

TRAVELLING IDEAS: BRITISH TOWN & COUNTRY PLANNING MODELS AND THE TRANSFORMATION OF BRAZILIAN TROPICAL HINTERLANDS

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ABSTRACT

In early twentieth century, coffee growing, migration, new urban settlements and railway lines were radically transforming the natural landscape of underdeveloped Brazilian tropical hinterlands into a somewhat urbanized setting. Within a vast transformation process, a private British land-speculation business was responsible for developing the northern region of Paraná State. However, in contrast to other regions in the country, within the boundaries of this foreign investor's territory, a systematic and comprehensive colonization process could be noticed; a deliberate urbanization policy was implemented, and the resulting cluster of new towns immediately rendered a peculiar and remarkable planning pattern to the area. Eventually, more than sixty new towns were planted due to this successful overseas colonization scheme. Ideas travel, like people, commodities and money. Circulating around the world, British planning ideas, especially those relating to town and country planning were also transferred to Northern Paraná State. Interestingly, the British enterprise in Paraná hinterlands coincided with the development and consolidation of town planning theory, ideology, legislation and professional skills in Britain. Thus, Howard's regional concept of social cities and its later transformation into London satellite towns' scheme, as well as Parker and Unwin's original features of the garden city layout can be noticed. This article seeks, therefore, to shed some light on the diffusion mechanisms of British town and country planning ideas in Northern Paraná State, as well as the extent to which those ideas and practices were changed in the diffusion process.

INTRODUCTION

Responses to three major British planning ideas can be readily spotted in Northern Paraná State urbanization process. Ebenezer Howard's social cities, Raymond Unwin and Barry Parker's tangible form for the garden city, and London satellite towns' scheme were successively taken as planning models during the development of that remote Brazilian tropical region from 1925 onwards. The implementation of these planning ideas and practices came along with a comprehensive, systematic colonization scheme carried out by an overseas land-speculation enterprise (Rego, 2009; Rego and Meneguetti, 2009).

Having bought directly from Paraná State government three million acres of forested fertile soil, Parana Plantations Ltd, a London-based private company, implemented regional development measures in order to raise land value. A cluster of towns was planted, a railway line was built, a marketing campaign was launched and migrants and immigrants were attracted not only by the highly profitable coffee-growing business, but also by the rural and urban infrastructure implemented.

This land development scheme was part of a frontier-expanding movement for the occupation of the hinterlands which transformed natural landscapes into a somewhat urbanized setting in the early twentieth-century Brazil. However, within a broader context, imperialist initiatives also backed this British enterprise in the tropic (Rego, 2009; Montagu, 1924; Lindley, 1935, p.289; Cain and Hopkins, 2002; Hobsbawm, 2006, p.53). The Empire was not but fields of possibilities (Said, 1994, p.101) and the history of town planning in England also relied upon the contacts with the colonial world and the opportunities it offered (Cherry, 1980; King, 1980; Home, 1987; Home, 1990; Howard, 1965, p.119-120, Beevers, 1988, p.77). The development of town planning theory, ideology, legislation and professional skills owed very much to exportation/importation to dependent territories through the network of colonial relationships. Besides, during the three first decades of the twentieth century, town planning in Britain became a professional organization, in order to improve the art and science of this new activity; became a university subject, taught for the very first time; and embodied a social movement that gathered the reformist aspirations of a vast group of followers (Cherry, 1981, p.17;

Miller, 1989). Notably, the colonization of Northern Paraná State coincided with the massive campaign for town and country planning that was in progress throughout the United Kingdom (Hardy, 1991).

All in all, international circulation of planning ideas has been a source of seminal researches which not only have examined how and why planning ideas came to be spread worldwide, but also have sought to comprehend their influence in the shaping of local built-up environments (Ward, 2000; Miller, 2002; Home, 1990; Cherry, 1980; Almandoz, 2004; Almandoz, 2010; Leme, 2004; Rego, 2009). Following this path, this paper will trace the diffusion of British town and country planning ideas in Northern Paraná State hinterlands in an attempt to shed some light on the diffusion mechanisms and the changes that have occurred along this process.

SOCIAL CITIES

Initially, Ebenezer Howard's social cities played a central role in Northern Paraná State colonization scheme, which comprised a cluster of independent, equivalent, and regularly-spaced new towns, connected by a railway line built by the British company local subsidiary in a coordinate action. Town sites were laid out in advance of occupation and, according to the nature of this commercial enterprise, town layouts conveyed a practical, grid-like pattern, usually not exceeding one square mile - resembling the typical dimension of British colonial towns studied by Home (1987, p.9); this urban pattern, though, was cautiously adapted to site particularities, which moulded different urban forms. Small rural plots were set up, and green belts were determined (Companhia, 1975; Dozier, 1956), which, considering the proximity to the urban settlements caused to bring town and country together. Therefore, goals and practices advocated by the Garden City movement were adopted, particularly those regarding agriculture, settlement and regional planning (Howard, 1965; Adams, 1905, p.23 and 43; Hall and Ward, 1998, p.23 and 91). As elsewhere, a selective application of Howard's idea can be seen; the reformist, social aspect of the original idea was disregarded in favour of its physical planning aspect only (Ward, 2002). Thus, Howard's famous diagram was adapted to the private settlement and colonization purposes as well as to the geographical circumstances.

Up to 1944, when the British company was liquidated, nine new towns had been founded and three were under planning, according to a contemporary governmental map. This successful (Katzman, 1978), though poorly-registered, regional planning scheme set up a remarkable and peculiar landscape (Dozier, 1956; Monbeig, 1984, p.350 and 375). Northern Paraná State town and country planning and its deliberate urbanization policy soon established the contrasting aspects of this foreign colonization scheme. The regional planning scheme applied to that Brazilian tropical hinterlands' development was quite unconventional. Outside the foreign investor's property and even in other Brazilian agricultural frontiers no similar comprehensive, systematic and coordinated scheme could be found.



Figure 1. Lord Lovat in Life Guards' uniform, c. 1894.

What took place in the remote lands of Northern Paraná State was not only related to London itself, but also to the British Empire as a whole. On the one hand, strong connections linked Brazilian economy to the City of London (Cain and Hopkins, 2002, p.535; Montagu, 1924); British influence on Brazilian government was substantial at that time (Abreu, 2000; Abreu, 1989, p.76), and the thought of an informal imperialism (Darwin, 1997; Hopkins, 1994) must not be overlooked. Particularly striking was the episode in which Parana Plantations exercised their influence on local governmental taxation policies to their own benefit (see Parana Plantations' documents held at The Rothschild Archives in London, XI 111/449037).

On the other hand, Lord Lovat (Figure 1), the central character in the story of Parana Plantations' investment in Brazil, was an 'enthusiastic imperialist' (Lindley, 1935, p.112). Lovat and some other members of Parana Plantations Board of Directors had been involved in previous overseas settlement enterprises in Sudan (Gezira scheme) and in South Africa (in the territories occupied after the Boers War, where the remote position of towns and railway lines contributed to the disappointment of colonization initiatives). Undoubtedly, previous colonial experiences were determining for the Brazilian project. Besides, as an MP, Parliamentary Under-Secretary of State for Dominion Affairs, and Chairman of the Overseas Settlement Committee, Lovat took part in several debates on town planning acts and international settlement issues.

Therefore, in the case of Parana Plantations' colonization scheme, the diffusion of planning notions and practices relied on a foreign planning tradition, as occurred in other company towns destined to settlement in the late colonial world (Home, 1990). It mirrored an externally-dependent economic and political context. British planning ideas were, so to speak, 'imposed', according to Ward's typology of international diffusion of planning (Ward, 2000, p.51). Foreign actors were responsible for this episode of planning diffusion on the practical level, which involved selection and adaption.

SATELLITE TOWNS

Later on, a shift in Northern Paraná State colonization scheme was felt just after Brazilian entrepreneurs took over the liquidated British company's assets. Howard's social cities model gave way to satellite towns' scheme. The existing equivalent, self-sufficient, connected cluster of towns became part of a greater group of hierarchically dependent urban settlements (Companhia, 1975). Thus, existing towns and new townships were to gravitate towards four major towns, which, not surprisingly, were positioned along the former British railway line. Nevertheless, it

was still the case of gathering town and country together and taking people to, and keeping them in, the countryside.

As an outcome of new planning ideas and commercial policies, subsidiary urban settlements were more randomly founded within former Parana Plantations property. These towns and townships were not founded by the land company only; third parties were also responsible for town foundation. Small urban structures were cheaper and infrastructure implementation costs could be transferred to other developers rather than the land company itself. Besides, Government transportation policies shifted from railway lines to the automobile industry, which was being implemented in Brazil, and this also privileged the scattering of towns instead of their clustering along the existing Parana Plantations railway line. Moreover, the more rapidly urban facilities could be provided, the more rapidly the territory would be legally occupied, avoiding clandestine invasions.

In this case, professional milieu and the knowledge of innovative planning traditions can account for the diffusion mechanism of planning ideas. At the time, São Paulo Polytechnic School was already renowned as an agent for the national industry technological modernization process (Bonfato, 2008, p.25). Engineers trained in the Polytechnic were expected to broadly understand the recent issues of the urbanizing impulse and, in response, develop global plans regarding sanitation, transportation and town layout (Steinke, 2007, p.24).

In that State school, studies on zoning, urbanism, garden city and regional planning were exemplified by English and North-American experiences (Ficher, 2005, p.199). Originally, satellite towns' model was carried out to plan Greater London's development, which was somewhat an evolution on Howard's diagram. In building satellite towns, Purdom sought to assign new value to the creative idea of the garden city (Purdom, 1949). Abercrombie, in figuring out the growth of the English metropolis, also considered a planetary system with the sun and its satellites (Abercrombie, 1933, p.99). Not surprisingly, the English satellite towns' scheme had been debated as a potential solution for the problems of Greater São Paulo's development (Ficher, 2005, p.310; Leme, 2005, p.520-522; Bonfato, 2008, p.45-46).

Interestingly, one of the members of the Northern Paraná State's land company Board of Directors, originally trained as a civil engineer, graduated from São Paulo Polytechnic by that time (Steinke, 2007, p.92; Companhia, 1975, p.128 and 137). Although no formal evidences can connect studies of regional planning in São Paulo Polytechnic to Northern Paraná State satellite town scheme, the deference for British planning ideas and practices cannot be dismissed. Despite the different context, London's satellite town scheme was also selectively borrowed to re-define Northern Paraná urbanization process according to local circumstances.

According to Almandoz (1999, p.226), 'as well as in terms of physical changes and urbanistic proposals, the European influence has been pursued in relation to the urban ideas, myths and fashions that informed the ethos of the bourgeois city in Latin America'. Eager to strengthen their links with European metropolises, local elites thus played a central role in the diffusion of planning ideas and in the transformation of the backward reality of their countries.

The globalization of planning ideas has been linked to historical colonization processes (King, 1976). Moreover, the dominating and creative protagonist role of the world's modern capital cities has also provided the basis for urban globalization. During the significant period of the second half of the nineteenth century and the first half of the twentieth century, the industrial metropolis acquired special value as a modernizing laboratory for urban reforms and artistic vanguard (Almandoz, 2008). Thus, Europe's urban ideas and models were imported as a conspicuous signal of modernization, progress, civilization and national identity (Almandoz, 2010).

Thus, improvement plans for the city of São Paulo (unfortunately, none of them totally carried to term) were based on Second-Empire Paris layout (Segawa, 2004); whereas, urban sprawl of residential areas was based upon the English planning tradition, that is to say, the garden city formal principles (Almandoz, 2010, p.30; Segawa, 2004, p.107-127). The potentiality of Brazilian urban expansion had drawn the attention of foreign investors in late nineteenth century and the participation of private investments in town development was prominent (Almandoz, 2010, p.92); urban infrastructure, namely water, gas and power supply, transportation,

sewerage and street lighting, proved to be a profitable investment for British capital at the beginning of the twentieth century in São Paulo; in the 1910's, though, a massive inversion of capital was driven to the implementation of new neighbourhoods, particularly in the city of São Paulo (Segawa, 1997, p.21-22), which spiralled from 240,000 inhabitants in 1900 to 579,000 in 1920, and 1,075,000 in 1930 (Almandoz, 2010, p.21). This is the case of the *City of San Paulo Land Improvements and Freehold Co. Ltd*, a London Company much responsible for transforming São Paulo into a modern capital city (Steinke, 2007, p.86). The *City Co* not only developed the first garden suburb in São Paulo but also brought Barry Parker to work for two years in Brazil, which contributed to the rapid internationalization of local planning (Almandoz, 2010, p.95).

TROPICAL GARDEN CITIES

Two garden cities were built in Northern Paraná State: Maringá (1945-47, Figure 2), and Cianorte (1953-55), which were part of the most recent strategy of the land company new Board of Directors in a striking marketing operation. The original colonization scheme was, thus, changed, and townships and towns would now be built around four major cities. Thus, as major cities, and as the first urban settlements to be founded by the new Board of Directors, Maringá and Cianorte were meticulously laid out.

A town planner, originally trained as a civil engineer and best known for his garden-city layouts, was hired for the job. During his training at São Paulo Polytechnic, Jorge de Macedo Vieira had studied not only technical subjects like town sanitation, drainage and water supply, but also aesthetics subjects such as civil architecture and architectural composition (Ficher, 2005). His major training, however, took place when he had the opportunity to work directly with Barry Parker, the English architect who was in São Paulo and laid out a garden suburb - *Jardim América*, in the early 1917 (Wolff, 1998; Segawa, 2004; Leme, 2005). According to Vieira, it was this experience with Parker that turned him into a proper town planner (Vieira, 1972). From then on, Vieira was responsible for numerous garden suburbs layouts, in which he re-created and adapted procedures and formal principles learnt from Letchworth Garden City design and from town planning treatises as well. Regarding the transnational influences, his library also fed him with current externally-developed planning ideas and practices. As a result, contrasting influences like Camillo Sitte's ideas and the City Beautiful Movement's aesthetics can also be noticed in Vieira's layouts. Likewise, many of Raymond Unwin's (1984) recommendations for designing a town can be found in the layout of Maringá and Cianorte. In addition, influences of a national sanitary reformist movement are also present on Vieira's work (Bonfato, 2008, p.71).



Figure 2. Aerial view of Maringá, 1972. Source: Museu da Bacia do Paraná.

Maringá original layout, in particular, conveys principles of zoning; low density; a multi-nuclei urban form; an organic tissue with picturesque areas adapted to the

site's conditions; urban parks, green belt and massive street arborisation; streets and avenues hierarchically laid out; a civic centre, where boulevards and the ensemble of buildings were designed to create vistas and formal perspectives; a sports ground; and secondary town centres, where public squares were surrounded by commercial and public buildings. Thus, aesthetics principles, environmental, transportation and other technical issues concurred in the design of this tropical garden city.

Therefore, the diffusion mechanism of the garden city idea in Northern Paraná resembles what Ward has called the 'borrowing' of ideas between different countries (Ward, 2000). Cultural deference and native aspirations have all laid down an encouraging scenario for the diffusion of British planning ideas (see Almandoz, 1999; Almandoz, 2010; Nars and Volait, 2003; Morley, 2009). Since Parker and Unwin designed the first garden suburb for São Paulo, the garden city model has been selectively interpreted and adapted all over the country (Leme, 2005) in new, noble and 'chic' neighbourhoods destined to the upper class urban society (Segawa, 2004, p.115). Vieira, as a key character, acted locally to grasp and develop a world-wide renowned planning model (Bonfato, 2008). Clearly, it is the case of synthetic borrowing, in which existing and imported ideas concurred in a somewhat innovative layout.

In remote Paraná hinterlands, this pioneering town layout has long since been taken as a sign of modernity. Moreover, Maringá and Cianorte are amid the few Brazilian examples of comprehensive garden city layout. They were built almost exactly as originally designed and even today they still maintain a high quality urban space, although Maringá's original townscape has considerably changed due to the construction of high-rise buildings and the dramatic population growth within just a few decades.

CONCLUSION

Northern Paraná State coordinated regional planning and colonization comprised deliberate urbanization policy and the foundation of new towns, whose layouts showed physically healthy environments, principles of zoning and low densities. Moreover, the social city idea, the satellite town scheme, and the garden city model were selectively adapted to this land development enterprise. Thus, British planning techniques, goals and models were applied in the urbanization process of this region.

As depicted in this paper, the diffusion of planning in Northern Paraná State was not a uniform process, and it took place in successive flows according to the different diffusion mechanisms. First, the social city idea was part of the scheme 'imposed' by the overseas colonizing company. This private land speculation enterprise followed the influx of British capital to Brazil. Town and country planning, as a step forward to raise company interests, became a somewhat public virtue. In this particular case, the political and economic context, in other words the dependence on foreign capital¹, implied the dependence on foreign planning traditions.

Later on, the diffusion of planning ideas in Northern Paraná shifted from the 'imposition' to the 'borrowing' of ideas, when the role of local actors became more important. Thus, the satellite town scheme and the garden city model were adapted to local circumstances with some innovative aspects. In any case, context has assumed a significant role in the diffusion of planning in Northern Paraná State (Figure 3); although initially foreign political and economic dependence was determining, later on cultural deference prevailed - and this was a proper reflection of the diffusion process taking place in São Paulo at the time. With improved organization of planning schools and professional milieu, the 'selective appropriation' implied adaptation and transformation of externally-developed models applied in that metropolis. With head offices based in São Paulo, the new Northern Paraná State's colonization company Board of Directors was certainly acquainted with the up-to-date planning practices.

¹ According to Almandoz (2010, p.23), dependence consisted of a 'correspondence' between the interests of the local elites and the demands of foreign groups.



Figure 3. Local people prepared to welcome the Prince of Wales and Lord Lovat at Parana Plantations' property, 1931. Source: Museu Histórico de Londrina.

British planning ideas also spread throughout Brazil, but the diffusion process basically relied on an encouraging cultural context. As an example, São Paulo - the capital city which Northern Paraná State were more closely related to - experienced an impressive urban modernization due to massive investment of foreign capital during the first decades of the twentieth century, which brought about several major developments that mirrored the garden city model. Foreign consultants like Bouvard and Parker were invited to come to São Paulo, as Alfred Agache and Le Corbusier had been to Rio. To a certain extent, the 'permeability' to imported new concepts of planning was even endorsed by the lack of local technical knowledge (Leme, 2004, p.8 and 9). However, native aspirations comprised the longing for the status of a civilized city and a general enthusiasm for European urban culture could be felt. Not surprisingly, trips and studies abroad, international conferences and the publication of technical books and treatises have all supported the diffusion of planning in an ever globalizing world.

REFERENCES

- Abercrombie, P. (1933) Town & Country Planning. London: Thornton Butterworth Ltd.
- Abreu, M.P. (2000) "British business in Brazil: Maturity and demise, 1850-1950," Revista Brasileira de Economia 54, 4.
- Abreu, M.P. (org.) (1989) A Ordem do Progresso: Cem Anos de Política Econômica Republicana, 1889-1989. Rio de Janeiro: Campus.
- Adams, T. (1905) Garden City and Agriculture: How to Solve the Problem of Rural Depopulation. Hitchin: Garden City Press Ltd.
- Almandoz, A. (1999) "Longing for Paris: the Europeanized dream of Caracas urbanism, 1870-1940," Planning Perspectives 14, 225-248.
- Almandoz, A. (2004) "The garden city in early twentieth-century Latin America," Urban History 31, 3, 437-452.
- Almandoz, A. (2008) "Para una reseña bibliográfica sobre la globalización urbana," Bifurcaciones 7, 1-10.
- Almandoz, A. (ed.) (2010) Planning Latin America's Capital Cities 1850-1950. London: Routledge.
- Beevers, R. (1988) The Garden City Utopia. London: The MacMillan Press.
- Bonfato, A.C. (2008) Macedo Vieira: Ressonâncias do Modelo Cidade-Jardim. São Paulo: Senac.

- Cain, P.J. and Hopkins, A.G. (2002) British Imperialism, 1688-2000. Essex: Pearson Education Limited.
- Cherry, G.E. (ed.) (1980) Shaping an Urban World. London: Mansell.
- Cherry, G.E. (ed.) (1981) Pioneers in British Planning. London: The Architectural Press.
- Companhia Melhoramentos Norte do Paraná (1975) Colonização e Desenvolvimento do Norte do Paraná. S.L.: Companhia Melhoramentos Norte do Paraná.
- Darwin, J. (1997) "Imperialism and the Victorians: The dynamics of territorial expansion," English Historical Review, June, 614-642.
- Dozier, C.L. (1956) "Northern Paraná, Brazil: an example of organized regional development," Geographic Review 46, 3, 318-319.
- Ficher, S. (2005) Os Arquitetos da Poli. São Paulo: USP.
- Hall, P. and Ward, C. (1998) Sociable Cities: The Legacy of Ebenezer Howard. Chichester: John Wiley & Sons.
- Hardy, D. (1991) From Garden Cities to New Towns: Campaigning for Town and Country Planning, 1899-1946. London: E & FN Spon.
- Hobsbawm, E.J. (2006) A Era dos Impérios - 1875-1914. Rio de Janeiro: Paz e Terra.
- Home, R. (1987) Of Planting and Planning: The Making of British Colonial Cities. London: E & FN Spon.
- Home, R.K. (1990) "Town planning and garden cities in the British colonial empire 1910-1940," Planning Perspectives, 5, 1, 23-37.
- Hopkins, A.G. (1994) "Informal empire in Argentina: An alternative view," Journal of Latin American Studies 26, 2, 469-484.
- Howard, E. (1965) Garden Cities of To-Morrow. Cambridge, Mass.: The MIT Press.
- Katzman, M.T. (1978) "Colonization as an approach to regional development: Northern Paraná, Brazil," Economic Development and Cultural Change 26, 4, 709-724.
- King, A.D. (1976) Colonial Urban Development. Culture, Social Power and Environment. London: Routledge & Kegan Paul.
- King, A.D. (1980) "Exporting planning: the colonial and neo-colonial experience," in Cherry, G.E. (ed.) Shaping an Urban World. London: Mansell, 203-226.
- Leme, M.C.S (2004) "Circulação de idéias e modelos na formação do urbanismo em São Paulo, nas primeiras décadas do século XX," in Anais VIII SHCU. Niterói: UFF.
- Leme, M.C.S. (org.) (2005) Urbanismo no Brasil 1895-1965. Salvador: UFBA.
- Lindley, F. (1935) Lord Lovat: a Biography. London: Hutchinson & Co.
- Miller, M. (1989) "The elusive green background: Raymond Unwin and the greater London regional plan," Planning Perspectives, 4, 1, 15-44.
- Miller, M. (2002) "Garden cities and suburbs: at home and abroad," Journal of Planning History 1, 1, 6-28.
- Monbeig, P. (1984) Pioneiros e Fazendeiros de São Paulo. São Paulo: Hucitec.
- Montagu, E.S. (1924) Report Submitted to His Excellency the President of the United States of Brazil. London: W. Neely & Co.
- Morley, I. (2009) "Revelations, predicaments & civic design: the Americanization of the British urban environment, c.1900-14," Cercles 19, 124-140.
- Nars, J. and Volait, M. (eds.) (2003) Urbanism: Imported or Exported? Chichester: Wiley Academy.
- Purdom, C.B. (1949) The Building of Satellite Towns: A Contribution to the Study of Town Development and Regional Planning. London: J.M. Dent & Son Ltd. First edition 1925.

- Rego, R.L. (2009) As Cidades Plantadas: Os Britânicos e a Construção da Paisagem do Norte do Paraná. Maringá: Humanidades.
- Rego, R.L. and Meneguetti, K.S. (2009) "Planted towns and territory organization in perspective. A morphological study of a settlement process," in XVI ISUF Proceedings. Guangzhou: South China University of Technology.
- Said, E.W. (1994) Culture and Imperialism. London: Vintage.
- Segawa, H. (1997) Arquiteturas no Brasil 1900-1990. São Paulo: EDUSP.
- Segawa, H. (2004) Prelúdio da Metrópole. São Paulo: Ateliê Editorial.
- Steinke, R. (2007) Ruas Curvas Versus Ruas Retas. A Trajetória do Urbanista Jorge de Macedo Vieira. Maringá: Eduem.
- Unwin, R. (1984) La Práctica del Urbanismo. Una Introducción al Arte de Proyectar Ciudades y Barrios. Barcelona: Gustavo Gili.
- Vieira, J.M. (1972) Interview held at Departamento de Patrimônio Histórico, Prefeitura do Município de Maringá.
- Ward, S.V. (2000) "Re-examining the international diffusion of planning," in Freestone, R. (ed.) Urban Planning in a Changing World: the Twentieth Century Experience. London: E & FN Spon, 40-60.
- Ward, S.V. (2002) "Ebenezer Howard: His life and times," in Parson, K.C. and Schuyler, D. (eds.) From Garden City to Green City. The Legacy of Ebenezer Howard. Baltimore: The John Hopkins University Press, 14-37.
- Wolff, S.F.S. (1998) Jardim América. O Primeiro Bairro-Jardim de São Paulo e Sua Arquitetura. PhD thesis. São Paulo: Universidade de São Paulo.