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HE AMERICANIZATION OF BRAZILIAN CITIES: NEW URBAN FORMS AND THE NEIGHBOURHOOD UNIT IDEA

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Abstract

This article explores the repercussion of the Americanization of Brazilian society as observed in mid-20th century town planning. More specifically, it focuses on the plans for new towns that emerged in the pioneering agricultural hinterlands of Brazil and examines the American ideas that contributed to the construction of new urban forms. By analyzing the layout of Goiânia-GO (1936), Angélica-MS (1954), and Medicilândia and Rurópolis-PA (1972) in the light of their historical and sociocultural context, this article shows that the North American neighborhood unity concept helped materialize the local aspiration for modernization and development, as depicted by the American way of life'. The configuration of the neighborhood unit in the city plans studied unveils the appropriation and adaptation of the American planning idea, and also reveals that the Americanization phenomenon coincided with the consolidation of the rationalist/functionalist urbanism hegemony in Brazil and got blurred by it.

Keywords

Planning diffusion. Modern town planning. New towns.



A AMERICANIZAÇÃO DAS CIDADES BRASILEIRAS: NOVAS Formas urbanas e a ideia de Unidade de Vizinhança

Resumo

Este artigo explora a repercussão da americanização da sociedade brasileira em meados do século XX no campo urbanístico, mais especificamente na conformação de novas cidades nas frentes pioneiras de colonização agrícola, e examina quais ideias norteamericanas contribuíram para a construção de novas formas urbanas no Brasil. Ao analisar os traçados de Goiânia-GO (1936), Angélica-MS (1954), e Medicilândia e Rurópolis-PA (1972), e compreender seu contexto sociocultural, o artigo mostra que a unidade de vizinhança norte-americana ajudou a materializar o anseio local por modernização e desenvolvimento, então referenciados no *American way of life*. A conformação da unidade de vizinhança no traçado destas novas cidades revela que a ideia norte-americana foi apropriada e adaptada e que o fenômeno da americanização coincidiu com a consolidação da hegemonia do urbanismo racionalista/funcionalista no país, e confundiu-se com ele.

PALAVRAS-CHAVE

Circulação de ideias. Urbanismo moderno. Cidades novas.

INTRODUCTION

Plans for new towns in the pioneering agricultural colonization fronts in mid-20th century Brazil were conceived and elaborated in consolidated urban centers, such as São Paulo and Rio de Janeiro. These plans were based on urbanistic ideas arising from metropolitan life, as well as other experiences obtained from different contexts, foreign to the actual locations the plans were intended to. The diffusion and development of urbanistic ideas in Brazil at the time involved the presence of foreign consultants, trips and courses abroad, access to international publications, and local debates (LEME, 1995). Therefore, the resulting city plans object of this analysis incorporated aspirations, yearnings and projections that were dear to the societies in which they were conceived. By recognizing that urban form constitutes and represents social and cultural existence (KING, 1990, p. 1), this article intends to demonstrate that the Americanization seen in large Brazilian urban centers can also be noticed in the configuration of new towns planned for the pioneering agricultural hinterlands of Brazil in mid-20th century.

The United States, especially the image of a futuristic Manhattan, had a considerable impact on the imagery of early-20th century European architecture and urbanism (COHEN, 1995). In Europe, Cohen's Americanism emerged as a constituent fact of modernity, guiding political, economic, intellectual and artistic life, involving collective practices and discourses marked by an insidious notion of 'backwardness' vis-a-vis the New World. However, it was certainly a less deliberate and directed phenomenon than that observed in Brazil (see PINHEIRO, 2013, p. 152). The Americanization of the Brazilian society - as seen later on - was most strongly noticed in the 1940s as a result of the effect of US foreign policy for Latin America, in line with the local desire for modernization and development by both the society as a whole as well as their rulers (TOTA, 2000; TOTA, 2014; MOURA, 1984). Previous authors, such as Szmrecsanyi (1993), Somekh (1997), Feldman (1996 and 2000), Costa (2009) and Leme (2010) have already observed the diffuse resonance of this phenomenon on urbanism, more particularly on the planning of (and within) the city of São Paulo. However, the urban development of new towns that have attempted to emulate the *ex-novo* urban world in the hinterlands of the country is yet to be addressed.

Goiânia (1936), Angélica (1954), Medicilândia (1972) and Rurópolis (1972) are cities that were created in Brazilian agricultural expansion fronts under different historical circumstances. The Vargas era (1930-1954) was committed to the modernization of the country, which, among other measures, involved reorganizing and occupying the territory, providing it with new public facilities and infrastructure, and connecting its different parts with roads and communication systems (GOMES, 2013, p. 43). The construction of the new capital of the State of Goiás was framed in the context of the 'march to the west' promoted during the *Estado Novo* (New State), as the authoritarian and centralizing Getúlio Vargas government was known (1937-1945). The objective was to move to a more urban, industrialized and modern country, leaving behind the agricultural-based model (REZENDE, 2012, p. 12).

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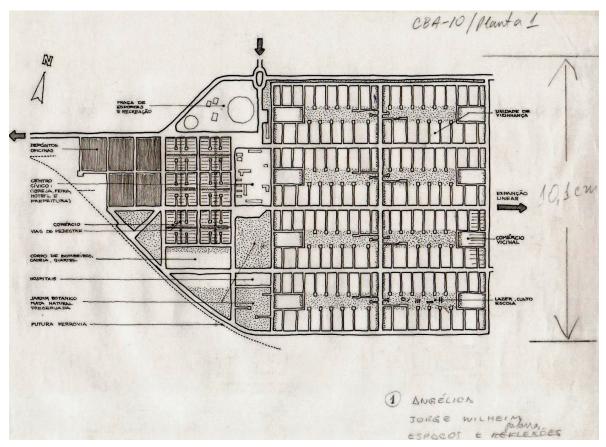


Figure 1. Angélica, Jorge Wilheim, 1954. Source: ROCHA; GROSBAUM, 2016.

The Juscelino Kubitschek government (1956-1961), responsible for moving the capital of the country from Rio de Janeiro to Brasilia and implementing extensive road plans, reiterated the desire for the development of the country. The plan for Angélica (Figure 1), a town located in the hinterlands in the South of Mato Grosso State, was elaborated in the wake of the 'march to the west' and, to a certain extent, anticipated the modern urban form that was later materialized in Brasilia (HERBST, 2011, p. 225). Free from any preexisting urban contexts, without needs or vices, Brasilia was supposed to generate a new social order based on its new image, and promote and leverage regional progress (GORELIK, 2005, p. 49; Holston 1993, p. 13 and 24). In general, these new towns were seen as modernizing agents, 'machines to invent modernity', rather than a natural consequence of it. Angélica, as well as the new capital of Brazil, established a new urban form, aiming at social transformation motivated by the radical reconceptualization of city life.

The military dictatorship (1964-1985) renewed the nation-building project, aiming at national integration, economic growth, and regional development. Territorial occupation and planning acted as the structuring axis of governmental ideals



Figure 2. Medicilândia, José Geraldo da Cunha Camargo, 1972. Source: CAMARGO, 1973.

(MORAES, 2008, p. 95-100 and 139). *Brasil Grande* (Great Brasil), resulted in the conduction of large construction projects, such as the *Transamazônica* (the Transamazonian Highway), along with the colonization project that planned the establishment of numerous modern towns within the Amazon Forest along the highway, such as Medicilândia (Figure 2) and Rurópolis (Figure 3) in the State of Pará. Thus, in different historical moments, the circumstances that prompted the creation of these new towns and the urban expansion towards the countryside had in common the same modernization and development goals. Their shared result seems to confirm the notion that the

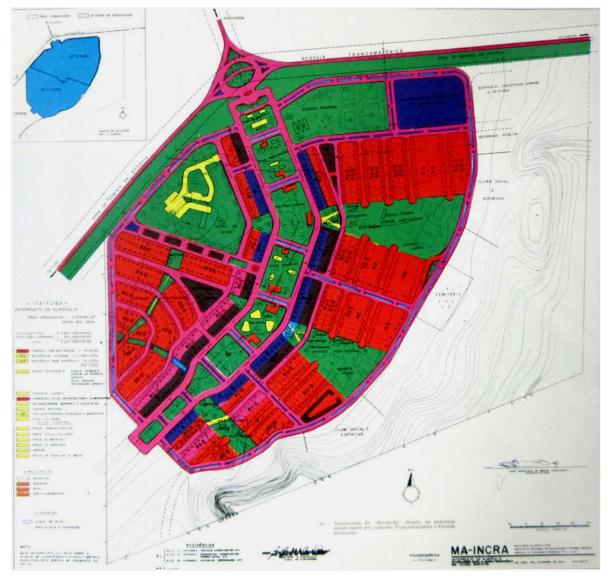


Figure 3. Rurópolis, José Geraldo da Cunha Camargo, 1972. Source: Camargo, 1973.

alteration of the physical environment was understood as the manifestation of progress (MORAES, 2008; ALMANDOZ, 2015).

But what were the American ideas that contributed to the elaboration of these modern and innovative urban forms during a time when the influence of the United States was notably felt in Brazil?

To answer this question, this article will address the influence of American political, economic and cultural policies on the Brazilian society; describe the context the new towns were created; and analyze each city plan in order to highlight the contribution of North American ideas. Formal elements found in the four new towns taken as case studies provide evidence of the appropriation of the North American concept of 'neighborhood unity' and its fusion with the rationalist (European) urbanism, even when the connections between Brazilian planners and the American ideology were not clearly explicit. Without neglecting recent transcultural approaches, the recognition of the origins of these elements and the idiosyncrasies of their appropriation in the Brazilian context can provide evidence of the *modus operandi* and the contribution made by local designers.

American presence in the Brazilian society

American companies such as Wilson, Swift, and Armor have operated in Brazil since the early decades of 20th century; the Brazilian market soon attracted other giant companies such as Colgate-Palmolive and the automakers Ford and General Motors, which arrived during the government of President Washington Luis (1926-1930), for whom "to govern is to open roads" (SZMRECSANYI, 1993, p. 196 and 209). However, in the 1940s, when the United States ascended to the position of the largest supplier of imported goods to Brazil, the American cultural presence in the country started to become more evident, changing the way we perceived, felt, explained and expressed the world (MOURA, 1984). The Americanization of Brazil, observed in movies, on the radio and magazines, eventually reached the large population, including the blooming lower-middle class and the elitist sector of the urban proletariat (TOTA 1993, p. 197).

The American President Franklin D. Roosevelt's 'Good Neighbor' policy, which structured the US relations with Latin America in the 1930s and 1940s, was based on a cosmopolitan rhetoric of inter-American friendliness and cooperation, centered on a socially and spatially constructed image of the good neighbor - quite useful to promote a sense of hemispheric community (SPELLACY, 2006). While, on the one hand, during World War II the authoritarian nationalism that flourished in Latin America had a certain affinity with European fascism, on the other hand, Latin America was essential for the strategic vision that projected the United States as a protagonist in world politics. It was, therefore, a question of minimizing European influence in Latin America and maintaining the American leadership through 'soft power', i.e., when nations influence others to want what they want, in contrast to 'hard power', when nations force others to do what they want. As Nye Jr. acknowledged, American culture was a useful, relatively cheap source of 'soft power' (see NYE, Jr., 1990, p. 154, 166 and 168; TOTA, 2000, p. 19). That is what the Good Neighbor Policy was all about.

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As a result of the Good Neighbor Policy, the Office for Coordination of Commercial and Cultural Relations Between the American Republics - or simply the Office for the Coordinator of Inter-American Affairs (1940–1946) dealt with communication, culture, health, trade and finance in the Americas under the command of Nelson Rockefeller. Thus, issues such as the cinema, press, travel, publication, education, health care, transportation, exports and development were of interest to 'the office', which had representation committees in Rio de Janeiro and São Paulo, as well as subcommittees in other Brazilian State capitals. Film production and distribution, sponsorship of Hollywood stars touring Latin America and Latin American artists visiting the United States, and the dissemination of news and publications, as well as training of Brazilian technicians in different areas of knowledge in the United States were activities conducted by 'the office'. The creation of the cartoon character Joe Carioca was a result of negotiations between 'the office' and the Walt Disney studios, in order to reinforce Pan-American solidarity (MOURA, 1984, p. 32-40).

As a result, closer relations between the United States and Brazil meant significant US cultural push, in particular those conducted by the Museum of Modern Art (MoMA) of New York, which had Rockefeller in its council. After the participation of Brazil in New York World's Fair organized by the urbanist Robert Moses in 1939, with a pavilion designed by Lucio Costa and Oscar Niemeyer, the New York museum promoted in 1940 a Festival of Brazilian Music and, two vears later, opened the Brazilian architecture exhibition, 'Brazil Builds'. The exhibition was the result of a web of contacts, mutual interests, and the sharing of ideas between the museum's direction, the Brazilian and North American governments, and Rockefeller, its main articulator and greatest enthusiast for the modernization of Brazil.'Brazil Builds' was then taken to Mexico, Canada and England, and a reduced version of the exhibition circulated throughout Brazil in the following year, passing through different cities in the State of São Paulo - São Paulo, Campinas, Santos, Jundiaí and Franca - as well as Rio de Janeiro, Porto Alegre, Florianópolis, Curitiba and Belo Horizonte (ZAKIA, 2010, p. 35). With a nationalist and modernizing spirit, Getulio Vargas' Estado Novo (1937-1945) promoted modernist architecture as the identity image of a Brazil in transformation (MARTINS, 2010) - as Rockefeller aspired.

Rockefeller was the Roosevelt government Inter-American affairs coordinator between 1940-1944, and then Under-Secretary of State for Latin American affairs until 1945. Outside the government, his philanthropic actions continued through the American International Association for Economic and Social Development (AIA) and its business progressed through the International Basic Economy Corporation (IBEC). Recent narratives have qualified Nelson Rockefeller's performance in Latin America in general, and in Brazil in particular, by observing that his actions did not recognize the boundaries between philanthropy and business: his missionary ideals and his altruistic attitudes converged with capitalist interests and governmental policies (SILVA, 2013; HILTON, 2016). His political, economic and cultural activities meant to a certain extant the continuity of the Good Neighbor policy, which was translated into financial and technical assistance to promote modernization (TOTA, 2014, p. 302). In fact, in telling his father about his business in Latin America, Rockefeller confided that 'their [Latin American] well-being and better opportunities in the future can only be achieved if they are identified with the model of our country and our way of life' (TOTA, 2014, p. 183).

IBEC was dedicated to industrial development and increase the standard of living of the Latin American population, supported by American capital and technical capability. One of IBEC's first initiatives was to commission the urban planner Robert Moses to prepare a 'public improvement program for the city of São Paulo', which, in the image of New York, would exchange the modernity of the urban boulevard by the modernity of the expressway (TOTA, 2014, p. 227; LEME, 2010, p. 517). Moses was to develop a zoning study, the proposals for expressways, mass transportation, a system of parks and playgrounds, the Tietê River canalization, etc. Two aspects of Moses' proposal had a definite impact on the development of the city of São Paulo and in the field of urban planning: the expressway system and the mass transportation system by bus, which together confirmed the emphasis on a transportation system based on the automobile, delaying studies and alternative proposals for mass transportation by surface or underground trains (LEME, 2010, p. 527).

The actions of the Rockefeller Foundation in the field of scientific philanthropy at the University of São Paulo in the exact and biological sciences, in the 1940s and 1950s, also denote characteristics of a more general situation: the growing hegemony of the United States, which, together with the influx of American resources, ideas, values and concepts, shaped individuals and social practices (MARINHO, 2001, p. 167).

Moreover, local actions also fostered closer relations between the two countries. In the specific case of urban planning, the journal *Politécnica* - the most important vehicle for disseminating ideas about urbanization, territory occupation and urbanism in the first decades of 20th century in São Paulo – focused on experiences and projects, 'likewise European and North American technical journals', while at the same time endeavored to build a repertoire of its own (COSTA, 2009, p. 83). The texts by Victor da Silva Freire published in the journal resorted to German, English, French and North American examples, although the latter was more often cited as a counterexample. In the texts of Luís Inácio de Anhaia Melo, however, 'the experiences, actions and plans elaborated and undertaken in the USA are now seen as a "model" to be "copied", adapted and transformed according to the needs of São Paulo society' (COSTA, 2009, p. 97).

A visible mark of the Americanization of the Brazilian city could be observed in the aspiration for verticalization, exemplified in São Paulo (SZMRECSANYI 1993, p. 205; SOMEKH, 1997). Also in the city of São Paulo, the Plan of Avenues proposed by the urbanist Francisco Prestes Maia in 1930 combined different solutions, including North American ones, particularly some aspects of modern city planning defended by Nelson Lewis and the parkways design popularized by Frederick Law Olmstead. As Cristina Leme (2010, p. 517) noted, there was some continuity between Moses' proposal and the Plan of Avenues, in that both emphasized road transport based on an expressway system. From pós- 🗠

the 1930s, the dissemination of US planning ideas and practices in Brazil was revealed not only in the esthetic conception of plans and in the regulatory mechanisms embodied in urban legislation, but also in the models taken from the American institutions and in the organizational structure of public administration urban planning sector (FELDMAN, 1996; FELDMAN, 2000).

Naturally, dissonances existed, such as the anti-imperialist discourse of the architect João Batista Vilanova Artigas. In his 'progressive urbanism', although he reaffirmed the social qualities valued by the neighborhood unit and its rationalist/functionalist design defined by the *Congrès Internationaux d'Architecture Moderne* (CIAMs) combining pre-fabrication, corbusieran *pilotis* and the Anglo-Saxon concept, Artigas treated the superblock as a *freguesia* (parish) – a less Americanized and more local term (ARTIGAS, 1999; VILANOVA ARTIGAS, 1997, p. 146). Nonetheless, the modernization that was sought in Brazil found a corresponding image in the American way of life promoted by the Good Neighbor Policy and disseminated by the local media (TOTA, 2000, p. 54-78).

North American urbanism, modern life, and the layout of new towns

The New York skyscraper had established a paradigm for modern metropolitan life in the early decades of the 20th century, but the imagery of the American city gained new references with the phenomenon of suburbanization (COHEN, 1995). In this scenario, the car had become a strong and captivating symbol of the American way of life (TOTA, 2000, p. 153). Indeed, by appropriating certain aspects of the CIAMs agenda, a politically conservative urbanism proposed to redo the centers of large American cities by incorporating expressways connecting with the residential suburbs. According to Mumford (2001, p. 117), it was this vision, rather than that of the CIAMs, which eventually characterized the modern urbanism effectively implemented in the United States, furnishing contemporary imagery with skyscrapers, motorways, automobiles and suburban housing.

The neighborhood unity devised by Clarence Perry in the 1920s to stimulate community spirit in the modern city (PERRY, 1974) was a powerful urbanistic idea that spread throughout the world. It contemplated an urban area determined by the population necessary for the operation of a primary school, and designed so that no child would have to walk more than half a mile, preferably without even having to cross major traffic routes; and in addition to school and park and leisure facilities, the neighborhood unit should host small shops to promote the local commerce necessary for the residential environment.

Radburn, designed by Clarence Stein and Henry Wright in late 1920s' New Jersey as the 'garden city of the automobile age' (Miller, 2002, p. 18), embodied the model of urban layout that became dominant in the 1930s, involving low density, decentralization and the restructuring of urban settlement based on the neighborhood unity idea formulated by Perry. For the historian Lewis Mumford (1998, p. 542), in Radburn two new planning characters emerged: the separation of heavy traffic arteries from local streets, so that pedestrian paths

and vehicle roads formed two independent systems; and the neighborhood park or 'inner greenery belt', joining the superblocks - which Le Corbusier was able to take full advantage of in the plan of Chandigarh in its most systematic cartesian way. But there are those who point to the solution given to the question of transport as the main innovation of Radburn (SCHUBERT, 2000, p. 125).

The number of automobiles in the United States rocketed from 1.2 million in 1914 to more than 23 million in 1930, and the grid-pattern road system in suburban areas proved to be disadvantageous for mass motorization; accidents and traffic casualties led to the idea that pedestrians should be protected from vehicular traffic, and road hierarchy would establish residential areas with *cul-de-sacs*, and the segregation of means of transportation. This response to modernization with regard to demands made by the automobile marked the Americanization of the garden city concept (SCHUBERT, 2000, p. 123). Together with the hierarchy of roads and the separation of pedestrians from automobiles, the neighborhood unit crystallized a modern way of inhabiting and shaping cities (BRODY, 2013).

Transatlantic exchanges associated the idea of the English garden city with the North American concept of neighborhood unity, which was later appropriated by European architects and CIAMs (see the London plan drawn up by the MARS group between 1933 and 1942 and presented in the V CIAM in 1937. Gold, 1995, p. 249). The neighborhood unit had repercussions on the European discourse of modern urbanism, particularly through the III CIAM (1930), when its secretary general, Sigfried Giedion, defended it as a solution to organize residential complexes satisfactorily, and was followed by the architects Le Corbusier, Walter Gropius and Richard Neutra. And, a decade later, when José Luis Sert published Can our cities survive? with proposals formulated in the IV CIAM, the incorporation of the neighborhood unit into the repertoire of rationalist urbanism was then recorded, being applied in his projects for Latin American cities (REGO, 2017, p. 402). For Sert, the most successful housing projects were based on groups of households forming neighborhood units, or approaching this scheme, and could serve as the basis for a 'new civic standard' (SERT, 1944, p. 72).

Goiânia, Angélica, Rurópolis and Medicilândia reconstructed, in their own way, the American idea of neighborhood unit. In addition to the new towns on the colonization fronts, satellite towns created in the 1950s and mid-1960s around Brasilia, in articulation with the pilot and interdependent plan for the city (Derntl, 2016), also incorporated the neighborhood unit concept - geometric, rational, standardized - in addition to insisting on the urbanism of the automobile promoted in the pilot plan.

Back to the core theme of this article, Radburn served as a model (WARD, 2012) for the layout of Goiânia, redesigned in 1936 by Armando Augusto de Godoy, particularly in his proposal for the layout of the Southern Sector, the residential neighborhood made up of neighborhood units, superblocks and enclaves, with road hierarchy, separation of pedestrian and vehicle traffic, *cul-de-sacs*, irregular and organic layouts, low density, large green open areas, and abundant vegetation. Godoy, an engineer graduated from the Polytechnic School of Rio de

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Janeiro, became a technical consultant for the company Coimbra Bueno, responsible for the urbanization of Goiânia, when the architect Attílio Corrêa Lima moved away from the project of the new capital of the State of Goiás, elaborated by him in 1933. Godoy was a link and source of information between Brazilian urbanists and foreign urbanistic production; his journeys were always accompanied by studies later published in specialized journals, such as his text 'Urbanism in the United States', published in 1935 in the Revista Municipal de Engenharia (REGO, 2017). The local press boasted that the innovative configuration of Goiânia stemmed from the North American experience: the 'most technical solution for modern cities ... which was first performed a few years ago in Redburn (sic), a city of the 20th century, as it is called in the United States' (see PIRES, 2009, p. 240; REGO, 2014, p. 288). In Goiânia, the neighborhood unit reproduced the same inversion proposed in the implantation of the residences in Radburn: the back of the houses took to the *cul-de-sac*, while the main entrance opened to the internal park, common to the houses in a superblock.

Moving away from the irregularity of Goiânia layout, Angélica's neighborhood units gained a more cartesian, regular, symmetrical, serial, uniform pattern, retaining the original organizing principle that binds the population of the neighborhood unit - and consequently defines its size- the number of pupils required for the operation of the local school. In fact, the Americanization of Brazilian cities is concomitant with the consolidation of the rationalist/ functionalist urbanism hegemony, notably in the post-Brasilia period (PINHEI-RO, 2010). Because of that, in a few cases the neighborhood unity in Brazil escaped the rationalistic and patterned conformation to reproduce the picturesque ambience and the informal and irregular outline of Radburn's initial proposal, as it had in Goiânia.

Angélica's designer was the young architect Jorge Wilheim, who graduated from the Faculty of Architecture of Mackenzie Presbyterian University in São Paulo in 1952. He was a leftist militant that later met the Neder family in Campo Grande, who also shared the same political views and owned *Companhia Colonizadora e Imobiliária Douradense*. They hired Wilheim to develop a new town in *Gleba Angélica*, in the municipality of Dourados, in the State of Mato Grosso do Sul, in order to colonize the area with small rural lots for the cultivation of coffee and cotton (Arruda, 2004). Wilheim claimed to have extensive theoretical background, from Le Corbusier's work and the CIAMs' urbanism to the 'English urban planning and its garden cities' (WILHEIM, 2003, p. 33).

In the plan for Angélica, Wilheim adopted the sectorization of the Charter of Athens and, as a result, the city ended up sectored by functions: commercial, administrative, recreational and residential. Alongside the mono-functionality of zoning, main and secondary streets - and *cul-de-sacs* - hierarchized the traffic; and pedestrians and automobiles also moved around separately (WILHEIM, 2003, p. 33). The residential sector was organized in superblocks and neighborhood units, proposing an unconventional configuration for the neighborhood - an urban component that ceased to exist there. The rectangular superblocks were linked to the continuous longitudinal green areas, free of

automobiles, that was destined for collective use, such as 'schools, clubs, creches, churches, sport facilities, and picnic places', with the shopping area at one of the edges' (WILHEIM, 2003, p. 33).

Angélica anticipated what was to be seen later in Brasilia. During the contest for the pilot plan of Brasilia, all winning proposals were based on the functionalist principles of separation by functions in demarcated areas, the organization of housing in neighborhood units, city configuration as a park city, the specialization of traffic systems, the separation of pedestrian from road traffic, and the independence of buildings in relation to the road system which, together with the specialization of traffic systems, led to the end of the street-corridor (BRAGA, 2010, p. 201-202).

The plan for Rurópolis, idealized by the urban planner José Geraldo da Cunha Camargo, also presents neighborhood units - called housing units - arranged along an axis formed by administrative, civic-cultural, ecumenical and recreational plazas. Camargo, who graduated from the National University of Architecture (FNA) of the University of Brazil - now the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro (UFRJ) – and specialized in town planning, was a teacher at UFRJ and also an employee of the National Institute of Colonization and Agrarian Reform (INCRA). He was responsible for the regional planning, urbanization and colonization scheme implemented along the Transamazonian Highway during President Medici government, aimed at developing the region. Camargo envisioned the establishment of a new society as a result of new urban forms (CAMARGO, 1973; REGO, 2015).

The housing units of Rurópolis contain regular lots and blocks, *cul-de-sacs*, traffic hierarchy and the separation between pedestrians and vehicles. Each housing unit is organized around an open green area that accommodates an elementary school, as well as day care and sport facilities for young people. The rigid zoning is constituted of a strip containing lots for commerce and services along the axis of the squares. The housing units also present a segmentation based on population income (CAMARGO, 1973).

In Medicilândia, Camargo resorted to a similar arrangement, with regular lots and blocks, arranged next to open green areas with a school and a nursery. However, due to local topographic conditions, Medicilândia reveals a more fragmented organization than Rurópolis, with a more irregular layout and, therefore, more dispersed housing units. This dispersion, and the connections between the various housing units of the city, do not seem to favor the pedestrian but, rather, the automobile.

In both cities the school is the fundamental and organizing element of the housing units, which have between 100 and 200 single-family residential lots - a much smaller number than that estimated in the original proposals by Clarence Perry.

In order to clarify the foundations of his urban thinking - of which the neighborhood unit is a fundamental part-, Camargo referred to American ideas and texts: the neighborhood unit defined by Clarence Perry, with irregular

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superblocks and a population between 5,000 to 6,000 inhabitants, and a density of 20 families per hectare, a radius of influence of 800 meters of the community public facilities (primary school with a community center, church, library and small commerce); the urban cells created by Clarence Stein and Henry Wright in the Sunnyside project and the layout of their neighborhood units in Radburn; the neighborhood unit planned by N. L. Engelhardt Jr., with a subdivision into two smaller urban cells, and the composition of two neighborhood units in a larger urban cell, called 'community'; and the functions of the neighborhood unit defined by C. J. Bushnell (BRAGA, 2011, p. 284-285).

While the city of Angélica has a regular, orthogonal and symmetrical configuration due to its flat location, the more irregular layouts of Rurópolis and Medicilândia reveal the same continuous void common to neighborhood units, in which community public facilities get scattered among to the low-density adjacent superblocks. Neighborhood units were, in the cities mentioned above, a modern way of building urban cells and stimulating community spirit.

Almost two decades after Brasília was built, the conformation of the urban neighborhood based on the neighborhood unit – rather than the traditional neighborhood - still seemed innovative and revolutionary as a promoter of a new urban way of life. However, neighborhood units made little sense in small new towns planted on pioneering fronts of colonization, with separation of pedestrian and vehicle traffic in independent systems, road hierarchy and discontinuous street layout. The same can be said of extensive open green areas in low-density areas, particularly amidst the Amazon rainforest. Nonetheless, it was seen as a modern way of living that was longed for.

CONCLUSIONS

The idea of neighborhood unity, coupled with a Fordist and Taylorist vision of the urban form, very typical of the mass production system - rationalized, simplified, standardized – as well as the prevalence of the automobile in urbanism, demonstrate a strong North American resonance in the city plans of Goiânia, Angélica, Medicilândia and Rurópolis.

The geometric, regular, standardized neighborhood unity has been more directly associated with the rationalist/functionalist urbanism of the CIAMs, which appropriated this American idea originally linked to the garden city concept and the romantic suburb. However, even urban planners who mapped neighborhood units in line with the ideals of CIAMs, such as Lucio Costa, Cunha Camargo and Jorge Wilheim - as well as Armando Augusto de Godoy based their design directly on the writings of Clarence Perry.Although indirectly, one can notices the resonance of the American planning ideas and practices in a hybrid solution, shadowed by the hegemony of CIAMs and the rationalist urbanism.

Neighborhood units were proposed for a better urban environment to the extent that, as Perry understood, they would enhance social life and increase the spirit of citizenship. But neighborhood units are components of the city and, as morphological elements, they are creators of meaning and generators of a

new, radically different, modern and Americanized urban image, insofar as they reflect the 'developed country' vision that was being attempted - a vision oriented almost always forward and out, often stimulated by the American way of life.

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