to be deeply involved in the promotion of gentrification, both by facilitating the alleviation of political and economic obstacles—making it possible through market mechanisms—and directly, through the removal of low income populations and their subsequent transference to farther locations.

Thus emerges the issue of removals. It appears that the existence of the popular classes in areas of interest to promoters of urban renewal becomes an obstacle to the process of appropriation of spaces to capital appreciation circuits linked to the production and management of the city. Indeed, one of the main ways to deal with this obstacle by the government has been to promote removal processes, which involves resettlement of families to outlying areas, mainly through social housing programs subsidized by the federal government My House My Life Program (*Programa Minha Casa Minha Vida*—PMCMV) and also through various forms of compensation. From a broader perspective, it is possible to interpret this process as a kind of equity transfer under the ownership of the popular classes to other class segments, setting, thus, the gentrification processes as argued above.

In the case of Rio de Janeiro, despite the inaccuracies of numbers, it is possible to infer, based on the dossier prepared by the Popular Committee of the World Cup and the Olympic Games, that a significant part of the removals promoted by the City Hall is in these three areas: Barra da Tijuca, the Port Area and the South Zone (World Cup and the Olympic Games Popular Committee in Rio de Janeiro 2014).

15.4 The Creation of New Institutional Arrangements and the Adoption of New Neoliberal Management

In the process of urban renewal underway, we see the creation of new arrangements for the management of public services and equipment and of the very urban spaces reconfigured, particularly through the establishment of public–private partnerships (PPPs), in general promoted in the context of the city’s preparation for the 2014 World Cup and the 2016 Olympics. As stated by Hackworth (2007, p. 61)

(...) One of foundations of neoliberal governance at the local level is public-private cooperation. These alliances can vary considerably in form, but city governments are increasingly expected to serve as market facilitators, rather than salves for market failures.

There are several examples in the case of Rio de Janeiro.

After being upgraded for the 2014 FIFA World Cup, the Maracanã stadium and the Tom Jobim International Airport, known as “Galeão,” had their respective

administrations delivered to the private sector in the public–private partnership model. The former, through the Rio de Janeiro state government, and the latter, by the Brazilian government.

However, in the context of the Olympics, it was the local authority, the City Hall of Rio de Janeiro, that most adopted this management model, diversifying services and activities granted to the private sector, including the management of large urban areas. From this perspective, it is worth noting the established contracts.

The Municipal Complementary Law No. 101 of 2009 designated the Region of the Port of Rio de Janeiro as an Area of Special Urbanistic Interest and instituted the Urban Operation Porto Maravilha, which aims to revitalize the port area. The execution of the works of Porto Maravilha takes place through the largest public–private partnership (PPP) in Brazil. The PPP contract was signed in November 2010 between CDURP¹² and the winning concessionaire of the public bidding, Porto Novo S.A.¹³ Said concessionaire will manage, for a period of 15 years, by administrative concession, services and works of revitalization, operation and maintenance of the Area of Special Urbanistic Interest of the Port of Rio de Janeiro, including the management of public services such as cleaning, lighting, road system, and basic sanitation.

The Olympic Park PPP, the second largest in the history of Brazil and relatively similar to the previous one, grants services and management of a wide urban area of Rio, located in Barra da Tijuca, to private groups. During the Olympic Games, it will receive competitions of 14 different Olympic sports modalities, as well as nine Paralympic ones. Public funds involved in this partnership have been granted in the form of tax exemptions and concessions in infrastructure works.

In addition, in the transport sector, it is important to highlight two PPPs related to the implementation and management of the BRT Transolímpica systems in Barra da Tijuca, and the VLT in the Port Area.

Public–private partnerships grant management of equipment and services for a certain period of time and involve the state through some of the public funds transfer mechanisms, such as tax exemptions, infrastructure works concessions, equity transfer, or budgetary resources. Contracts by PPPs reveal two important issues. The first relates to the change in the pattern of activity of private companies which executed large works in the past but now are managing public facilities and services. The second issue is related to the risks of subordinating the management of equipment and public spaces to the logic of the market, considering that the management companies of such equipment and public spaces start to make decisions related to economic efficiency and maximizing profits from their investments. In the case of Porto Maravilha and the Olympic Park, it should be emphasized that private management concerns large urban areas of the city of Rio de Janeiro.

¹²Urban Development Company of the Port Region of Rio de Janeiro (*Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro*—CDURP).

¹³Winning bidding consortium composed of the following construction companies: OAS LTDA, Norberto Odebrecht Brasil S.A. and Carioca Christiani-Nielsen Engenharia S.A.

Another aspect to be considered in the analysis of urban change from the perspective of city neoliberalization involves the destruction/creation of market-friendly regulations (Hackworth 2007; Theodore et al. 2009). As noted in the United States and the core countries, this phenomenon can also be seen in the context of Rio de Janeiro.

In the context of the realization of the World Cup and the Olympics, a set of laws was approved by federal, state, and local governments, aiming at the adoption of exceptional measures favoring the governing bodies of the *Fédération Internationale de Football Association* (FIFA), the International Olympic Committee (IOC) and its subsidiaries.

In the case of Rio de Janeiro, although it is not possible to deal in depth with this issue in the scope of this article, it should be noted that the adoption of new regulations is not limited to the realization of mega sporting events, but affects the process of urban renewal underway in the city. In short, a wide range of measures seem to indicate a pattern of government intervention increasingly marked by the adoption of exception regulations, subordinated to market interests in the areas targeted for urban renewal interventions.

15.5 Final Considerations: Urban Conflicts and the Future of the City

It was attempted throughout this article to outline some elements that make it possible to interpret the current processes of urban transformation of the city of Rio de Janeiro as a process of neoliberal modernization, expressed in a new round of commodification, associated with a process of creative destruction involving urban configurations, institutional arrangements and urbanistic and social regulations encompassing certain areas of the city, mainly located in Barra da Tijuca, the Port Area, and the South Zone. It is important now, in these final considerations, to raise some impacts of such neoliberal modernization upon urban governance and the future of the city of Rio de Janeiro.

First, based on the approach specified here, it is worth highlighting that this process of changes preserves old agents, practices, urban structures, institutions, as well as institutional arrangements, and it occurs combined with what has been preserved. Therefore, the attempt here was to show that what is going on is not merely a continuity of previous processes. There are indeed new processes that do not exactly express a rupture with old practices, but an inflection, in which the ongoing neoliberal modernization can be considered as conservative in several aspects. In this sense, it becomes a challenge to analyze how the new and old political cultures will combine within this new context.¹⁴ Anyway, it is possible to

¹⁴The study by Guimarães (2015) elucidates some of the mechanisms through which old and new practices are combined in the case of neoliberal modernization of Barra da Tijuca.

infer that from the point of view of urban governance, this neoliberal modernization seems to approach the patrimonial practices that both mark the history of the city of Rio de Janeiro and distance themselves from the democratic management associated with the ideas of the right to the city. In this context, the public spheres of participation are progressively replaced by decision-making processes that subordinate the government to market logics.

Second, in line with the approach used in this article (Hackworth 2007), the implementation process of this neoliberalization project involves several contradictions and raises different urban conflicts involving resistance and opposition, for example, with regard to the priorities of investments, the removals of communities located in the areas of intervention, the lack of social participation channels, and changes in social life. Such conflicts, perpetrated by a variety of organizations and social movements, may relate to the neoliberalization project course, changing more or less substantially, or even invalidating it, depending on the strength that it will achieve over time, which reinforces the uncertainty about the future of the city. In this sense, one can predict that the urban governance of Rio de Janeiro tends to be marked by the intensification of conflict.

However, as a third aspect, one cannot ignore the strength of the power coalition that commands this neoliberal entrepreneurial governance project, which demonstrates hegemonic strength and ability to incorporate, in a subordinate manner, at least discursively, subaltern interests, complementing the action of other agents and existing political grammars to enable the implementation of this project, resulting in the specificity of the neoliberal city of Rio de Janeiro.

In short, the profound transformations in the urban dynamics of the City of Rio de Janeiro involve, on the one hand, new commodification processes of the city and, on the other, new patterns of relationship between the government and the private sector, characterized by subordination of the government to market logics. This process involves the creative destruction of physical structures, institutional arrangements, and urban and social regulations that would aim to create new conditions for the production and reproduction of capital in the context of contemporary globalization, expressing a new structured coherence (Harvey 2004), which simultaneously preserves urban structures, social institutions, and agents in the territory. The combination of old and new moves toward the reproduction of practices that threaten the principles of democratic governance and the universalization of rights in the city.

In this context, it would be important to reflect on the possibilities of setting up an opposition block to the ongoing transformations, overcoming the trend toward fragmentation driven by the current power coalition, and the construction of an alternative project in view of the affirmation of an inclusive city, that is fairer and democratic, in Rio de Janeiro.

References

- Comitê Popular da Copa e das Olimpíadas do Rio de Janeiro (2014) *Megaeventos e Violações dos Direitos Humanos no Rio de Janeiro*. Dossiê do Comitê Popular da Copa e das Olimpíadas do Rio de Janeiro. June 2004, mimeo. Available at: https://comitepopulario.files.wordpress.com/2014/06/dossiecomiterio2014_web.pdf
- Corrêa RL (1995) *O Espaço Urbano*. Ática, São Paulo
- Gluszevicz AC, Martins SF (2013) *Conceito de Centralidade Urbana: estudo no Município de Pelotas, RS*. Trabalho apresentado no II SEURB - Simpósio de Estudos Urbanos: a dinâmica das cidades e a produção do espaço. 19th–21th Aug 2013
- Guimarães RCV (2015) *Barra da Tijuca e o Projeto Olímpico: a cidade do capital*. Master thesis submitted to the master course of the graduate program in urban and regional planning at the Federal University of Rio de Janeiro—UFRJ. Rio de Janeiro, UFRJ
- Hackworth J (2007) *The Neoliberal City: governance, ideology, and development in American Urbanism*. Cornell University Press, New York
- Harvey D (2004) *O Novo Imperialismo*. Loyola, São Paulo
- Harvey D (2005) *A Produção Capitalista do Espaço*. Annablume, São Paulo
- Harvey D (2008) *O Neoliberalismo: história e implicações*. Loyola, São Paulo
- Harvey D (2012) *Rebel Cities*. Verso, London
- Harvey D (2013) *Os Limites do Capital*. Boitempo, São Paulo
- Janoschka M, Sequera J, Salinas L (2014) *Gentrification in Spain and Latin America—a critical dialogue*. *Int J Urban Regional Res* 38, 234–265
- Nunes E (2003) *A Gramática Política do Brasil: clientelismo e insulamento burocrático*. Jorge Zahar, Rio de Janeiro; ENAP, Brasília, DF
- Polanyi K (2000) *A Grande Transformação: as origens da nossa época*. Campus, Rio de Janeiro
- Ribeiro LCQ, Santos Junior OA (2013) *Governança Empreendedorista e Megaeventos Esportivos: reflexões em torno da experiência brasileira*. *O Social em Questão*, ano 16, 29, 23–42, 1st sem
- Santos Junior OA (2001) *Democracia e Governo local: dilemas da reforma urbana no Brasil*. Revan/FASE, Rio de Janeiro
- Smith N (2006) *A gentrificação generalizada: de uma anomalia local à “regeneração” urbana como estratégia urbana global*. In: Bidou-Zachariasen C (ed) *De volta à cidade: Dos processos de gentrificação às políticas de revitalização dos centros urbanos*. Annablume, São Paulo, pp 59–87
- Smith N (1987) *Gentrification and the rent gap*. *Ann Assoc Am Geogr* 77(3):462–465
- Theodore N, Peck J, Brenner N (2009) *Urbanismo neoliberal: la ciudad y el imperio de los mercados*. *Temas sociales*, Santiago de Chile, no 66, marzo

Chapter 16

Transport Management: The Renovation of the Road Pact

Igor Pouchain Matela

Abstract In 2010, for the first time, a public bidding was held for the private concession of the entire bus transport system of the city of Rio de Janeiro. Until then, the operation of this transportation modality, the hegemonic one in the city, had been conducted through legally precarious permits. The contractual relations between the state and the traditional bus companies in the city, the bid-winners, could be identified as a rupture with the previous model. However, this analysis points to a complex picture of continuities, adaptations, and trends of changes included in a more general context of the deepening of market logics in the regulation of the public transportation sector.

Keywords Urban transport · Regulatory transition · Neoliberalization · Bus · Rio de Janeiro

16.1 Introduction

In 2010, for the first time, a private concession (via bidding) of the entire bus transportation system in the city was held. Until that time, the operation of bus lines was based on government license to companies that had traditionally worked in the city. This shift toward a more regulated form of the statute of public service is not restricted to a mere legal issue, but has important implications in the very structuring of the metropolitan transport system, the relations of the bus companies with the state, and the power relations within the sector.

Historically, bus entrepreneurs constituted one of the main forces in the *Carioca*¹ urban policy. The busing hegemony model characterized as a public transport system dominated by private companies in the city of Rio de Janeiro gets

¹*Carioca*, in Portuguese, is the city of Rio de Janeiro demonym.

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consolidated from the decade of 1960 onwards. Since then, these companies have strengthened their economic and political power, aggregating great influence in the coalition of interests that formed urban governance in the city.

This chapter addresses the reorganization of transport by bus in the city of Rio de Janeiro due to changes in sector regulation. First, there is a characterization of the importance of transport by bus in the city of Rio de Janeiro within the metropolitan context. Then, the rise of bus companies and their hegemonic consolidation in the transport system are analyzed. Afterwards, this article demonstrates how the creation of an idea of crisis in this system provided the basis for market-oriented alternatives in the provision of services. Finally, it examines the private concession of transport by bus held from 2010 by the City Hall, the emerging rationality, the meaning of the regulation change, and how the process develops empirically, the conflicts, and the adjustments recorded to date.

16.2 Bus Transport in the City of Rio de Janeiro in the Metropolitan Context

Public transport in the Metropolitan Region of Rio de Janeiro (*Região Metropolitana do Rio de Janeiro*—RMRJ) is done primarily in five ways: bus, metro/subway, trains, boats, and vans² (legalized or clandestine). Despite this apparent diversity of modes and displacement options, there is a primacy of road transport by bus with a share of about 77%³ in total displacements made by public transport in the metropolis. While it is the state government's duty to regulate intercity transport in the RMRJ, municipalities are responsible for regulating public transport within the limits of their territories. Thus, the state government regulates trains, subways, ferries, vans, and intercity buses and each City Hall regulates the vans and intra-municipal buses.

Internal displacement to the municipality of Rio de Janeiro (originating and terminating within the administrative limits of the municipality) accounts for 58%⁴ of all daily trips in the RMRJ. To this concentration in the core city of the metropolitan area, it must be added that 71.6%⁵ of internal displacements are made by bus. This enables the affirmation that the bus system of the municipality/city of

²Vehicle for public transport of a limited number of passengers (usually carries between eight and 16 people); also adapted as a “food truck” and for selling quick meals and transportation of light goods.

³2011 Urban Transport Masterplan.

⁴2003 Urban Transport Masterplan.

⁵Rio de Janeiro City Hall Data Warehouse. Data on alternative means of transport were not contemplated, such as transportation by vans and kombis (a nickname given by Brazilians to the Volkswagen Transporter, which was later adopted by the company as the official model name in this market).

Rio de Janeiro is the most significant in quantitative terms in the metropolitan transport infrastructure.

16.3 Trajectory of the Bus Companies and the Construction of Their Hegemony in Public Transport in Rio de Janeiro

Bus companies currently dominate the public transport sector in the city of Rio de Janeiro. Their hegemony in the sector and political importance in the urban coalition is the result of a trajectory especially built after World War II. Disputes that arise around this service are fundamental to understand their rise and monopoly among public transports.

At the end of the war, with the economic recovery, the strengthening of political and trade relations with the United States, the reestablishment of the import capacity and the normalization of the supply of fuel, there was the creation of conditions for road transport to present itself as a viable solution for the urban transport crisis. New North-American buses with greater capacity and speed were introduced in the market through imports favored by public financing and the exchange rate policy. With the end of the *Estado Novo*,⁶ a new government rises to power, one that assumes a more liberal perspective, which stimulates the creation of new bus companies to quickly expand supply. Thus, new lines are created, and the service starts to grow exponentially and in a sprayed way, mainly through the *lotações*, which now compete with buses and trams.

Lotações were smaller vehicles (minibuses) with a seating capacity between 10 and 21 seats that had arisen during the war, and were tolerated due to the crisis in public transport in the period. They were popularized due to their flexibility and speed and were operated by “freelancer” drivers; they followed no fixed routes until the early 1950s. They were a strong competition both to trams—covering overlapping routes—and to buses, which were less flexible in terms of routes and frequencies, both of which were regulated by the government.

Buses and minibuses met the transportation needs of the growing urban peripheries and made feasible the sprawling of the city to vast areas not served by other means of transport. The road model, in a way, gave conditions for a rapid dynamics of real estate speculation and of peripherization of the city of Rio de Janeiro. Thus, the road transition allowed a new momentum and enabled a new way for the expansion of the occupation of urban space in Rio de Janeiro. In addition, it has united, around its construction, a strong coalition of interests in capitalist accumulation, involving the public works sector, the construction of roads and the

⁶Nationalist dictatorial regime, led by Getúlio Vargas between 1937 and 1945.

real estate circuit, with the incorporation of new areas resulting from the accessibility provided; and, lastly, the bus transport companies.

From the late nineteenth century until the 1930s, railways had directed the expansion of the city of Rio de Janeiro toward certain vectors. This period is characterized as the first phase of accelerated expansion of the urban area, based largely on the reproduction needs of certain fractions of domestic and foreign capital (Abreu 1987). The city, so far with an urban settlement structure still heavily marked by its colonial characteristics, experienced an accelerated development of its transport sector that would facilitate the sprawling of its urban area. Trams allowed the gradual occupation of the north and south (higher income regions), while the deployment of the trains directed the occupation of the poor suburban region.

The 1940s and 1950s witnessed a metropolitan explosion derived from a migration especially powered by its condition as Federal District/Capital of the country, with a notable increase in the urban area, especially toward the metropolitan periphery. This would result in a strong increase of the demand for transport with exponential increases in the number of trips (characterized by commuting back and forth) and distances. This time, the transportation axes that enabled the occupation were not primarily railways, but new avenues toward the periphery and neighborhoods in the city limits. Moreover, in the period between 1954 and 1965, for the first time such cross structuring routes appear in the suburbs providing a better link between suburban regions and breaking the relative rigidity established from the old railways (Kleiman 2001).

Therefore, the end of the 1940s marked the beginning of a transition that will be consolidated in the 1960s. The dominant pattern of urban transport in Rio de Janeiro is no longer railways (trams and trains), but now mainly relies on the road model (buses, minibuses, and private cars). It is a period of many interventions for road traffic in the city (construction of tunnels, viaducts, and expressways). Buses become the main organizing means of transport, no longer being a complementary service, while trams and trains are gradually deteriorating and losing their importance (Chart 16.1).

This road transition will develop, until the early 1960s, based on a highly sprayed model set on the operation of minibuses. The multiplication of such vehicles in urban transport has created a highly competitive environment and an excess of vehicles vying for passengers on the streets. It is estimated that in the late 1950s, there were more than 5 thousand minibuses circulating the city streets, especially between the center and the South Zone. There was little supervision and few obligations for the operators of this type of transport. The minibuses were responsible for the decline of the old bus companies and the cable cars in the main areas of the city and the source of the emerging order of urban transport in the city in the 1960s. Because of this, Pereira (1987) sustains that minibuses were, in fact, de-structuring the old model. The competition imposed by them, on the fringes of

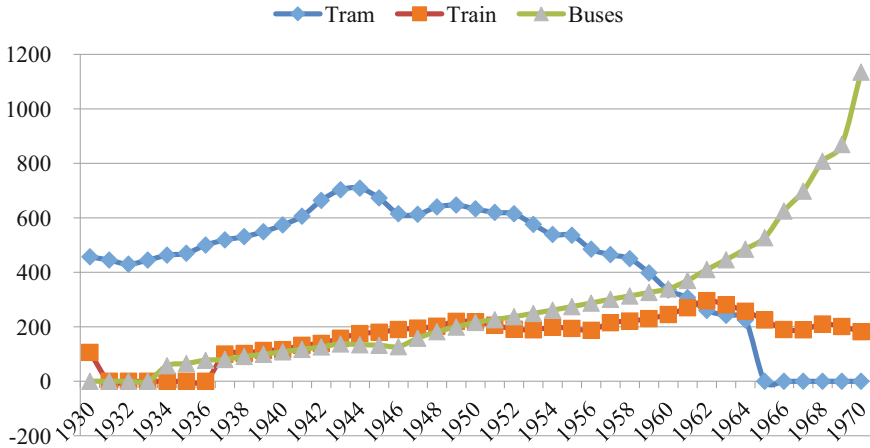


Chart 16.1 Passengers transported per year by transport means (1930–1970). *Source* Barat (1975)

the regulations, made several of the former formal bus companies bankrupt.⁷ The minibuses created the conditions for the emergence and the appearance—thus they might be considered the embryos—of the second generation of bus companies that came to dominate the public transport in the city (Pereira 1987).

From 1958 to 1967, a series of regulations on public transportation from the City Hall will give the basis for a new conformation of the sector and the ultimate hegemony of bus companies in Rio de Janeiro. In general, state regulation was to stimulate and often determine the concentration of capital in the sector, establishing minimum numbers for fleet companies. In 1958, it established the permission regime for the operation of public transport service. In this system, there is no predetermined revaluation or expiration dates and the rights and obligations of the grantee are not clearly established. In practice, the permission came to favor decisions on transport by the bus companies. In 1963, the minibuses were banned and the bus became the only road vehicle in public transport.

Electric trams are finally extinct in 1964 in the city of Rio de Janeiro. As a result, there was a great wave of mergers and acquisitions, especially among the owners of small fleets of minibuses who became associated with new bus companies to conform to legislation. Therefore, new companies emerge from the former owners of minibuses or from drivers' unions. From these measures, emerges the new logic of transport in the city: priority for buses; state regulation to limit the number of firms and restrict competition between them; area boundaries for each company, creating spatial monopolies and a permission system (Pereira 1987).

⁷Only four bus companies “survived” the period of the open competition with the *lotações* (minibuses).

Authors such as Pereira (1987) and Orrico and Santos (1999) show the influence of the interests of the entire industry associated with road transport in this new orientation of transport policy. Vehicle body plants, chassis dealers, oil companies, among others, were all very interested in the development of the sector, while the incipient automotive industry saw in the market of the formal bus companies an important demand, reinforced by regulations that stipulated fleet renewal periods.

Therefore, the 1960s was an instrumental decade to the history of public transport in Rio de Janeiro, since it completes the road transitional period that had begun after the war and lays the foundation for the field and the consolidation of the bus system in Rio de Janeiro in the following decades. Since then, public regulation led increasingly to business concentration, creating a barrier to the entry of new companies into this system. A specificity of this process is the continued existence of a large number of companies, now concentrated in the hands of a smaller group of entrepreneurs.

The argument of the government and proponents of incentives to the concentration of capital was that the large number of companies competing against each other would be an obstacle to the planning and organization of transport. The result was that the concentration process favored the consolidation of few and large groups of private bus companies that have become increasingly powerful, politically and economically. This power is linked to the strategic position that the companies achieved in the provision of an essential service to life in the cities, as in the case of mass transportation in Rio. They imposed and legitimized themselves as representatives of the sector, influencing policies and public investments in the various spheres of the state apparatus.

Thus, between the decades of 1970 and 2010, the power of the companies established a model that had among its main points: control of a virtually closed market, with a guarantee of profitability, as well as blockade to the entrance of any new competitor; spatial monopolies in certain areas, as variations or line changes began to be made by the companies that were already operating in them, circumventing the legal requirement of bids; cash billing resulting from millions of trips per day; assurance of transfer costs for tariffs through spreadsheets informed by the companies themselves; consolidation of the legal character of permit holders. In practice, the planning system was also made by the companies, even if in a fragmentary way, upon request lines, additions, and dismemberment. The City Council authorized only what was decided privately. The period was also characterized by resistance to any change that did not come from the companies' own formulations.

The political organization of the category was through the employers' unions. The Rio de Janeiro State Federation of Passenger Transport Companies (*Federação das Empresas de Transporte de Passageiros do Estado do Rio de Janeiro*—Fetranspor) brings together ten unions of bus companies in the state of Rio de Janeiro and has a role in formulating strategies and policies across public spheres. The main union that makes up Fetranspor is *RioÔnibus*, which represents bus companies in the city of Rio de Janeiro.

More schematically, Pereira (1987) identifies two key moments in the recent history of relations between the government and the bus companies in Rio de Janeiro. The first, during the 1960s, showed strong state intervention to promote the creation of new bus companies (larger, more capitalized and organized) to the detriment of trams and minibuses. In a second moment, the system is consolidated in increasingly more concentrated and powerful groups with a strong union and hegemony in the municipal and metropolitan transport. Sector policies become, increasingly and essentially, the endorsement of the companies (in fact, often policies are formulated from companies). This paper understands that, from 2010 onwards, with a broad concession of the bus transport system in the city of Rio de Janeiro, a third moment is established in this relationship between businesses and the government.

16.4 From the “Public Transport Crisis” to the Regulatory Transition

From the 1990s, the public transport bus sector experiences a decrease in absolute number of passengers in the city of Rio de Janeiro. A first decline can be attributed to the fact that companies are now required to carry public students, the elderly and the disabled people free of charge and the volume of passengers drops to a level slightly lower than it had in previous years. The number remains stable until 1998, when starts a period of constant passenger losses. A period that lasts until 2005. (Chart 16.2).

With local characteristics, such a situation was repeated in the main Brazilian cities. Thus, industry associations, representatives of bus companies, and specialized academic literature announced a “public transport crisis.” According to this approach, the construction of a legacy of half a century of private enterprises in urban transport was threatened. Passengers were opting to use private cars to the detriment of buses and a large contingency of passengers were preferring the illegal or clandestine transport option of vans—smaller vehicles from 10 to 16 seats—which signaled a return to the chaotic and irrational past of minibuses.

The increased use of private cars led to a decline in the captive demand of public transport; contributed to increased congestion, reducing speed and productivity, which resulted in higher costs for the bus and, consequently, in higher bus fares. To complete the picture, the demand that was still dependent on public transportation was being increasingly captured by the informal transport, because of their flexible schedules, rates, and itineraries (Aragão et al. 2004).

Thus built the problem, the challenge to overcome the transport crisis was to find ways to recover and develop the private business bus sector. In this perspective, it would have its origins in the historic state protectionism for the sector which, by discouraging innovation and business efficiencies, prevented the development of a competitive environment between enterprises (Aragão and Santos 2004). The closure of the urban transport market in favor of already active companies, the

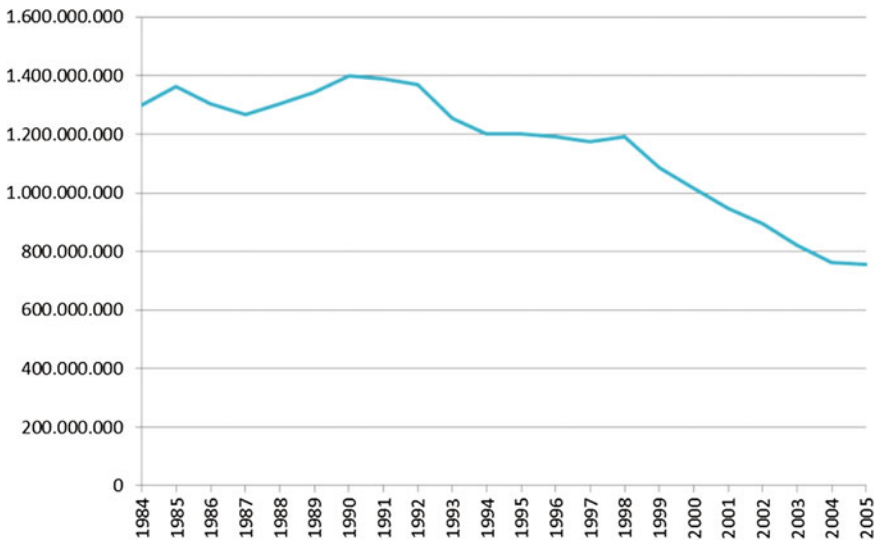


Chart 16.2 Paying passengers on buses in the city of Rio de Janeiro. *Source* Fetranspor

privileges in the granting of new lines to be explored (without competition), the permissions given without evaluation of quality and efficiency, tariff calculations that guaranteed the full cost of companies (even if inefficient), among other things, had created a comfort zone that damaged the modernization of enterprises and facilitated the emergence of the factors that shaped such a crisis.

Faced with this, the traditional organization of companies and the state regulatory framework showed themselves unable to cope with this scenario. The solutions should come from the introduction of elements of competitiveness in the sector, necessarily going through a new relationship and redefinition of powers between the government and the companies that would bring greater regulatory flexibility so that they could organize their operations according to the changing circumstances of the market (i.e., a greater capacity for planning and organization of private transport) and also search efficiency derived from the introduction of competitive internal mechanisms (Aragão et al. 2004).

The state regulation of the sector should adapt to new times. The public authority should be strengthened so that an efficient regulation could be set up. Its weakening meant business uncertainty and risk for the regulated sector, since it would open up room for illegal and/or unfair (such as vans) competitive practices. Therefore, the government should also expand its capacity to ensure the proper functioning of the market, monitoring the provision of public services and related activities. The preservation of defensive strategies, protection, and closing of the market would lead to political isolation and, therefore, could accelerate the weakening of the sector toward other operating agents. Internal competitiveness would also be a

means of stimulating external competitiveness, an important factor to forge the modern Brazilian bus company able to meet the new operators (large construction companies and pension funds that started to take control of the railway concessions in the metropolis).

The particularities of the urban transport market would justify state intervention toward a pro-streamlining regulation, since free entry of operators would be a factor of instability. International experiences (United Kingdom and Chile) had resulted in excess supply without increasing demand, increase in the average cost per passenger and, consequently, increase in bus fares. In these cases, there was also increased congestion and pollution, and loss of coordination of the transportation system. Thus, the economic inefficiency of the free market in the sector should be resolved through a pro-market regulation that stimulated competitiveness and efficiency by abolishing privileges (Gomide and Orrico Filho 2004).

From this construction of the problem, from its causes and guidelines for the solution, a consensus was built on the implementation of the mechanism of periodic competitive bidding to select the operating companies of urban transport, improving services through contracted regulation and inserting competitiveness. Thus, the competition would not take place directly on the streets—i.e., competition for passengers—but the right to operate public transport. The potential threat of other operators in future bidding (every five years, for example) would take operating companies to a constant search to improve the performance, quality, and productivity in service delivery. Concessions via bidding would be a motor for modernization of the sector and the way to overcome transport crisis, enabling the emergence of a group of national companies able to compete within and outside the country (Gomide and Orrico Filho 2000).

The perspective exposed above follows in the same direction of the transformations occurring in Brazilian capitalism from the 1990s, based on the liberalization of the economy and reaching more strongly the production of urban space from the mid-2000s. In this context, the arrival of new agents and new circuits in urban accumulation would be pressing the transformation of the city and the redefinition of the interests of coalition around the urban accumulation in different bases of the historically established patrimonialism.

We agree with authors such as Peck et al. (2012), for whom the deepening of commodification and the adoption of market logics, applied to state regulation of public services, can be understood as part of a neoliberalization process. According to this view, “(...) actually existing neoliberalization” is not a thing or an ideal situation, but variegated and path-dependent process, due to inherited regulatory landscapes, generating contextually specific forms. The incidence of neoliberalization in singular concrete spaces leads to a redefinition of arenas and political interests in which disputes will be articulated over accumulation.

16.5 The Reorganization of the Bus System in Rio de Janeiro

Inspired and influenced by the above-mentioned situation and concepts, in April 2010, the City government of Rio de Janeiro announced its intention to make a general bid of the city's bus lines. According to the official explanation, the measure was justified because:

In Rio de Janeiro, the current model operates as such for decades now. Permissions for companies operating bus lines have harmed the organization and rationalization of the system and encouraged predatory competition between the various transport modes operating in the city, to the detriment of integration (Diário Oficial do Município do Rio de Janeiro, 29 de abril de 2010, p. 62).

Therefore, in June of the same year, the Municipal Transportation Secretariat (*Secretaria Municipal de Transportes*—SMTR) launched the process of public notice through which it intended to reorganize the transport by bus in the city, normalizing the service and rationalizing lines. The notice promised a radical transformation in the city's transport structure. Thus, for the first time, the Rio de Janeiro City Council held a public bidding, and one that was open to international competition for the private concession of the whole transport system by bus. A fundamental change altered the grantor's ratio (City Hall) with bus companies, which no longer permits holders but concessionaires.⁸ Until then, with the permissions model, each company projected the lines according to its particular interests and presented the proposal to SMTR, which analyzed the operation authorization. In the concession model, the government would be provided with more regulatory instruments, with a formal contract and a comprehensive transportation planning system. The City Hall's discourse focused on the argument that the system needed to be streamlined so that everyone in the city would gain with the improving efficiency. That is, the adequacy of the bus supply to passenger demand, by abolishing competition on the streets, would reduce the cost of business and consequently the value of the fare.

The concession divided the city into four regions, called Regional Transport Networks (*Redes de Transportes Regionais*—RTRs). Each consortium should control a RTR, reinforcing the concept of putting an end to territorial competition between bus companies, ensuring a defined—and exclusive—area for the performance of each bid-winning consortium. At the end of the bidding process, the four consortiums representing 40 of the 47 bus companies already operating in the city of Rio de Janeiro were announced as eligible for the grant of service for 20 years. It was also established that the bid-winning consortia were to operate the future express bus lanes (Bus Rapid Transit—BRT).

The comprehensive concession for the bus transport system, with the relationship between City Hall and the bus companies ruled by a public contract with a

⁸Forms of delegation of public service provided for in the Brazilian Administrative Law.

fixed term, could, in principle, be considered as a break with the previous regulation model. However, the development process in practice involved a number of contradictions and complexities that must be observed for a more precise interpretation of the matter.

Five years after the concession, the structure set up through the operating consortia, and around them, indicates a strategy of dominant entrepreneurial groups in order to concentrate capital, power, and information. The relationship between the post-concession groups shows an intense internal dispute and a rapid strengthening of some entrepreneurs. We will try to support this assertion below.

Most entrepreneurs have distributed shareholding in two or more companies (only seven of them have exclusive partners). The concentration by groups indicates that the three largest groups account for 48% of passengers (Matela 2015). Evidence of irregularities in the bidding and the formation of a cartel between the bus companies already working in the city led the City Court of Auditors (*Tribunal de Contas do Município*—TCM) to conduct an investigation that identified a number of problems in the process.

However, the understanding of the mechanisms of control and concentration of private power in the sector depends on the understanding of how Fetranspor operates. In recent years, it created a number of companies to act on transportation-related business. Among them were advertising agencies for buses (MOVTV); an administrator of the 22 bus terminals (“RioTerminais”); equity stake in transport by barges and the (then) future light rail vehicle (*Veículo Leve sobre Trilhos*—VLT) that would be implemented in the central area of the city. But the key company created by Fetranspor is “RioCard.” It was created to install and operate the collection system passing through an electronic card (Bilhete Único—*Single Ticket*). The State guaranteed the control of Fetranspor and established that the administration of this system should be carried out by bus companies or an entity designated by them. With the implementation of electronic ticketing (which happened gradually from 2005), revenue from bus companies became centered on *RioCard*. Thus, the group of entrepreneurs that control Fetranspor started to manage revenues and to have exclusive access to the entire system of accounting. Legalized vans also pay an administration fee for *RioCard*.

As it occurs with the centralized control of information, and as the division of revenues collected on the bus system and its accountability are made from Fetranspor, minority groups of bus entrepreneurs ended up not having full access to apportionment criteria of funding coming from fees and other sources. Such groups lose power over their own capital and system information. Also for the government, control becomes precarious. A report by the TCM found that the accountability of consortia is not reliable and the City Hall does not have accurate information about the profitability of companies. The study itself for calculating fare adjustment is not conducted by the city, but by consultancy firms hired by Fetranspor and data provided by it. With immense difficulties of control, the government—the TCM, the councilors and the City Hall itself—hardly have access to the complete information on the sector.

In practice, Fetranspor performs the private management of the entire business involving public transport by bus in Rio de Janeiro, a key sector for life in the city and with a huge capacity of capital accumulation (gross annual revenues estimated at R\$ 2.6 billion in 2010). The famous “black box” of bus companies consists in the restriction to access for industry information and Fetranspor, in turn, is controlled by a small group of dominant entrepreneurs who run a complex privatization scheme of the bus system control and operation activities.

16.5.1 BRT as Business Modernization

An important point to note that points to bus transport business modernization is the introduction of structural corridors of the so-called Bus Rapid Transit buses (BRTs) as the main response to transport problems in the city.

BRT corridors are feeder-trunk systems consisting of lanes separated from general traffic lanes with traffic priority at intersections road. They are powered by high-capacity articulated buses, designed to meet high passenger demand with special stations that allow quick loading and unloading of passengers, and charging of fares outside of the vehicle, and are fed by the conventional bus network. Its implementation is key to the streamlining of the system. They are part of the System of Collective Transport for municipal buses, being the object of the same concession. Thus, all BRTs that will be deployed would automatically be inserted into the ruling concession. The road infrastructure of BRTs would be the responsibility of the City Hall, and the concessionaires’ job would be the acquisition of vehicles and equipment necessary for their operation.

By allowing a more effective rationalization of the currently existing lines and the consequent cost reduction, this model is emerging in the city. The capture of much of the demand of the public transportation system passenger is a perspective of both City Hall and companies from the sector. According to their estimates (Table 16.1), the four planned BRTs could carry up to two million people per day, representing about 45% of public transport passengers in the city. Thus, the operation of BRTs should consist in the most important business in the public transport sector in the city of Rio de Janeiro.

According to the concession agreements, the bus transport consortia should form an operating agreement with each other for the administration of the BRTs. The form of this agreement was not stipulated by the grantor, leaving under the concessionaires’ responsibility the decisions about which companies will specifically operate the system in which proportion and at which control levels. Participation and management of the BRTs are subject to criteria established internally, without interference from the City Hall. This situation strengthens the dominant groups in the bus sector that, by exercising a strong weight in the internal decisions of formal consortia, acquire great decision power in a very promising business for the few chosen companies that will manage this system of BRTs.

Table 16.1 General characteristics of the planned BRT

BRT corridor	Trajectory	Extent (in miles ^a)	Stations	Predicted to be operational by	Calculated demand (per day)	Fleet
TransOeste	From Barra da Tijuca ^b until Santa Cruz and from there to Campo Grande ^c	39.14	60	2012	220 thousand	91
TransCarioca	From Barra da Tijuca to Ilha do Governador (International Airport) through Penha ^d	24.23	48	2014	Between 400 and 570 thousand	107
TransOlimpica	From Deodoro ^e to Recreio dos Bandeirantes ^f	14.3	14	End of 2015	Between 110 and 350 thousand	60
TransBrasil	From Deodoro until Downtown, through Avenida Brasil ^g	19.88	31	Beginning of 2016	900 thousand	720

Source RioÔnibus and Planejamento Estratégico da Prefeitura do Rio de Janeiro 2013–2016

^a1 mile = approximately 1.61 km

^bBarra da Tijuca is a high-status neighborhood located classically in the close periphery of Rio de Janeiro, more specifically in the West coastal zone. Since the 1980s it has emerged as the new centrality of the metropolis

^cSanta Cruz and Campo Grande are neighborhoods of the close periphery located in the West Zone of Rio de Janeiro, but in its mainland—unlike Barra da Tijuca, situated by the sea. Due to the long length of these two, it is common to say that both have their own centers which concentrate trade and referral services to the population that resides there

^dIlha do Governador and Penha are neighborhoods of the close periphery located in the suburbs of the North Zone. Tom Jobim International Airport (Galeão) is located on Ilha do Governador

^eDeodoro is a neighborhood of the close periphery located in the West Zone, and also the terminal station of the railway line of *Central do Brasil*

^fRecreio dos Bandeirantes is a neighborhood of the coastal West Zone next to Barra da Tijuca

^gThe Avenida do Brasil is one of the main roads of the city of Rio de Janeiro. Inaugurated in 1940, it is about 94 miles long. It connects the West Zone to Downtown Rio de Janeiro

And if one takes an extended look beyond the city of Rio de Janeiro, it is possible to see that the structure of BRT corridors is a key part of a model that emerges as a strategy in metropolitan scale for the reorganization of public transport. In the main cities of the metropolitan area, different BRT corridors are being advertised as an alternative to public transport and response to urban mobility problems.

16.6 Final Considerations

The concrete unfolding of the proceedings seems to really show an overcoming of the sector crisis. After the implementation of electronic ticketing, the number of passengers stopped falling and recovery may be checked by inflexion on an upward curve since 2005. The trend increases from the concession in 2010, and 2012 numbers return to the early levels of the last decade (Chart 16.3). The main former external competitors, the vans, see their participation radically reduced in the metropolitan transport, and now are linked to the RioCard ticketing system.

With this victory outlined, the bus entrepreneurs realize the threat that emerges on the horizon and the need for modernization to maintain their position in urban coalitions that rearticulate themselves:

No one is closer to the government than the big construction companies. And today they are in all mass transport. They are our successors. We want to get there someday. We are kids compared to that group. (...) It's a new thing. They are very large groups, very well structured and professionalized. I think it's a model to be pursued. (...) We are trying not to be competitors, but partners, so that we can plan the system in a unique way. We are trying to get closer to them (Jacob Barata Filho, in an interview to *O Globo* newspaper of November 12, 2013).

Indeed, in recent years, there has been an entry of new groups into the private operation of public transport in the city. In 2009, the Metro was acquired by Invepar, the consortium formed by the OAS construction company, pension funds of Caixa Econômica Federal (FUNCEF) and Petrobras (Petros) and an investment fund of Banco do Brasil (BB). In 2011, the operation of the trains, by the company called *Supervia*, was acquired by the Odebrecht construction company as well as by foreign investment funds. In 2012, bus entrepreneurs, through Fetranspor, are associated with CCR (construction companies Andrade Gutierrez, Camargo Corrêa) for operation of the barges. In 2013, the consortium that will manage the VLT, a new modal that will do most of the transportation in the city center, was announced. The winning consortium is formed by Invepar, CCR, Odebrecht and RioPar Participações (holding company created by Fetranspor).

Therefore, we interpret the observed changes in the sector as necessary to support the modernization of bus companies, allowing the best spot in a renewed coalition of interests around the urban accumulation. But if one is to discuss about changes, it is believed that in general they are configured more as trends than breaks. The old coalitions do not fall apart, but reorganize themselves.

The concession of 2010 marks a moment of deepening the market-oriented regulation and operation of bus transport and all the activities that support its modernized operation. The business sector concentration and control go through groups that, by exerting increasing control of the flow of capital and information, tend to accumulate more power. The state seems to lose influence and capacity over the decisions. It emerges a form of regulation which gradually ceases to be based on

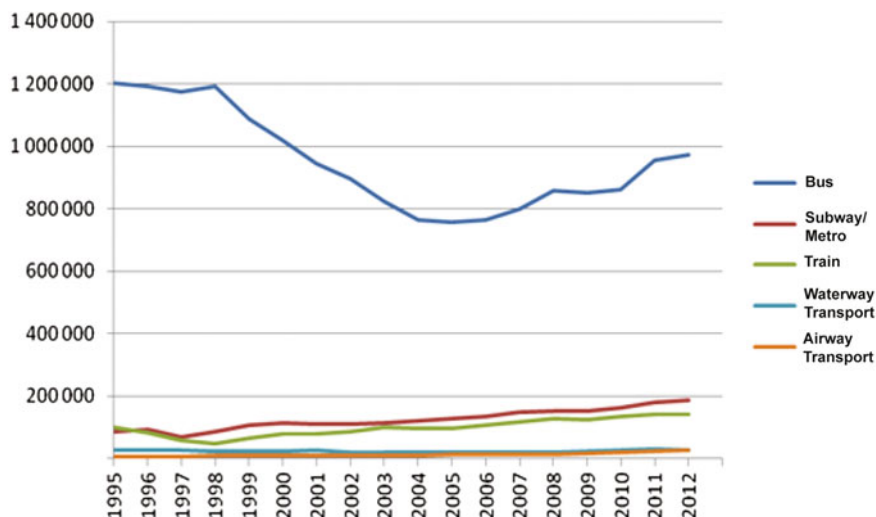


Chart 16.3 Paying passengers in public transport in the city of Rio de Janeiro. *Source* Armazém de Dados and Fetranspor (excluding the vans)

historically constituted “patrimonialism” to approach a more focused model on a market self-regulation. We argue that this process is inserted in the context of neoliberalization. On the other hand, without being a contradictory fact, the old practices of accumulation by dispossession, the privileges of a regulation based on “patrimonialism” do not disappear, but adapt.

References

- Abreu M (1987) A evolução urbana do Rio de Janeiro. IPLANRIO; Zahar, Rio de Janeiro
- Aragão J et al (2004) Sacudindo a poeira e construindo o novo ciclo de desenvolvimento do transporte público por ônibus. In: Santos E, Aragão J (eds) Transporte em tempos de reforma, Estudos sobre o transporte urbano, pp 23–47. 2 ed. EDUFRN—Editora Universitária da UFRN, Natal, RN
- Aragão J et al (2004) Transportes públicos metropolitanos no Brasil: uma pauta para sua reorganização. In: Santos E, Aragão J (eds) Transporte em tempos de reforma, Estudos sobre o transporte urbano, 2nd edn. EDUFRN—Editora Universitária da UFRN, Natal, RN, pp 157–191
- Aragão J, Santos EM (2004) Regulamentação, competição e financiamento em transportes urbanos: elementos para o debate. In: Santos E, Aragão J (eds) Transporte em tempos de reforma, Estudos sobre o transporte urbano, pp 13–22). 2 ed. EDUFRN—Editora Universitária da UFRN, Natal, RN
- Barat J (1975) Estrutura metropolitana e sistema de transportes: estudo do caso do Rio de Janeiro. Rio de Janeiro, Instituto de Planejamento Econômico e Social—IPEA/INPES
- Gomide A, Orrico Filho RD (2004) Concessões de serviços de ônibus urbanos: a necessária introdução da competitividade e o papel das licitações. In: Santos E, Aragão J (eds) Transporte

- em tempos de reforma, Estudos sobre o transporte urbano, 2nd edn. EDUFRRN - Editora Universitária da UFRN, Natal, RN, pp 127–156
- Matela IP (2015) Transição regulatória no transporte por ônibus na cidade do Rio de Janeiro. 1. ed. Letra Capital, Rio de Janeiro
- Kleiman M (2001) Rede viária e estruturação intra-urbana. A priorização dos investimentos em rede viária e seu papel na configuração das cidades: o Rio de Janeiro sobre rodas. In: IX Encontro nacional da ANPUR (2001) Rio de Janeiro. Anais do IX Encontro Nacional da ANPUR. ANPUR, RIO DE JANEIRO
- Orrico R, Santos E (1999) Hegemonia privada: da capital do bonde ao ônibus no Rio de Janeiro. In: Brasileiro A, Henry E (ed) Viação ilimitada: Ônibus das Cidades Brasileiras, pp 401–428. Cultura Ed. Associados, São Paulo
- Peck J, Theodore N, Brenner N (2012) Mal-estar no pós-neoliberalismo. Novos Estudos - CEBRAP, São Paulo 92:59–78
- Pereira V (1987) Avaliação da política de transportes públicos no Rio de Janeiro: causas e conseqüências do modelo privado no transporte por ônibus. EBTU, Brasília
- Rio de Janeiro (2010) Ato de justificação da outorga de concessão da prestação de serviço público de transporte coletivo de passageiros por ônibus. Diário Oficial do Município do Rio de Janeiro, ano XXIV, n 29, Rio de Janeiro, pp 62, 29, abril

Appendix 1

Rio de Janeiro: A Presentation of Its Spatial Divisions

Pedro Paulo Machado Bastos

This section aims to briefly present to the reader that is unfamiliar with the geography of Rio de Janeiro the main political-administrative divisions that permeate this city. In this sense, it is intended to contribute to a better understanding of the reading of the chapters of this book, trying to delineate the various reading scales of the territory. It will present three important scalar axes that concern the *Observatório das Metrópoles* approach to this work: State, Metropolitan Region, and the Capital. Afterward, it will point out some observations on the socio-spatial territories of the city of Rio de Janeiro, elucidating their zonings and symbolisms. Finally, based on what was shown, it outlines the morphology of the metropolitan territory from the core–periphery analytical model.

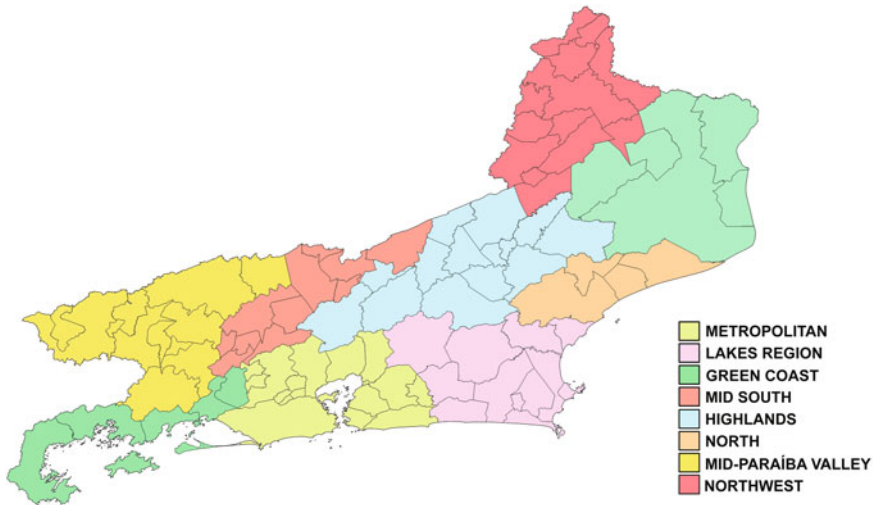
Rio de Janeiro

State and Metropolitan Region

Located in the Southeast Region of Brazil, the **State of Rio de Janeiro** is one of the 27 federative units of the country. It is composed of 92 municipalities disposed in approximately 43,700 km², which are regionalized in eight major areas: Northwest, North, Coastal Lowlands, Highlands Region, Mid-South, Mid-Paraíba Valley, Green Coast, and the Metropolitan Region¹ (Map 1).

The configuration of the current **Metropolitan Region of Rio de Janeiro** (*Região Metropolitana do Rio de Janeiro—RMRJ*) goes back to the year of 1974, when the fusion of the former states of Guanabara and Rio de Janeiro occurred.

¹In Chap. 2, “Production Transformations”, researcher Hipólita Siqueira elaborates a brief economic outlook that characterizes each of the mentioned regions.



Map 1 Rio de Janeiro state regionalization. Development: *Observatório das Metrópoles*

With it, the extinct city-state of Guanabara was transformed in the current city of Rio de Janeiro, the new capital of the homonym state; until then, the capital was the city of Niterói.² With the city of Rio de Janeiro as the new core municipality, the entire area adjacent to the new capital now comprised its metropolitan region, also called “Greater Rio.”

The metropolitan region of Rio de Janeiro was legally instituted by the *Lei Complementar no 20*, in July 1974, and was composed initially of 14 cities. However, in the last 40 years, its boundaries have suffered several alterations with the exclusion of a few municipalities and the inclusion of others in this group.

Today, the RMRJ is composed of 22 municipalities: Rio de Janeiro (core city), Belford Roxo, Duque de Caxias, Guapimirim, Itaboraí, Itaguaí, Japeri, Magé, Mangaratiba, Maricá, Mesquita, Nilópolis, Niterói, Nova Iguaçu, Paracambi, Queimados, São Gonçalo, São João de Meriti, Seropédica and Tanguá, as well as Cachoeiras de Macacu and Rio Bonito, included in 2014. Prominent among all these municipalities are Rio de Janeiro and Niterói, the two largest and most important ones in terms of strong institutional power and concentration, production, and distribution of goods and services (Map 2).

²For more detailed information on the institutional history of the City of Rio de Janeiro as the Federal District, then as a city-state, and today, as municipality, see Sergio de Azevedo and Yolanda Lobo (2015).



Map 2 Metropolitan region of Rio de Janeiro. Development: *Observatório das Metrópoles*

The City of Rio de Janeiro Zonings

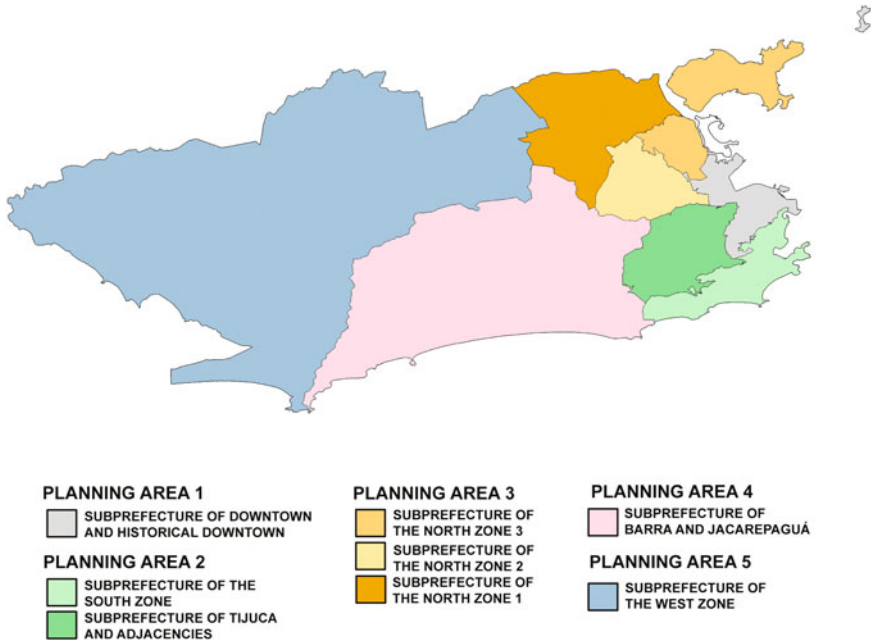
Circumscribed to a territorial area of approximately 1255 km²,³ the city of Rio de Janeiro possesses 159 neighborhoods disposed in 33 administrative regions (in this book, these areas are denominated *districts*); 8 (eight) subprefectures; 5 (five) planning areas; and 4 (four) zones—North, South, West, and Central.

The districts, the subprefectures, and the planning areas (APs—*Áreas de Planejamento*) are spatial divisions created by the City Hall of Rio de Janeiro with political-administrative objectives.

The districts were instituted in the 1960s and group together neighborhoods integrated by interdependence (especially in terms of services) and also by geographic proximity. They are responsible for the operation of small public organisms of regional interest, whose responsibility is the management of services such as neighborhoods health care facilities, military service offices, civil identification stations, working permit posts, unemployment insurance, etc. The subprefectures function as collocator bodies between neighborhoods and the City Hall (Prefecture), thus being different from districts for their function that is more political than administrative. The planning areas (APs) are macro-regions instituted at the moment of formulation of the first master plan of the city of Rio de Janeiro, in 1991. The APs cover districts with geographic and socioeconomic affinities, configuring a reading instrument that assists the city to intervene strategically in certain areas of the city according to the urban and social reality of each (Map 3).

Another important zoning attributed to the capital is designated by the cardinal points (North, South, West, and Center), and it is the most recurrent in the daily life of the population. The Central Zone corresponds to the historic center and its surroundings, including the Port Area; the South Zone concentrates the

³For comparative purposes, São Paulo has an estimated area of 1523 km², while Paris has 105.4 km² and New York, 789. The data are from Google Maps.



Map 3 City of Rio de Janeiro: planning areas and subprefectures. Development: *Observatório das Metrópoles*

neighborhoods bordering Guanabara Bay and the Atlantic Ocean; the North Zone, the neighborhoods located West and Northwest of the Central Zone; and finally, the West Zone, which brings together the most distant districts of the Central Zone, located beyond the North and South Zones (see Map 4).



Map 4 City of Rio de Janeiro: districts and official zoning. Development: *Observatório das Metrópoles*

In this context, it is worth mentioning a curiosity: Cardoso (2010, 2014) explains that this geographical division was not supported theoretically by the science of Urbanism at the time of its establishment; it is a zoning socially constructed during the first half of the twentieth century, when the pioneering vectors of urban expansion of the city of Rio de Janeiro were already in stage of further consolidation. It is essential to note, however, that the name of the cardinal points does not obey the geographical directions of the same space.

For example, it is seen that the Central Zone of Rio de Janeiro is positioned, from a geographical point of view, at the eastern end of the municipality, location in which Rios pioneer urbanization took place first, due to its seaside condition (Villaça 1998). Thus, what should be the “East Side” was deleted from the map to effectively accommodate the “Center.” According to Cardoso (op. Cit.), it is clear, thus, that the definition of North, South, West, and Central in Rio has suffered a great deal of influence by the way the city’s territory was occupied by social classes in the course of the first phase of the city’s urban expansion.

Symbolisms and Representations

Given what has been mentioned, it is clear that the reading of the zoning by cardinal points of Rio de Janeiro also offers the possibility to observe how the city can be represented from the symbolic point of view, that is, how each region is conceived by the hegemonic collective imaginary. The occupation of the classes in the territory engenders socio-spatial hierarchies which, in turn, claim toponyms to differentiate themselves from more marginalized areas or more privileged areas located within the same macro-region.

Thus, both for studies produced in the area of Applied Social Sciences⁴ and for the common sense, the South Zone and the North Zone, for instance, are treated as opposed socio-spatial categories, bestowing differentiated *status* to the individuals that reside in each of these places. In this bias, the “South Zone” expresses the place of the elites and touristic spots, neighborhoods that have the best urban services; thus, it expresses the place of natural beauty, beaches, and a cosmopolitan, sophisticated lifestyle (Cardoso 2009; O’Donnell 2013). On the other hand, the “North Zone” is represented symbolically as the place of the middle classes and the lower classes, far from the waterfront.

⁴This paper recommends the reading of “A Utopia Urbana”, by Gilberto Velho (1973), and “O raptó ideológico da categoria subúrbio: Rio de Janeiro 1858–1945,” by Nelson da Nobrega Fernandes (2011).



Map 5 City of Rio de Janeiro: symbolisms. Development: *Observatório das Metrópoles*

However, while the South Zone is more socially homogeneous, Rio's North Zone concentrates different social strata in its territory,⁵ as well as different occupation profiles and land use. For example, it is possible to mention a sub-region of the North Zone called “*subúrbio*” (suburbs). “Suburb” is considered a strip of land in the North Zone that is more distant from the Center area, crossed by railway roads and occupied mostly by the lowest socio-occupational profiles.⁶

For the geographer Fernandes (2011), the concept of “*subúrbio*” in Rio de Janeiro suffered an “ideological abduction”⁷ in the first half of the twentieth century when it started to designate those places for the popular classes, differing, therefore, from its original concept of “outskirts or fringe of the city” (Map 5).

In the population's daily life, it should be noted that currently “*subúrbio*” is a politically avoided term because it is charged with dyslogistic meanings referring to this space and its dwellers (or to those that belong there). On the other hand, in academic papers, “*subúrbio*” continues to be an important analytical category, since, considering the proper scales, it summarizes the position of the periphery.

The genesis of the ideological concept of “*subúrbio*” goes back to this stage of consolidation of pioneering vectors of the urban expansion of Rio, when living in the waterfront—by the Atlantic Ocean—became synonymous with social prestige.

⁵In Chap. 3 of this book, “Spatial Transformations”, authors Luiz Cesar de Queiroz Ribeiro and Marcelo Gomes Ribeiro analyze the diversification process and territorial polarization in the city of Rio, also addressing the question of the presence of favelas in different socio-spatial strata of the city.

⁶See Appendix 2 of this book on the Social-Occupational Categories of the Observatório das Metrópoles.

⁷As defined by Henri Lefebvre (quoted by Fernandes 2011), ideological abduction is the abrupt and sudden change process of the meaning of categories.

The South Zone emerged with the occupation of the seaside by the elites, and, since the 1970s, new elitized territories have been progressively incorporated to this axis.

The case that best illustrates this scenario is that of Barra da Tijuca. Since the abovementioned decade, Barra has been established as an important centrality of Rio de Janeiro, attracting all sorts of investments and services. Although officially located in the West Zone, it is common for this neighborhood and its surroundings to be referenced apart from that zone by its centrality profile and therefore higher hierarchical position in the intra-urban network.

Regarding the spatial divisions of the city of Niterói, it is possible to state that those are not so intricate as the ones in Rio de Janeiro, but yet are still praiseworthy of comments. The symbolism of “South Zone” of Rio as the *locus* of the beaches and the elites is so pronounced that, for that city, it can also generate a few associations in the geography of Niterói.

It is recurrent to denominate the prime area of Niterói (neighborhoods such as Icaraí, Ingá, São Francisco, Boa Viagem, Santa Rosa, and vicinities), bordered by Guanabara Bay, as “South Zone,” while the North Zone would comprise those areas inhabited by denizens with lower purchasing power. Still in Niterói, there is also the so-called Oceanic region (*Região Oceânica*), comprising peripheral neighborhoods with relative purchasing power.

The Metropolis of Rio de Janeiro Core–Periphery Model

The productions of the *Observatório das Metrôpoles* discuss the morphology of the metropolitan territory of Rio de Janeiro based on the analytical core–peripheries (close, intermediate, and farther) model. As shown by Luiz Cesar de Queiroz Ribeiro in the introduction of this book, the morphology considered in this production is thus described:

Core	Central commercial and financial area—old historical <i>core</i> —and its expansion toward the waterfront (the “South Zone”) and the interior of the city (districts of the “North Zone” such as Tijuca, Vila Isabel, and São Cristóvão), as well as Downtown and the “South Zone” of Niterói
Close periphery	The districts that compose the “suburbs” inside the city of Rio de Janeiro (Méier, Madureira, Irajá, Penha, etc.), the “North Zone” of Niterói, besides the district of Barra da Tijuca and adjacencies such as Jacarepaguá
Intermediate periphery	Lowlands (municipalities of the Greater Rio region such as Nova Iguaçu, Duque de Caxias, Nilópolis, São João de Meriti, Belford Roxo, etc.), as well as part of Magé and São Gonçalo
Farther periphery	All the remaining area of conurbation

References

- Azevedo S, Lobo Y (2015) O processo de fusão e o novo Estado do Rio de Janeiro: a questão institucional. In: Ribeiro LCQ (ed) Rio de Janeiro: transformações na ordem urbana, Letra Capital, Rio de Janeiro
- Cardoso ED (2009) A invenção da Zona Sul: Origens e difusão do topônimo Zona Sul na geografia carioca. *GEOgraphia*, 11(22)
- Cardoso ED (2010) Estrutura Urbana e Representações: A invenção da Zona Sul e a construção de um novo processo de segregação espacial no Rio de Janeiro nas primeiras décadas do século XX. *GeoTextos* 6(1)
- Cardoso ED (2014) Representações e identidade na cidade na primeira metade do século XX - os subúrbios cariocas. *Urbana*, vol 6, n 9, Dimensões Simbólicas das Intervenções Urbanas - CIEC/UNICAMP, Dossiê
- Fernandes NN (2011) O raptó ideológico da categoria subúrbio: Rio de Janeiro 1858–1945. Editora Apicuri, Rio de Janeiro
- O'Donnell J (2013) A invenção de Copacabana: Culturas urbanas e estilos de vida no Rio de Janeiro (1890–1940). Zahar, Rio de Janeiro
- Velho G (1973) A utopia urbana. 1st edn. Zahar, Rio de Janeiro
- Villaça F (1998) O espaço intra-urbano no Brasil. Studio Nobel, FAPESP, Lincoln Institute, São Paulo

Appendix 2

Social-Occupational Categories of Observatório das Metrôpoles

Marcelo Gomes Ribeiro
Michael Chetry

The proposal of this article is to present a summary of the Socio-Occupational Categories (*Categorias Sócio-Ocupacionais*—CATs) of the *Observatório das Metrôpoles*, which are commonly used to analyze the social structure of Brazilian metropolises and are also employed in the analysis of the social organization of the metropolitan territory. In order to provide an understanding of the issues that guided the formulation of the CATs, the study outlines the socioeconomic context in which they were conceived, besides presenting the theoretical framework underlying them. Based on the theoretical framework and the socioeconomic context, it then exposes the explanatory principles of each socio-occupational category. The following section explains how the CATs can be used to analyze the social organization of the metropolitan territory. Finally, in the final considerations, it raises a few questions on the current scope of the CATs.

Theoretical Framework

The Socio-Occupational Categories (CATs) of the *Observatório das Metrôpoles* correspond to a social stratification based on the occupation variable of the household surveys conducted by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*—IBGE)—arranged according to the Brazilian Classification of Occupations (*Classificação Brasileira de Ocupações*—CBO), which seek to represent the social structure of Brazilian metropolises. Representing social structure through a stratification based on the occupation variable is part of the tradition of sociological research, in its varied perspectives, which acknowledges the importance of this variable as a mechanism of social analysis. Traditionally, the most commonly used analyses in social sciences to

understand social structure are the Marxist and the Weberian, since their theoretical concepts on social class are more consistent, although it is a difficult concept to define (Crompton 1993). However, the theoretical framework underlying the CATs is based on Pierre Bourdieu's concept of social space, consistently introduced in his book *Distinction: Social Critique of Judgment of Taste* (Bourdieu 2008). The use of this concept of social space has the advantage of allowing the formulation of theoretical classes (or class fractions) which are closer to the real world (empirical), incorporating contributions from both Marxist theory and Weberian thought. This advantage stems from the author's concern to understand, through the social space, the social practices of the agents.

To represent the concept of social space, Bourdieu builds a three-dimensional space comprising the volume of capital, the structure of capital, and the paths followed over time. Social space is conceived through antagonistic positions related to the volume of capital on the one hand and the structure of capital on the other. Oppositions of class are identified based on the volume of capital, while oppositions of class fractions are identified based on the structure of capital.

It should be stressed that understanding the relationship between classes from this perspective has the advantage of considering not only the economic dimension in its definition, but also other kinds of capital, such as cultural or social. In this sense, it is possible to efficiently relate class (or class fraction) position with the practices of social actors, inasmuch as such practices stem from the "embodied form of class status and the conditions it imposes," viewed as the unifying and generating principle of practices, i.e., the *habitus*.

This common feature of constructed class explains the existence of common lifestyles within the class (or class fraction), which at the same time distinguish it from other classes, thus being *distinct* and *distinctive* lifestyles. This makes it possible to outline the structure of the symbolic space that refers to structured practices as a whole. These *distinct* and *distinctive* lifestyles are so because, at the same time, they are configured as having social status, due to the position they occupy in the social space (in both the hierarchy related to the volume of capital and the hierarchy arising from the structure of capital). The struggle to reproduce the current status (when it is privileged) or to achieve social advancement is no coincidence. And, in this struggle, emerge efforts to re-appreciate the position by guaranteeing its uniqueness and restricting access to it, resulting in the preservation of social status, when this process is successful, or a reduction in social status, when access is expanded to social agents from lower classes (or class fractions).

It is evident that the use of the concept of social space involves both the dimension of social structure considered by Marxist theory and the dimension of social structure viewed from the Weberian perspective, insofar as that all of them consider that this structure stems from social classes, incorporating production relations (Marxism) and, at the same time, social status (Weberian). In addition, the use of this understanding of social space enables the operationalization of the concept of class (and of class fraction) to perform empirical analyses, given that the objective class, as presented, is also a constructed or theoretical class.

Socioeconomic Background of the Development of the CATs

Initially, the Socio-Occupational Categories were developed as part of a CNRS/CNPq cooperation and scientific exchange program on “Economic and social restructuring of large metropolises: Paris-Rio de Janeiro comparative study,” and included the contribution of Edmond Preteceille, researcher at the *Centre Sociétés et Cultures Urbaines* (CSU), and of Luiz Cesar de Queiroz Ribeiro, from the Research and Urban and Regional Planning Institute (IPPUR) of the Federal University of Rio de Janeiro (UFRJ). That project aimed to analyze the impact of economic changes on the social and spatial structures of metropolises, at a time when the debate was dominated by the thesis of the “global city.” The proposal was to test its main hypothesis, which consisted of the tendency to dualization of the social and spatial structures of large cities under the effects of globalization.

The development of CATs was inserted in the French tradition started by Tabard and Chenu (1993) and Tabard (1993), and therefore it adopted as a point of reference the French system of classification of professions—the socio-professional categories (CSP). The CSPs, created in the early 50s by the *Institut National de la Statistique et des Etudes Economiques* (INSEE), express a position in the social structure of society resulting from the combination of several criteria, such as income, occupation, position in occupation, activity sector, level of education, etc. An additional resource was existing Brazilian studies which tried to develop classification systems based on occupational variables used by the IBGE (Jorge et al. 1985; Valle Silva 1973), in order to take into account the particularities of Brazilian society and its labor market. Indeed, if the relationship between the system of socio-professional categories and social hierarchy is strong in France due to the degree of regulation of the labor market, in Brazil, the low level of stability and institutionalization of a large number of registered occupations required adapting the French classification system in order to express Brazilian social hierarchy. In particular, that meant producing criteria with both statistical and social coherence regarding Brazilian society.

To express Brazilian social hierarchy, the classification system should also show evidence of social recognition. Indeed, as shown by Desrosières et al. (1983) and Desrosières and Thévenot (1988) regarding the CSP, developing occupational classification results from operations to represent the social world. They identified three distinct forms of representation: statistical, cognitive, and political. This means that it was necessary to produce and use classification criteria that were statistically coherent, complying with the technical constraints and legal practices established in the official statistical system; that the categories would place individuals in the occupational positions that form the current social division of labor in the urban/metropolitan Brazilian economy, and whose grouping represented social positions or classes of social positions with a certain level of social homogeneity; and, finally, that these social positions showed signs of resonance with the principles according to which Brazilian society recognizes the distinctions of social and political hierarchies and differences, giving “mandates” to certain groups or

“unrecognizing” the “right to mandates” of others. In addition, this development takes place in a situation of economic and social transition of Brazilian society.

Indeed, although countries with planned economies had already been integrated in the globalization process in the early 1990s, and undergone deep economic changes such as production restructuring processes, Brazil was at that time going through a period of economic transition, marked by the transition from an economy based on the import replacement process to a more liberalizing experience, that is, when its insertion in the global economy acquires a wider breadth due to the opening of trade and finances introduced at the beginning of the decade and the macroeconomic policies of fiscal and monetary adjustment aligned with the international economic dynamics. Consequences of Brazil’s insertion in globalization were felt in the production process, with production restructuring processes; in the labor market, with rising unemployment, underemployment, and precarious work relations; in the occupational structure, with the emergence of new occupations simultaneously with the disappearance of older ones. In short, the 1990s were marked by significant changes in Brazilian society, both economic and social.

Although the CATs were developed in this context of economic and social change in Brazil, the classification process was still strongly marked by the previous economic structure and labor market. This happened because the processes of economic restructuring and social change do not occur immediately, and when they do occur, they still bear part of the structure or experiences that culminated in those processes of change. For this reason, the occupations’ classification system culminating in the CATs carried that past experience, manifested in intense social mobility due to the spatial mobility of migration processes; the establishment of a middle class, linked both to state bureaucracy and the private sector of the economy; the emergence of an industrial working class linked to traditional industries and also modern industries in major urban centers; and the large number of people entering the labor market in precarious conditions, with no guarantee of social security. These marks of the Brazilian industrialization period are already present in the first occupations’ classification system culminating in the CATs, although major changes had already arisen at the time of its development.

The first study carried out in Brazil with the use of CATs is by Ribeiro and Lago (2000), in which the authors aim to analyze the social space of large Brazilian metropolises (São Paulo, Rio de Janeiro, and Belo Horizonte). At the time, the analysis used data from the 1991 Brazilian census, which made it possible to observe to what extent the social structure in those metropolises is marked by the opposition between the socio-occupational categories in terms of a combination of economic capital and educational capital, that is, the main criterion of social differentiation results from the ownership of economic capital and educational capital by certain social groups at the expense of the absence of such capital in other groups. Furthermore, it was realized that there is also a significant association between the social position represented by the CATs and the socio-demographic attributes of race/ethnicity, gender, and type of family. These findings were key to formulating a research agenda capable of deepening the analysis of social structure for Brazilian metropolises, including its expansion to other metropolitan areas in the

country, and to understanding the structure of urban metropolitan space according to those socio-occupational categories.

CATs Explanatory Principles

According to the guiding theoretical principles and in view of the social formation of Brazilian society, especially of its metropolitan areas (Ribeiro and Ribeiro 2013), a social stratification was developed considering the following criteria:

1. *Capital X Work*: owning or not the economic activity is the main characteristic that defines the position of individuals in the production process. In this case, the division is between individuals who are employers or self-employed, and individuals who are employed. However, regarding the former group, three distinctions must be made, which will also imply the development of social stratification. First, among owners of economic activities there are those who are employers, who have employees, and there are those who work on their own, the so-called self-employed, which are important differences to understand the position of individuals in the social structure. Second, among employers there are large employers and small employers. This differentiation is more difficult because there is no agreed criterion, or one based on a theoretical approach. The distinction made, which is nevertheless arbitrary, will be according to the number of employees. Third, among the so-called self-employed, there are differences in professionalization. Those engaged in an occupation resulting from their actual profession have a social status different from those engaged in an activity that is regarded more as a survival strategy due to the lack of formal employment; therefore, this is an additional criterion used to differentiate groups or social classes.
2. *Manual work X non-manual work*: engaging in a manual occupation differs socially from engaging in a non-manual occupation, which normally requires some level of education, whether secondary or higher. Certain non-manual occupations require a higher level of education; usually these occupations fall within the concept of profession, since they are occupations in which occupants enjoy a certain degree of autonomy in the performance of tasks, due to the need of mastering prior knowledge, as well as barriers to entry, characterized by the actual level of education. But there are also non-manual occupations which require only a secondary level of education; such occupations are usually related to performing technical activities. In this case, there are differences in relation to non-manual occupations that do not have such requirements.

There are also important differences regarding manual work. Although they derive much more from economic sectors than from actual educational requirements, some occupations demand a certain level of skills (which is not the same as education). In this case, there are manual workers of production activities, who must be separated into agricultural workers and industrial workers. Industrial workers, in turn, can be separated into those engaged in

traditional industries and those occupied in modern industries, where there is a higher demand for skills. For manual workers in the services sector, one must separate those occupations that require some level of skills from those whose exercise does not depend on prior training.

3. *Control work X subordinate work*: there are also important differences between occupations that exercise activities of control, whether in administration, management and supervision, and subordinate occupations, which are controlled by others. Even among control occupations, there are differences depending on whether the activity is carried out in large or small enterprises. As such, a distinction cannot be made; income is used as a proxy for position of control.
4. *Public work X private work*: another criterion used to differentiate occupations is between those occupations that take place in the public sector and those that take place in the private sector, given that this criterion is an indicator of distinct social positions in Brazilian society.

Socio-occupational categories of Observat6rio das Metr6poles

Aggregate	Socio-occupational categories
Executives	Major employers
	Public sector managers
	Private sector managers
High-level professionals	Self-employed high-level professionals
	Employed high-level professionals
	Statutory high-level professionals
	High-level professors
Small employers	Small employers
Middle-level occupations	Occupations in arts and similar activities
	Office occupations
	Supervision occupations
	Technical occupations
	Middle-level occupations in health and education
	Occupations in public security, justice, and mail services
Specialized tertiary sector workers	Tradesmen
	Specialized service providers
Workers in the secondary sector	Modern industry workers
	Traditional industry workers
	Auxiliary services workers
	Construction workers
Workers in the non-specialized tertiary sector	Providers of non-specialized services
	Domestic workers
	Street vendors and odd-jobbers
Agricultural workers	Agricultural workers

Based on these criteria, we use the occupation category—main occupation of the individual—cross-checking it with other variables (income, education, status in employment, economic sector, and institutional sector) to define the social stratification resulting in 24 (twenty-four) socio-occupational categories which can be grouped—for purposes of analysis—into eight (8) major socio-occupational aggregates, as can be seen in the table above. The intention is to use the databases derived from the IBGE household surveys which collect information related to labor and income, such as the census and PNAD (National Household Sampling Survey). However, for analysis at the intra-metropolitan level, only the census has representative data.

Use of CATs in Analyzing the Social Organization of the Metropolitan Territory

As the Socio-Occupational Categories of *Observatório das Metrópoles* seek to represent the social structure of Brazilian metropolises, the analysis of the social organization of the metropolitan territory that uses this social structure regards it as inscribed in the physical space (territory) of the metropolis. That is, the social organization of the metropolitan territory stems from the inscription of the social structure in the physical space.

In analyzing the social organization of the metropolitan territory with the use of CATs, a socio-spatial typology is developed based on two procedures: correspondence analysis and cluster analysis, which are techniques corresponding to multivariate analysis. This socio-spatial typology is formed by groups of intra-metropolitan territorial cross sections (weighting areas), where each one of these groups seeks to present internal homogeneity and heterogeneity in relation to the others, in order to obtain a set of area groupings corresponding to a socio-spatial hierarchy. It is this socio-spatial hierarchy (socio-spatial typology) that makes it possible to analyze the metropolitan areas where more social groups occupying higher positions of the social structure are concentrated, or where social groups occupying lower positions of the social structure are concentrated, or where social groups occupying intermediate positions of the social structure are concentrated.

Once the socio-spatial typology has been developed, it is important to analyze its social organization structure, the evolution of this structure of socio-spatial organization, the relationship with other social dimensions, and interpret the mechanisms that underlie the social organization of the metropolitan territory. To this end, it is necessary to analyze the internal composition of each one of the socio-spatial types, observing the categories that stand out in each one of them compared to the other types; compare the composition of these socio-spatial types between different periods of time in order to analyze the changes that may have occurred; check for correspondence between the characteristics of the socio-spatial type and variables such as sex, skin color or race, income level, education level, housing conditions,

public services conditions (water, sewage, garbage collection, etc.) to see whether there is any relationship between social inequalities and territorial inequalities; and, finally, seek to understand the mechanisms that explain the social organization of the metropolitan territory, which can be interpreted based on the actual procedures to develop the socio-spatial typology, but can also be sought elsewhere, as in housing policies, or government action in a broader sense, or even in market mechanisms, etc. All of this, however, can be done in a comparative way between different metropolises, made possible by the use of a common analysis methodology, despite dealing with different contexts.

Final Considerations

This study aimed to present, albeit in a summarized form, the Socio-Occupational Categories of *Observatório das Metrópoles*, highlighting the theory underlying them, the socioeconomic context in which they were developed, their main explanatory principles, and how they can be used to analyze the social organization of the metropolitan territory. Many analyses have been carried out by the Brazilian academy with the use of CATs. Those analyses, in general, seek to highlight either the social structure or the social organization of the metropolitan territory, stressing social processes that manifest themselves territorially in the country's metropolises. Therefore, it is believed that the development of this social stratification system, which can be representative of social structure, is a breakthrough in the study of inequalities and in urban studies.

Nevertheless, this article ends by proposing some questions that can contribute to advancing and hopefully upgrading the CATs system, allowing it to always be, in the most effective way possible, the representation of the social structure of Brazilian metropolises, although social structure is not limited to social stratification. These questions arise from the observation of some processes of changes in Brazilian society that may impact the development of CATs and, therefore, their representation:

- i. From the moment the country was inserted in the globalization process and underwent the process of economic restructuring, the world of labor was heavily influenced: the service sector now has a greater weight in the economy and in the labor market; hiring arrangements and labor relations have changed; in general, the population has become more educated, which has reduced the *value* of education in the labor market. How do these processes impact CATs?
- ii. In the last 20 years, despite the economic structure, the country has experienced different social and economic situations. In the late 1990s, unemployment was the major social issue, which changed in the following decade when the country experienced full employment. Over the last decade there was also a reduction in income inequalities, a real increase of the minimum wage and greater labor regulation, changing the living conditions of the population. How

does this feeling of better living conditions affect the CATs and what they represent?

- iii. The changes in the world of work and in the economic context also influence the occupations classification system. Certain occupations can become more appreciated; others may lose social prestige. Some occupations have emerged in recent years; others have disappeared. How might these changes in the position of occupations in the social system affect the way CATs are classified?

References

- Bourdieu P (2008) *A Distinção: Crítica social do julgamento*. Edusp, São Paulo, Zouk, Porto Alegre, RS
- Crompton R (1993) *Class and stratification*. Polity Press, Cambridge, UK, 231 p
- Desrosières A, Thévenot L (1988) *Les catégories socioprofessionnelles*. Editions La Découverte, Paris
- Desrosières A, Goy A, Thévenot L (1983) *L'identité sociale dans le travail statistique. La nouvelle nomenclature des professions et catégories socioprofessionnelles*. Economie et Statistique, INSEE
- Jorge AF et al (1985) *Categorias sócio-ocupacionais: Uma perspectiva para análise da força de trabalho e da distribuição de rendimentos no Brasil*. Departamento de Estudos e Indicadores Sociais (Deiso), mimeo
- Preteceille E, Ribeiro LCQ (1999) *Tendências da segregação social em metrôpoles globais e desiguais: Paris e Rio de Janeiro nos anos 80*. Revista EURE XXV (76):79–102, Santiago do Chile, dez
- Ribeiro LCQ, Lago LC (2000) *O espaço social das grandes metrôpoles brasileiras: Rio de Janeiro, São Paulo e Belo Horizonte*. Revista Brasileira de Estudos Urbanos e Regionais 3:111–129
- Ribeiro LCQ, Ribeiro MG (2013) *Análise social do território: fundamentos teóricos e metodológicos*. 1st edn. Letra Capital, Rio de Janeiro
- Tabard N (1993) *Des quartiers pauvres aux quartiers aisés: une représentation sociale du territoire*. Economie et Statistique (270):5–22
- Tabard N, Chenu A (1993) *Les transformations socioprofessionnelles du territoire français, 1982–1990*. Population 6:1735–70
- Valle Silva N (1973) *Posição social das ocupações*. Centro de Informática/IBGE, mimeo