

The parks system proposed by Joseph Antoine Bouvard in the Town Planning for San Paolo City and Buenos Aires

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In the first decade of the century XX, the french architect Joseph Antoine Bouvard was prestigiously working as Director of Office of Architecture, Walks, Transit and Planning for Paris City, previously occupied by Adolphe Alphand (1853-1870).

Due to the importance of his position, since 1907 he was working in an ambitious town planning for the city of Buenos Aires and for the same reason, in 1911, he was asked to opine about the proposals, discussed for transformation and decongestion of San Paolo City central area. Instead of a simple report, Bouvard elaborated a town planning including a system of parks and walks.

If in Buenos Aires Bouvard received severe critics to the suggested town planning, in San Paolo he found a favourable environment to its proposals, allowing the creation of the first public parks in the city.

The aim of the essay is to present the differences between the two town planning with focus on green areas and to discuss the limitations of the parks implanted in San Paolo respect to the importation of models unrelated to the local peculiarity.

Buenos Aires and São Paulo during the arrival of Bouvard

It is not possible, naturally, to consider here all the economic, cultural, and political contexts of the capital of Argentina or of the capital of São Paulo State (in Brazil) during the first decade of the twentieth century. However, it is reasonable to mention briefly some factors, in order to explain the similarities which occasioned the coming of the French architect Joseph Antoine Bouvard to work in these two capitals.

Since the last quarter of the nineteenth century, Buenos Aires and São Paulo were already in an outstanding political-economical position in their respective countries. This fact was due to an exporting economy and a strategic geographic position for draining such production. In the early twenties the population growth coming mostly from the immigration of European workers reached startling scores (1). The insufficiency of infrastructure (water and sewer systems, transportation and lighting), housing, and epidemic diffusions were common to these two capitals. Therefore, it was necessary at that time to clean up the city, organize its expansion, and make these spacially visible.

For this reason, the ideological speech was by Baron Haussmann about the need to organize the city by systems (water and sewer system, road system, and parks and walkways systems) – which explained the destruction of blocks, the opening of wide roads and the creation of parks and boulevards in Paris during the age of Napoleon (1853-1870) – was followed by many cities in the world.

The transposition of this town planning model was possible because, as Antoine Picon (2001, p.67) has pointed out, “as the resulting model from the combination of these systems has been achieved according to an unmistakable typology, its technical basis could be dissociated from this typology and transported to totally different situations.”

According to Jorge Tartarini (1991, p.44), the application of this model was very simple. “New wide and straight streets would overlap the old city, making a communication system between the main activity centers of the city and the train stations. Monuments and public buildings would be isolated, and where there were no monuments or public buildings, they would be created than as visual focus, emphasizing their magnificence through multiple perspectives.”

Thereby, building avenues, or at least one major avenue following Haussmann’s style became a modernity icon to be introduced at any cost into the cities and, most of time, it did not have a function in connection with the preexisting road system.

It was in this context that the architect Joseph Antoine Bouvard (1840-1920) was invited to work in Buenos Aires and in São Paulo during the first decade of the twentieth century. Although, he was a late representative of the solutions already implemented in Paris about a half century earlier and long before his entering in Parisian administration (2).

Projects in Discussion Buenos Aires

The city of Buenos Aires is characterized by plain topography and has on one side the River of Silver and on the other side the pampas. It was founded in the sixteenth century and grew following the reticulated plan. With the growing of the city and the need to solve the traffic problem (especially in the central area), avenues were built at the end of the nineteenth century. In spite of the construction of Avenida de Mayo (May Avenue) - a monumental East-West axis that linked Plaza de Mayo (May Square, in East, near the River of Silver) to Lorea Square (in west) – the reticulated structure of the city aggravated the traffic problem in the

central area, because banks, several district and state department buildings, and trade were located in this central area.

Traffic problems have also occurred in the South area, due to the railroad stations in that region. To solve this problem, North-South Avenue was planned in 1889. It linked the South Stations to the North Stations. This avenue began a great controversy that was mostly monopolized by a local architect called Victor Júlio Jaeschké, who founded the “Comissão Pró Avenidas Diagonais” (Pro Diagonal Avenues Commission). Jaeschké demonstrated through many presentations to the municipal authorities that it was useless to construct new parallel avenues, since the diagonal ones, according to the author would provide an aesthetic variety to the monotony of the small square plan. Besides they would shorten the distances between the main places in the city, that would favor “original, interesting, and comfortable” distributions.

According to Jorge Tartaini (1991, p.47), the supporters of the parallel avenues “supported exactly the opposite, stating that those were the main mistakes of the diagonal avenues and in addition to that, multiple crossroads would be formed.” Given the various projects that were presented by the end of the nineteenth century about the construction of avenues, where no solution was found that would best please both public and private interests, the town hall decided to hire, in January 1907, the architect Joseph Antoine Bouvard, who was working as the Director of Office of Architecture, Walks, Transit and Planning for Paris City.

Bouvard’s recruitment represented the image of the political and economic power of the administration of Buenos Aires and also the belief in endless wealth before the celebration of the centennial independence (1910). But Bouvard also represented the permanence of the French gardening’s concepts, which were alive in the remodeling and creation of gardens, parks, and squares made by French landscapers who worked in Buenos Aires at the end of the nineteenth century. The French landscaper Charles Thays, who worked in Buenos Aires from 1891 to 1913 as Director of Walks for instance, was recommended by Alphand to work in Argentina (4).

In 1910 Buenos Aires disposed a notable number of 43 green areas (parks and squares), adding up over than 1 million square meters for a population of 1.300.000 inhabitants (5).

It is also important to mention that the diffusion of the works done in the Haussmannian administration and their continuity was accomplished not only through the trips that the upper classes took to Paris, but also through the professionals who graduated abroad (the local Architectural School was only founded in 1901); their participation in Urban Congresses, the presentation of the ideas and projects in Magazines and Newspapers. In addition to this there was the fact that *Les Promenades de Paris (1867-1873)*, by Adolphe Alphand, and *Parcs et Jardins*, by Edouard André were present in every important library, including Argentina and Brazil (6).

São Paulo

Unlike Buenos Aires, São Paulo is characterized by a full meadows and valleys landscape and it was originated in a small beaoned triangular hill by three religious orders that were implementing themselves there just after the foundation of São Paulo, in the sixteenth century. Surrounded by high levels of about 25 meters, this triangular hill sheltered the greatest urban nucleus up to the middle of the nineteenth century. At that time, the introduction of the railroad that traveled the fluvial terraces which were like an arch around the hill, gave the opportunity for the needs of improvements and opening of ways to commute the urban nucleus to the railroad stations implemented in North and West of the city. In the first decade

of the twentieth century, the original urban nucleus (the hill) did not suit the profusion of trolley lines or people, due to its irregular and narrow streets.

The first suggestions to solve the problem of traffic congestion in the central area (the hill) were not enough to solve the road problems. They were worried about making a suitable "frame" for the Municipal Theater that was being built opposite to the historical hill (urban expansion area separated by the Anhangabaú river) and at the same time "fitting" a haussmannian's style avenue – just like what was being done in Rio de Janeiro – called Avenida Central (7) (Central Avenue). But there was also an issue to solve: the topography. There were two suggestions of avenues that were being discussed more and more (the governmental and the municipal ones). The municipal one was prominent because its mentor, the engineer Victor da Silva Freire (8) was the only one to emphasize that before it was a difficulty, the topography would need to be the data of a project and something to grant the solution for São Paulo through the importation of non-contextualized solutions of haussmannian paradigm, like the case in Avenida Central in Rio de Janeiro.

Freire's criticism was particularly directed to State Government's proposal, which was elaborated by the engineer Samuel das Neves and presented three weeks after the divulgence of the project presented by Freire and Eugênio Guilhem (1911). Neves' project was a great *boulevard* that would cross the center of Vale do Anhangabaú with constructions following the Rua Rivioli de Pariz (9) style. More than the importation of models, Freire's criticism was that such an avenue hid all the visibility of the Vale do Anhangabaú and canceled the possibility of having a huge and gardened area in the center of the city. Another criticized point was the clear benefit Conde Prates (owner of most lands in vale do Anhangabaú) would have with that.

Victor Freire, who was an active participant in the Urban Congress and was tuned in to the debates and interventions that were being held in Europe, was invited by the association of Escola Politécnica de São Paulo to hold a conference about the "Improvements in São Paulo" (10). In the conference Freire supported his proposal, presenting several European examples which tried to show a critical position to the rectilinear alignments that were attributes in Parisian *boulevard's* model. On the other hand, the current quotation made to the Viennese architect Camillo Sitte came across from his concerns in tracing ways that could clear the traffic but at the same time be drew "with art". In this case, referring to Sitte's proposals for *Ringstrasse* in Vienna, the solution Victor Freire proposed, for the clearing of the traffic in the central area of São Paulo was the implementation of an "external circuit." This "circuit" would involve the hill, having in its vertexes the three religious orders that beacons the historical hill. Besides trying to solve the road issue, the "circuit" also tried to preserve the historical side of the city, because, as the author stated, "all of our history was concentrated in a triangle that has its vertexes on the convents São Bento, Carmo, and São Francisco." (Freire, 1911, p.101).

Another issue supported by Freire about the Project proposed by the town hall is in regard to the green areas. In spite of presenting only the garden in the hillside of Vale do Anhangabaú, Victor Freire showed in his conference the need to think about a "park system" for the city. For that he compared two examples. They were Paris and London overlapping the limits of the urban area from the foremost to the latest and localizing the green areas distributed in both of them. He observed that while London was "sieved with open spaces" and "many small public areas that in spite of being small were arranged in such way that everyone there could rest, walk, sit, and breathe," (Freire, 1911, p.130) Paris was different, with just a few "open spaces" inside of the city. The two biggest green areas were concentrated in Bois de Boulogne and Bois de Vincenne that were far from the city and the urban nucleus.

To explain the lack of green areas in the case of São Paulo, the amount of people per green area was calculated. For example, Jardim da Luz (the only garden considered by Freire) and some other public areas were about 25 hectares long at that time. With a population of 350

thousand inhabitants (in 1911), the coefficient would be 14 thousand persons per hectare of green area. The green area of Vale do Anhangabaú, with a little less than 5 hectares, and the proposals that were being discussed for Várzea do Carmo (localized in the opposite side of the hill, considering Vale do Anhangabaú) would add up 24 hectares more to the coefficient above. The total of 54 hectares that existed or were about to be introduced was too insignificant compared to the needs that Victor Freire found important, based on the examples observed in other capitals.

The repercussion of Freire's conference had its effects on March 17th, 1911, when the alderman Alcântara Machado suggested Bouvard's hiring as the solution to the impasse between the suggestions made by the state (Samuel das Neves) and municipal (Freire-Guilherm) governments. Bouvard was surely indicated by Freire. Freire presented in his conference some images of the proposals that were being elaborated upon by Bouvard in Buenos Aires (1907 – 1911). Besides that, the indication of Bouvard, who occupied the position of Director of Architecture Services, Walking, Roads and Planning for Paris could not be criticized by the supporters of the project of Samuel das Neves, who clearly adopted the Parisian model.

Bouvard's plans: road system versus system of green area

The indication of Bouvard, made by Victor Freire seemed contradictory, since he was supposed come in order to give an opinion about the two proposals at stake, being a representative of the haussmannian. It was also unusual that Freire used in his conference in Buenos Aires, examples made by Bouvard, since the solution for these funds was harshly criticized by some local architects about the use of haussmannian model.

Through texts and projects studied, two explanations are given for the issue. First of all, one needs to emphasize that Bouvard's projects to Buenos Aires – which were presented by Freire in his Conference - highlighted the projects that were elaborated beyond the general plan presented (11). Some of these projects emphasized the particularities of the relief or even solutions of which landscape aspect was the center of the project, like Bouvard's propose for the Parque Três de Fevereiro, turning it into a place to shelter the Exposição do Centenário (the Century Exposition). This was something Bouvard at which was an expert, due to the several expositions in which he participated and organized (12).

Secondly, it should also be emphasized that the context in which Bouvard was invited to work in the two capitals was the same. Meaning that he had to, in fact, referee the game by proposing a solution (like in Buenos Aires) or giving an opinion about the best solution (like in São Paulo). Neither case was impartial, on the contrary, there was a clear overlap of solutions already exposed (like in Buenos Aires), as well as the conciliation of the two proposals (like in São Paulo). Let us first look at the case of Buenos Aires and then after we will verify the case of São Paulo.

Buenos Aires

In 1906, the architect Enrique Chanourdie presented the supplement *Technical Architectural Magazine*, which was directed by himself in Buenos Aires, a "General Plan for the Transformation of Buildings in the Capital." The plan was to keep the two parallel avenues previously proposed (Avenida de Maio and Avenida Norte-Sul) and suggest diagonal avenues over the reticulated plan, using the existent squares as a convergence and distribution plan for the roads in the center of the city. A year after, Bouvard presented a similar proposal for the

central area, and in 1910, he presented the final plan for the city, including “a total of 32 avenues (over 60 km of new roads), over 100 round-points, and more than 15 new squares, using some of the existent parks as a connection to large roads.” (Tartarini, 1991, p. 48, 49)

In this final plan, all the system of green areas proposed by Bouvard were connected and were an integral part of the road system proposed. This system was then equally distributed around the city. The small green areas were located in the central area of the city, while the medium ones were at North and the larger ones at South. In spite of Bouvard’s reference to Jean Claude Nicolas Frestier’s theory about the distribution and difference of the sizes and programs proposed for the green areas, Sonia Berjman (1998, p. 183) suggests that “these different sizes were probably due to the availability and costs of the land.”

Bouvard was very criticized by some local architects and mainly by Victor Júlio Jaeschké, who stated that the plan was not a new idea and that the proposed avenues, even the diagonals, did not solve the traffic congestion problem in the central area. Besides that, the existent and proposed squares were truly “islands of traffic” (13).

From the presented plan, only Urbanization of the Quinta Hale, the Hospital Torcuato de Alvear, the Plano Geral da Exposição do Centenário, and some squares were carried out. As for the road system, only two diagonal roads were built in the central area one was completed in the forties (North Diagonal), and the other was unfinished (South Diagonal) (14).

São Paulo

In contrast to Buenos Aires, in São Paulo Bouvard was not invited to come to develop a proposal, but to give an opinion about the already existent ones: the governmental and municipal. However, the report presented on May 15th, 1911, exceeded just a simple opinion about the improvements of the capital. Besides his opinion, the talk also included preliminary studies for an area much larger than the projects in question. In the projects, two proposals were presented for Vale do Anhangabaú (Anhangabaú Valley), two for the creation of a park in Várzea do Carmo (Carmo Flood Plain), and one plan for road intervention in the central area. In the same report there was also an indication of a third park and a circuit of “interior walkways” (15).

One of the two projects for Vale do Anhangabaú proposed the construction of a road in the center of Vale do Anhangabaú and the transformation of all its slopes into parks (just like the solution Victor Freire had found). The other tried to unite the discussions on the agenda, proposing the construction of two buildings beside Líbero Badaró Street, in which the terraces returning to the Vale would solve the interests of Conde Prates and, at the same time, respect its whole aesthetics.

Despite of not being a brand new thing, Bouvard had the initiative to elaborate a project for a Park in Várzea do Carmo. Like in Anhangabaú, in one of his proposals, the whole Várzea should be turned into a park. In the other one, he just tried to unite the investor’s interests with making that enterprise possible for the city, proposing a transfer of part of the land. Such solution substituted the ones already proposed since 1889 – when the municipal competition for “Cleaning and Embellishment of Várzea do Carmo” was elaborated. The proposal about the two parks – Anhangabaú and Carmo – also substituted the idea already drawn by the President of the Province of São Paulo, called Alfredo Corrêa de Oliveira (16), in 1886.

As to the road reformulations in the central area, his proposal did not solve the traffic problems and almost shattered the “external circuit” proposed by Freire. Although his report pointed out that to elaborate upon such a proposal he “studied the topography, the market, flow, and the intensity of traffic in different districts,” and that when the difficulty in reaching

“the constructions that were extended around the valleys” was identified, there was a need to “forget about the archaic system of absolute squares [...], leading through central, radial, or evolving lines” (Bouvard, 1911); his plan presented solutions very similar to the ones that were carried out in Paris. The Municipal Theater would be the focus of four diagonals opened in the middle of the blocks surrounding it. The Largo de Santa Ifigênia would be transformed into a smaller version of Place de L’ Etoile. The other diagonals opened in the middle of the blocks in the central hill would not solve the traffic problems at all. The transposition of the haussmannian model, with was so criticized by Freire, had found a fertile soil with prompt solutions adopted by Bouvard, just like in Buenos Aires.

But as to the system of green areas, Bouvard proposals were in harmony with Victor Freire’s concerns. The system included besides Parque do Anhangabaú and Parque do Carmo, a third park and a circuit of “interior walkways,” with differently connecting scales. While one route enclosed itself in a perimeter leading though the central area, crossing the Parque do Anhangabaú, and traveling up through the noble neighborhoods beyond Anhangabaú, and after that, returning to the initial point; the other route, derived from the previous one, by starting from the center or Estação Ferroviária da Luz (Railroad Station), would go down to the flood plans along the Tamanduateí river, which was in the crossroad of the stream of Ipiranga, to the Tietê river.

The idea of using the axis of Tamanduateí river not only as a “circuit” to connect to other parks, but as a great linear park itself was raised by the architect Ramos de Azevedo when his office was put in charge of the project of Palace of Industries, in an area that was given to the State Government by the town hall of Várzea do Carmo in April of 1911, almost one month before the presentation of Bouvard’s report. His idea was to construct a great park, starting from the Parque da Várzea do Carmo and ending at Museu do Ipiranga. In its route, there would be significant buildings, and each one of them would have a different purpose. None of these circuits (neither Bouvard’s nor Ramos’) were implanted.

Bouvard’s plan was approved by the City hall in September of 1911, but his road plan was not accepted alongside. Only the construction of a few streets was approved. The construction of Parque do Anhangabaú and Várzea do Carmo would only begin in the next administration, as well as part of the “external circuit” proposed by Victor Freire.

Conclusion

Through the exposed plans for Buenos Aires and São Paulo, one can consider that, at least in these cases, Bouvard’s project control referred only to a small scale or a limited site. The quality of the two proposals that were accomplished for Parque do Anhangabaú and Várzea do Carmo, as well as for the urbanization of Quinta Hale and for the Exposição do Centenário, which were carried out in Buenos Aires, is undeniable. But the French architect had no concerns or even control before the general plans, in which lots of ability, technical and theoretical knowledge, were required for the functionality of the city.

In this sense, the system of green areas, which was greatly related to the road system, was also compromised, because a large part of the proposed squares – like the case of Buenos Aires – was positioned as distribution and convergence points for road flowing. The diagonal grid design overlapping the orthogonal one, of which intersection caused the creation of some squares, was considered merely a formal issue, with a loss in the road system and in the usage of the proposed green areas. Even in São Paulo, where the topography conditioned different solutions, Bouvard also used “crossroads” for leveled areas.

But there is another point relevant to the proposed system of green areas in São Paulo: the segregation of spaces that the system ratified. No wonder it was a system that was completely too far to assist the city. That's why it was named "internal walkways" by Bouvard. But the two proposed walkways commuted to different places. While one of them traveled by noble neighborhoods that were being introduced in areas that were expanding on the high lands; the other one, opposed to the first, traveled exactly on the low lands, and therefore, lead through factories and the housing of the working man most of time. Between these two walkways there was the central area (the hill) and by its both sides there were two parks projected by Bouvard, which were implemented later. They were Anhangabaú and Várzea do Carmo Parks. While Anhangabaú received a landscape treatment in its slopes and a green way over its river, Várzea do Carmo – which was larger – sheltered the first public park of São Paulo.

The project suggested the building of some areas for several kinds of sports. That was the idea discussed at that time, where the parks, besides being "green lungs" ahead of the expansion of the cities, should also assist the "moral and physical health" of the population (Bouvard, 1911). These ideas were related to the debates that began to happen in the beginning of the twentieth century in Europe and in The United States, in which the park systems should have different locations and scales in the cities, in order to assist the different functions, and not only the contemplative leisure. Body health turned out to be mind health and the introduction of playgrounds and areas for several kinds of games came to be a fundamental item for the programming definition of parks.

Therefore, it was necessary, according to this view, to remove the rural view of Várzea, the accumulated garbage of the city that was concentrated there, the washerwomen's activity, the spontaneous leisure of bathing in the river, and both fishing and soccer games that took place there. In place of these things should have been substituted an instructed leisure, along with guided activities. Criticisms were not long in appearing. "They are trying to build up a green ring to separate bourgeoisie from populace," reported a newspaper (working man's newspaper). Most of newspapers that had an anarchist tendency, were used to criticize the work done in the central area because of the lack of basic infrastructure in the houses in their neighborhood.

The park was implanted, but no sport areas proposed by Couchet were built. The sinuous gardens and walkways did not make the practice of soccer games possible; and soccer games were such a characteristic of the region. This sport was introduced, at the end of the nineteenth century, and was scattered around the several flood plans of the city. The first public park of São Paulo, which was projected by Bouvard, although being constantly exalted in the literature of São Paulo, was not useful in fact. In a research made by the working man's newspaper of São Paulo during the period of 1889 and 1934 (18), when the discussions around Várzea started and long after its implementation, there was found no reference about the use of such area. In an interview with ninety year old people who lived around that area, it was stated that the park was used at most for "passage", and the couples dating there were "dissipated by the guards who watched over the park".

The importation of models made by the public administration – not only from São Paulo, but also from Buenos Aires – brought beautiful landscape examples. However, they did not follow the local peculiarity. Therefore, some of them lost their character, due to the lack of speakers to defend them, like in the case of Parque da Várzea do Carmo, and later, Parque D. Pedro II, which in the 60s totally lost all character because of the implementation of a huge automobile parking and a compound of viaducts that made it "abandon" its park position.

Acknowledgments

- (1) In 1895, from the 104.000 immigrants who came to São Paulo to work with the coffee plantation that were in the countryside of the State, almost 40% (39.000) remained in the Capital of the State, and most of them were Europeans. In 1893, São Paulo sheltered 130.775 inhabitants. In 1900, this number increased to 239.820, and in 1911 the number raised to 350.000 inhabitants. In Buenos Aires, in 1910, the city already sheltered 1.300.000 inhabitants, and many of them were Europeans. In: BONDUKI, N. (1994). *Origens da Habitação Social no Brasil: o caso de São Paulo (1930-1954)*. Doctorate Theses. São Paulo, FAU-USP, pp. 19; FREIRE, V. (1911). "Melhoramentos de São Paulo." *Revista Polytechnica* 33 (1911) pp. 134 and BERJMAN, S. (1995). "Projectos de Bouvard para Buenos Aires Del Centenario: Barrio, Plazas, Hospital y Exposición." *Revista DANA*, 37/38 (1995), pp. 41.
- (2) Joseph Antoine Bouvard (1840-1920) graduated in École des Beaux-Arts, and since 1879, when he was 41 years old, he became the architect for the permanent services in Paris, and in 1897 he replaced Jean Charles Adolphe Alphand (1817-1891), who was responsible for remodeling and creating the great parks in Paris, during the administration of Baron Haussmann (1853-1870). It means that only 10 years after the transformations, was when Bouvard entered to the Parisian administration. These informations and some others about Bouvard are gathered in one of the works I developed in the research I made for my master's degree. In: ENOKIBARA, Marta (1999). *Projetos de Joseph Antoine Bouvard desenvolvidos para Paris, Istambul e Buenos Aires*. Trabalho Programado Mestrado. São Paulo, FAU-USP. Other information can also be found in my doctorate theses, from where I extracted information for this paper. In: ENOKIBARA, Marta (2003). *Para além do Vazio. As propostas elaboradas para a Várzea do Carmo na cidade de São Paulo: séculos XIX e XX*. São Paulo, FAU-USP.
- (3) TARTARINI, J. (1991). "La polemica Bouvard-Jaeschké (Buenos Aires 1907-1910). *Revista DANA*, 30 (1991) pp. 44-52.
- (4) The list of the other French landscapers who worked in Buenos Aires, including the systematize of what was made by Bouvard, can be found in the works of BERJMAN, S. (1998). *Plazas y Parques de Buenos Aires: la obra de los paisajistas franceses (1860-1930)*. Buenos Aires: Fondo de Cultura Económica de Argentina S.A. e BERJMAN, S. (1994). "En la Ciudad de Buenos Aires", in LECLERC, B. (1990). *Jean Claude Nicolas Forestier (1861-1930). Du jardin au paysage urbain*. Paris: Picard, pp.206-219.
- (5) BERJMAN, S. (1998). Op.cit., p.98 e 104
- (6) In 1860, Edouard François André (1840-1911) was invited to work with Alphand in the Parisian administration. In 1879 he launched his book named *L'Art des Jardins: Traité générale de la composition des parcs et jardins*, in which he systematizes the art vocabulary used by Adolphe Alphand.
- (7) Before Brasília became the capital of Brazil, Rio de Janeiro was the capital of Brazil. In 1903, the construction of the Avenida Central (Avenida Rio Branco, since 1912) was started. It was finished in 1905. It was 1.800 m long and 33 m wide. About 700 buildings were demolished to pattern the buildings that would be constructed along the avenue. Even an international competition for the best front was promoted. For more information, see: DEL BRENA, G.R. (1985). *O Rio de Janeiro de Pereira Passos: uma cidade em questão II*. Rio de Janeiro: Index e LEME, M.C. S. (1999). *Urbanismo no Brasil: 1895 – 1965*. São Paulo: Studio Nobel/ FAU-USP/FUPAM, which contains other bibliographical references about the interventions in Rio de Janeiro during that time.
- (8) Victor da Silva Freire (1869-1951) was Portuguese, but his parents were Brazilian. He studied at Escola Politécnica de Lisboa between 1885 and 1888, and at École de Ponts et Chaussées de Paris between 1889 and 1891. He worked in Belgian and in Spain, and returned to São Paulo in 1895 to work at Superintendência de Obras Públicas. After that, he went to work at Saneamento do Estado de São Paulo. He was a professor at Escola Politécnica de São Paulo, where in 1897 he started to teach Civil Engineering and Architecture. In 1899 he accepted the invitation made by the mayor Antonio Prado, to take on the position of Director of Municipal Works in São Paulo. He was coordinating that Direction from 1899 to 1926, when he retired. He took part in many international congresses about urbanism and published several articles. The list of texts published by Victor Freire and more detailed data about his biography are found in the doctorate theses of SIMOES JR, J.G. (1995). *Anhangabaú: História e Urbanismo*. São Paulo, FAU-USP. The lists of the several congresses held during that time are

- found in the doctorate theses of RETTO JR., A.S. (2003). *Escalas de Modernidade. Vale do Anhangabaú: estudo de uma estrutura urbana*.
- (9) S.N.A. "Os melhoramentos de São Paulo: Projecto Samuel das Neves". *Revista de Engenharia*, 2 (1911), p.41.
 - (10) This conference was published later. FREIRE, V.S.F (1911). "Melhoramentos de São Paulo". *Revista de Engenharia* 2 (1911), pp. 91-148.
 - (11) The prompting projects were: a Urbanização da Quinta Hale, o Hospital Torcuato de Alvear, o Plano Geral da Exposição do Centenário e a Remodelação das Praças do Congresso e de Maio. More information in BERJMAN, S. (1998). Op.cit.; BERJMAN, S. (1995). "Proyectos de Bouvard para la Buenos Aires del Centenario: Barrio, Plazas, Hospital y Exposición" . *Revista DANA*, 37/38 (1998), pp. 41-53 e GUTIERREZ, R. (1983). *Arquitectura y Urbanismo en Iberoamerica*. Madrid: Cátedra.
 - (12) What impressed the public and made the international recognition of Bouvard possible were the works he designed and carried out at the Universal Expositions in Paris. In the 1878 exposition he designed The City Pavilion. In the 1889's he designed the Palais des Industries Divers, and in the 1900's he occupied the position of Director of Parks and Gardens. He also administrated the French installations at the Expositions in Vienna, in 1873, the expositions in London, in 1874, in Brussels, in 1876, in Amsterdam, Melbourne, Chicago, Saint Louis, and Viége, in 1881. In 1892, due to this experience, Bouvard was nominated General Commissary of Official Celebrations, substituting Alphand. In 1897, he was nominated Director and Administrator of Architecture Service, Walks, and Roads for Paris. In: TARTARINI, J. (1991). Op.cit.; S.A. *Revista Engenharia*, 1 (1911) e S.A (s.d.). *Revue Générale de Architecture et des Travaux Publics*. Paris, Ducher.
 - (13) JAESCHKÉ, V. J. (1905). "¿Avenidas Diagonales o Paralelas?". *Arquitectura. Suplemento de la Revista Técnica*, 71 (1911), p.77; JAESCHKÉ, V.J. (1911). "Las Avenidas". *Arquitectura. Suplemento de la Revista Técnica*, 72 (1911), pp.137-142; JAESCHKÉ, V.J. (1911). "Las Avenidas (conclusión)". *Arquitectura. Suplemento de la Revista Técnica*, 73 (1911), pp.162-167 e (TARTARINI, J. (1991). Op.cit. (where other bibliographical references are indicated.)
 - (14) BERJMAN, S. (1998). Op.cit., pp.175-213 e BERJMAN. S. (1995). Op.cit., pp. 41-53.
 - (15) Joseph Antoine Bouvard's report in: *Relatorio do Prefeito Raymundo Duprat à Camara Municipal de São Paulo*, 1911, pp.12-15.
 - (16) A detailed survey of all the works accomplished in Várzea do Carmo, since the sixteenth century to the twenty first century, are found in my doctorate theses. ENOKIBARA, Marta (2003). Op.cit
 - (17) Chácara Floresta was a private property, and was already used by the population for recreation, since the end of the nineteenth century. In the beginning of the twentieth century, it would be bought by the city, for the constructions of a Park, proposed by Bouvard. It was something that was not concluded. For a detailed information of all the public parks in São Paulo, see: BARTALINI, V. (1999). *Parques Públicos Municipais de São Paulo. A ação da municipalidade no provimento de áreas verdes de recreação*. Doctorate Theses. São Paulo, FAU-USP.
 - (18) ENOKIBARA, Marta (2002). *Pesquisa em Jornais Operários de 1899 a 1934. Arquivo Edgar Leuenroth (Unicamp)*. Trabalho Programado Doutorado. São Paulo, FAU-USP. 17 working man's newspaper were researched.