

A HISTORICAL APPROACH TO AVENIDA PRESIDENTE VARGAS PROJECT IN RIO DE JANEIRO: CHALLENGES AND CONTROVERSIES TOWARDS A RESPONSIVE FUTURE

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ABSTRACT

Six decades after President Vargas Avenue drastic urban surgery (1940-1944) for opening this main urban artery in the central area of Rio de Janeiro city, it still seems an unfinished project sprinkled with notable examples of pre-modern, modern and ordinary architecture and multiple urban voids. Diversity, emptiness, discontinuity and permanence summarize, nowadays, this monumental project, conceived during the nationalist context of the Dictatorial regime (1937-1945) imposed by President Getúlio Vargas. Recent attempts – projects, new buildings, urban legislation review – to manage this unfinished project have been in vain. This paper aims to discuss the current conjuncture, through the understanding of this historical process. What controversies and challenges do these attempts point out towards a responsive future for President Vargas Avenue?

INTRODUCTION

The controversies of President Vargas Avenue planning process, the main downtown urban artery of Rio de Janeiro, announce important challenges towards a responsive future. Seeking to identify both, controversies and challenges, we undertook a historical review based on specific contemporary spatial configuration aspects. Thus far, urban morphology and architecture are considered as embodiments of this urban project and legislation as well as cultural desires of each historical moment. This researchⁱ discusses an architectural urban dimension through an urban planning perspective, by focusing on the Avenue project guidelines, urban structure, built environment and urban legislation. This Avenue is a remarkable case for that as it is legible in its public space and built environment as a great spectre of urban, planning, architectural, urban legislation and cultural heritage history.

However, six decades after the monumental urban surgery, President Vargas Avenue still seems unfinished. Withal, recent attempts – projects, new buildings and urban legislation review – to handle it have been proved in vain. Some of them were conceived to manage the urban tissue merged by the former project; others incited even more this fragile urban tissue and increased the urban voids. For standing this currently sprinkled project with notable cases of pre-modern, modern and ordinary architecture and many urban voidsⁱⁱ, the main keywords to define the Avenue are *diversity, emptiness, discontinuity* and *permanence*.

The gap between the Avenue project and its actual shape is striking. Whereas in the first portion, nearby the Bay and the Mineiros Quay, the built ensemble is very similar to that proposed in the 40s, after Uruguaiana Street, it begins to be marked by situations of urban voids. As we approach to the last portion of the Avenue, nearby the Mangue Canal, it is remarkable that there are the buildings that mark the voids. Devoid of architectures, the monumental axis of this Avenue, with 4km long and an average width of 80 metres, prevails as a big void reinforcing the split between its sides.



Figure 1: Rio de Janeiro Central Area and President Vargas Avenue's landmarks. AB, 2010.

This Avenue can be shortly described as a path connecting two Bay Shore points: the Mineiros Quay and the entrance of Mangue Canal. In this sense, its history begins in the 19th century with the opening of Mangue Avenue connecting the Canal to the former Gas Plant in 1858. In terms of planning history, this connection took part in non-implemented plans of the beginning of the 19th century. Nevertheless, the Mangue Avenue was finally conceived and undertaken by a private entrepreneur, Baron de Mauá, interested in supplying English coal for his gas plant through Mangue Canal. In 1929, Alfred Agacheⁱⁱⁱ designed its extension as a part of his circulation plan. However, according to political issues of that time, this plan was called off. In 1938, the nationalist context of Estado Novo^{iv} gave political support to undertake this project. It was no longer just an urban project; it had become a national one with a whole symbolic repertoire associated with it. As a result, this avenue became one structural part of the 1940s Management Plan^v. In 1944, it was inaugurated with *pomp and circumstance* by the president.

Meanwhile the works for the President Vargas Avenue opening, other Brazilian city capitals, such as Niterói^{vi}, Recife and Porto Alegre^{vii}, were being remodelled influenced by Agache's ideas about circulation and urban types. All followed Rio's model and opened a main large avenue in the city centre, settled with continuous arcades with *pilotis*. As Rio had been the federal capital for three centuries^{viii} and still remains a Brazilian cultural centrality, its urbanistic and architectural conceptions have always been disseminated to other cities, inspiring urban remodelling elsewhere.

In order to be aware of President Vargas Avenue project guidelines, motivations and failures as well as the subsequent projects and attempts proposed later, the methodology of research tackled with dynamic interpretation of empirical, bibliographical and iconographic data, applying the digital graphics resources.

THE CONCEPTUAL GROUND: PROJECT OF AVENUES

Contextualizing the Avenue project, a brief historical review of avenues is presented. The turning point for the conception of Avenues was the 19th century, when they became associated with the rationale of urban space contributing to promote a new image for the city or the occupation of the urban expansion areas. Moreover, the rectilinear trace would facilitate urban infrastructure network, which initiated to be supplied to individual houses. The avenues became a privileged visible path of underground infrastructure. From that moment on, the avenues became synonymous with *urban project*.

If we had to select a guideline in the avenue's project, it would be *link*. Avenues express visible connections between significant city landmarks, trendy architectural aesthetic premises, ongoing spatial practices and new symbolic meanings, as well as invisible links between new linear subway infrastructures.

During the 19th century, several great occidental cities and capitals had their urban tissue reconfigured by urban projects whose avenues drove them to the *fresh*

modern times. Haussmann's^x boulevards and avenues were the icons of this urban conception, rationalizing the paths of Paris urban medieval tissue. Yet, in a moment of urban upheavals, they allowed a stronger people control. Before Haussmann, we cannot talk about avenues shaped by uniform blocks or as places under severe State control. This conception will last until the next century. Guided by hygienic and embellishment notions, the avenues became the scenario of the early 20th century lifestyle.

Yet in Rio, Mangue Avenue (1858), opened into an ancient swampy area, connecting the Mangue Canal to the former Gas Plant, was one of the first avenues of the city, where, later, President Vargas Avenue would take place. Few decades later, it housed the Central Railway Station, the Army, town houses and new plants.

Other important avenues of Rio de Janeiro, such as Rio Branco, former Central Avenue^x, and Atlântica, were opened as part of the Urban Plan (1903-1906) promoted by the mayor Pereira Passos. Rio Branco Avenue, with 33 metres width, linear disposal of trees in the middle and flanked by eclectic buildings, represented the arrival of the fresh modern times to Rio and consequently the new urban lifestyle place. Accordingly, Atlântica Avenue would become together with the Copacabana Palace Hotel (1923) international icons of urban leisure lifestyle^{xi}.

In 1940, the extension of the Mangue Avenue towards the Bay Shore, nearby the Customs House, was finally implemented and was named after the current president, President Vargas Avenue. Even if it had maintained the former blueprint, its conception was guided to the "interior of Brazil", motivated by the emergent political approach. It should have settled the expansion of central business district, established along Rio Branco Avenue, and given place to institutional buildings, whose monumentality would symbolize the magnificence of Estado Novo regime. An avenue with opened doors to the future and closed windows to the city's colonial past. Nevertheless, the expected investments had failed and displaced to Copacabana, after the World War II, leaving great extensions of urban voids among the new CBD's buildings until today.

In the middle of 20th century, with the growth of the cities and a rising number of vehicles, public transport and people moving around their streets and avenues, speed emerged as an important issue in the projects of the avenues. They became lines, with so many roads as necessary, where vehicles could circulate faster. They shouldn't be interrupted in their way. Viaducts, or, in other words, new levels of avenues, were built to enlarge vehicles circulation. This conception reached the top during the 1950-1960s^{xii}. The speed of these projects would only become slower with the emergence of the heritage preservation movement during the 1960s.

The 1950s in Rio de Janeiro correspond to a moment of several urban surgeries in downtown urban tissues. The razed Santo Antonio Hill was displaced by two crossed avenues – Chile and República do Paraguai Avenues – flanked by important financial buildings with barely none sidewalks. A system of up-avenues – 31 de Março, Perimetral and Paulo de Frontin viaducts – crossing downtown area were built, despite the massive urban environment put down. By the end of the 1960s, it was opened the Americas Avenue as a vector of expansion towards Barra da Tijuca, a new borough in the west zone.

The 1970s and the 1980s in Rio represent the arrival of a system of down-avenues – the subway – following the trace of the President Vargas Avenue. Differently from other cities, the subway left a footprint of voids in the surface due to a *non-aedificandi* ordinance. This new layer represented another disruption on the fragile urban tissue of President Vargas Avenue. The 1980s also represented, in Rio, the conception of city as a cultural asset, or in other words, the understanding of relevance of the cultural heritage aspects.

This brief historical approach revealed that President Vargas Avenue went through a process of transforming the nature into a continuing sprawl of the urban fabric, as well as a process of creating public lands into the valued downtown. Moreover, two dialectic processes dominated the earliest times of Rio de Janeiro urban history: i) construction of a new axis towards west, full of magnificent State and commercial buildings; and ii) destruction of old quarters identified with a deniable past. As a result, this Avenue is remarked not only by its architectural icons but also by its wastelands.

NORMATIVE URBAN DESIGN AND PRESERVATION

Recognizing that urban regulation has a morphological dimension as well as that the urban dimension of architecture is particularly revealed through cultural heritage issues, we analysed President Vargas Avenue from this bias. Hence, it provides not only an exemplar case for revealing the implicit normative dimension in the spatial configuration^{xiii} and its role in the maintenance of the wastelands created by urban projects in this area; but also, the State concern of what should be preserved since 1940. In this sense, we are going to consider some aspects concerning President Vargas Avenue urban legislation and cultural heritage issues as they are related in many terms.

Few years before the clearance for the avenue, the first functional zoning ordinance of the city was issued, based on Agache's proposals, which corroborated with the existing location tendency for the commercial, industrial, residential and dockland zones. Shortly afterwards, it was substituted by the first *Building Code for the City*, which ratified the 1935 zoning^{xiv}.

According to legislation guidelines for the Commercial Zone of the city centre, blocks alignments follow the outer limits of the lot, configuring uniform quarters. Agache, concerned with the formal aspect of the city, conceived it as a reference basis for architectural practice. The conjunction of urban morphology, zoning and architectural type would configure quarters. The first guidelines for the Avenue determined height limits of 12 floors at Candelária sector and 17 floors for the rest. Later, in 1940, the heights were lifted to 22 floors in its central area. Thus, we can state that the architectural ensemble idea persisted and incorporated the notion of hierarchy of urban patterns.

Following the functional city model, the next zoning ordinance, limited residential use in central area and industrial districts even if the federal district's Building Code did not explicitly restrict housing in the central area. The new Zoning Code (1976) reinforced commercial purposes. This normative model, guided by the logic of control or allowance of land uses, gave priority to space functionality^{xv}.

As a result of residential use restriction, downtown was excluded of the massive urban renewal moment. This period observed a real estate market growth and availability of home financing. However, the urban ordinance parameters for the Avenue were incongruous to real estate market expectations to that location, at that time. So, vertical typologies have remained on *paper*, and the project incomplete. Nonetheless, the functionalist urban legislation could have destroyed local traditional urban morphology of the Avenue surroundings, if the legislation's building potential had been accomplished. The lack of real estate development did promote urban voids, but also urban preservation, yet not avoiding physical decaying of the buildings.

The urban ordinance in force today in the City centre district is the so-called Centre's Law^{xvi}, from 1994. It stimulates the rehabilitation of the urban space by encouraging residential use, the valorization of cultural heritage and the stimulus to economic activities, and tourism interest.

The subordination of the architectural design to urban parameters is operated on a lot scale. In this case, urban tissue was redesigned for configuring new parcel structures and shaping new quarters^{xvii}. By regulating building typology^{xviii} through design control ordinances, Government has granted the proposed urban ensemble – on paper. Nevertheless, the new alignment becomes progressively concrete at a lot scale, according to landowners' will. Although in major cases, edifications are easily renewed, since they can be rebuilt without a lot alteration, in this case, the materialization of blocks has depended on private investments to join multiple parcels that would redefine a lot. This operation has posed obstruction for the fulfilment of the ensemble of the Avenue as built.

Considering cultural heritage issues on the President Vargas Avenue, it is remarkable that as the city centre urban fabric, it comprises built elements which are representative from the city's and the Nation's history. Thus, the conceptual trajectory of Heritage protection practice in Rio de Janeiro is registered between the lines of its history. Yet, their recognition as cultural Heritage has occurred according to the prevailing heritage notion of each moment.

Briefly, the conceptual evolution of cultural heritage protection reveals the changes of values, from primarily emphasizing the exceptional value of

architectural and historical National Monuments, assuming later the comprehensive notion of cultural heritage sites, towards an urban conservation and rehabilitation approach. This evolution can be correlated with the shift of urbanism paradigms of then. According to Choay's^{xx} argument, preservation has always been in the opposite way from the prevailing urbanization process. Thus far, she reminds that it was, in fact, becoming an obstacle to urbanism reforms, that heritage developed its conceptual identity in the 19th century.

In Brazil, the preservation protection issues had emerged just a few years before the Avenue project was implemented. The primary attention of the National Heritage addressed the acknowledgment of exceptional value, thus listing monumental architecture, especially religious buildings, baroque colonial style, followed by neoclassical ones, yet underestimating the recent past.^{xx}

This Avenue is known not only for its urban spaces and built ensemble, but also for what was demolished. Several blocks were razed for its opening, sweeping hundreds of residential and commercial buildings, four important seventh-century churches^{xxi}, a hospital, a school, a nursing home, and the XIX century City Hall, and provoking an irreparable loss of social memory and cultural heritage. Besides, a range of 90 metres wide was bitten from Campo de Santana, a remarkable urban park (1874-1880) designed by Auguste Glaziou. The demolition of the churches and the strip of the Campo do Santana Garden provoked public complaints for being National Heritage listed sites^{xxii}. Despite of that and SPHAN director's fight to change the project and safeguard the monuments, the demolitions of these sites were legally approved^{xxiii} in 1941.

On the other hand, a few significant institutional buildings, such as the Old Customs building, the Bank of Brazil, and the Rivadávia Corrêa School, were preserved. Among them, it is important to noteworthy the Candelária Church (1775-1811), with its remarkable main portico facing the bay, turning back to the Avenue. Originally inbuilt in an urban tissue of narrow streets, with attached houses, after the works for the Avenue, it's surroundings were cleared and the church acquired more visibility. It is an exemplar case of modernist conception of historical heritage. Symbolically, this fact reinforces the paradox of this project, between historical past and modern present.

Only in the 1980's, the municipality inaugurated an integrated conservation approach, as part of the city urban planning, in consonance with 1970's Heritage Charters. Urban conservation policies have been established through the demarcation of protection areas. The pioneer was the Cultural Corridor (1984), a paradigmatic experience, protecting large urban ensembles, part of which are placed along President Vargas Avenue.

Being both the Historic Centre and Central Business District, the Local urban regulation must contemplate the clashes of interests of this condition. Besides zoning ordinances, there are, in force, five Preservation Areas in the surroundings of the Avenue: Corridor Cultural; Docklands region SAGAS; Cidade Nova and Catumbi; Cruz Vermelha; Teófilo Otoni/São Bento Monastery^{xxiv}. Thus, according to contemporary heritage notion, this Avenue project would remain on paper.

URBAN MORPHOLOGY AND ARCHITECTURE

The urban morphology and architecture proposed to President Vargas Avenue has conferred it a magnanimous scale, by flanking the great empty axis a continuous, high and robust mass of institutional, commercial and service buildings. The morphology was inherited from Agache's Plan in its functional aspects and urban composition that had incorporated the symbolic power of the nationalist government of Vargas. Behind this image of monumentality, modernity and progress, colonial and eclectic architecture and historical landmarks that used to identify Rio de Janeiro were hidden. As this project was scarcely implemented, only a few buildings and several footprints of the colonial and eclectic architecture can be seen along the Avenue.

Analysing the current spatial configuration of the President Vargas Avenue, we identified four great types of building along the avenue – historical buildings and monuments; town houses; multiple storeys and freestanding buildings – and five different sectors that contrast from intensively dense to barely inhabited. A historical approach to this Avenue architecture should be attached to its parts and phases of occupation. The three first sectors contain the initial avenue buildings

and correspond to the part inaugurated in 1944. They correspond also to the ancient centre of the city, where the contrasts between the oldest urban tissue and the morphology proposed to the Avenue reach its maximum.



Figure 2: President Vargas Avenue's Sectors. AB, 2010.

From east to west, from the Mineiros Quay to the Mangue Canal, or from the ancient centre of the city to its 19th century expansion area, Candelária is the first sector. Candelária Church and the 1940-1950s corporate buildings dominate this sector. The most important examples are in the open square around this Church (Square Pius X). This sector concentrates part of Rio's Central Business District (CBD). The urban morphology still corresponds to the one proposed in the original project: 22 floors except around the Pius X Square with 12 floors. This new mass has completely changed the relationship scale among the church-monument and its surroundings, subtracting its skyline prominence and transforming it into a dialogue with the environment.

In this sector there are still some buildings in art deco and *pre-modernist*^{xxv} styles mixed among the natural modernist buildings. The portion near the Pius X Square went through a recycling of uses in the 1980s. Some old financial centre buildings were then converted into cultural facilities. A concentration of museums and cultural centres occupy Historical Heritage buildings. In the junction of this area with the Avenue occurs an abrupt juxtaposition of scales, the dense historic colonial city with the monumental scale of the Avenue design.

The second sector, named Uruguaiana, comprehends the blocks between this street and Passos Avenue. In this area, pre-modernists buildings, higher ones from the 1970s and also some wastelands uncover the eclectic commercial houses at the rear of the quarters, at both sides of the avenue. We can observe in this sector the first fractures in the proposed ensemble of 22 floors. Perfectly inserted in this architectural ensemble, stands out its most renowned building, the IPERJ Headquarters, designed by architect Affonso Reidy. Its prominence is mainly due to its mosaic of *brise-soleil* on the facade, which would be facing a square and north-south avenue in case these two projects had left the paper^{xxvi}.

Candelária and Uruguaiana Sectors are recognized for some projects the most important architects at that time, like Oscar Niemeyer, Lúcio Costa and Alfonso Reidy or even by architects with strong presence in the housing market, as Firmino Saldanha and Paulo Casé, among others. They provided a sense of diversity and quality to their architecture, despite legislation guidelines. There are also post-1980's buildings that offers more contemporary solutions. They contribute to the creation of an amazing architectonic mosaic in these sectors.

Finally, it should be mentioned that the transformation of the ground's floor and mezzanine's uses that no longer belong to a single corporation had been subdivided into small units. This could have been quite positive considering the use of the urban space, if it hadn't produced visual pollution, disorder and degradation of several units.

The last sector of the part inaugurated in 1944 corresponds to Campo de Santana. It is dominated by the Central Railway Station, the former War Ministry's Building and the green vision of this urban park surrounded by significant historical buildings conforming a different urban context completely apart from the entire avenue. We can also visualize behind the railway station the hills dominated by squatter settlements^{xxvii}. As in some other monuments in the vicinity of the Avenue, we notice the problem of disengagement of the historical object of its urban context.

The Duque de Caxias Palace (1941)^{xxviii} was built on the grounds of the former Central Army Headquarters (1906) with an architectural repertoire expressive of the Italian fascist power buildings at the time. From the pulpit of its pantheon, the

President welcomed the citizens in the 1944 Independence Day, in the opening of the Avenue.

The Central Railway of Brazil Station (1937) was built on the grounds of the inaugural train station (1858). The new station^{xxxix} fully embraces the Estado Novo dictatorship symbolic ideals and the repertoire of railways architectural typology that emphasizes a watch as its main element. It should be the symbol of the new times, when the capital would be connected with the whole country^{xxx}.

From the Railway Station to Francisco Bicalho Avenue, the predominance of full over the voids is reversed. Most buildings of the last sectors, XI Square and Cidade Nova, belong to institutional or privatized public enterprises. Their architecture is completely different from the others razed and inaugurated in 1944. At that time, plants, worker houses, administrative buildings, and even the red light district^{xxxi} densely inhabited these two sectors. Considered *out of place* for this great avenue, their demolitions lasted for decades. Ruins still mark the landscape of this sectors in which the voids prevail on the urban ensemble. Actually, tax and financial efforts have failed to intensify the occupation of these sectors. It was left largely to the public sector to *fill in the blanks*.

The fourth sector, named XI Square, strengthen the disjunction between the part inaugurated in 1944 and the latter. This is the only sector of the avenue with considerable residential use. Its architecture seems an assortment of urban history and architectural styles. The Sambodromo^{xxxii}, large corporate buildings, large extensions of wastelands, and the ruins of historic Gas plant coexist side by side. It is, somehow, ironic that XI Square's name remains a reference for this area, as the square itself was swept away by the works of the avenue^{xxxiii}.

The last sector's toponymy – Cidade Nova/ New City – indicates an expansion area: primarily, in the beginning of the 19th century, an expansion area of the city; and after 1960, an expansion of the central area. Since the 1980s this sector has been undergoing a strong process of urbanization and speculation. Its new urban phase began in the 1970 with the construction of the Brazilian Post Office Headquarters Building^{xxxiv}, the Prefecture City Hall^{xxxv} and the General Archives of the City^{xxxvi}. In the 1990s the City Hall Annex and the Teleport building were built. More recently, the Headquarters of the Insurance Company Sul-America, multi-business and residential buildings, as well as the new subway station, have been transforming the profile of the area. Even so, it still demands a responsive urban project emphasizing its inhabitants and passersby.

FINAL CONSIDERATIONS

This comprehensive historical approach emphasizes the morphological aspects of the planning process looking forward to understand the roots, permanencies and transformations that were imprinted on the Avenue tissue since its beginning. This ongoing research let us point some connections between urban project, urban planning, urban legislation, architectural and cultural heritage history that could contribute to transform the “unfinished” reality of President Vargas Avenue. A leap to the future that began with a step behind.

First of all, according to projects of avenues history, we can consider that along its history President Vargas Avenue has been much more an urban artery than a boulevard. Through its arcades people do not roam: they rush. As far as this privilege to the vehicles persists, the fracture promoted by this urban surgery on downtown urban fabric will persist as well.

Secondly, the President Vargas Avenue architecture can be considered as a mirror of the historical process of modernity in Rio de Janeiro. Like a game of mirrors, whose repeated images confuse the observer, the avenue represents the many contradictions of the Estado Novo, which represent the modernity conflicts: progress against tradition and authoritarianism against democracy.

In terms of urban legislation it should be created a *projectable ensemble*^{xxxvii}, inspired in the notion of urban ensemble established in the Heritage Charts, in order to reorganize the urban tissue messy caused primarily by the Avenue project. President Vargas Avenue should be considered as an ensemble that makes sense all along its 4km extension. From our viewpoint that is the greatest controversy and challenge towards a responsive future.

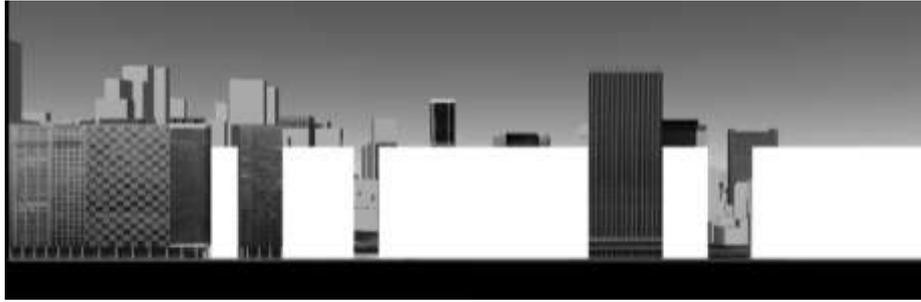


Figure 3: 3D Model of President Vargas Avenue (2010) with the actual situation and, in white, the original shape conceived in the project (1938). AB, 2010.

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ⁱⁱ See Borde (2006).

ⁱⁱⁱ French urban planner invited in 1927 to conceive an urban plan to the city, that was published (1930); abandoned; and retaken and updated by a City Committee (1938).

^{iv} *Estado Novo* corresponds to the second period (1937/1945), the dictatorial one of President Getúlio Vargas government. The first one (1930/1937) was the rupture with the ancient regime and the third one (1950/1954) the political crisis till the president's death.

^v This plan followed Agache's guidelines particularly for the road system and the urban design guidelines, shaping great architectural ensembles of blocks.

^{vi} The Amaral Peixoto Avenue (1942) in the Niterói centre seems a "little" Presidente Vargas Avenue. At that time, Niterói, at the other side of Guanabara's Bay, was the capital of the State of Rio de Janeiro. See Azevedo, M. N. S (2003) "Expressões e Vestígios Modernistas na Capital Fluminense nas décadas de 1940, 1950,1960 e seus Valores como Patrimônio Urbano". 5^o Seminário DOCOMOMO Brasil <<http://www.docomomo.org.br/seminarios.htm>>

^{vii} The plans for Recife and Porto Alegre centres were conceived by two assistants of Agache in Rio de Janeiro plan: N. Figueiredo and Gladosch. See Moreira, F. (2007). "French urbanism and the transformation of Rio de Janeiro during the Vargas Period, 1930-1945". ISUF 2007 International Seminar on Urban Form. Ouro Preto, Brazil.

^{viii} Rio de Janeiro was the Capital of Brazil from 1763 until 1960 when Brasilia was inaugurated. This transference also caused a drop of investments in the new capital.

^{ix} Haussmann was the Mayor of Paris (1851-1870) who tore the ancient urban fabric in blocks, defined by avenues and boulevards, making Paris the image of the modern city of that time.

^x Inspired by the Haussmann's avenues, the *Façades Concours* for this avenue underlines the interpretation of the aesthetic agenda of that moment. Eclectic buildings of six floors

- conceived by the most important architects sheltered a few numbers of enterprises, journals and, last but not least, theatres and cinemas (Borde, 1998 op. cit)
- ^{xi} Borde, Andrea L.P (2009). *Seis Avenidas cariocas*. Rio de Janeiro: PROURB/ IVM. Vídeo 6'
- ^{xii} New York City after the World War II is a good example. Robert Moses accomplished great projects of urban renewal, transferring the workers to distant places on behalf of the car, gave birth to great avenues but also the uncountable social wastelands. Hundreds of remarkable cultural heritage were thrown away by Moses planner range.
- ^{xiii} For more information on Rio de Janeiro urban legislation historical process and its influence on spatial configuration, see Sampaio (2006).
- ^{xiv} The Decree 5595/1935 consolidated the Agache's proposals. The Decree 6000/ 1937 was only replaced with Decree 3800/ 1970. See Sampaio (2006).
- ^{xv} The Decree 3800/1970 disposed as inappropriate housing typology for that zone, except for mixed-use typologies located in certain areas. The Decree 322/1976 defined the Zoning Code. See Sampaio (2006).
- ^{xvi} Law 2236/ 1994.
- ^{xvii} They are imprinted on Street Alignment Projects (PAAs), approved by Decrees.
- ^{xviii} The term typology appears here more specifically as an urban design parameter related to the functional principles of the architectural rationalization. As a normative disposition, the typology guides the occupation shape and to the building's function.
- ^{xix} See Choay (2001).
- ^{xx} The basis for an effective heritage policy was established in 1937 with the creation of the National Heritage Agency (SPHAN). The ideological bias of the institution was markedly pro-modernist, nationalist, valuing the colonial past. See Cavalcanti, L. (Org.) (2000). *Modernistas na repartição*. Rio de Janeiro, UFRJ/ Minc-IPHAN.
- ^{xxi} The Borromini's influence of São Pedro dos Clérigos Church was the biggest loss. Bom Jesus do Calvario and Nossa Senhora da Conceição Churches and Sao Domingos Square and Church were also demolished.
- ^{xxii} The SPHAN's arguments praised the historic and artistic qualities of the churches and the garden, and yet the technical difficulties for restoring the Glaziou's composition on the remaining part of the Garden. There had even been cogitated to displace the São Pedro do Clérigos Church, but it was unfeasible.
- ^{xxiii} Decree-law 3.866 /1941 specially edited by the President, for allowance of cancellation of Heritage Listing for the public good.
- ^{xxiv} Corredor Cultural (Law 1139/1987); Docklands region SAGAS (Law 971/1987 and dec. 7351/1988); Cidade Nova and Catumbi (dec. 10040/1991); Cruz Vermelha (dec. 11883/1992); Teofilo Otoni/ São Bento Monastery (dec. 16419/1997).
- ^{xxv} The pre-modernism term is used for buildings that are neither considered art deco, nor modern, for some stylistic features such as tripartite facade, cornices, symmetrical elements and well-defined windows instead of glass windows.
- ^{xxvi} This urban renewal project was revoked in 1963. In the 1970s, the Headquarter of the Federal Bank in Rio was built up in this place with 33 floors.
- ^{xxvii} Including the first Favela, currently known as Providencia Hill.
- ^{xxviii} Designed by Stockler das Neves as the Ministry of War building.
- ^{xxix} Designed by Roberto Carvalho, Adalberto Szilard and Geza Heller.
- ^{xxx} Both buildings are in Art Deco style, with a strong bias classicism, based on historical forms, employing the echeloning, conveying the idea of hierarchy and power.
- ^{xxxi} Known as *Vila Mimoza*, the red light district was placed in this area for more than a century. During two decades it was slowly demolished, initially in the late 1970s, for the subway works, and, finally, in 1994, to give place to the City Hall Anex.
- ^{xxxii} This "Stadium for the Samba", designed by Oscar Niemeyer in 1984, became the new Carnival Avenue ever since replacing the President Vargas Avenue Parade.
- ^{xxxiii} This square, originally formed by slaves and immigrants, was built in the first half of the 19th century. In the second half, it had received several investments and activities and inhabitants who sought the vicinity of the port area and railway station replaced the wealthier classes. Not only blocks, but also a multicultural sector with an indigenous cultural expression and the best-known variety of samba were razed.
- ^{xxxiv} Designed by Antonio Antunes Soares Filho, this Building (1974-1979) is a typical 1970s construction; it is a part of Modernism's final phase here. See Czajkowski (2000).
- ^{xxxv} Designed by Marcos Konder Netto, the City Hall (1973-1982) tower belongs to the same generation of the Post Office Building.
- ^{xxxvi} Designed by the Musa's Architecture Office (1977-1979) this little building maintains the blind wall initiated with the Post Office Building on the other corner.
- ^{xxxvii} See Borde (2006). *Projectable* is used here not in the sense of ensemble to be projected but as a heterogeneous tissue created by an urban Project.