Sheila Regina Sarra Roberta Consentino Kronka Mülfarth HE EVOLUTION PROCESS OF THE COMMERCIAL ARCHITECTURE IN DOWNTOWN SÃO PAULO

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Abstract

The article discusses the evolution process of the architecture in downtown São Paulo, with an emphasis on the role driven by the State by means of legislation and urbanistic interventions. The central region housed the first verticalization pole in the city, exhibiting commercial buildings that represent the evolution of architecture over more than a century. Besides reflecting distinct architectonic styles, the different typologies of commercial buildings are also due to the legal rules and incentives in use at the time they were built.

Keywords

Urban legislation, old downtown, evolution of architecture.



A EVOLUÇÃO DA ARQUITETURA Comercial no centro de São Paulo à luz das mudanças Na legislação urbana

Resumo

Neste estudo, discute-se o processo evolutivo da arquitetura comercial no centro da cidade de São Paulo, com ênfase no papel desempenhado pelo Estado por meio da legislação e das intervenções urbanísticas. O centro de São Paulo abrigou o primeiro polo de verticalização da cidade, exibindo edifícios comerciais que representam a evolução da arquitetura ao longo de mais de um século. Além de refletir diversos estilos arquitetônicos, as diferentes tipologias dos edifícios comerciais também são fruto das normas e incentivos legais vigentes na época de sua construção.

PALAVRAS-CHAVE

Legislação urbana, centro antigo, evolução da arquitetura.

INTRODUCTION AND PROBLEMATIZATION

From the second half of the 19th century onwards, with the financial dynamism generated by coffee growing and accentuated by the consecutive industrialization process, the city of São Paulo underwent several transformations necessary to accommodate the significant demographic increase and the new emerging functions. According to IBGE data, the population of São Paulo increased from 64,930 inhabitants in 1890 to 579,033 in 1920 and 1,326,261 in 1940. The need for administrative services brought a great boost to commercial architecture, which was installed mainly in the central region of the city, leading to a progressive verticalization of the "old downtown", followed by an expansion towards the "new downtown". At the end of the 1920s, the construction of new buildings already exceeded the limits of the "historic triangle", located between the Direita Street, XV de Novembro Street and São Bento Street. From the old nucleus, growth continued towards the Vale do Anhangabaú and the República Square. In a short period, there was a rapid evolution of the city.

This work aims to analyze the role played by the State in the evolution of commercial architecture in the city of São Paulo. Through changes in urban legislation and urban interventions that sought to value neighborhoods and urban spaces, the interference of public power has been present since the beginning of this process. During the administrations of Antônio da Silva Prado, Raimundo Duprat and Prestes Maia, the city downtown benefited from a policy of improvements that valued the region and attracted numerous businesses. Consequently, the downtown became the first verticalization vector of São Paulo. Since then, the central region became the headquarters of commercial buildings that represent each movement of the architecture and reflect the evolution of urban legislation. The eclectic, Art-Deco and modernist styles marked the downtown of the city of São Paulo, composing a scenario that also represents the different phases of the State's performance in relation to economic and social interests.

DEVELOPMENT OF THE DISCUSSION

In this article, the role of urban legislation in the evolution of commercial architecture in São Paulo downtown during the 20th century is discussed. When studying changes in use and the verticalization process in the central region of São Paulo, it is necessary to recognize the role of the State through the investment of resources and changes in legislation.

The history of the city of São Paulo begins around the Jesuits' college, with its activities concentrated in a central triangular region (old downtown), and bounded by the XV de Novembro, São Bento and Direita streets. The wealth

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generated by the coffee cycle brought about the consolidation of the commerce and services sectors in the "old downtown", giving commercial use to the region and displacing households to other areas. At the beginning of the 20th century, industrialization further stimulated business in the central region, leading to its expansion towards the Vale do Anhangabaú and the República Square (new downtown). In the first decades of the 20th century, the "new downtown" area underwent strong transformations, becoming a new development pole that attracted numerous investors. The appreciation of the "new downtown" was accentuated by the opening and widening of streets and avenues and the creation of new public spaces, attracting numerous investors. In 1903, the Mayor Antônio da Silva Prado started the construction of the Municipal Theater, completed in 1911. It was followed by improvements in the Vale do Anhangabaú region, during the administration of Raimundo Duprat, according to the Bouvard plan, partially completed in 1917.

As a first topic, there is a discussion about how the verticalization of the downtown was stimulated by Municipal Law No. 2,332/1920, which establishes a progressive coefficient between the maximum height of the buildings and the width of the streets.

The second topic concerns the first Municipal Works Code (Arthur Saboya Code), promulgated by the Law No. 3,427 of 1929, by the Mayor Pires do Rio. It discusses how the Arthur Saboya Code encouraged verticalization in the downtown by attracting investors for the possibility of using higher height coefficients than in other regions.

The third topic deals with Act No. 663 of August 10, 1934, in particular its Article 145, which modified the provisions of the Arthur Saboya Works Code. Through this article, the buildings in the central region, built in the alignment of the streets, were able to reach heights higher than the stipulated by the maximum limit, by means of floors set back from the alignment.

The fourth topic discusses the Avenues Plan, prepared by Prestes Maia, an engineer at the Department of Traffic and Public Works of the São Paulo City Hall, between 1926 and 1930. Published in 1930, this project is considered the first overall plan for the city of São Paulo, aiming to structure the transport system. According to Santos (2014), the Avenues Plan sets out for the organization of the road system, by associating the model of Irradiation Period to the Radial-Perimeter System. It is discussed how the Avenues Plan became a reinforcement to the character of a single urban pole, although its author had the initial objective of promoting decentralization.

The fifth topic discusses Decree-Law No. 41 of 1940, by the Mayor Prestes Maia, which established requirements for the buildings on Ipiranga Avenue. Article 3 established a minimum height of 39m for buildings facing the Ipiranga Avenue, promoting the verticalization of the "new downtown". The sole paragraph of Article 9 stipulated the possibility of concessions for buildings with permeable galleries on the ground floor, encouraging the creation of "gallery buildings".

The sixth topic discusses how the enactment of Law No. 4,313/1952, by the Mayor Armando de Arruda Pereira, created a new commercial hub on the Paulista Avenue. The influence of this law on the projects of the new commercial buildings of multifunctional character is discussed, which, in addition to the office tower,

had a ground floor for commercial activities and services. At this time, there were still no limitations regarding the coefficient of utilization, being possible to occupy the entire plot.

The seventh topic deals with legislation that instituted limitations regarding the coefficient of utilization. Municipal Law No. 5,261/1957, by the Mayor Adhemar Pereira de Barros was the first to establish a maximum coefficient of utilization, determining a maximum coefficient of utilization of 6 for commercial buildings. In 1972, new urban legislation further restricted the coefficients of utilization in the city of São Paulo. Law No. 7,805, of 11/01/1972 established the zoning of the city, defined the zones of use and restricted the maximum coefficients of utilization at much lower values, between 1 and 4, according to the zone. With the need for greater land, the southwest region of São Paulo (Marginal Pinheiros, Berrini, Itaim, Vila Olímpia and Pinheiros) became the new development pole and the central region suffered a gradual process of eviction and degradation.

The eighth topic is about the Laws No. 11,090/1991 and 12,349/1997 and the rehabilitation policies of the downtown.

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How municipal law no. 2,332/1920 Stimulated the verticalization of the old Downtown

Municipal Law No. 2,332 was enacted by the City Council and promulgated by the Mayor Firmiano de Morais Pinto on November 9, 1920. According to its Article 3, the City of São Paulo was divided into four zones (central, urban, suburban and rural) with different requirements. It was established that the central area was bounded by the streets General Carneiro, Vinte and Cinco de Março, Anhangabaú, Florêncio de Abreu, Mauá, Protestantes, General Couto de Magalhães, Ipiranga, República Square, streets Sete de Abril, Ladeira and Largo da Memória, Riachuelo, João Mendes Square, streets Teatro, Onze de Agosto, Travessa da Sé, Carmo and Largo do Palácio.

At the time that this law was enacted, there were many financial resources from the coffee growing and industrial activity and it was desired to promote commercial investments in the central region of the city. An attempt was also made to enhance the central region, by means of rules that ensure a uniform pattern of alignment and aesthetic conditions of the facades. Article 100 established that the buildings located in the commercial triangle and in several other streets in downtown had at least four floors, in addition to the basement. Article 97 reflects this concern with the aesthetics of the facades of the buildings, requiring that the projects preserve the harmony of the whole, constituting a single architectural motif. Article 16 established that, in the central region, all buildings should be built in alignment with the public roads (without setback), requiring the issuance of an "alignment and leveling permit" by the Works and Transport Directorate.

Unlike what was proposed for the central region, Municipal Law No. 2,332/1920 established for the other regions the need for minimum setbacks, which reached 10 m in the case of Paulista and Independência Avenues (Article 19). For urban and suburban areas, the minimum setback was 4 m (Article 17). The

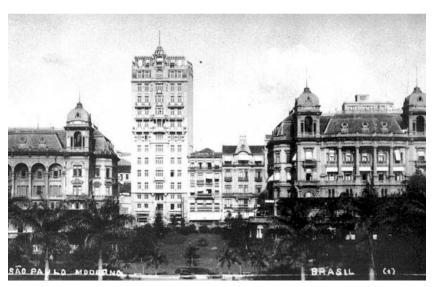
establishment of differentiated rules stimulated investments in commercial buildings in the "old downtown". Considering that no setbacks were used, they could also occupy the entire plot. It should be added that there were no limitations related to the coefficient of utilization. The buildings of this time have high coefficients of utilization.

Another measure that marked the difference between the regions was the establishment of progressive coefficients for the template of the buildings according to the width of the streets. Article 67 established a height limit for the buildings in alignment with the street, such a way that, for streets over 12 m in width, the maximum height of the buildings was 3 times the width of the street; for streets between 9 m and 12 m, the coefficient was 2.5 and for streets below 9 m, the coefficient was 2. As the streets of the "old downtown" were the widest, the buildings could reach higher heights.

Article 20 established the requirement to issue a "building permit" for any building work (except for the rural area) by the City Hall. For approval, the project would need to comply with all of these standards. There were also, in Section III, requirements relating to insolation, natural lighting and ventilation criteria. A very thorough study was carried out to promote quality for the indoor environments of the buildings, requiring compliance with a range of standards and regulations aimed at ensuring natural lighting and ventilation for indoor environments. Articles 75 to 78 deal with the possibility of using lobbies to provide natural lighting and ventilation to buildings. Another interesting aspect of the legislation is that the required ceiling height was relatively low, between 2.5 m and 3 m (Article 66). This factor can cause limitations when renovating buildings from that time.

According to Rolnik (1997), the lack of requirements for the rural region stimulated the construction of popular settlements on the city's margins, leading to the migration of workers' houses to the periphery and the horizontal expansion of the urban area.

According to Almeida (2015), the enactment of Municipal Law No. 2,332/1920 induced growth within the historical triangle. All buildings of that period followed the legislation of the time, being located in the alignment of the public road and



occupying practically the entire plot. The Sampaio Moreira Building and the Martinelli Building, both in the "old downtown", date from that time.

The Sampaio Moreira Building (Figure 1) was designed by Cristiano Stockler and Samuel das

Figure 1 – Sampaio Moreira Building in 1924 Source: https://spcity.com.br/ edificio-sampaio-moreira-primeiroarranha-ceu-de-sao-paulo/



Figure 2 - Martinelli Building Source: https://www.prediomartinelli.com.br/fotos/fotos.htm

Neves and opened in 1924, located at Libero Badaró Street, 346, figured as the tallest commercial building (50 m tall) until the inauguration of the Martinelli Building. In an eclectic style, it has twelve floors and is situated in the street alignment. With wide openings and a facade facing northwest, it has excellent natural ventilation and lighting conditions. Following the options of the legislation, it also has a central courtyard to ensure the natural lighting. It maintained its commercial use from its inauguration until the closure for restoration in 2010.

The Martinelli Building, designed by Giuseppe Martinelli and built between 1924 and 1929, became a symbol of verticalization in São Paulo. It is located in the region of the "old downtown", between the São Bento Street, Libero Badaró Street and São João Avenue. The Hungarian architect William Fillinger of the Academy of Fine Vienna designed it. It was designed to have 12 floors, but the project was modified and, at the time of the inauguration, it had 20 floors. Its approval by the City Hall was an exception to the Legislation (Municipal Law No. 2,332/1920), based on the precedent created by the approval of the

Sampaio Moreira building. Subsequently, new floors were added to the original building and the building was even embargoed for violating the legislation. The building is located on the street alignment and currently contains 25 floors from the São João Avenue (Figure 2). As there was still no limitations in the legislation regarding the coefficient pf utilization, the Martinelli building had a coefficient of utilization of around 20. In its original design, the building would be a multifunctional undertaking with offices, residence, commerce and leisure. In its history, it housed various types of commercial, administrative and service activities, including political parties, newspapers, clubs, unions, restaurants, confectioneries, nightclubs, a hotel, cinema, dance school. After a period of decay, it was restored and began to house several organs of the City Hall.

The first municipal works code (arthur saboya code)

The Municipal Works Code – Arthur Saboya Code (Law No. 3,427) was promulgated on November 19, 1929 by the Mayor Pires do Rio and maintained the division of the city in the four zones described in Municipal Law No. 2,332/ 1920. The determination to always build in line with the street was also maintained for the downtown streets (Article 32). Article 151, in its first paragraph, maintained the minimum requirement of four floors for buildings located in the commercial triangle and on other streets in downtown.

For the central region, the same height coefficients related to the width of the streets were maintained. There was, however, a change in relation to the coefficients for edifications situated outside the central region. Article 120

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stipulated a maximum coefficient of 1.5 between the height of the building and the width of the street for buildings constructed in alignment with the street outside the central region. This difference in height coefficients between the regions encouraged verticalization in downtown, attracting more investors to the region.

Despite maintaining the recommendation on the need to harmonize the facade as a whole, Paragraph 2 of Article 146 was inserted, which allowed the free choice of architectural and decorative style, with the following caveat: "as long as it does not oppose decorum and rules of the art of the building".

The requirements for ventilation, lighting and insolation introduced by Municipal Law No. 2,332/1920 were maintained in the Arthur Saboya Code. Consequently, the buildings in the central region, built during this period, exhibit several architectural strategies to take advantage of natural lighting and ventilation and to protect against solar radiation. Among the passive strategies adopted, we can mention: orientation of the facade more favorable to the insolation; narrow plan¹; wide openings; use of protective elements against solar radiation such as *brise-soleil*; setback of the openings; possibility of control of openings by the occupants; use of thermal mass; etc. The use of lounges as a solution to provide natural lighting and ventilation was allowed.

The SULACAP building represents well the effects of the legislation on commercial architecture of this time. Designed in 1933, in compliance with the requirements of the Arthur Saboya Code, it was a project by the Sulamérica Capitalização, designed by Robert Prentice and Jacques Pilon. Following the incentives of the legislation, they decided on the location of the building in the "historic center" of the city, a region that symbolized progress and modernity. The chosen site was located at the XV de Novembro Street, 46/62, at the corner with Anchieta Street. It brings a classic-inspired architecture, but without many ornaments, containing ground floor plus 10 floors. Following the norms, it is located in the alignment of the XV of Novembro and Anchieta Streets. The

wide openings originally containing "Copacabana" iron frames allowed the use of natural lighting and ventilation.

The Saldanha Marino Building, opened in 1933, also represents this phase. It is situated in the region of the "old downtown", in the corner of the streets Líbero Badaró and San Francisco. Designed by Elisiário Bahiana, the building has a triangular plan and is in line with the streets. In Art Deco style, the facade has large openings that favor natural sunlight and ventilation, fulfilling the requirements of the Works Code regarding the healthiness of the environments (Figure 3).

Figure 3 – Saldanha Marinho Building Source: http://spcultura.prefeitura.sp. gov.br/espaco/1838/

¹The narrow plan helps to promote natural ventilation.



ACT NO. 663 OF AUGUST 10, 1934 AND THE BUILDINGS WITH GRADUATED SETBACKS

Act No. 663 of August 10, 1934, in its Article 145, modified the provisions of the Arthur Saboya Code, allowing buildings in the central region built in the alignment of the streets, to reach heights higher than that stipulated by the maximum limit, through floors set back from this alignment. Side and front setbacks were possible.

As an example of this period, we have the Thomaz Edison building, situated on the Dr. Bráulio Gomes Street, 60, in front of Dom José Gaspar Square, in the "new downtown". Designed by the architects Francisco Beck and Lucjan Korngold, its construction took place between 1944 and 1946. In a modern style, it is located in the street alignment and occupies almost the entire plot. It has commercial ground floor plus 22 floors of offices and basement with garage. To comply with current legislation, the project contemplates a graduated setback of the facade.

The maya prestes avenues plan

Prestes Maia elaborated the Avenues Plan in 1930 to meet a need to organize urban life, modernizing the design of circulation routes and guiding real estate expansion. He proposed a remodeling of the São Paulo road system through a system equipped with three perimetral rings and radial routes towards all quadrants of the city. Its function would be to promote alternative routes so that traffic does not have to pass through the city downtown. With this, Prestes Maia wanted to structure the growth of the city towards the "new downtown" and encourage locomotion by alternative routes, using cars and buses. At the same time, it served the interests of real estate investors, valuing the "new downtown" region.

Although Prestes Maia wished to decentralize the area of the "historical triangle", encouraging the occupation of the surroundings of the República Square, several authors consider that this plan was, in fact, a reinforcement to the character of a single urban pole. According to Leme, the proposal of the Avenues Plan cannot be considered decentralizing, because the expansion of the downtown does not in itself generate decentralization, but only reinforces the character of a single urban pole.

The Avenues Plan guided several road interventions that took place in São Paulo. The plan led to works to widen the main streets and avenues in downtown, such as Senador Queiroz, Ipiranga and São Luiz, to the extension of the route from the Vale do Anhangabaú towards the south, and to proposals for expressways such as the avenues Estado and 23 de Maio. Act No. 1470, of September 14, 1938 approved the expansion of several routes, including Ipiranga and São Luiz, stimulating the transformation of the "new downtown" region into a new commercial center that started to concentrate many real estate investments.

The execution of the new roads from the Avenues Plan stimulated real estate investments in the region close to the República Square. The widening of roads

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Figure 4 - Headquarters building of the newspaper O Estado de S. Paulo Source: https://acervo.estadao.com.br/ noticias/lugares,predio-hoteljaragua,8305,0.htm

also brought real estate value to the region of the "new downtown". The new avenues and intersections were accompanied by important projects such as the headquarters building of the newspaper O Estado de S. Paulo (1946), the Montreal Building (1950) and the Itália Building (1956). Consequently, large commercial buildings were built in the "new downtown", with high coefficients of utilization.

As an example of a project driven by road interventions, we have the building of the new headquarters of the newspaper O Estado de S. Paulo, located on the corner of Major Quedinho and Martins Fontes streets (Figure 4). The 21-floor building was designed by Jacques Pilon, with the participation of Franz Heep, with a program for the provision of services, consisting of facilities for the newspaper (basement and first seven floors), a radio (eighth and part of the seventh floor) and a hotel with 240 apartments (top floors). Following the recommendations of the time, it has a V-shaped plan that

occupies practically the entire plot and the facades are in alignment with the streets on the corner. In line with the modernist school, there is a concern with adaptation of the project to the climate, opting for the use of passive protections on the facades (*brise-soleil*).

DECREE-LAW NO. 41, 1940, BY THE MAYOR PRESTES MAYA

During the administration of the Mayor Prestes Maia, several decree-laws were passed, which created minimum heights for downtown buildings. In 1940, Decree-Law No. 41, by the Mayor Prestes Maia, established requirements for the buildings on the Ipiranga Avenue. In its Article 3, the minimum height of 39 m for buildings in alignment with the street was established. Article 5 established the maximum limit of 115 m for the height of the buildings, except for cases of street corners over 30 m wide, where they could reach 135 m. In the part of the building built above 39 m in height, a scaling of the constructed area should be made.

The sole paragraph of Article 9 stipulated the possibility of concessions for buildings with permeable galleries on the ground floor, encouraging the creation of spaces for fluidity and passage on the floors of the buildings located along this route. It is a legislation that encouraged verticalization on the Ipiranga Avenue, as well as the creation of permeable floors, containing living spaces, such as cafes, bars, restaurants. This legislation clearly demonstrates the intention to increase the movement of people through the

streets of downtown, exerting the attraction through the leisure and commerce activities provided by the active floors of the new buildings. Thus, the downtown of São Paulo acquired greater importance in the social life of its inhabitants.

Since the enactment of Decree-Law No. 41 of 1940, many centrally located office buildings have also chosen to give commercial use to the ground floor, featuring a typology in which the office tower was based on commercial galleries that opened onto the street, giving the feeling of an extension of the sidewalk. This permeability of the ground floor associated with commercial activity and leisure has become a characteristic of the "gallery buildings" located in downtown of São Paulo, and which marked the modernism. This form of implantation guaranteed vitality to the enterprises, transforming them into places of tour, trade and leisure. The commercial galleries located on the ground floor of these buildings have become important leisure points in the life of the city:

This new profile of the buildings that proliferated in the "new downtown", called gallery buildings, was quite favorable for the diffusion of modernist architecture. The implantation by means of pilotis advocated by modernism is aligned with the proposal to release the ground floor for public access to the gallery buildings. Modernism also favors the proposed multifunctional building.

Within the architectural concept of gallery buildings located in the "new downdown" of São Paulo, it is possible to mention the Califórnia Building, designed by Niemeyer in 1953; the Galeria R. Monteiro Building, designed by Rino Levi in 1959; the Metrópole Building, designed by Salvador Candia and Giancarlo Gasperini in 1959 and the Grandes Galerias Building (Rock Gallery), designed by the architecture office Siffredi & Bardeli in 1962.

Following this concept of using the ground floor for leisure activities, it is worth mentioning the 22-floor building that contained the Hotel Excelsior and the Cine Ipiranga, designed by Rino Levi. It became a meeting point, marking the

landscape for its monumentality.

On the Ipiranga Avenue, Decree-Law No. 41, of 1940, also provided the construction of the Itália Building. Located at the confluence of the Ipiranga and São Luiz Avenues, it was designed by the architect Franz Heep between 1953 and 1956, at the initiative of Circolo Italiano, making it a landmark in the region due to its monumentality. The building was opened in 1965 with 151 meters and 47 floors (Figure 5). Conceived in a

Figure 5 - Itália Building Source: http://www.spbairros.com.br/edificio-italia/

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modernist style, its architecture is marked by a 40-floor tower in oval shape that ensures wide insolation to the building and is protected by concrete brises that form an orthogonal mesh. It contains a basement with a ground floor, a mezzanine and two attached volumes (side bodies of finishing). The ground floor occupies the entire plot and opens onto the sidewalk through a permeable gallery with commercial areas. The basement houses an auditorium and an area used as parking. It has 52,000 m² of built area in a 2,382 2.382 m² plot, with a coefficient of utilization close to 22

LAW NO. 4,313/1952, BY THE MAYOR ARMANDO DE ARRUDA PEREIRA

From the mid-1950s, verticalization moves from the central region to the Paulista Avenue, stimulated by Law No. 4.313/1952. This law liberated the presence of commercial buildings on the Paulista Avenue, allowing for several types of uses, such as educational, hospital, offices, theater, cinema, etc. This law also established the obligation of buildings to have underground parking, with a minimum capacity of one vacancy for each 500 m² of constructed useful area.

Benefiting from the presence of large plots, investments were mobilized to the Paulista Avenue, triggering a real estate valuation in the region. Buildings with a multifunctional character were designed, containing, in addition to the office tower, a ground floor for commercial and service activities and one or more floors in the basement to house the parking spaces.

Because of the displacement of the dominant classes to other regions of the city, the attributes of centrality were moving away from downtown. Real estate production was very low and the downtown started to suffer a progressive deterioration process. The headquarters of large companies were progressively leaving the offices located in the central region and migrating to the new commercial poles of the city. This caused the eviction of the buildings of downtown and reduced trade, accelerating the degradation. The image of downtown was loaded with negative aspects, linked to the violence and depreciation of real estate and urban spaces. Downtown started to be considered a popular area, with abandoned buildings in poor condition and even transformed into tenements.

On the other hand, in the Paulista Avenue region, the interest of the real estate market provided by the new legislation, led to the construction of large buildings that occupied the entire plot and had high coefficients of utilization. Until 1957, there were no limitations on the coefficient of utilization; there was only a limitation on the maximum template. The Conjunto Nacional Building, situated on the Paulista Avenue, 2.073 represents this phase of legislation. The architect David Libeskind designed it in 1955. It occupies the entire block formed by the Paulista Avenue, Santos Avenue, Augusta Street and Padre Manoel da Nóbrega Street. The denomination of *joint building* comes from the fact of having on the ground floor real streets that have a high flow of people and combine multiple activities, such as cinemas, shops, cafes, restaurants,

leisure areas, etc. The Conjunto Nacional Building stands out from the other buildings for two reasons: the coincidence between the block and the plot and the appreciation of the public use of private spaces. The choice of the modernist architecture style sought to associate the Conjunto Nacional with an image of progress and innovation. It is a mixed-use project, spatially organized into a horizontal blade and a vertical blade. The horizontal blade contains the ground floor with galleries and two more service floors. The vertical blade contains 27 floors and is divided into three blocks: two office blocks (Horsa I and Horsa II) and one apartment block (Guayupiá). As required by Law No. 4.313/1952, the building has underground parking (two floors). The project has a coefficient of utilization of 8.4.

MUNICIPAL LAW NO. 5,261/1957 AND LAW NO. 7,805/1972

Municipal Law No. 5.261/1957, by the Mayor Adhemar Pereira de Barros, was the first to establish a maximum coefficient of utilization. From that date, it was determined that the maximum coefficient of utilization for commercial buildings would be 6. The establishment of a maximum coefficient of utilization started a process of restricting verticalization and excessive densification in the city. The Sul-Americano Building represents this phase. Rino Levi, Roberto Cerqueira Cesar and L. R. Carvalho Franco designed it in 1961. Situated ate the Paulista Avenue, 1948, it was conceived within the principles of modernist architecture with bioclimatic optimization and with influences from European rationalism. The building has two volumes: a horizontal block (with ground floor, mezzanine and terrace) and a vertical office tower containing 15 floors. Both volumes have distinct accesses, which ensures independent functionality. The building also has two floors in the basement that serve as a parking area (later expanded by the construction of two more basement floors). The coefficient of utilization of the Sul-Americano Building is approximately 6, as stipulated by Municipal Law No. 5,261/1957. The plot area is 2.600 m².

In 1972, a new urban legislation further restricted the coefficients of utilization in the city of São Paulo. Law No. 7,805, of 11/01/1972, established the zoning of the city, defined the zones of use and restricted the maximum coefficients of utilization at much lower values, between 1 and 4, according to the zone. From that date, new expansion centers for office buildings emerged, located in the regions close to Marginal Pinheiros, Berrini, Itaim, Vila Olímpia and Pinheiros. Due to the limitations of the new urban legislation, the buildings started to have a single volume, with a lower number of floors and a smaller built area. The ground floor was no longer used as a commercial area, housing the entrance hall exclusively. pós-

LAWS NO. 11,090/1991 AND NO. 12,349/1997 AND THE DOWNTOWN REHABILITATION POLICIES

Law No. 11,090/1991 introduced a legal mechanism called "Urban Operation" in the public administration of the city of São Paulo, aiming at improving the urbanization pattern of a certain area of the city. Urban Operation Anhangabaú was established, with the objective of implementing works to improve urban quality, encourage better use of properties and encourage the preservation of historic heritage. In return, benefits were offered such as transferring the constructive potential of listed buildings due to the historic heritage that were rehabilitated. As the real estate market was not interested in the proposal, there were few developments carried forward.

As an example of the effects of this law, it is possible to mention the restoration of the Alexandre Mackenzie Building, built in 1929 by the office of the architect Ramos de Azevedo, former headquarters of the Eletropaulo company, which became the Shopping Light. The original facade of the building was preserved and there was redistribution of some internal areas to suit the new use.

The restoration of the Martinico Prado building, located at the Antônio Prado Square, on the corner of the João Brícola Street and designed by the architect Ramos de Azevedo, was also carried out within the Urban Operation Anhangabaú. The building was restored and renovated to become the headquarters of the Futures and Commodities Exchange (BM&F).

Law 12,349/1997 approved the Downtown Urban Operation, aiming at the improvement and environmental valorization of the central area of the city. This operation offered benefits in urban indexes and the possibility of transferring the constructive potential of listed buildings to real estate located outside the downtown. The idea was to attract real estate investments to the central region, offering flexibility in existing legislation through counterparts. There were concessions for residential use, services and hotels.

Law No. 12,349/1997 provided for the reutilization of the building that was the headquarters of the newspaper O Estado de S. Paulo and the former Hotel Jaraguá to become the Novotel Jaraguá São Paulo Conventions. In this restoration process, costs were reimbursed through the sale of constructive potential for buildings located outside the downtown. The same process of reimbursement occurred for the restoration of the building of the Centro Cultural Banco do Brasil (Bank of Brazil Cultural Center) located at the Álvares Penteado Street, 112.

CONCLUSIONS

It is possible to say that the urban legislation and the respective urban transformations were absolutely determining factors of the architectural styles used in the different times reported in this bibliographical review. The central area of the city of São Paulo went through several processes of physical transformations that brought changes in the vitality of urban spaces and in the attractiveness for real estate investors. These transformations are basically related to changes in legal provisions and public investments in urban infrastructure. By comparing urban legislation with the urban aspects and architectural projects that date from the time they were in force, it is possible to understand the close link that exists between them. In this sense, the "untying" of decisions, in the legislative sphere, in relation to the quality of the urban environment and of the building, can burden, as a whole, the built environment and, consequently, the city

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