

# The Modern Idea of Park and the Formation of Urbanism in São Paulo: *Der Städtebau* and the British *Town Planning* Reception

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## 1. Introduction

As defended by Lepetit, many few things during the pre-industrial period, are not related to the city, in one aspect or another (2001, p.52). Evidently, the transformations undergone by cities during the late XVIII century and throughout the XIX, mainly in Europe, created new urban scenarios in which the former balance between the city and the countryside were astonishingly broken.

Technical innovations, changes in production methods, the development of the rail networks, the mechanization of the countryside and large migrations of multitudes to the industrial cities changed radically the economic, social and territorial structures in which the former historic cities were immersed. As a consequence, the majority of the industrial cities suffered the problems caused by congestion, population growth, sprawling, lack of green areas, housing shortage and unhygienic conditions.

This process drove Engels to affirm, in *The conditions of working class in England*, that each new industrial plant built in the countryside brought together with it the seed of an industrial city; and Lefevre, already in the 60s of the XX century, to extend this appreciation affirming that “industrialization is the starting point of our time” (1979, p.14). It is worth mentioning that England’s population surpassed the amount of 6 million inhabitants in 1750 to reach 9 million in 1801. The case of Manchester is one of the most emblematic ones. At that time its population grew from 12.000 inhabitants up to 95.000, to reach in 1850 the number of 400.000 inhabitants. London and Paris had their population increased five fold in the course of the XIX century reaching, respectively, 4 million and a half and 2 million and a half people. The population of Berlin increased from 190.000 to 2 million inhabitants, and almost half of the families lived in apartments of only one room and small kitchen and had to share it to be able to pay the rents. This scenario, according to Benévolo (1992), originated two main trends of urban development thoughts. One of them was marked by strong social-reflexive utopian ideas; and the other was based on scientific and objective methods and focused on the combat of the unhygienic conditions of the cities. Urbanism, as a scientific discipline, emerged as a response to those problems and tried to define programmatic attempts to intervene within, build and plan the modern cities.

The urban park also appeared in the XIX century, as a response to the phenomenal growth of the industrial cities (Chadwick, 1966, p.19). Firstly, they appeared as areas of land amidst

urban surroundings for public use and secondly they became part of the majority of the urban proposals in both trends defined by Benévolo. They were at the same time thought to be used by the public at large and as an important instrument of planning the modern city. Therefore, both urbanism and urban park have their roots in the XIX century and are modern phenomena.

In São Paulo, the effects of change from a small village into a complex city were just visible in the turn to the XX century. Until the last quarter of the XIX century its population was 10.000 inhabitants, reaching the number of 60.000 in 1890; 240.000 in 1900 and 580.000 in 1920. We defend that it is exactly at that period, between the end of the XIX century and the first two decades of the XX century, that the importance of planning the city started being pondered. It is with the foundation of urbanism as a discipline in São Paulo that the modern idea of urban park appears in the city.

The following words are going to reveal how the works by the German Städtebau and by the British Town Planning, the most important and well-known planning trends in the world at that time, were adopted as fundamental references in the first plans for São Paulo, as for the idea of modern park.

## **2. The formation of urbanism in São Paulo and the emergence of the Urban Park**

São Paulo was founded in the XVI century as a Jesuitical settlement over a hill flanked by two rivers, the Tamanduateí and the Anhangabaú. Its morphology was similar to several European historic cities until the end of the XIX century when an impressive urban sprawl took place. The sprawling process and population growth to which São Paulo was being submitted to put under threat its state of equilibrium and awakened local engineers for the need of thinking about the city's future. The picturesque aspect of its unplanned curved central streets, its well-defined shape and balance between built and open areas suddenly started to disappear.

The driving forces that led it to this state of sprawling were the economic boost generated by coffee trade, the arrival of the railways and the new possibility of speculating with the land. Industrialization soon consolidated this process. The small farms which surrounded the city started being developed by private developers in an uncontrolled way to absorb the migration from the countryside and from European countries. The unrestrained urban sprawl that took place obeyed no rule but the obtaining of maximum profit with the selling of lots and the grid soon became the city's new general urban pattern. The city, which had had a clear and well-defined shape on the top of a hill, as well as a good relationship between open and built areas, started becoming fragmented, amorphous and shapeless.

The grid and wide streets and avenues were not only used in private land developments, but were also present in proposals made by the public works departments as ways of organizing the city expansion. It is worthwhile mentioning that, roughly at the same moment, two plans for the city came about and included academic axes, diagonal avenues and large and wide boulevards: the "Three avenues Plan" and the "Samuel das Neves' plan".

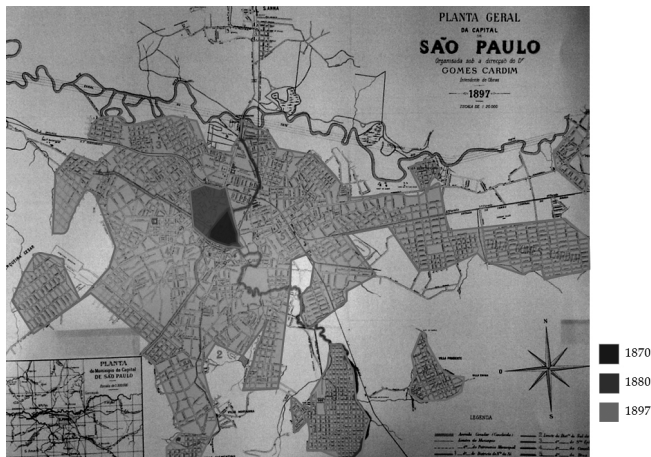


Fig. 1 - Map of São Paulo showing its urban sprawl from 1870 to 1897

In 1911, Victor da Silva Freire, the Municipal Public Works Officer, gave some conferences in the subject of town planning and defended the creation of a comprehensive plan for São Paulo. He strongly opposed the gridded private land developments taking place in the city and to those two aforementioned plans. For him, the local government had to take a more active role in defining the future of the city in order to avoid the problems that the European industrial cities had already faced. If in São Paulo those effects were still not so astonishing, it would, as he said, inexorably become a reality if nothing was made in order to prevent them. According to him, if it was in England and in Germany that the phenomena of urban, population and industrial growth manifested their most dreadful consequences, the most impressive planning solutions were also from there. He clearly defended that the German planners were the main pioneers, stating that the British solutions were developments of those ideas mixed with the garden city theory. Therefore, the ideas and visions on how the modern city should be like, presented by individuals such as Camillo Sitte, Theodor Fischer, Joseph Stübgen, Rudolf Eberstadt, among others, on the one hand; and on the other hand by British citizens like Raymond Unwin, Patrick Abercrombie and Barry Parker, caught Freire's attention.

The Beaux Arts schemes that were being put forward to different South American cities at that moment, such as Buenos Aires and Rio de Janeiro – which derived mainly from the works of Haussmann in Paris and from the examples of the American City Beautiful – were thoroughly criticized by Freire. It is important to mention that already at the beginning of the 1910s, the use of academic axis and formalist compositions were being severely criticized both in the United States and in Europe. An important example of this can be seen in the debates at the first *Town Planning Conference* (TPC), organized by the Royal Institute of British Architects, in London in 1910. Luque clearly describes how City Planning, in the United States, and the *Städtebau* and the British *Town Planning*, in Europe, reacted against academicism and defended the creation of more comprehensible plans based both in aesthetic features and in scientific analysis (2004, p.11). In Raymond Unwin's speech at the TPC one can identify this clear opposition:

The importance of so designing plan of a town that interesting and beautiful street pictures can be created as a result of it has been very fully recognized by the Germans, in the strong reaction which has taken place in their cities against the geometrical style of town planning which they followed in the early years of the modern revival of the art. (1910, p.259)

Freire paid a very close look at those experiences. Firstly, it was due to the fact that he believed São Paulo had developed as a European city, through a historic process of accumulation, social relationships related to the place and slowly constitution of its well-defined shape and therefore not as an American city based on the *Quadrillage*. The city picturesqueness should not be destroyed by the profusion of large avenues and by the massive use of the grid. The abstractionism of this urban pattern was considered to ignore the historic and geographic features of the place and to promote a uniform city, without visual hierarchy. It was in the German and British plans that he found examples of creating extension plans that cared about the historic city, the picturesqueness of the city, the geography and the sense of place. He also believed in the importance of preserving open areas for the creation of parks and the implementation of a complete park system connected to the street system. Although it was in the United States that the idea of park system was originated, soon it was defended by all the most important trends of town planning. Freire recognized the importance of the American efforts to create them, mentioning specifically the city of Boston, but he preferred to focus on the European cases, mainly because in the comprehensive plans made by the *Städtebau* and by the British Town Planning actors the park system were connected to a irregular and picturesque street system and not to large axis, to the grid and to diagonal avenues as it happened in many of the cities in the United States.

Hence, Freire adopted the most recent ideas on urban planning when thinking about São Paulo and tried to develop of a way of creating an extension plan that should connect the new residential areas to the historic centre, respecting its topography and picturesqueness; that could redefine the city's shape, connecting its urban fabric and promoting green areas.

With regards to the traffic system, he adopted Joseph Stübgen's idea (1890) of creating an interconnected network of radial and circular arteries, which was further developed by Eugène Hénard (1903) who proposed the creation of a ringroad around the city centre.

The ringroads were present in the majority of plans developed at that moment in Germany (such as Dessau, Leipzig and Nuremberg), especially after the construction of the Ringstrasse in Vienna and the boulevards in Paris. Paying close attention to those examples, Freire defended the use of this street system in São Paulo, which should also be connected to a park system. The main elements of his plan were the creation of a ringroad around the city centre, as Hénard suggested for Paris; the radial arteries, which should drain the traffic out to the expansion areas; two major parks and several other green areas. It is also worthwhile mentioning that Freire cited, in his report, the *Königstrasse* of Nuremberg, Theodor Fischer's plan for Frankfurt and the ringroad proposed by Karl Henrici for Dessau in order to stress the need of building a city ring in São Paulo.

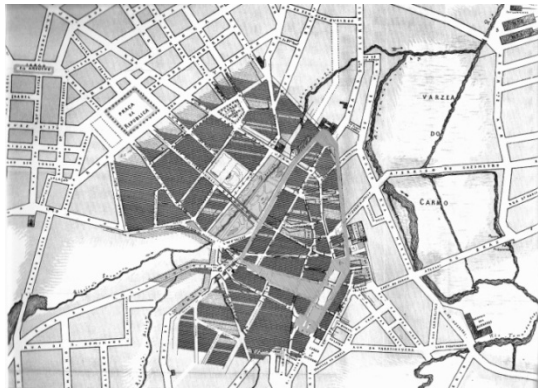


Fig. 2 - Freire's ring for São Paulo

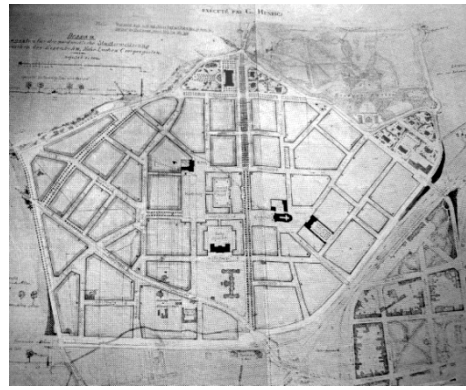


Fig. 3 - Karl Henrici's ring for Dessau

With regards to the parks, they should be constructed around the centre, in the fluvial valleys of the Tamanduateí and Anhangabaú Rivers, and the rest of the green areas should be spread in the city's fabric and reach the whole population. It is also important to point out that the idea of having a large amount of small green areas instead of fewer and larger ones was based in Hénard's idea, which was illustrated in his comparison between the green areas of Paris and of London (1903, p.204-5). Camillo Sitte's attention to the European historic cities was a fundamental theoretical support for the development of Freire's ideas regarding the safeguarding of the city centre picturesqueness. The interventions in this area should be limited, aiming at keeping its picturesqueness and connecting the area to the new traffic and park system proposed.

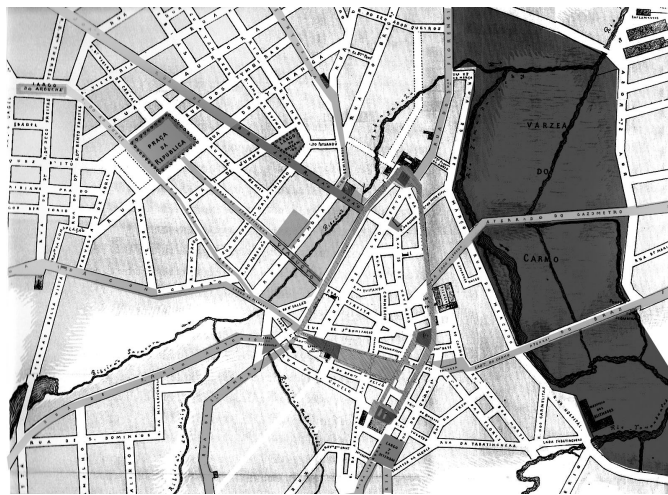


Fig. 4 - Freire's plan for São Paulo. The street system, the squares, the area of the Anhangabaú Park (on the left) and of the Carmo Park (on the right) are highlighted

The comparison between the international debates in urban planning and the case of São Paulo leads us to state that they shared the same questions and preoccupations. As discussed before, at the first Town Planning Conference, in 1910, there was a clear division between the works of the *Städtebau* and of the British *Town Planning* on the one hand, and the academic tendencies based in *Beaux Arts* schemes and compositions on the other. In few words we can stress that the first group claimed for the defense of the picturesqueness of the historic city, the respect for its landmarks and topography, and the creation of comprehensive extension plans based on irregular street patterns. The other trend was concerned with the

monumentalization of parts of the urban fabric, hierarchy and urban embellishment. In São Paulo, private land development was the initial sparkle that incited the public works department to think about the need to plan the city. The 'Three Avenues' and 'Neves' plans' accentuated the local tendency of using the grid and the academic axis. Freire rejected this model and drew attention to other references that, according to him, would be more suited to serve as precedents for the planning of São Paulo, like the Städtebau and the British Town Planning. Therefore, in São Paulo there was also an evident opposition between the two tendencies outlined above and the impasse of which plan to build took place.

The impasse would be resolved by a French architect. Joseph Bouvard, who had previously presented academic plans in Argentina, was invited to arbitrate the cause. Therefore, it wouldn't have been out of the ordinary if he defended in São Paulo the same principles. Curiously enough, he did support Freire's ideas. In his report, he defended the need of preserving the picturesqueness of the city centre, the creation of a comprehensive plan and the respect for topography and for the city history:

It is necessary, from now towards the future, fill the empty spaces, which is going to be easy, if a firm decision of adopting a certain number of measures aiming at the achievement of a great effect, as interesting as picturesque.

It is needed, for this purpose, to abandon the archaic system of the absolute grid, the principle of the straight line, which is excessively uniform; the secondary streets which emerge always perpendicularly from the main artery. It is necessary, in one word and considering the state of things today, to go towards the use of convergent and involving lines, according to specific cases. (...)

As a result, we have: for the city centre, for the *urbs*, respect for the past, the understanding of the uselessness of exaggerated street openings and enlargements - the understanding of the uselessness of putting to work, without stop, the pickaxe, as the only result of making the city historic character, archeological and interesting aspects disappear. (1911, p.42)

He also proposed a new plan, preserving basically the main ideas defended formerly by Freire. Bouvard included a larger area in his proposal and stressed the need of constructing the two major parks in the central area, the Anhangabaú Park and the Carmo Park, and several small green spaces. By 1922, these two parks were already built and open to the public. On the one hand, the Anhangabaú Park filled the area between the city centre and the elites' new districts, connecting them to the southwest new garden suburbs; and on the other hand, the Carmo Park was placed between the city centre and the industrial eastern districts, in the Tamanduateí valley. Designed by the French landscape architect Cochet, this park was thought to be the 'central park' of the city. It should provide a pleasant green area both to rest and for active recreation for the public at large. The brief included several sport areas, which would provide a wide range of choices for all social groups and ages. The idea of creating central parks was a tendency widely present in the town plans worldwide since Olmsted's famous creation in New York. It was an element of the park systems adopted, for instance, both by the British Town Planning and by the German Städtebau works, as well as other parks, green belts, the profusion of small green areas connected to the residential areas and parkways. Freire, Bouvard and Cochet were well aware of those experiences and each one of them contributed to the debates in the city on how to create a modern São Paulo and its park system.

With these experiences, urbanism appeared as a possible solution for the problems caused by uncontrolled urban sprawl. Against fragmented private land development based on the grid and also in opposition to Beaux Art schemes, Freire found theoretical support in the works of

professionals of the German *Städtebau*, of the British *Town Planning* and in Hénard's ideas. Bouvard became his ally and helped promoting these concepts of intervening and planning the city. The parks were not to be simply elements of urban embellishment and to promote more hygienic conditions, but fundamentally served as elements of planning and shaping the modern city and were proposed to be used by the whole population.

### 3. Rivers and parks: the scale of the territory

Another distinguished planner that came to São Paulo was Barry Parker, who had previously planned with Raymond Unwin the first garden city, Letchworth, in 1903. He was invited to plan some garden suburbs and stayed there from 1917 to 1919. Freire, Bouvard and Parker had personal connections and defended similar ideas. They believed that the construction of these suburbs would help promoting the creation of green areas at the same time it would fill the empty spaces in the urban fabric. It would put forward the dissemination of a high standard model of planning which was in accordance with the main international urban debates. The local government should stimulate their construction, articulate them to the existing traffic system and consider them a part of the city's park system. In this regards, the construction of the modern São Paulo was thought to be achieved by the combined actions of public planning and the private development of garden suburbs.

Parker also proposed the construction of a park ring enclosing the city. Parker's ring differed from Freire's idea of creating a ring around the centre in two different aspects. First of all, it would encircle not only the city centre, but the whole urban area, as a limit to sprawling. Secondly, it was to be a large strip of park in itself, differently from the avenue created by Freire, which was more of an element to connect different areas. If in European cities the greenbelts or rings were mainly created to replace the city walls, in São Paulo they were to be placed in the river valleys of the Tietê and Pinheiros. It was the first time that a greenbelt was presented as a solution to control the urban sprawl and to provide huge areas of greenery for the city.



Fig. 5 - Plan of São Paulo from 1916 showing the park ring proposed by Barry Parker

The greenbelt, which became an element of several plans in Germany and in the UK in the 19<sup>th</sup> century, was an important instrument in defining the shape of the modern city, both in the works by the *Städtebau* and of the British *Town Planning*, evidently influenced by the experience of Vienna and of Howard's Garden City. At the first RIBA *Town Planning* Conference, Unwin highlighted the importance of controlling the urban sprawl and of providing large areas of park in the limits of the cities:

The essential idea that after a certain size the development of a city should be checked, and that defining belts of park, woodland, or open country should be reserved, seems to me of the utmost importance. Many continental towns, when abandoning lines of fortification, have been wise enough to reserve such a belt. (p.250)

Parker evidently shared this point of view and tried to apply this idea to São Paulo. From this proposal on, the debates around the creation of a park system for the city changed. The scale of the plans became larger and the belief that São Paulo could create an impressive park system was visible. The canalization of the Tietê River, which had been considered since the end of the 19<sup>th</sup> century observing mainly technical aspects, started being understood as part of the plans for the whole city and also as a remarkable opportunity to create an enormous park ribbon in the lowlands alongside the river bed. Instead of being a utopian solution, this idea was taken as a stimulus for the local planners to broaden their focus, proposing plans that considered larger areas and aspired to the creation of a vast number of parks and pleasant walks along the city's edges. The park started to be planned at the scale of the territory.

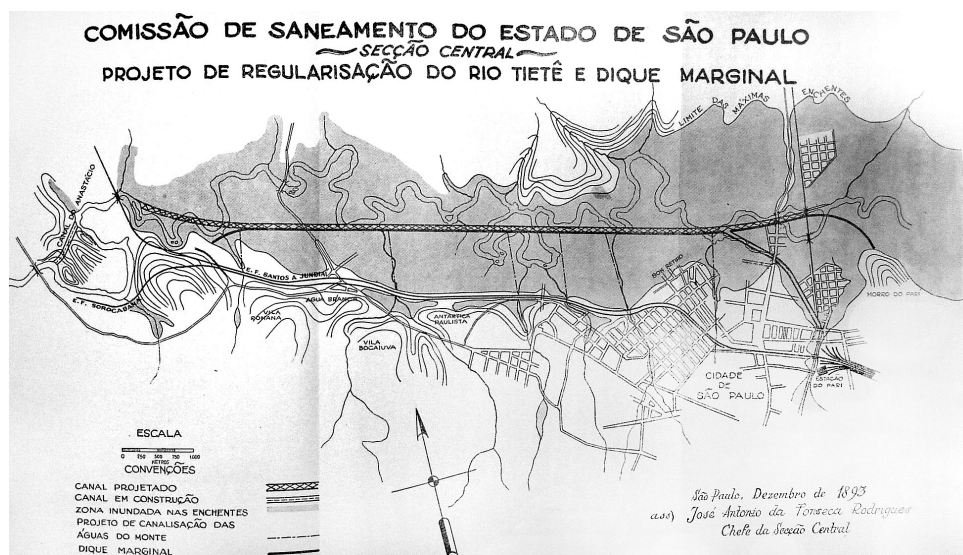


Fig. 6 - Rodrigues' Plan for the Tietê River, 1922

In 1922, Freire was asked to prepare a report on a plan for the Tietê River made by the engineer José Antônio da Fonseca Rodrigues. This plan mainly considered the creation of a straight canal, aiming at increasing the water speed and at avoiding floods. Freire severely criticized this solution, considering it extremely tedious and monotonous, and called for the need of facing the problem of canalizing the river not only considering sanitary issues, but also as a chance to reconstruct the city's shape, to create picturesque scenarios and to provide a huge amount of park areas. Ulhôa Cintra, who worked with Freire, presented an alternative proposal that followed these suggestions. Deeply influenced by Parker's solution, Cintra created a sinuous strip of parks alongside the riverbed. He defended his own work in these words:

The first impression, and I think I can speak with self-assurance, is that the studies made so far [for the Tietê River] were proposed by well-known engineers with indubitable competence in the issue, but to whom it lacks the habit of studying the urban problems as a whole. The consequence of this fact is that the plans or simply suggestions presented suffer from a kind of rigidity and formalism, either faultless if seen only from the point of view of the technical solution, and criticized if seen from a



wider point of view which considers the city as a whole, the complexity of its problems of hygiene, traffic, comfort and wellbeing of its inhabitants. (1923, p.195)

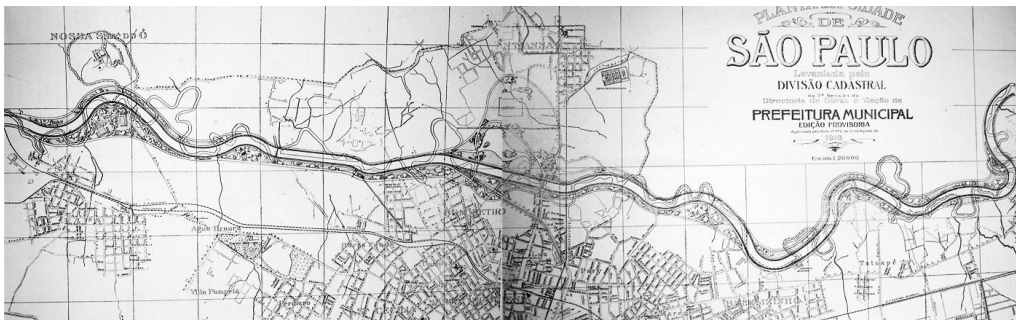


Fig. 7 - Cintra's plan for the Tietê River, 1922

Cintra affirmed that the green areas in the city by that time reached 700.000 m<sup>2</sup>, which was much lower than the minimum area of greenery he calculated it would be necessary: 3.400.000 m<sup>2</sup>. According to him, in 20 years the city would need at least 10 million square meters of greenery, which made him firmly defend the creation of parks in the areas alongside the Tietê River:

One can make an objection and defend it is not necessary to concentrate the majority of the city's open spaces alongside the riverbed.

This objection has no reason to be. There is not in other districts of the city so cheap land, because of the reasons we all know, and which fulfill so well all the requisites needed for parks-proximity to dense districts, extreme facility in establishing fast connections with these centres and the rest of the city, adaptability to all kind of sports and, above all, the water, the queen of the landscapes. (Idem)



Fig. 8 - Brito's Plan for the Tietê River, 1925

The idea of creating large park areas around the Tietê River is part of the engineer Saturnino de Brito's plan as well. Brito became the commissioner of the river canalization works in 1923 and two years later presented another plan. He proposed the creation of parkways and of large park areas alongside the sinuous riverbed too. However, they were not a continuous strip of parks as Cintra had proposed. Cintra would not adopt the same solution in his further plans.



Fig. 9 - Cintra's plan for the Tietê River, 1928

In 1928, he presented new plans for the Tietê River and opted for the creation of a parkway that would connect specific park areas. These last proposals are much closer to the distribution of parks alongside a circular avenue as proposed by Hénard in his *Boulevard à Redans* for Paris, than to Parkers' idea of greenbelt.

In the following decades the will to build parks in the Tietê and Pinheiro Rivers kept being one of the most important aspects of the general and specific plans for the area. Therefore, the creation of a park system connected to the traffic system started to include the outer river valleys after Parker's proposal and with the works of Cintra and Brito. Those parks, placed around the city, initially were thought to act as a greenbelt which should control the urban sprawl and provide greenery to the city; and in the late 20s, the planning of park areas was reduced but still played a fundamental role in the development of the land alongside these rivers.

## Conclusions

The change from a picturesque village to a gridded large city in the turn to the XX century was the spark for the debates around planning the city and its parks. From one perspective, the grid was defended as the best way of obtaining profit from land development and also as a sign of progress and modernity. From another, it meant the destruction of the city in its essence, the rupture of a continuous historic urban development.

Opposed to the regularity of the grid, to the Beaux Arts compositions and to the rigidity of the academic schemes, the works of the German Städtebau and of the British Town Planning were the main international references for the constitution of town planning in São Paulo in the first decades of the XX century. They called for the need of creating a comprehensive plan for the cities as a whole; for the respect for the historic city, its geography and picturesqueness; and for the importance of creating a park system connected to the traffic system. Irregularity and sinuosity were to be fundamental elements of town planning, as opposed to the indistinctive use of the grid and of the straight line.

Victor da Silva Freire, one of the most important individuals in the divulgation of the urbanism as a new disciplinary field capable of solving the problems of the city, strongly defended these ideas. He particularly focused on the works by Joseph Stübben, Karl Henrici, Theodor Fischer, Camillo Sitte, Raymond Unwin and Eugène Hénard to propose his plan for São Paulo in 1911.

At that moment, the park and the park system started being considered as fundamental elements of the plan and should help to control urban sprawl, connect parts of the city and fill the empty spaces. They would also help to promote citizens' mental and physical health, transform unhygienic areas into beautiful places where the public at large could rest and recreate. However, it is important to clarify that they were not considered anymore only from the point of view of creating healthy open areas or for beautification purposes, but as instruments of planning, public spaces and essential objects for the life in the modern city. Bouvard reaffirmed this preoccupations and Cochet had a very important role in the creation of the most significant urban park built in the city in the period.

With Barry Parker the idea of creating an outer greenbelt in the valleys alongside the Tietê and Pinheiros rivers emerged. So far, the scale of the plans was limited to the centre and the main districts around it. After Parker's plan, the newer efforts of planning the city and its park system started including these rivers. The park as an element of planning reaches the scale of

the territory. Cintra's and Brito's plans for the Tietê River are further consequences of this new approach.

The first decades of the XX century was the moment when both urbanism and the modern idea of park emerged in São Paulo. Planning the modern city could not ignore the planning of its parks and other green areas, as it was visible in these first experiences here analyzed.

## **Bibliography**

B. LEPETIT. *Por uma Nova História Urbana*, São Paulo, Edusp, 2001.

E. HÉNARD. *Etudes sur les transformations de Paris et autres écrits sur l'urbanisme (1903-1910)*, Paris, L'Equerre, 1982.

G. CHADWICK. *The Park and the Town in the 19th and 20th centuries*. London, The Architectural Press, 1966.

H. LEFEVRE. *El derecho a la ciudad*, Barcelona, Edicions 62, 1969.

J. F. ULHÔA CINTRA. "Nota sobre o relatório, apresentada pelo engenheiro da municipalidade, J. F. de Ulhôa Cintra". *Boletim do Instituto de Engenharia*, 19, 1923, p.195-7.

J. LUQUE. (coord). *Constructores de la Ciudad Contemporánea: aproximación disciplinar a través de los textos*, Madrid, Inversiones Editoriales, 2004.

J. STÜBBEN. *Handbuch der Architektur: Unter Mitwirkung von Fachgenossen*. Darmstadt: Verlag Von Arnold Bergstrasser, 1890.

L. BENÉVOLO. *Orígenes del urbanismo modern*, Madrid, Celeste Ediciones, 1992.

R. UNWIN. "The City Development Plan". In: *Transactions of the Town Planning Conference*, RIBA, London, 1910, p.247-65.

V. S. FREIRE. "Melhoramentos de São Paulo", *Revista Politécnica*, 33, 1911, p.91-145.