

# A NEW CONCEPT FOR URBAN PARK IN BRAZIL ON THE 21<sup>ST</sup> CENTURY

## UM NOVO CONCEITO PARA PARQUE URBANO NO BRASIL DO SÉCULO XXI

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### ABSTRACT

This article has the objective to show that urban parks established between 2000 and 2017 in Brazilian cities are different from the parks of the twentieth century and have created new design and management challenges. The great parks of the twentieth century were intended for the leisure of the urban masses and were made in central or housing areas of higher income segments. The new parks, largely, were made with less emphasis on leisure provision but, above all, on environmental conservation and are located in less-central neighborhoods or lower-income camps. The article develops from the work of Sakata (2018) that identified the existing parks in 14 cities and highlighted those established between 2000-2017. The parks were allocated on income distribution maps and data were collected on the latest parks on city hall websites, GoogleEarth images, newspaper articles, the reports of the workshops conducted by the Quapá-SEL research group and other surveys. Although the large traditional parks are the reference for the designers and the population, most of the new parks, established mainly from demands for environmental preservation, are inserted in contexts that are very different from those of the traditional parks and, therefore, they present other demands of uses. It is appropriate to review and extend the concept of urban park to cover these new figures, but mainly, it is necessary to re-evaluate the design criteria for the new parks and to increase the management of old and new ones.

Keywords: Urban park. Public Park. Landscaping. Environmental Preservation.

### RESUMO

Este artigo visa mostrar que os parques urbanos implantados entre 2000 e 2017 em grandes cidades brasileiras são diferentes dos implantados no século XX, e criaram novos desafios de desenho e de gestão. Os grandes parques do século XX se destinavam ao lazer das massas urbanas e eram feitos em áreas centrais ou de moradia de camadas de rendas mais altas. Os novos parques, em boa parte, foram feitos com menos ênfase na provisão de lazer, mas, sobretudo, pensando na conservação ambiental, e estão localados em bairros menos centrais ou de camadas de rendas mais baixas. O artigo se desenvolve a partir do trabalho de Sakata, que identificou os parques existentes em 14 cidades, destacando aqueles criados entre 2000 e 2017. Os parques foram alocados em mapas de distribuição de renda, e dados sobre os mais recentes foram coletados em sites das prefeituras, em imagens do Google Earth, em artigos de jornais, nos relatórios das oficinas realizadas pelo grupo de pesquisa Quadro do Paisagismo no Brasil – Sistemas de Espaços Livres (Quapá-SEL) e em outros trabalhos. Conclui-se que, ainda que os grandes parques tradicionais sejam a referência para os projetistas e a população, a maioria dos novos parques, criados principalmente a partir de demandas pela preservação ambiental, está inserida em contextos muito diferentes daqueles dos parques tradicionais e, por isso, apresenta outras demandas de uso. É conveniente, assim, rever e ampliar o conceito de parque urbano para abarcar essas novas figuras, mas é preciso, principalmente, reavaliar os critérios de desenho para os novos parques e incrementar a gestão de todo o conjunto.

Palavras-chave: Parque Urbano. Parque Público. Paisagismo. Preservação Ambiental.

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## 1. INTRODUCTION

Between 2000 and 2017, the number of Brazilian urban parks doubled if we consider a set of 14 capitals, listed in Table 1 (SAKATA, 2018). These capitals were selected because they were previously investigated by the research network Brazilian Landscape Design – Open Spaces Systems (Portuguese acronym: Quapá-SEL), which sought to characterize urban morphology and open spaces systems in cities through workshops with the joint participation of researchers from the Faculty of Architecture and Urbanism of the University of São Paulo (Portuguese acronym: FAUUSP) and local universities. In these important Brazilian cities, 205 parks were counted until the year 2000. From 2000 to 2017, 240 new parks emerged - public areas named and, albeit minimally, shaped as such. This process was not significant, in numerical terms, in some big coastal cities – such as Rio de Janeiro, Maceió, Santos, Fortaleza and Florianópolis –, because the beach edge is still the large urban park, welcoming a great diversity of social uses, both in the sand as on the boardwalk. But during this period, works were made to expand and requalify the leisure spaces on the edges of these cities. Vitória and Recife are exceptions, with the establishment of new parks. In the interior capitals – such as São Paulo, Belo Horizonte, Brasília, Campo Grande, Curitiba and Rio Branco, and in big cities like Guarulhos, Sorocaba and São José dos Campos, the phenomenon of the establishment of new parks was evident. In Goiânia, one of the exponents of this process, until 1996 there were three parks implemented and, in 2016, there are 39 parks and woods equipped that can be used by the population, of a total of 190 areas reserved for this purpose, but which by 2018 had not been structured as public parks.

To study this process, the Quapá-SEL research group collected available data on city parks from city hall and other organization websites, newspaper articles, and workshop reports. City halls and state governments do not always communicate their actions directly. Six parks opened in Curitiba in the previous

administrative management, for example, were not on the city hall website in 2018.

The parks were searched on Google Earth and Street View, also to see if they could be recognized as public parks, and were located on urban morphology maps and income distribution maps produced by Quapá-SEL on ArcGIS. The issue of rent was important to us because the first parks were made in the neighborhoods of the elites with the function of leisure and beautification, but mainly to value the surrounding properties. We thought this would be a constant, but we note that in the recent wave of park establishment, the main driver in park allocation was not real estate appreciation, but the opportunity for the public administration to take advantage of areas for environmental preservation and urban leisure.

Conservation parks surrounded by the urban area and open to enjoyment were often included in the list, except for cases such as Rio de Janeiro and Porto Alegre city halls, where the classification is clearer and distinguishes natural parks from urban parks. But in practice, they do not distinguish between urban and conservation parks in urban areas: both are urban parks. Parks without public access were disregarded, whenever identified. Nor were the beach boardwalks added, even though they function as urban parks.

The park area in Table 1 does not represent the sum of protected areas, but the park areas in the municipality with public access. The sum of the total areas of parks for public use is not very important information because this number does not tell us whether the population has easy access to these areas, or whether they have indeed quality for leisure. For public enjoyment, well-maintained small parks can be very useful and large parks may be unknown. Thus, the data that we highlight is the number of new parks opened.

To understand the reasons that led to the establishment of the new parks, the ways in which the public administration announced them and the presence of environmental discourse were analyzed. It was observed that environmental

discourse was used in all park presentations, even of the most constructed ones and with a small-vegetated area. Only one park, the Parque dos Esportes Radicais (Extreme Sports Park) in Sao Paulo, was presented solely as equipment for sports and recreational activities. All the others were, at least in speech, launched as environmental actions. It was then made the relationship of the establishment of parks with the evolution of legislation and environmental protection institutions in the period. This evolution did not happen similarly in all states and cities, but contributed to consolidate the result.

## 2. LOCATIONS

Parks established between 2000 and 2017 are preferably not located in the high-income strata and their distribution throughout the urban fabric is dispersed. They were located in both higher-income and lower-income neighborhoods, unrelated to population density. This could be observed in the cities surveyed, as shown in the maps of Belo Horizonte and Campo Grande (Figures 1 and 2).

The parks with the highest quality equipment, the best maintenance and the influx of audiences of various income strata continue to be those installed in the higher income neighborhoods. But it was found that the new parks were open indistinctly by the urban fabric, usually where there were natural resources to preserve and where there was a set of opportunities that enabled the establishment in that location.

In São Paulo, the Programa Cem Parques (One Hundred Parks Program) conducted by the city between 2008 and 2012 – sought to expand the number of parks in the city and did so mainly in places where opportunities converged: land that was already owned by the public administration, usually with woods or springs to be preserved, and designed and implemented as resources of commitment terms for environmental compensation of other enterprises around the city flow (Figure 3).

### 2.1. URBAN LOCATIONS AND TRANSFORMATIONS

Great changes took place in the country at the beginning of the 21<sup>st</sup> century. The medium and large Brazilian cities were more built since the number of households grew even more than the population. In the metropolitan region of Rio de Janeiro, for example, the growth in the number of households between 2000 and 2010 was 20.1%; that of the population, 9%. That meant one fifth of the increased houses or apartments in the city. This increase in the number of households is mainly due to the new family composition, which is smaller. For a decade, it is a significant growth.

The Quapá-SEL survey from the FAUUSP Landscape Laboratory investigated the transformations in Brazilian cities in the early 21<sup>st</sup> century (PEGORARO, 2017; RIBEIRO, 2018), differentiating three processes: (1) transformations by replacement, when the built volume was changed: expanded, exchanged for another or demolished; (2) transformation by consolidation, when empty areas were built within the urban fabric; and (3) transformation by addition, when non-urban areas were incorporated into the urban area.

Transformations by replacement are characteristic of expanded centers and consolidated areas. There is a tendency for horizontal buildings to be replaced by vertical buildings, but replacement may be by another type of building, not necessarily vertical ones. According to the Quapá-SEL surveys, these transformations occurred in a smaller amount in the analyzed period, when compared to the others, usually within the range of 5% to 15% of the total transformed. Consolidation was the most observed phenomenon and was characterized in the cities analyzed, mainly by the construction of small buildings and buildings in empty lots, deepening pre-existing neighborhoods (RIBEIRO, 2018).

Through the studies of Quapá-SEL research, it was noted that the transformations by addition are common in the edges of urban areas, where many of the new parks of the period were

TABLE 1 – NUMBER OF EXISTING PARKS UP TO 2000 AND ESTABLISHED BETWEEN THE YEARS OF 2000-2017..

CITY	Population (2000 Census)	Parks until 2000	Parks' area (m <sup>2</sup> ) until 2000	Estimated population in 2017	Added parks' area (m <sup>2</sup> ) (2000-2017)	Added Parks (2000-2017)	Total parks' area (m <sup>2</sup> ) in 2017	Percentage increase in area	Total parks in 2017
SÃO PAULO	10.434.252	40	26.112.671	12.106.920	8.893.204	76	35.005.821	34%	116
BELO HORIZONTE	2.238.526	29	4.842.266	2.523.794	2.893.647	33	7.735.913	60%	62
GOIÂNIA	1.093.007	3	301.130	1.466.105	5.188.953	39	5.490.083	1.723%	42
DISTRITO FEDERAL	2.051.146	21	32.159.489	3.039.444	86.544.338	12	118.703.827	269%	33
VITÓRIA	292.304	8	2.579.129	363.140	469.259	5	3.048.388	18%	13
CURITIBA	1.587.315	30	18.045.935	1.908.359	10.069.685	22	28.115.620	56%	52
CAMPO GRANDE	663.621	4	1.744.261	874.210	5.654.832	13	7.399.093	324%	17
MANAUS	1.405.835	1	420.500	2.130.264	855.220	13	1.275.720	203%	14
RECIFE	1.422.905	9	618.138	1.633.697	3.380.766	5	3.998.904	547%	14
RIO DE JANEIRO	5.857.904	30	59.308.996	6.520.266	47.817.660	12	107.126.656	81%	42
SALVADOR	2.443.107	9	6.320.000	2.953.986	920.000	3	7.240.000	15%	12
FORTALEZA	2.141.402	6	139.217	2.627.482	11.570.000	2	11.709.217	8.311%	8
BELÉM	1.280.614	4	14.137.000	1.452.275	86.000	2	14.223.000	0,6%	6
PORTO ALEGRE	1.360.590	11	2.727.600	1.484.941	370.600	3	3.098.200	14%	14
TOTAL	34.272.528	205	169.456.332	38.561.089	190.114.164	240	360.170.442	112%	445

Source: Produced by Francine Sakata and Caroline Ribeiro in 2018, based on IBGE (Brazilian Institute of Geography and Statistics) data (for population) and city data, Google Earth survey and other sources (for parks).



# BELO HORIZONTE Parks and Income

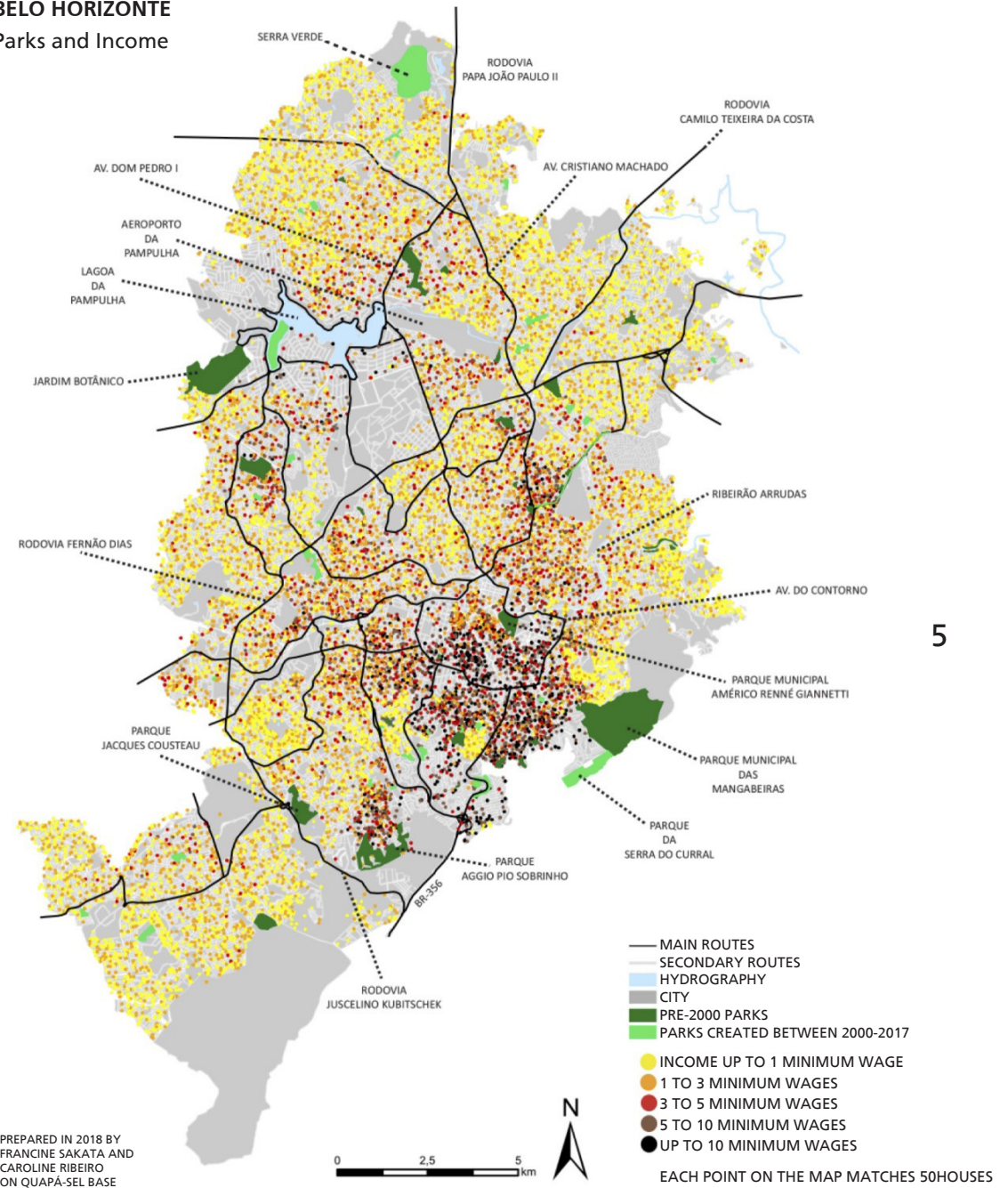


Figure 1 – Location map of the new parks in Belo Horizonte.  
Source: Sakata (2018).

# CAMPO GRANDE Parks and Income

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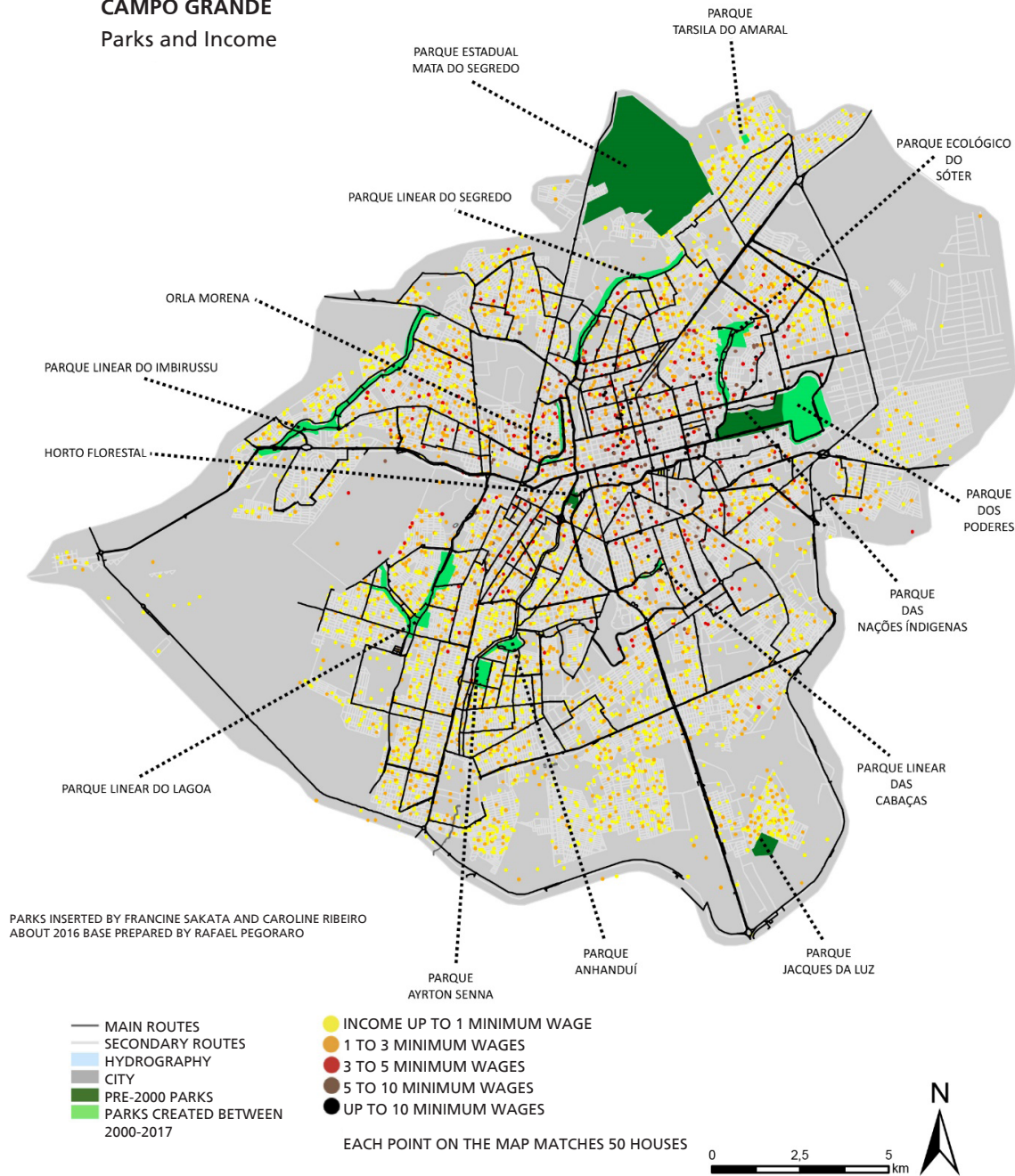
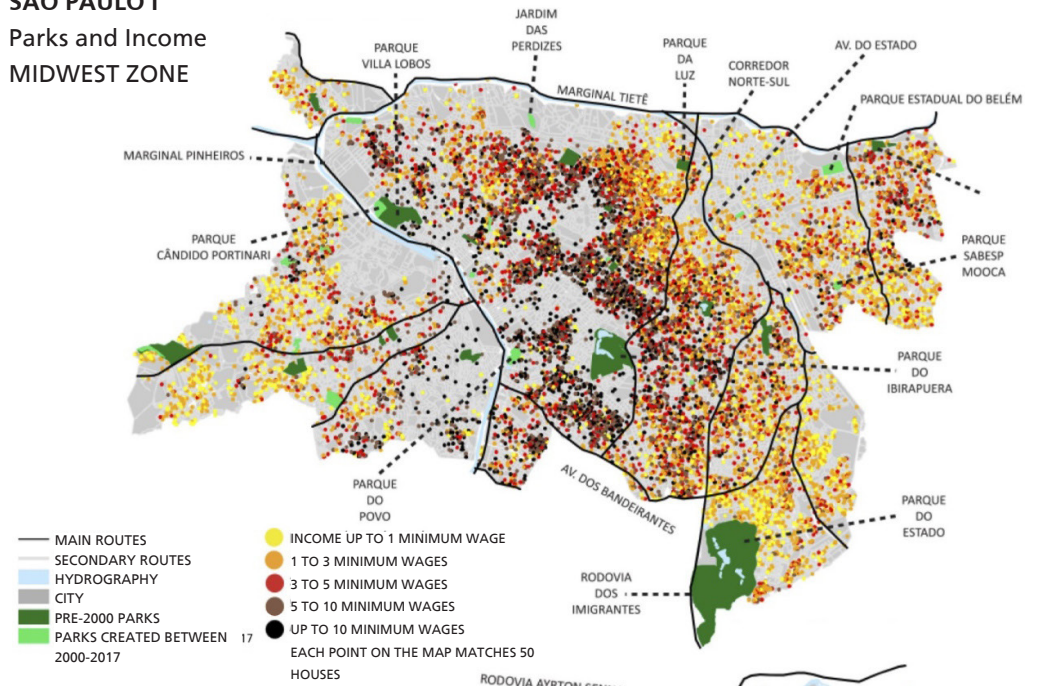


Figure 2 – Location map of the new parks in Campo Grande.  
Source: Sakata (2018).



**SÃO PAULO I**  
Parks and Income  
MIDWEST ZONE



**EAST ZONE**

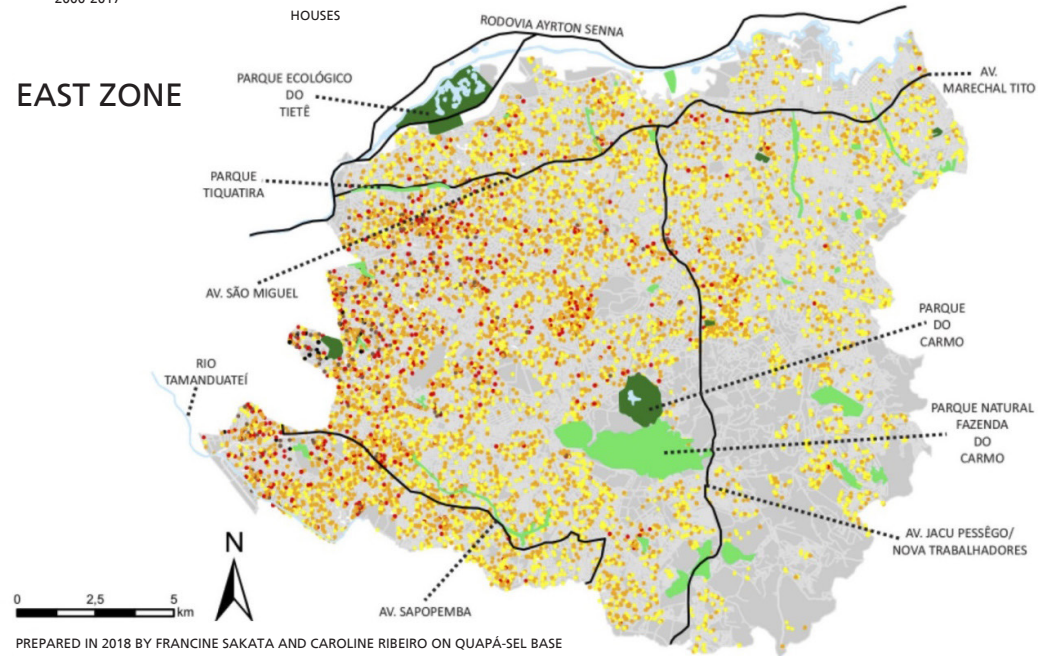


Figure 3 – Location maps of the new parks in in the Midwest and East Zones of São Paulo.  
Source: Sakata (2018).

implanted. In metropolitan regions, they exceed the boundaries of host municipalities, extending to neighboring municipalities. The most prominent fact in the peripheries was the extensive construction of low-income housing developments associated with the Minha Casa Minha Vida Program (“My Home, My Life”) (MCMV), which sought to address the repressed housing deficit and permanently marked many of the Brazilian urban landscapes. Significant areas were also identified in the metropolitan areas occupied by closed condominiums of high and middle-income, with large houses and swimming pools, which appear near the highways. They are large walled plots that generate discontinuities in the urban fabric – that is, it is not possible to cross them.

Irregular occupations, characterized by constructive precariousness and lack of basic infrastructure, remained present, but with less occurrence. Many illegal occupations began to be planned, considering urban parameters, aiming at possible future regularization.

When the park establishment maps were superimposed on the transformation maps in the cities of Goiânia (Figure 4), Brasília (Figure 5) and Curitiba (Figure 6) we observed that parks were established in various locations, regardless of the urban transformations these areas go through.

At the edges of cities, in the context of this fragmented expansion, between urban fabric of housing complexes, enclosed lots and invasions, open spaces are also fragmented and often disqualified. In these territories, there was also the establishment of parks, especially as environmental reserves. This action sought to safeguard environmentally valuable portions of the landscapes, now incorporated into urban areas. The social uses of these parks, generally, yet to be better defined and structured.

### 3. ROLE OF ENVIRONMENTAL LEGISLATION

The expansion of the park network from 2000 to 2017 was driven by the evolution of environmental legislation. We can point out

three effects of environmental protection laws in this regard: (1) the support that the national protected area system has given to the establishment of state and municipal protected areas; (2) the implementation of permanent preservation areas (PPAs) that decreed the margins of rivers and lakes as such, regardless of whether they are rural or urban areas; (3) the implementation of tools for raising environmental compensation to create or requalify parks.

Systematic public interventions for environmental conservation in Brazil had been gaining momentum since the 1980s, with the first national environmental provisions. Over time, consensus on the resources that should be preserved and how this could be done has broadened. As the technicians’ understanding progressed, state and municipal administrations equipped themselves with environmental secretariats and colleges. Laws to support preservation have evolved. This legal evolution was not the same in all states and municipalities, but in general, national guidelines were followed.

#### 3.1. PROTECTED AREAS

In 2000, the National System of Protected Area (Portuguese acronym: Snuc) established 12 categories of protected areas that differ in their form of protection and permitted uses. The law departed from existing legal figures such as National Forest, National Park, Ecological Station and Environmental Protection Area (EPA), and unified the nomenclature for the entire country. There are state and municipal variations due to previously established and categorized protected areas.

In the city of São Paulo, for example, state parks had been established with the primary function of protecting springs or remnants of vegetation, such as the Cantareira, Capivari-Monos, Fontes do Ipiranga and Serra do Mar parks. Anhanguera Park, municipal, was established from large preserved areas (Bartalini, 1999). The 2002 Master Plan of the city of São Paulo established new figures in its Green Areas System, in addition to the tradi-

**GOIÂNIA**  
Parks and urban transformations

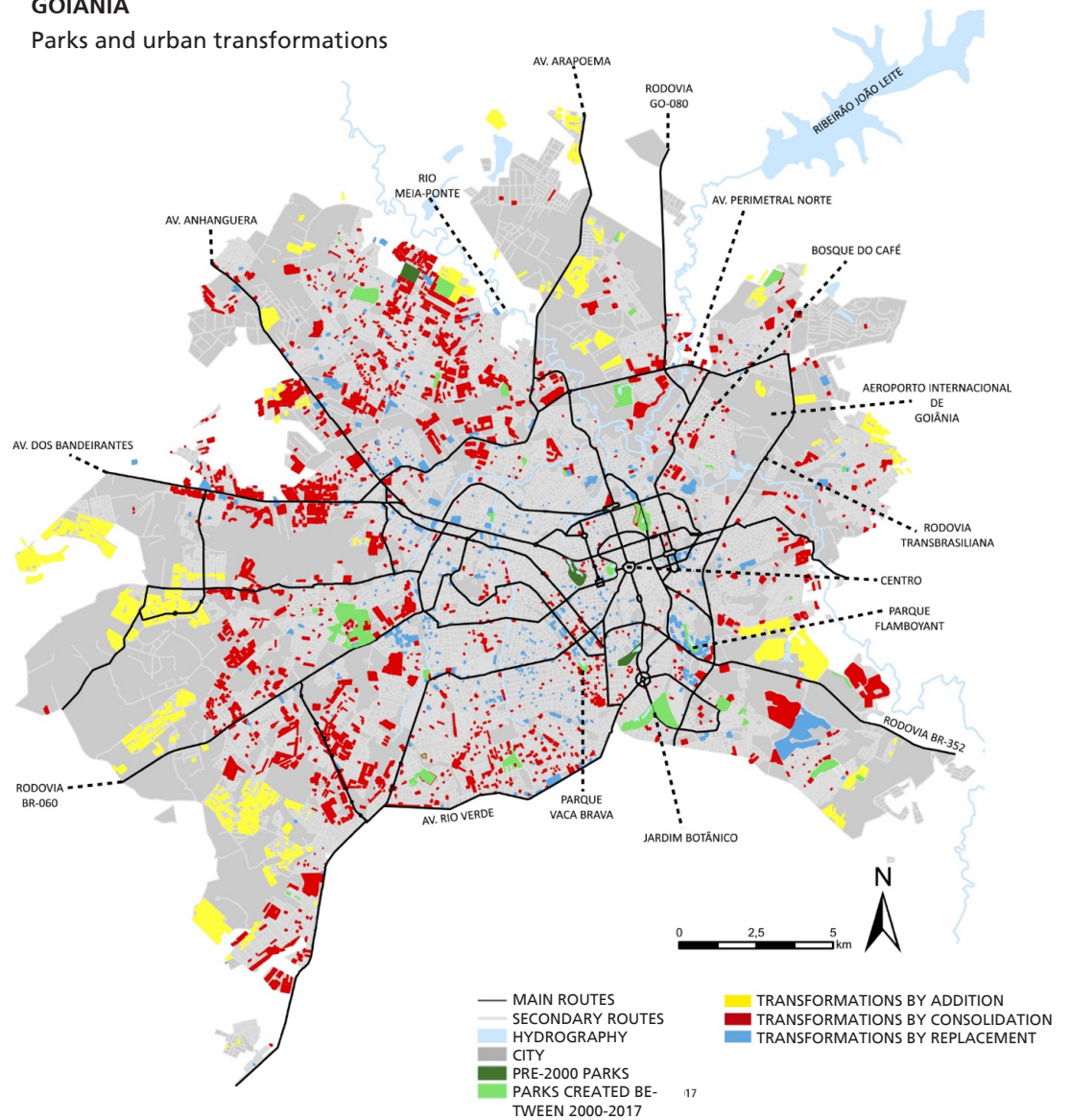


Figure 4 – Map of parks and urban transformations for Goiânia.  
Source: Sakata (2018) with Ribeiro bases (2018).

PARKS INSERTED BY FRANCINE SAKATA AND CAROLINE RIBEIRO  
ABOUT 2018 BASE PREPARED BY VICTÓRIA MENDES RIBEIRO



**DISTRITO FEDERAL**  
Parks and urban transformations

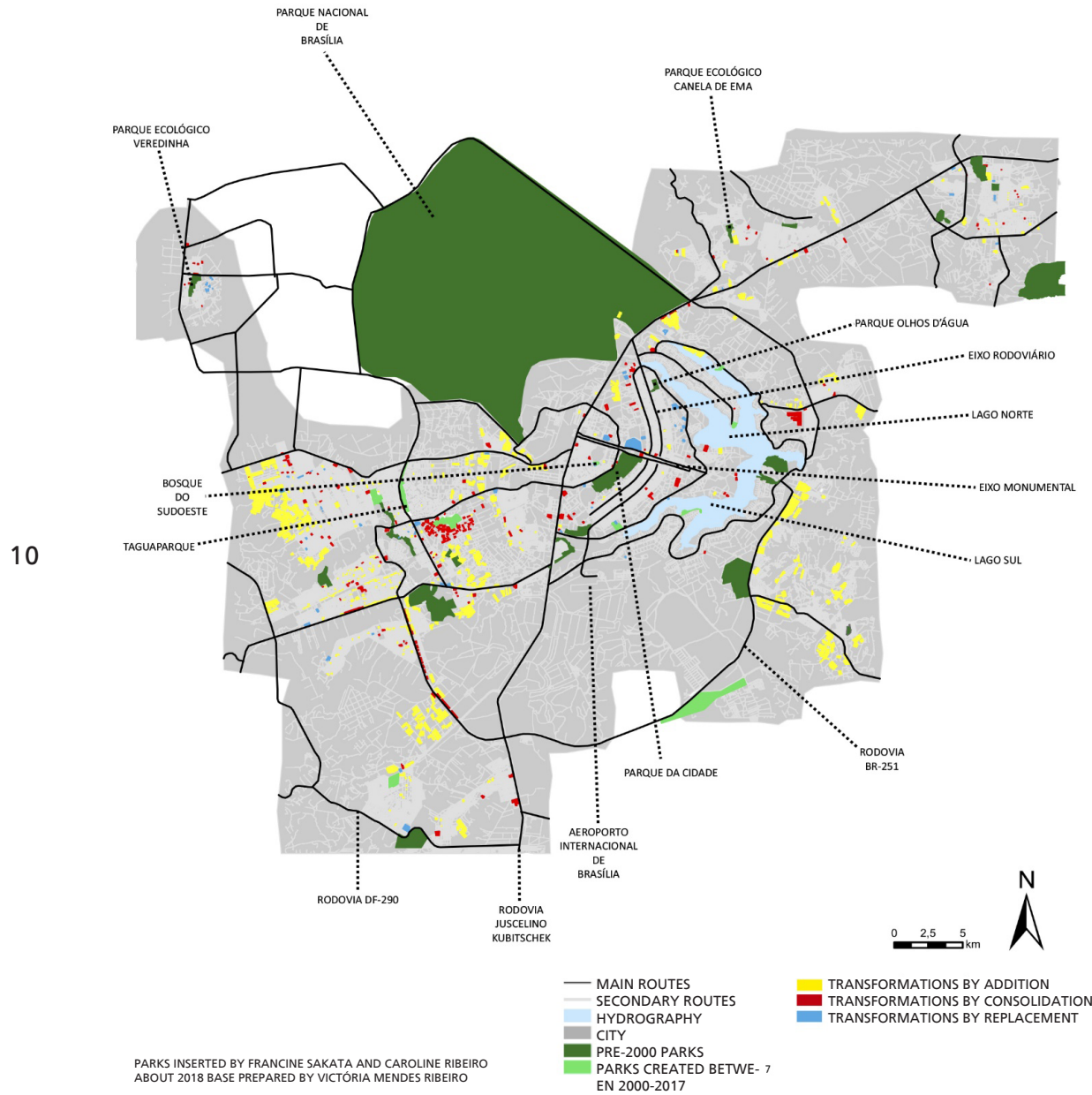


Figure 5 – Map of parks and urban transformations for Brasília.  
Source: Sakata (2018) with Ribeiro bases (2018).



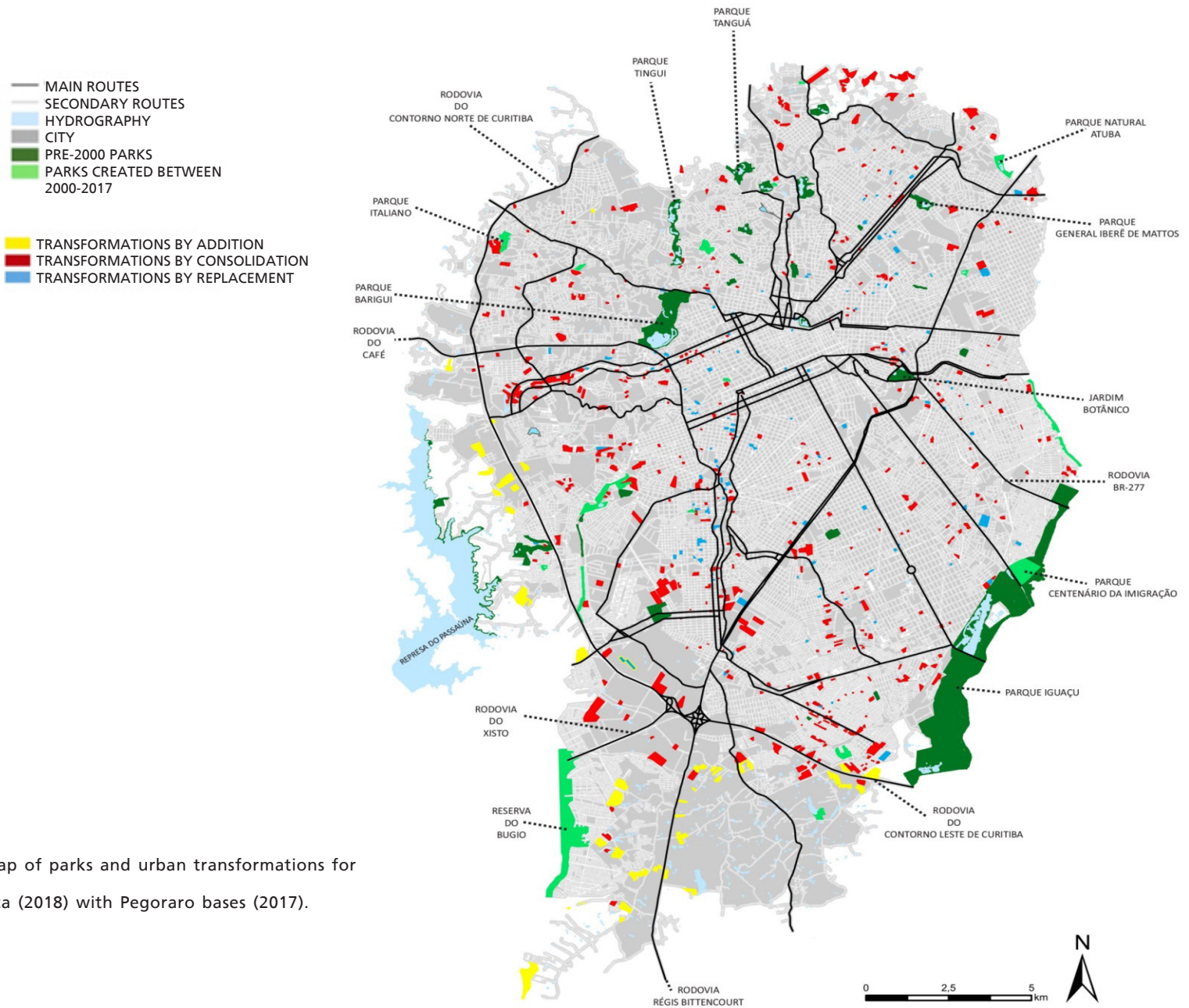


Figure 6 – Map of parks and urban transformations for Curitiba.  
 Source: Sakata (2018) with Pegoraro bases (2017).

tional urban parks and public squares, such as: public integral protection green areas (parks and reserves); and public or private green areas for sustainable use. The parks were ranked according to their function as a barrier to urban growth and were divided into: (1) urban; (2) of dam edge; (3) damping – acting as a buffer between a protected area (PA) and the urban fabric; (4) occupancy containment – for damping areas with strong occupational pressure. Around the Guarapiranga Dam, in the South Zone of the City, parks were established (Figure 7) such as Linear São José (2007), Linear Castelo (2008) (Figure 8), Linear Nove de Julho (2008), Guarapiranga Dam (2008), Praia do Sol (2009) (Figure 9), Cratera da Colônia (2007) and Bororé (2012), these last two never open for visitation.

In the city of Rio de Janeiro, the Municipal Secretariat of Environment (Portuguese acronym: Smac) registered as protected areas: Environmental Protection Area (EPA), Environmental Protection Area and Urban Recovery (Portuguese acronym: Aparu), Relevant Ecological Interest Area (Portuguese acronym: Arie), Biological Reserve, park and natural well preserved<sup>1</sup>. For the city hall of Rio de Janeiro, *park* is a protected area of public possession and domain, intended for visitation and leisure. When established by the municipality, it is called Municipal Natural Park.

In Vitória, a municipality that has been a pioneer in the institutionalization of environmental protection, one of the actions privileged by the Municipal Secretariat of Environment (Portuguese acronym: Semmam) since its implementation in 1986 is related to the implementation of PAs and public green areas. Initially, there was no differentiation between PAs and public green areas such as urban parks. Over time, the term “urban park” came to be associated with parks devoid of environmental attributes, which did not fit Snuc<sup>2</sup> legislation. Thus, the urban park

<sup>1</sup> Ministry of the Environment Ordinance No. 245 of July 11, 2011, recognized the Mosaico Carioca, consisting of 2 federal PAs, 4 state PAs and 17 municipal PAs (RIO DE JANEIRO, 2010).

<sup>2</sup> The first protection area created by the municipality of Vitória was the Ilha do Lameirão Ecological Station, in 1986, highlighting the preservation of the mangrove ecosystem. Subsequently, the Gruta da Onça Municipal Park was created in 1988. The municipality also benefited from the establishment of the Fonte Grande Natural Park by the Legislative Assembly of the state of Espírito Santo, which, after the implementation of the park, transferred its responsibility to the Municipal Secretariat (TRIGUEIRO; LEONARDO, 2011).

in Vitória is not defined by leisure uses, but by the absence of natural fragments to protect.

In Fortaleza, the city defined that, among green areas, the *urban parks* constitute a category whose main objective is preservation and, in justified cases, can be compatible with the offer of equipment and urban leisure spaces (FORTALEZA, 2014).

In the Distrito Federal, the establishment of parks was also intensely driven by conservation. In the delimitation of the park areas, urban and non-urban areas were not distinguished and the territory was considered from the point of view of the resources to be conserved and – not at all – not from social and urban uses. Urban parks have been classified as ecological parks, which are a category of PAs, as well as native forests, ecological stations and biological reserves. Urban networks sometimes bypassed the areas established for parks sometimes did not, and many were unqualified.

Natural parks were considered, throughout the twentieth century, distinct figures of urban parks. Far from cities, they might or might not be open to human enjoyment. There is a current of thought, more than a century old, in the United States, which has been gaining momentum in Brazil, which values the understanding that it is important that natural parks attract visitors and be known to obtain resources that guarantee preservation<sup>3</sup>. The Tijuca Forest National Park, in the city of Rio de Janeiro, being the best known of the national parks, is also the most watched, which has more employees and receives more resources. With the establishment of conservation parks in urban areas, whether totally or partially surrounded by the urban network, we have urban parks. Thus, the concept of urban park mixed with that of the natural park, as we have seen in many cities.

<sup>3</sup> In Brazil, the Semeia Institute has been promoting lectures and publications to strengthen this idea and has sought to align public and private sector partnerships so that natural parks are included in the economic circuit. They say that with this, there will be more resources to ensure the maintenance of natural goods.

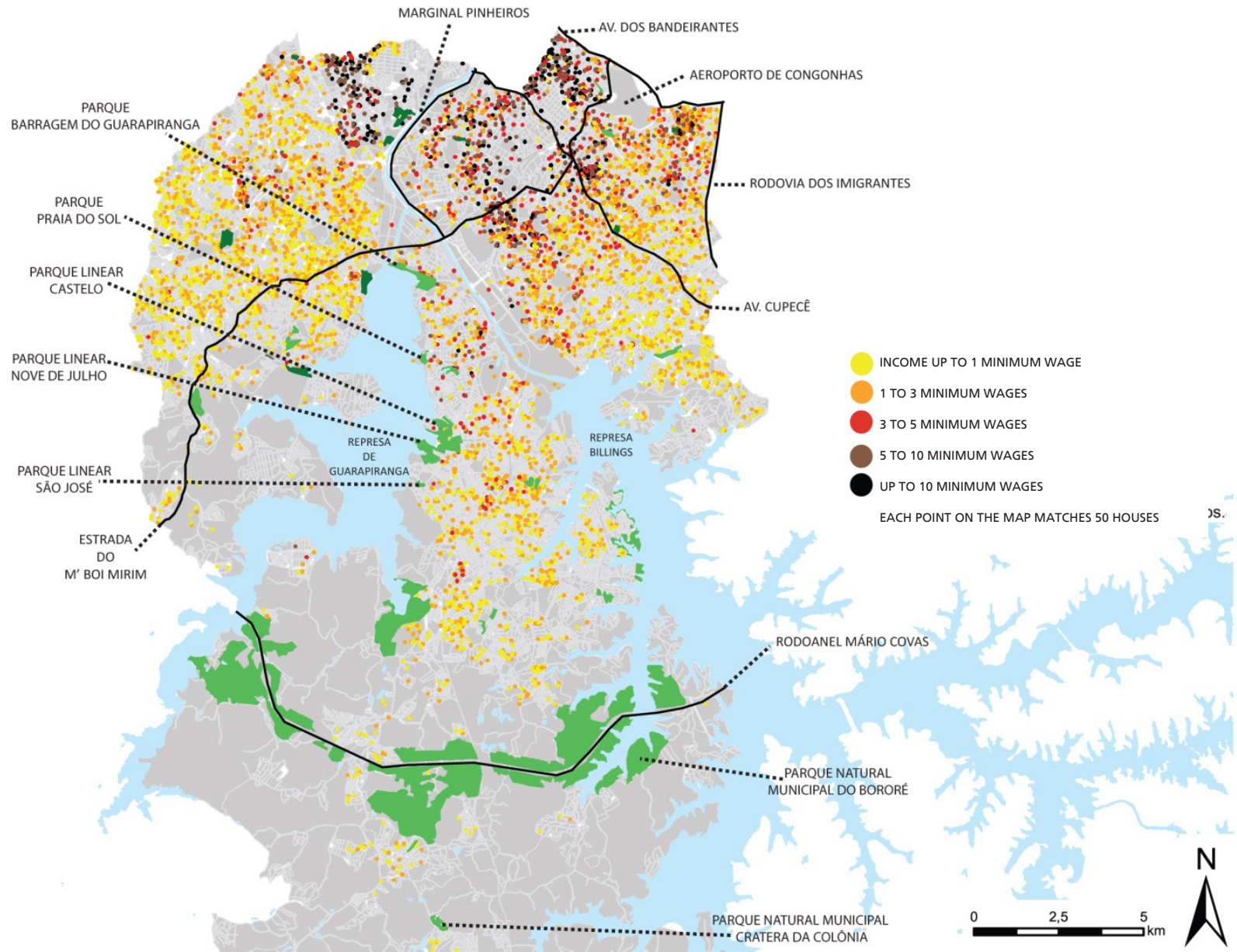


Figure 7 – Parks of the South Zone of São Paulo.  
Source: Prepared by Caroline Ribeiro based on Sakata (2018).





Figure 8 – Linear Castelo Park. Picture: Pedro Fernandes, 2014.



Figure 9: Praia do Sol. Picture: Caroline Ribeiro, 2015.

### 3.2. PRESERVATION AREAS ALONG WATER COURSES

The Brazilian Forest Code (BRASIL, 2012) considers Permanent Preservation Areas (PPAs), among others, the marginal ranges of any perennial and intermittent natural watercourse, excluding ephemerals, from the gutter edge of the regular bed, varying according to the width of the watercourse in question around natural and artificial reservoirs, as well as the areas around the headwaters and perennial water eyes within a minimum radius of 50 meters. It is also determined the simultaneous possibility of human occupation and preservation, through the partial use of the total area of the PPA by the public domain green areas system, being released percentages of soil sealing (5%) and landscape intervention (15%), possible flexibility in Special Zones of Social Interest according to specific norms. Galender and Campos (2014) understand that this stance allows to appropriate these areas and, therefore, their consolidation, which means a gain, at the same time, in the social and environmental aspect<sup>4</sup>.

This law is generic, that is: it does not consider the history of the city and the urban processes already underway. Areas designated as protected may be public or private. Avenues or low-income housing may have occupied them. Their conversion to park may not be feasible in the short term due to factors such as: being privately owned, conflicting with other uses, lack of resources or lack of demand for on-site leisure uses. Nevertheless, in the medium and long term, PPAs constitute a stock of reserved areas for future parks.

Even before the PPA law, the understanding that the water network has a role in urban drainage and that respecting marginal streams is a way of minimizing flood damage already encouraged the establishment of parks associated with watercourses, commonly called linear parks.

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4 On this topic, cf. Souza (2015).

### 3.3. ENVIRONMENTAL LICENSING RESOURCES

Federal Law No. 6.938 / 1981 first mentioned the figure of environmental licensing, which brought the concept of objective liability, in which the polluter is required to compensate or repair the damage to the environment and third parties caused by their activity. Coelho (2008) sets this picture: in 1986, the National Environment Council (Portuguese acronym: Conama) consolidated the use of the Environmental Impact Study (Portuguese acronym: EIA) as the main tool of the licensing processes; In 1998, the Environmental Crimes Law (IBAMA, 2014) strengthened the application of environmental compensation; In 2000, Federal Law No. 9,985 / 2000 implemented the National System of Conservation Units (Portuguese acronym: Snuc); and in 2004, the Brazilian Institute of Environment and Renewable Natural Resources (Portuguese acronym: Ibama) established the Federal Chamber of Environmental Compensation (Portuguese acronym: CFCA), which was a precedent for the opening of clearing houses at the state and municipal levels, such as the municipality of Sao Paulo.

Although the establishment of instruments that allow the transfer of environmental licensing resources to environmental agencies has been different in each state and municipality, these laws established the framework that supported municipalities to approve medium and large works, to apply sanctions and to capture – through fines – resources from infrastructure works or real estate projects Funding for Environmental Compensation Terms or Conduct Adjustment has been important since the 1990s for the establishment and equipment of parks both in the periphery and in high-income neighborhoods. The application of these resources in parks occurred more in some cities – such as São Paulo, Vitória, Belo Horizonte and Goiânia – than in others – such as Porto Alegre, Fortaleza or Rio de Janeiro. In Belo Horizonte, Nossa Senhora da Piedade Park (opened in 2008), in the northern region, was established through the Municipal Environmental Recovery Program (Drenurbs) in a work that involved expropriations and family removals (Figure 10). In Vitória, works on the port structures generated compensation funds that allowed the acquisition of park areas and even the renovation of



existing urban parks, such as the Pedra da Cebola Park in Vitória (Figure 11).

#### 4. NEW CONCEPT FOR URBAN PARK

In 2001, the publication *Parques urbanos no Brasil (Urban Parks in Brazil)* (MACEDO; SAKATA, 2001), published in the scope of Architecture and Urbanism, defined urban parks as open

spaces in cities, with generous dimensions, intended for social enjoyment – walking, contemplation, coexistence, Children’s recreation and sport. In addition, they were defined as urban spaces structured by vegetation, water, relief or all these elements combined, and which were considered parks for their role of leisure and social practices.

The park’s role as an environmental conservation area could be added to those previously mentioned. The combination of

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Figure 10 –Nossa Senhora da Piedade Park, Belo Horizonte. Picture: Francine Sakata, 2017.



Figure 11 –Pedra da Cebola Park, in Vitória. Picture: Francine Sakata, 2014.



leisure and conservation is convenient and beneficial for both and was the major contribution of the twentieth century to the park concept.

However, since the 2000s, a significant number of parks have been set up along urban networks, primarily, to address environmental needs. Virtually all new parks implemented since 2000 have been described as sustainable parks. In fact, as partially permeable and wooded spaces, parks fulfill ecological functions, contribute to urban drainage, microclimate maintenance and heat island reduction. Even those implemented for the provision of leisure in underserved areas are presented as environmental actions.

With the establishment of natural parks inserted in urban networks, the urban park is no longer understood as a leisure space that may or may not also be a conservation space. The urban park becomes a conservation space, which may or may not include leisure activities. Urban conservation parks, fenced woods and linear parks are new categories of urban parks that do not require leisure. Recreation, in some cases, is only a future possibility.

Among conservation parks on the edge of cities, there are many cases in which leisure, when introduced, is restricted to trails, sometimes only at the outer limits. The Dunas Park (opened in 2008) in Salvador (Figure 12) received visitors for the trails by appointment in 2017. There are cases where public access is seasonal, depending on management conditions.

In the West Zone of Rio de Janeiro, the Mendanha Municipal Natural Park (inaugurated in 2008), was established in a 6.500.000m<sup>2</sup> plot that belonged to the Bangu Development and Participation Company and, in 2018, is also under pressure from housing in its area, threatening the integrity of the park.

Fenced woods are similar, smaller cases. In the southern sector of the city of Curitiba, from 2010, some woods on public land, in poorer neighborhoods, were fenced and had public use banned. As the government in Curitiba is stricter with the categorization of open spaces, these forests were not considered parks, but

Urban Biodiversity Conservation Woods (Portuguese acronym: BCBUs). The municipality set up sidewalks around the area outside the fence so people could enjoy the woods while walking (Figure 13). This new category, which “aims to preserve gene banks”, circumvents the immediate difficulties in managing these spaces.

Woods in poorer neighborhoods are often seen as waste and rubble dumps, shelters for marginalized people and invasions by buildings. Fenced, the area fulfills environmental functions and requires less surveillance and maintenance, but becomes an urban enclave.

Between 2000 and 2017, Curitiba city hall also established linear parks, including housing estates, with the partial or complete removal of slums. Some have stretches of generous width and equipped for leisure as traditional parks. In addition, there are those that are narrower, and that do not give the visitor the feeling of isolation from the urban environment that is characteristic of parks. These were called by the city hall as linear parks and have characteristics that approximate them to squares or other categories of open spaces, but not exactly to parks.

The São Paulo Housing Secretariat has designed and implemented many open spaces near popular housing estates. The name park was given when management was administratively transferred to the Secretariat of Green and Environment (Portuguese acronym: SVMA) (GALENDER; CAMPOS, 2014). These parks cannot be fenced because spaces are closely related to roads and dwellings, and people need to cross them intermittently. This subverted the concept of park used by the São Paulo City Hall, which defined them as fenced green areas, with rules and hours of operation.

For these works to be realized, intersectoral and state concessionary articulations were necessary – which were facilitated by the existence of a political program. SVMA’s establishment of the linear parks figure was crucial for these spaces to be generated.

The qualification of free areas in housing estates in low-income neighborhoods is new in Brazil in the 2000s and, despite efforts,



Figure 12 – Dunes Park in Salvador.  
Picture: Silvio Macedo, 2010.

is still punctual. In general, housing estates were built in distant neighborhoods over large unqualified free areas, which over time were occupied by parking lots or poles or fenced and privatized. In slums in more central and dense neighborhoods, when removing – whether to build a housing development or to open up the river – the deployment of qualified leisure areas is a way of trying to ensure that precarious households no longer occupy the space.

Maintenance issues in these areas are visible. Broken floors and furniture, unfinished bridges, garbage and accumulated water

are common. At the same time, use is intense and children have nowhere to play. Managing these spaces is a big challenge for the next few years. It must be recognized that these are not just spaces in a poor neighborhood, but spaces in the city as important as the rest.

We may disregard that fenced woods are parks, even when they are given that name. We may even disregard that part of linear parks are parks, especially when very small. However, there is a large set of areas called parks in urban areas, delimited with a focus on conservation and not on urban leisure, which oblige us



Figure 13 – Urban Biodiversity Conservation Wood (BCBU). Picture: Everson Brassan, 2014.

to expand the concept of urban park so that it welcomes these new figures. Thus, the urban park of the early 21<sup>st</sup> century is a public open space structured for environmental preservation or leisure or, as is always more desirable, for both functions.

In the fringes of the northern and southern areas of São Paulo, there are populous neighborhoods interspersed with mountain slopes (to the north) and dam arms (to the south), in fragmented urbanization, with tortuous and under-served access roads and other infrastructure networks. The relationship of the population with nature is contradictory: at the same time, its proximity is a

source of pride and great inconvenience, because urban services are lacking. In this context, the parks created as PAs are not simulations of nature in the city environment, they are nature itself and the absence of the urban, in what is majestic and uncomfortable. It is not yet clear how these parks should be managed.

## 5. FINAL CONSIDERATIONS

Parks have proliferated in this context of urban transformations and new environmental legislation, often as a means of preserving



existing natural resources, sometimes to fulfill both resource conservation roles and the provision of leisure and sports spaces, enhancing the neighborhoods that receive new real estate developments.

From 2000 to 2017, it was observed that at the same time as fragmented cities were built - with closed lots for the upper, middle and low income layers (case of many MCMV Program complexes) – and apartment tower condominiums with ground floor equipped with swimming pools, playgrounds and courts, public spaces have become even more demanded for both traditional and new uses – from street carnivals to tour by night of cyclists' groups. Street races gained supporters; the number of domestic animals, especially dogs, has increased; the population requires walks, parks, boardwalks and cycle paths. Open spaces have never been so full.

Large parks were built between 2000 and 2017 in the country, such as Juventude (2007) Povo (2008) in São Paulo; Mangal das Garças (2005) in Belém; Madureira (2012/2015) in Rio de Janeiro. Many parks with simpler designs were also made, such as those around the Guarapiranga Dam, which make the most of existing natural elements. In these, ease of execution and low cost are privileged as design criteria. Many are articulated by paths that surround the forests already formed, with benches, toys and the ubiquitous "fitness equipment for the elderly". In these cases, when the planting projects are carried out, they are discrete, punctual and complementary.

These simpler parks and in peripheral areas are part of the history of Brazilian parks, landscaping and urbanism, but they are recent phenomena of large scale and relevance to many Brazilian cities. On the one hand, they are spaces of actual use or potential to

be used, but, on the other hand, they reflect the relative lack of preparation of the municipalities' staff to establish and manage them. It is possible that its existence contributes positively to the change of this picture.

The established parks confirm that the culture of use and maintenance of urban parks has, in Brazil, an elitist tradition, that is, the highest incomes are served by better quality equipment. The new set, which includes lower-income places, is therefore an important step towards becoming more democratic and inclusive. Generations that grow up in parks can be expected to commit to their defense and maintenance. If many of these parks are nothing but effective floodplain and slope protection strategies to prevent inappropriate and illegal occupation, they may be reserved, qualified and open to effective population use in the future.

Having this expressive set of parks means the possible, timely and important step towards improving the urban open spaces system of these cities. This step was only possible by understanding the role of parks implemented in previous decades. The intense use of these parks – everyday or sporadic – in the second half of the twentieth century showed the population, politicians and real estate agents their multiple potentials.

In the 2000s, the public authorities, due to the impossibility of acting according to the real need and demand of the population and the need to capture resources from different sources, do not act based on urban planning, but on taking advantage of opportunities. The strengthening of the environmental discourse – even due to the use of funds from environmental compensations – led the recreation function to the background in urban parks.

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