

THE CENTER OF RIO DE JANEIRO: URBAN CULTURAL PARADOXES

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ABSTRACT

In the second decade of this century a series of major international events will take place in Rio de Janeiro - the World Football Championship (2014) and the Olympic Games (2016) - and this will undoubtedly affect the city's urban structure. The renovation of the central area - the urbanization of Porto Maravilha - will be one of the essential objectives of the proposed plans. An open space at the business district - the Esplanada de Santo Antônio - and its fragmented occupation by contradictory cultural functions, establish a challenge for the city center future. Project prepared for the occupation of Santo Antônio Hill defined the particularity of the discussion about Rio de Janeiro urban culture of the first half of the XX century. Master plans developed by Donat Alfred Agache (1875-1959), Paulo de Camargo e Almeida (1906-1973), José Octacílio Saboya (1899-1967) and Afonso Eduardo Reidy (1909-1964) represent the changes occurred from the academic vision of the urban structure to the renovation of the Modern Movement under Le Corbusier influence. They express the antithesis between the desire to integrate the new projects in the traditional, compact tissue of the historic city and valorize the diversification of cultural functions. At the same time appeared a rejection of an elemental organization of tall buildings in the open new space, thesis finally applied on the partial concretization of the Santo Antônio Esplanade. The object of this paper is to show how social and cultural meanings of the urban center calls for an intimate relationship between historic heritage and the new proposals of renovation. And also try to define the dialog between architectural and urban typologies related to the compact tissue, denied by the isolated towers that represent the image of the contemporaneity. In this indispensable articulation, the discussed urban culture at the Santo Antônio Esplanade will be an essential precedent for future projects for this central area.

THEORETICAL REFERENCES

In the first half of the 20th century, the set of problems of urban projects were a priority in the debates among the Southern Cone and Brazilian professionals. The fast population growth, as well as the concentration of industrial, commercial, and financial activities in the cities and the revolution in the transportation system, turned the old urban models obsolete. Particularly in Latin America, city design did not

respond either to the functional needs nor the local bourgeois' symbolic values since they had remained unchanged for almost four centuries. There was little experience with city design because the development of architectural teaching was still tied to the aesthetic aspects of the *Beaux-Arts*. Therefore, in the beginning of the 20th century, in Hispanic America and Brazil, European city planners were invited to design city capitals such as Havana, Caracas, Montevideo, Rio de Janeiro, São Paulo, Buenos Aires, and Santiago. They defined the theoretical basis that would influence the local professional's. The study of this relationship guide the content of this paper.

French planners were most demanded due to the significance of Paris in the cultural imagination of politicians and managers who required fast, functional, and formal changes in the cities. Joseph Bouvard worked in São Paulo and Buenos Aires; Donat Alfred Agache in Rio de Janeiro; J.N.L. Forestier in Havana; and Maurice Rotival in Caracas. They prioritized the classical devices and the monumental image of public buildings that should represent the national democratic governments. Experiences developed in Chicago by Daniel Burnham and the dissemination of *The American Vitruvius* manual created by Werner Hegemann from Germany and Elbert Peets from the US also had influence in this vision of the importance of the *Civic Art*. Other formal, technical, and conceptual strands were also assimilated in the area. The severity of the German and Austrian design schools landed in Chile and Colombia with the urbanist Karl H. Brunner, Camillo Sitte's pupil. Many city officers also adopted the city codes and urban standards created by Werner Hegemann and Joseph Stübben. The model of Garden City, by Ebenezer Howard, inspired the expansion of the new residential neighborhoods in São Paulo. A great example of that is Jardim America, designed by Barry Parker and Raymond Unwin.

In Rio de Janeiro architecture was taught at the National School of Fine Arts (*Escola Nacional de Belas Artes*) and the French academic style prevailed in construction projects, such as the Centennial Exposition (1922) buildings as well as at the contest for "A general plan for the possible modifications, remodeling, and embellishing of the City of Rio de Janeiro" won by Cortez & Bruhns' office. This plan was never done and some professionals in Rio de Janeiro support with enthusiasm the invitation of Donat Alfred Agache b Mayor Antônio Prado Junior in 1927. Among them were José Marianno Filho, Adolfo Morales de los Rios, Armando de Godoy, Edgar Vianna. In 1929 Le Corbusier visited Rio and the classic model crashed after young *Carioca* professionals learned about his revolutionary ideas. The battle between "the old and the new" was not simple nor easy and until the 1950's there was a lot of interaction between these trends. The compact structure proposed by Agache was applied in the Esplanada do Castelo, and Avenida Presidente Vargas kept the greatness of the avenues in the 1940's. Lucio Costa was the main spreader of the canonical principles of the Modern Movement, applied in the Vila Operária de Monlevade (1934), and settled them with Brasília's Pilot Plan (1957). European *avant-garde* experiences are mentioned in local publications: Armando Augusto de Godoy commented about the new city founded in the USSR by Magnitogorsk; and José Estelita about the linear cities.

While Le Corbusier's strands are highly assimilated in the Esplanada do Castelo project by Affonso Reidy; Ludwig Hilberseimer and Mies van der Rohe's German discipline shows up in the project of Esplanada de Santo Antônio, by Paulo

Camargo de Almeida. The proposal for the same downtown area of Rio de Janeiro by José O. Saboya Ribeiro shows interaction between classic and modern principles, which summarizes the European and North-American tendencies in the 1930's, when quoting Werner Hegemann, Karl Brunner, Marcel Poëte, Pierre Lavedan, Camilo Sitte, Raymond Unwin, among others in the foundations of the project. Specialized magazines present themes related to urban infrastructure, the road system required by the growing number of cars; and the addition of high rises to the cities' downtown areas. Following that line of thought in the capital's urban development, the disassembling of the Santo Antônio hill had release of a significant area in the center of the city were the main theme in urban debates and concentrated the proposals for its occupation between the Thirties and the Fifties. Ideas that never came to a reality and kept this big emptiness until the end of the 20th century. Are initiatives that represented the change that should have happened since the adoption of the academic model until the assimilation of the Modern Movement.

PERSISTENCE OF THE ACADEMY: DONAT ALFRED AGACHE

In the last years of the Old Republic, Rio de Janeiro's Mayor Antônio Prado Junior, who was born in São Paulo, invited Donat Alfred Agache (1875-1959), a renowned French city planner, to create the Master Plan for the city of Rio de Janeiro. The process that Pereira Passos started timidly in the beginning of the 20th century would end with an ambitious transformation of the capital, where the symbolic and functional systems should not be limited to the central area, but follow the population growth, the invasion of the automotive transportation, and the need for the basic infrastructure of the city to become more modern. Agache's plan, on the other hand, was carefully studied just now and we will get deeper into his proposal for the Esplanada de Santo Antônio. When the project started, in 1927, the Esplanada do Castelo was completely free. It was the target for the symbolic and functional structures of the central area, hence the presence of Porta do Brasil (Brazil's Door) at the shore of the Guanabara Bay, where the main government buildings were located, the creation of a park and a religious center in Ponta do Calabouço, and the skyscrapers located in Praça do Castelo. Agache followed the residential expansion to the South Zone and was mainly concerned about building a train station in Praça da Bandeira – that would be an important transportation artery of the city – and the expansion of the docks to Caju. For that reason the road plan became very important for the main connections between Porta do Brasil and Praça do Castelo, and the relationship of the downtown area with Praça da Bandeira, in a great axis where Avenida Presidente Vargas would be built.

In this design, Esplanada de Santo Antônio appears as an intermediate space, basically delimited by Avenida da Independência – almost parallel to Riachuelo and Mem de Sá streets – which used to connect Porta do Brasil and Praça da Bandeira. The system of the future metropolitan, which had its origin in the South Zone, curved towards Niterói. In functional terms, this area was expected to become a commercial exchange district, almost like a mirror image of the financial district – a main square surrounded by high rises – though with less symbolic importance. A quadrangular and compact area with two perpendicular avenues - East-West and North-South – defined the complex. The two avenues would form an intersection at

the main square, connecting one side of Avenida da Independência to Praça do Castelo, and the other side to the future Avenida Presidente Vargas. In this compact block structure occupied by twelve story buildings, the skyscrapers would have thirty stories, the Arcos da Lapa would be identified while intersected by Avenida da Independência, and the Convento de Santo Antônio would be surrounded by a small green area.

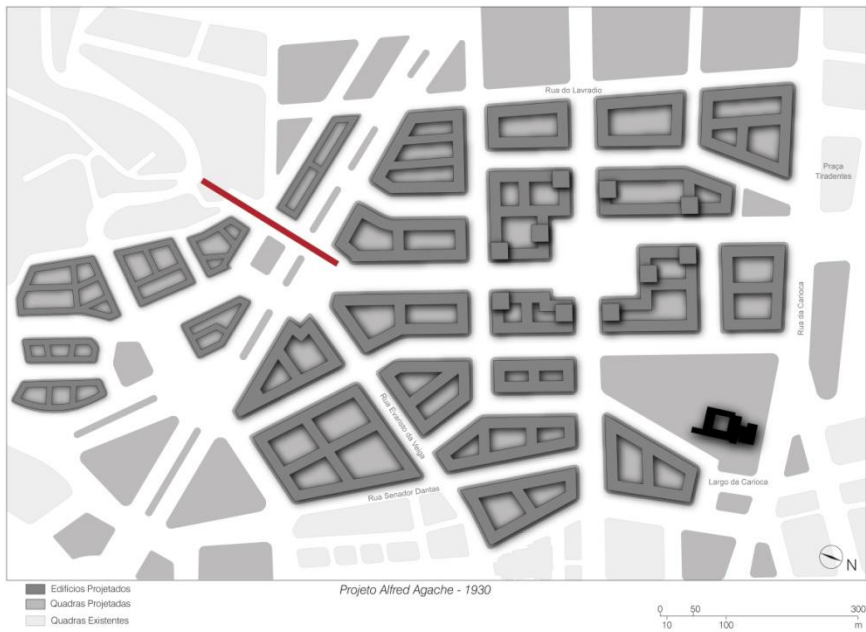


Figure 1 – Agache's Project 1930. Detail.

The Esplanada de Santo Antônio did not show any individuality in Agache's urban system, basically because the square plaza surrounded by skyscrapers was more of a road system connection than a space with symbolic significance or social and political functionality. The idea of adopting a North-American business district model, without residential areas, combined with the "Parisian" architectural inheritance, defined the environmental coolness of the proposal. At the same time, its historical identity completely vanished over the years: Largo da Carioca loses its importance, the traditional architecture of Carioca and Lavradio streets, two important bouderies of Santo Antônio's Hill, disappeared. In this sense, the design of the complex of pentagon shaped buildings that defined the square at the intersection of Avenida da Independência – which divided Passeio Público in half – and Avenida Rio Branco, was more important. The Cinelândia square and the high rise complex of Serrador also lost their importance. As in 1927 Santo Antônio's Hill still existed in its fullness, and there was an "embellishing" project happening, it is possible that Agache did not believe it would be razed in the future.

EQUILIBRIUM BETWEEN TRADITION AND MODERNITY: J.O. SABOYA RIBEIRO

Agache's project ends the twenties decade and the connection of the Academy with the Old Republic governments. In 1930, with the Getúlio Vargas' Revolution begins a new stage in the History of Brazil and the urban development of Rio de Janeiro. The classical tradition begins to be questioned due to the diffusion of the Modernist urban theories, and in particular to the presence of Le Corbusier in Latin America. Replacing the old ideas by the new ones was not a quick phenomenon; it is a long process where there is an exchange of influences between old and new professionals, whom want to impose new aesthetic and functional concepts. In Rio de Janeiro, Armando de Godoy, Edison Passos, José Mariano Filho, José de Oliveira Reis, Arquimedes Memória, Adolfo Morales de los Rios, Ângelo Bruhns, and José Saboya Ribeiro are adept to the traditional system; while Lucio Costa, Paulo de Camargo e Almeida, Affonso Reidy, Adalberto Szilard, Hermínio de Andrade Silva defend the Modernism.

In 1931 mayor Pedro Ernesto ceases the execution of Agache's plan and creates the City Plan Committee to study its validity. Later on, during Henrique Dodsworth federal government (1937-1945), another committee is created and is in charge of executing Agache's plan. At that time Agache's design for Avenida Presidente Vargas becomes a reality. At the same time, with Affonso Reidy's and the Committee's new project, enquiries about blocks built close together arose, considering the new project, conceived in 1936 by the Education and Public Health Ministry, consisted in blocks built among green areas. In 1940, Edson Passos, General Secretary of Roads and City Construction, requests Jose O. Saboya Ribeiro (1899-1967) to create a project for Esplanada de Santo Antônio. The interesting points of Saboya's project were the highly detailed system of roads and buildings, the relationship between the complex and the traditional city, the protection of the historical monuments, and the study of the profits that would come with the urbanization.

Saboya Ribeiro was a highly educated professional and was aware of the international urban trends, which are quoted in the fundamentals of his project, both the conservative from Marcel Poëte, Pierre Lavedan e Werner Hegemann, and the innovative from Le Corbusier. He had studied the *Urbanism Manual* by Karl Brunner, which had influence in his idea of diversified blocks and free organization of buildings, based on the idea that the homogenous tissue and personified individual elements achieve balance. The urban structure is defined by "H" shaped blocks, with average heights of 17 stories in the central area and 11 stories in the surrounding area. This standard building had the following functional organization: underground for parking, an area on the ground floor for retail spaces and department stores, lower floors would be occupied by offices and higher floors by apartments and hotels.

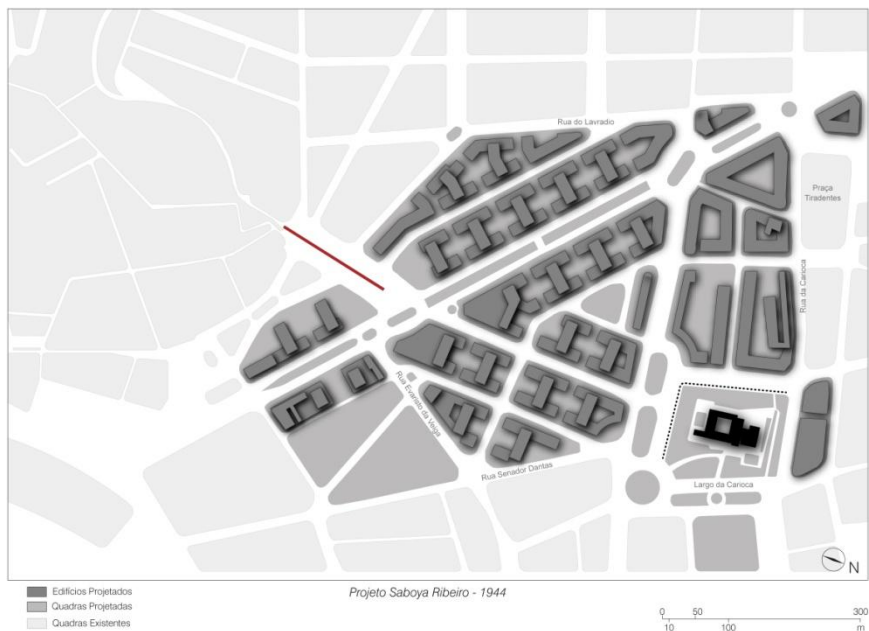


Figure 2 – Saboya Ribeiro's Project 1944. Detail.

Neither the monumental complex in Praça do Castelo nor the train station in Praça da Bandeira would become a reality. Therefore, Saboya radically changed Agache's solution for the Esplanada do Castelo. Avenida da Independência would become Avenida Diagonal connecting Avenida Beira Mar to the Central Station and Campo de Santana. He would create two more avenues; one connecting the Convent and the Arcos da Lapa, while the other connected Largo da Carioca with the North Zone of the city. He isolated the Santo Antônio Convent and the Arcos da Lapa to distinguish them as the main monuments of Rio's architecture. Saboya designed staircases and retaining walls, and proposed rebuilding the old Chafariz do Largo da Carioca. Traditional buildings in Rua da Alfandega would disappear but one side of Carioca Street would be maintained. The architectural image was associated with the aesthetics of the Modern Movement and the skyscrapers were located in the main squares along the Avenida Diagonal, the Praça dos Arcos da Lapa, and nearby Central Station. The project was defined as intermediate between classical and modern concepts, showing the desire of keeping the compact city and the link between the existent tissue and the new intervention as well as a multifunctional internal structure that would increase the social interactions in the complex, since he envisioned it would be occupied by a total of 82 thousand people. At the same time he plays with the idea of isolated blocks, the importance of the green spaces and the pedestrian flow through the internal streets and small public parks, made possible by the "H" shaped buildings.

URBAN MODERN MOVEMENT CODES

Le Corbusier's visit in 1929 had substantial influence over the young students of the School of Fine Arts who assimilated the innovative proposals presented in the book *Urbanisme*: Paulo de Camargo e Almeida, Hélio Duarte, Paulo Santos, Oscar Niemeyer, and Affonso Reidy. In 1936, during his stay in Rio de Janeiro, he presented the book *La Ville Radieuse*. Add to that his experiences with the Russian Avant-Garde and the urban work done in Germany and Holland. He shared those experiences in the course he thought at the Distrito Federal's University, where Lucio Costa attended his course, and based his studies on the text *Reasons of the New Architecture*. Paulo de Camargo e Almeida (1906-1973) post graduated from this course in 1938 and based his monography on the urbanization project of Esplanada de Santo Antônio. His work got the Gold Medal Prize in the 5th Pan-American Congress of Architects in Montevideo in 1940 and was presented at the same time as the one created by the City Plan Committee, where participated Herminio de Andrade and Edwaldo M. Silva.



Figure 3 – Camargo e Almeida's Project 1939. Detail.

The project's image was closer to the German model than to Le Corbusier's representations. The chain of buildings in the long comb shaped articulations reminded of Hochhausstadt de Ludwig Hilberseimer (1924) style. The smoked gray drawings corresponded to the main graphic styles of that time and are shown in the drawings of Mies van der Rohe, Karl and Almeida, Brunner, Hugh Ferriss, and Giuseppe Terragni. Those drawings were also applied in Argentina by the architect Wladimiro Acosta, whose project from *City Block* resembled the solutions presented by Camargo e Almeida. The style of continuous blocks with maximum heights of 14 stories and generous green spaces defined the homogeneous structure that did not limit itself to the Esplanada but expanded along the shore towards the area that would become Enseada da Glória, whose new urban tissue articulate with the new solution presented by the City Plan Committee for Esplanada

do Castelo. He rejected the Avenida da Independência and the division of Passeio Público, but also emphasized the Arcos da Lapa and kept some of Agache's ideas, such as the Porta do Brasil – which lost its academic monumental significance – and the square in the middle of Esplanada without the skyscrapers and divided it in two plazas with important roles in the road system. The smallest established the intersection between Avenida Almirante Barroso and Avenida Passos, and the main one with a large "T" shape at the crossing of Rua do Lavradio and Avenida Almirante Barroso. This way, he clearly defined the two-way circulation system – North-South, East-West – which would be used by Reidy later on.



Figure 4 – Reidy's Project 1948.Detail

In Camargo e Almeida's project the arterial urban system became very important, with the goal of establishing connections between the South Zone, the downtown area, and the North Zone. That's why the project had wide avenues, that created bridges over pillars and intersections. In his project old streets were widened, for instance Rua do Lavradio by 60 meters, Rua do Catete by 40 meters, Rua da Carioca and Rua 13 de Maio by 30 meters. Continuous blocks and vegetation that allowed the use and circulation of pedestrians limited these arteries. It's worth noting that, from the architectural and urban point of view, this project was an already orthodox version of the Modern Movement, without waiving the traditional compact city or the goal of a high density population. It also integrated administrative, commercial, and cultural functions to maintain a lively urban space. In the Fifties, in Adalberto Szilard and José de Oliveira Reis' book *Urbanism in Rio de Janeiro*, Szilard questioned Saboya Ribeiro's proposition and presented an alternative. While he preserved the importance of Avenida Diagonal, which was eliminated in Camargo and Almeida's project, he eliminated the structure of close-knit buildings, creating a system of open green spaces in which public buildings

would be seated. At the axis of Avenida Barroso, he placed a square that created a division on the avenue in front of the City Hall, a 40-50 story building. Commercial centres, residential areas, restaurants, schools, cinemas, and an auditorium spread around the borders of the Esplanade. Interestingly, the project suggested continuing the tramway lines through Avenida Diagonal, in the direction of the Estação Central do Brasil Central, to define a connection with the area of Cinelândia and maintain the permanence of cultural activities on the Esplanade. The posterior definitions of the volumetric and functional structures are not found in the floor plan.

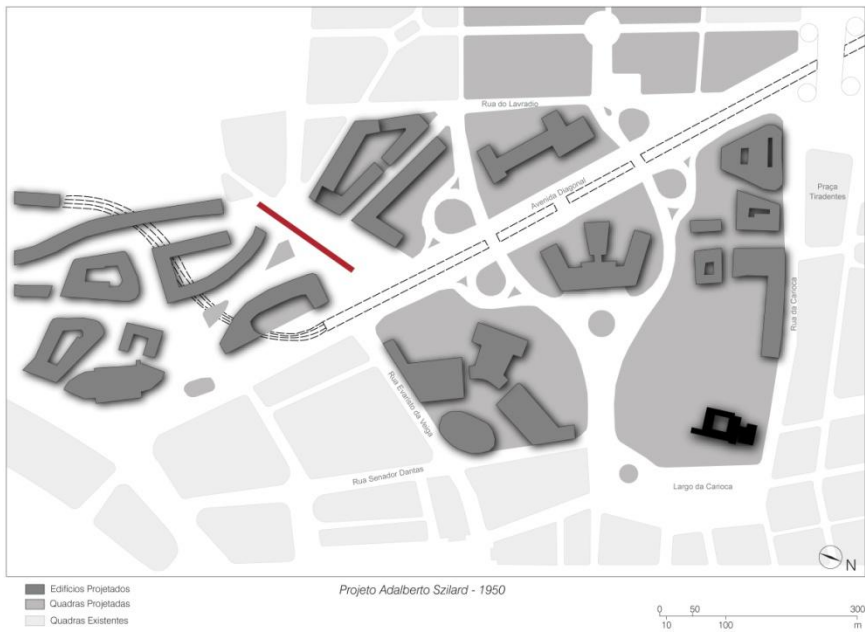


Figure 5 – Szilard's Project 1950. Detail.

Afonso Eduardo Reidy (1909-1964) undoubtedly created the most elaborate plan in the orthodox language of the Modern Movement. His plan summarized the contributions of previous projects in a clear and clean version of what should provide a refreshing solution to the empty city center. He defined a more precise road system and Agache's 'economic' symbolism became a political-administrative symbolism, creating the City Hall, the City Council, the Municipal Library, and the Municipal Museum. The plan also reasserted the multifunctional vocation of the area, creating substantial public housing.

Since the creation of the City Plan Commission (1938-1948) by Mayor Henrique Dodsworth, directed by José Reis de Oliveira and formed by Hermínio de Andrade e Silva, David Xavier de Azambuja, Aldo Botelho, Nelson Muniz Navares, Armando Stamile Genarino, and Edwaldo Moreira de Vasconcellos, only the new city road system had been defined and Avenida Presidente Vargas had been established. Mayor Ângelo Mendes de Moraes (1947-1951) requested in 1948 that Afonso Reidy, then Director of the Urbanism Department, a new project for the Esplanada de Santo Antônio. Saboya Ribeiro and Camargo e Almeida's compact solutions were replaced by an open concept, structured by a North-South bridge (where we have

Avenida República do Paraguai today), and the smallest perpendicular avenue that was a continuation of Avenida Almirante Barroso. He conserved the Arcos da Lapa and the Convent, but eliminated the edges of Lavradio and Carioca streets and created what would be the true political-administrative centre of the city, inexistent for half a century, with a large central plaza for public activities defined by the 30 stories City Hall Tower, the City Museum (inspired by Le Corbusier's Museum of Unlimited Growth), and an auditorium. On the opposite side he put four office towers, each one with 24 stories. The residences were located on a linear strip 780 meters long and 12 stories high along Rua do Lavradio, enough for 8 thousand people to live in with all the necessary public services. He envisioned that 24 thousand people would work in those offices. The mayor considered the expected population for the complex low and that it would not reach the necessary revenue. Therefore, in 1949, Reidy designed a simpler project, without the museum and adding an extension to the embankment with 6 residential layers of 20 stories on the shore.

As the disassembling of Santo Antônio's Hill began in 1952 during the government of mayor Dulcídio Cardoso and was continued by Negrão de Lima, ending in 1959 with the grand opening of República do Chile Avenue by President Juscelino Kubitscheck, none of the projects was executed. The North-South and East-West avenues were not finished, the first ending at Rua da Carioca and the second at Rua do Lavradio. Projects were created by José de Oliveira Reis (1903 – 1994) and later on by Hermínio de Andrade Silva and Ewaldo J. Pereira, but represented a trivialization of the solution created by Reidy, where the main goal was the revenue generated by the office buildings. The residential aspect was eliminated as well as the symbolic presence of the public buildings.

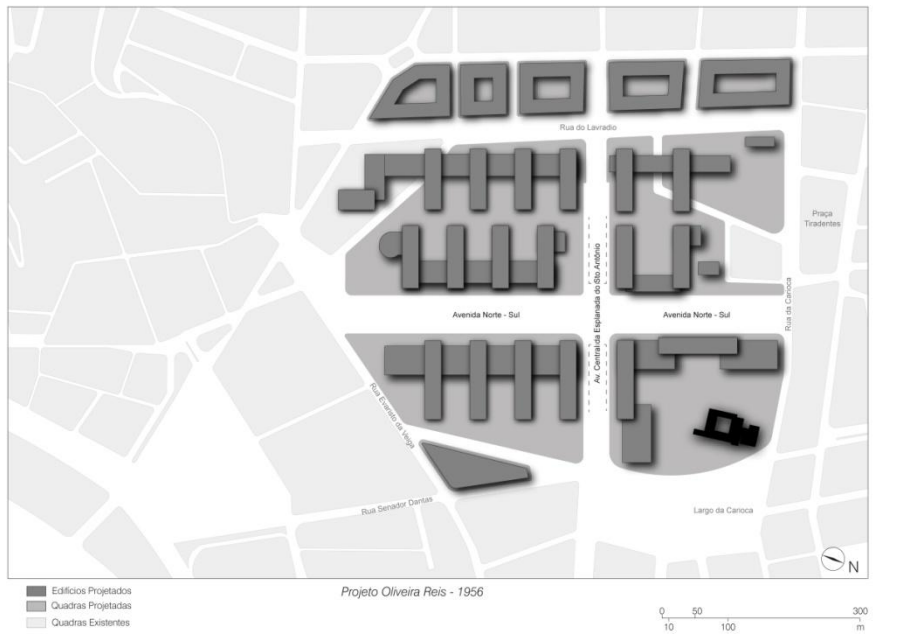


Figure 6 – Oliveira Reis's Project 1956. Detail.

CONCLUSION

At the Esplanada de Santo Antônio - the area studied in this paper - the projects analyzed had no noticeable consequences. Urban downsizing has opened the doors to an empty future that would be randomly fulfilled from the sixties on without any urban planning, a situation that persists in the 21st Century.

REFERENCES

- AAVV, Affonso Eduardo Reidy. Rio de Janeiro. Rio de Janeiro: Solar Grandjean de Montigny. Pontifícia Universidade Católica do Rio de Janeiro, 1985.
- Abreu, Mauricio de A. Evolução Urbana do Rio de Janeiro. Rio de Janeiro: IPLANRIO, 1997.
- Agache, Donat Alfred. Cidade do Rio de Janeiro. Remodelação, Extensão e Embelezamento: Paris. Foyer Brasilien, 1930.
- Bondukil, Nabil (Edit.). Affonso Eduardo Reidy. Arquitetos Brasileiros. Lisboa, São Paulo: Editorial Blau, Instituto Lina Bo e P.M. Bardi, 2000.
- Brunner, Karl. Manual de Urbanismo. Volumes I-II. Bogotá: Ediciones del Consejo de Bogotá, 1939-1940.
- CENIQUEL, Mario. Affonso Eduardo Reidy. Ordem, Lugar e Sentido. Uma Visão Arquitetônica da Centralidade Urbana. São Paulo: Tese de Doutorado. FAUUSP, 1996.
- CERÁVOLO, Ana Lúcia. Paulo de Camargo e Almeida. Arquitetura total na trajetória profissional de um arquiteto brasileiro. São Carlos: Dissertação de Mestrado, Escola de Engenharia de São Carlos, 2000.
- Freire, Américo; Lippi de Oliveira, Lúcia. Novas Memórias do Urbanismo Carioca. Rio de Janeiro: Editora FGV, 2008.
- Giedion, Sigfried; Klaus, Franck. Affonso Eduardo Reidy. Bauten und Projekte. Stuttgart: Verlag Gerd Hatje, 1960.
- Godoy, Armando Augusto de. "A Urbs e os Seus Problemas". Rio de Janeiro: Jornal do Commercio, 1943.
- Mello Junior, Donat. Rio de Janeiro, Planos, Plantas e Aparências. Rio de Janeiro: Galeria de Arte do Centro Empresarial Rio, 1988.
- Passos, Edison. "Plano de melhoramentos da cidade do Rio de Janeiro", in Revista Municipal de Engenharia (PDF), Rio de Janeiro, Volume VIII, junho 1941, pp. 8-55.
- Queiroz Oliveira, Sonia Maria. Planos Urbanos do Rio de Janeiro. Plano Agache. Rio de Janeiro: CAU, SMU, 2009.

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Rezende, Vera. Planejamento urbano e ideologia. Quatro planos para a cidade do Rio de Janeiro. Rio de Janeiro: Civilização Brasileira, 1982.

RODRIGUES SOSA, Marisol. Rio de Janeiro de Agache e Havana de Forestier. A Escola Francesa de Urbanismo nos Centros Urbanos de América Latina. Rio de Janeiro: Dissertação de Mestrado, PROURB/ FAU/ UFRJ, 2003.

Saboya Ribeiro, José O. "Urbanização da Esplanada de Santo Antônio", em Revista Municipal de Engenharia (PDF), Rio de Janeiro, Volume XI, Janeiro de 1944, pp. 8-16.

SANSÃO FONTES, Adriana. A nova forma da Esplanada de Santo Antônio. O projeto urbano na área central do Rio de Janeiro no século XXI. Rio de Janeiro: Dissertação de Mestrado, PROURB/FAU/UFRJ, 2004.

Silvia, Lúcia. História do Urbanismo no Rio de Janeiro. Administração Municipal, Engenharia e Arquitetura, dos anos 1920 à ditadura Vargas. Rio de Janeiro: E-Papers Serviços Editoriais, 2003.

Silva Leme, Maria Cristina da. Urbanismo no Brasil. 1985-1965. São Paulo: FUPAM, Studio Nobel, 1999.

Stuckenbruck, Denise Cabral. O Rio de Janeiro em Questão. O Plano Agache e o Ideário Reformista dos Anos 20. Rio de Janeiro: Observatório de Políticas Urbanas, IPPUR, Fase, 1996.

Szilard, Adalberto; Oliveira Reis, José de. Urbanismo no Rio de Janeiro. Rio de Janeiro: Editora "O Construtor", 1950.

Lima, Evelyn Furquim Wernek. Rio de Janeiro. Uma cidade no tempo. Rio de Janeiro: Secretaria Municipal de Cultura, Turismo e Esportes. Prefeitura da Cidade do Rio de Janeiro, 1992.