

The new urban form and the model city: town planning in the Brazilian hinterland

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Abstract. *The diffusion of planning ideas incorporates both objective learning and more imaginative processes. This paper explores the interconnection of these two factors in Sinop, a new town in Brazil's Mato Grosso state, planned by private developers in 1972. Sinop's layout was commonly believed to reflect features of Maringá, a new town founded in 1945 in southern Brazil, whose highly rated design was planned according to formal garden-city principles. Like Sinop, Maringá was developed by private investors as part of a systematic colonization and deliberate urbanization process. Although Maringá was taken as a model for Sinop's design, the two urban forms appear fairly distinct.*

Keywords: Maringá, Sinop, new towns, imaginative geography, planning diffusion.

Places widely admired for their perceived 'good planning' have acted as 'models' that have inspired and informed the designs of other cities. To varying degrees, they have stimulated emulation, selective or partial borrowing and even direct copying of praised planning features. The diffusion of planning ideas can result both from rational, objective learning and from more imaginative processes, based on images that are consciously or unconsciously culturally constructed (Ward, 2012a, 2012b; see also Almandoz, 1999, 2010). The interaction of these two factors is the subject of this paper.

In the early-twentieth century, Hampstead Garden Suburb in London, England inspired the creation of affluent new neighbourhoods across Brazil, and similarly Letchworth Garden City informed the layouts of various new towns (Almandoz, 2004; Andrade, 2000, 2010; Bonfato, 2008; Rego, 2011). The southern Brazilian city of Maringá (Figure 1) has a striking garden-city configuration, though certain City Beautiful features are also

evident (Rego, 2012a; Steinke, 2007). Designed in 1945 as a regional centre for northern Paraná state, this new town was part of an attempt by a British firm to extend an agricultural frontier (Rego and Meneguetti, 2010) in a 'colonization zone', as the developing territory was then called. This new town had an unusual urban form, which has been praised as a successful planning model both for its 'modern', innovative and exotic features, and for its incredibly fast development. Small colonization companies pursuing profitable results similar to those obtained by Maringá's developers followed the same planning policy, not only in that region, but also in more remote agricultural areas.

Sinop (Figure 2) was founded some 1500 km north-west of Maringá nearly 2 decades later, in the remote, agricultural Mato Grosso state. Most of the initial migrants to this expanding agricultural frontier came from Paraná state, and it has been commonly accepted that Sinop's urban form was some-

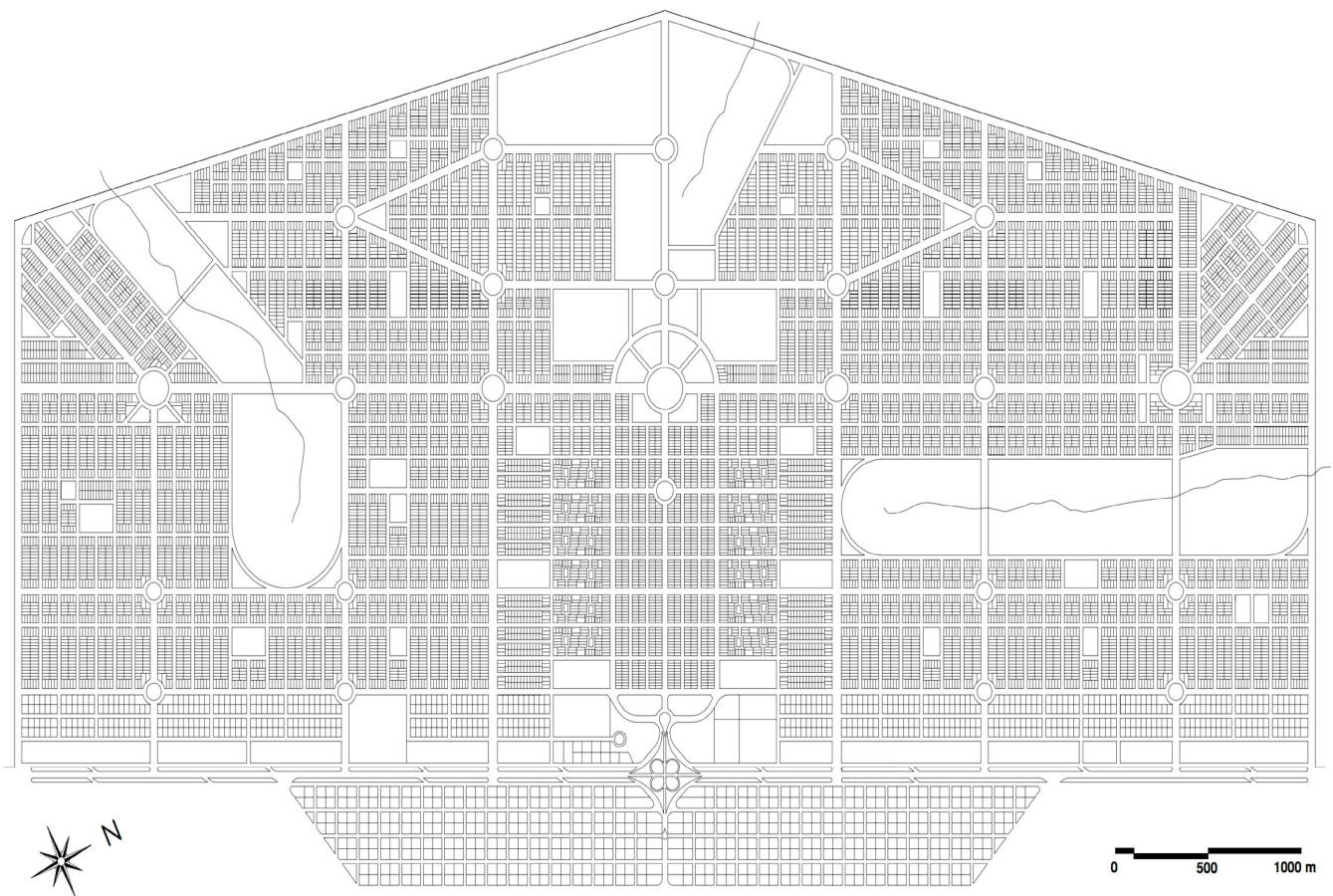


Figure 2. Revised plan of Sinop, 1979. Redrawn by the author.

and their ‘admired (or sometimes disliked) aspects are, in effect, being imaginatively constructed to highlight characteristics that those encountering them already wish to see strengthened (or avoided) in their own countries. Far from being truly accurate or complete representations of exotic experience, the knowledge received into the new setting is selective, partial, even false’ (Ward, 2012b, p. 500). The concept of imaginative geography enables the exploration and explanation of the gap between, on the one hand, common understanding and the town planner’s discourse and, on the other hand, actual urban forms: in other words, it makes it possible to explore more effectively the dichotomy between the symbolic and the material domain. In this way, the pursuit of urban morphology can be expanded to increase understanding of the characteristics of a planned new urban form.

Representing the planning model

Maringá was one of several planned new towns conceived by *Companhia Melhoramentos Norte do Paraná*, formerly a British development company, which was responsible for the region’s colonization and development plan. Created from scratch in 1945, Maringá ‘continues to be a model of urban design. Its original organization, street network hierarchy, and open spaces make for a healthy urban environment that offers its citizens a good quality of life as evinced by human development indicators and other indices that measure quality of life in urban areas’ (Macedo, 2011, p. 357).

Jorge de Macedo Vieira (1894-1978) designed the town following various precepts of modern town planning that were in vogue at the time (Macedo, 2011). Vieira was particularly famous for designing the garden



Figure 3. Maringá civic centre, 1980. The cathedral and the residential area are in the foreground.
Source: Gerência de Patrimônio da Prefeitura do Município de Maringá.

suburbs that had helped furnish a modern image for São Paulo (Passos and Emídio, 2009; Segawa, 2004). Trained as a civil engineer, he had worked with the British architect Richard Barry Parker during his stay in Brazil (Miller, 2012). Like São Paulo's suburbs, Maringá's layout conveyed a totally different, modern physical form in regional terms, and its innovative features were intended to be a sign of progress and civilization (Rego, 2011, 2012b).

One of the remarkable aspects of Maringá is its similarity to the form of a garden city (Andrade, 2000), though certain concepts of the City Beautiful movement are particularly

noticeable in the arrangement of its civic centre (Rego, 2012a): the monumental axis, the crescent, the symmetrical display of buildings, and the central grid street pattern create an impressive scheme of architecture, landscape and layout (Figures 1 and 3). Yet, segregated land use and zoning, the preservation of open green space within the urban tissue, the general street system adapted to the contours of the land, and the leafy tree-lined roads are significant features that offer evidence for the linkages between the theoretical garden-city model and the design of Maringá (Macedo, 2011; Rego, 2012a). The principle of design was thus not only order and



Figure 4. A central avenue in Maringá, 2010. Photograph by the author.

perspective, but also the idea of picturesqueness.

The individuality of Maringá's urban form is, to a very large extent, the product of the topography of the site. In consonance with Unwin's book about 'the art of designing cities and suburbs' (Unwin, 1909, p. 254), straight and curved streets were adeptly combined by Vieira. Short, straight streets with terminal features avoided monotony and vanishing perspectives and enhanced the formality of the city centre, where a certain effect of stateliness was desirable. Tree-lined curved streets enhanced the picturesqueness of residential areas with ever-changing views across less level sites, while also easing drainage. A dozen roundabouts were employed to articulate the irregular street junctions and thus solve traffic problems. The civic centre was a rather impressive element of the layout: a symmetrical grouping of public buildings at the end of a wide boulevard lined with palm trees that connected the railway station to the main, central public area, crowned by a crescent and adorned with fountains and parterres (Figure 3). The main square was located on the summit of the rising ground, in a dominant position. Parks created near the central area protected water springs, thus improving sanitation. Additionally, they

established limits for the different urban zones. Different species of trees were used both as natural decoration and to stamp each street with individuality (Figure 4), producing a very considerable variety in a small district. They were architecturally disciplined along the avenues and made residential areas more picturesque. As a result, Maringá's layout was able to address the practical problems of planning but still give priority to beauty and the art of town building. The concern for notions of academic town planning was unmistakable (Andrade, 2010; Pinheiro, 2009).

Imagining an urban form

The creation of Sinop in 1972 resulted from, on the one hand, the national policy of occupying the Amazonian region (Doula and Kikuchi, 1998; Trevisan, 2011) and, on the other, the previous experience that SINOP acquired in northern Paraná State, where the company had already founded some minor new towns before starting a more ambitious enterprise in Mato Grosso state, initially with an extent of 100 000 ha but later surpassing 650 000 ha.

Federal initiatives for the colonization of

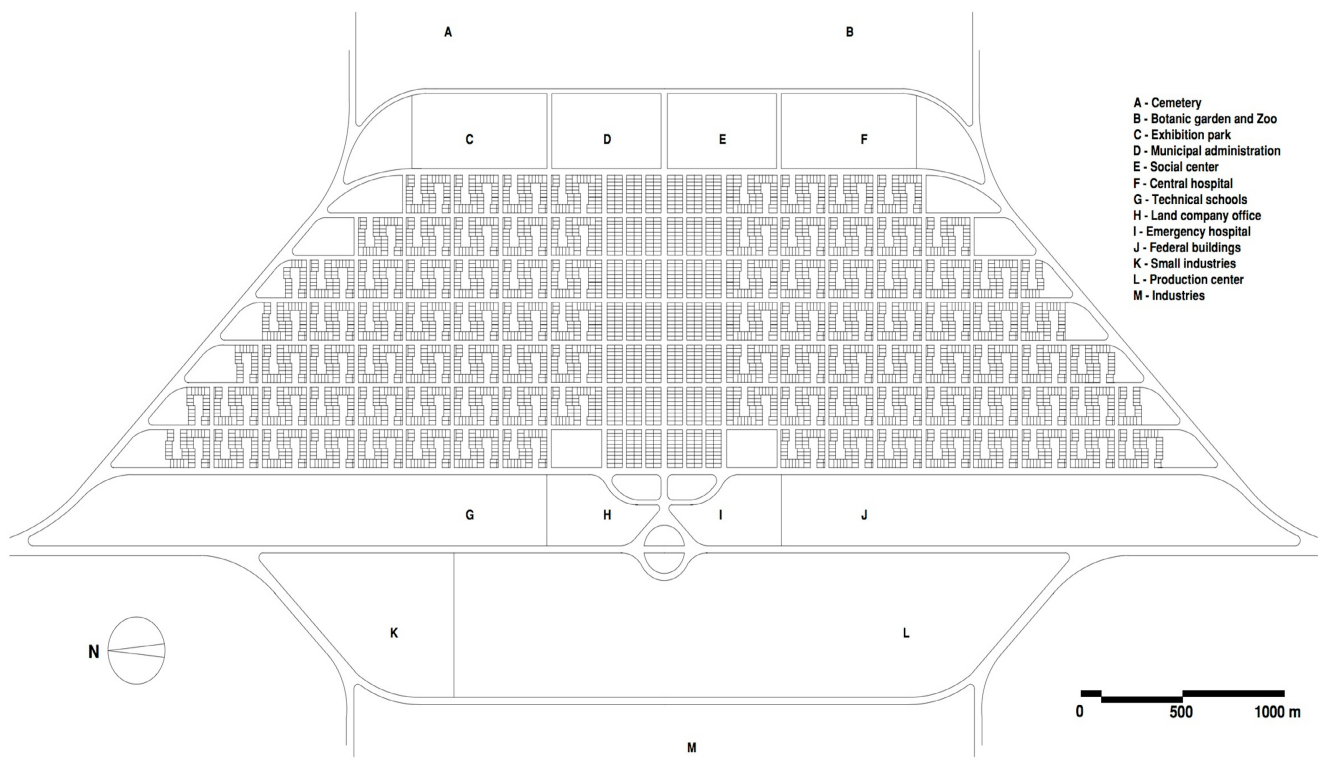


Figure 5. Initial plan of Sinop, 1972. Redrawn by the author.

Mato Grosso state brought to the area so-called 'civilized workers', especially those from southern Brazil (Paraná state included), for they supposedly had a 'European, entrepreneurial mind' plus farming experience. In return, the colonization of Mato Grosso offered the opportunity to become landowners, or to enlarge existing rural properties (Doula and Kikuchi, 1998, p. 4).

To a certain extent SINOP followed the national policy to plan privately-owned settlements. A hierarchical urban structure was anticipated, consisting of three types of dependent urban settlements: *agrovilas*, *agrópolis*, and *rurópolis*. *Agrópolis* were to be small administrative, cultural, agro-industrial urban centres to support the integration of satellite *agrovilas*, or agricultural villages; *rurópolis* were considered as development poles of rural communities consisting of *agrovilas* and *agrópolis*, and should have between 10 000 and 20 000 inhabitants only; and towns were to be the major urban structures in the region. Sinop was initially

planned as a *rurópolis* of 20 000 inhabitants (Figure 5), with the neighbouring Santa Carmen acting as an *agrópolis*, and Vera as an *agrovila* of 5000 inhabitants (Camargo, 1973, pp. 14, 16-17; Colonizadora Sinop, 1972, pp. 32, 35). Around Sinop there was to be a ring of small farms and, beyond them, medium-sized properties (36 to 72 ha) and, finally, farms of up to 290 ha (Oliveira Neto, 2012, p. 5). This policy was not so different from the satellite-town scheme that had been carried out in northern Paraná (Rego and Meneguetti, 2010), though it differed in terms of measurements, for a small property in Mato Grosso was equivalent to a large portion of land by Paraná standards. Apart from this, the rural land-parcelling scheme was very much the same: roads were positioned along the ridges and long rectangular rural plots were transversely laid out, so that each property had direct access to water courses and a straight connection with the road system (Rego and Meneguetti, 2008, p. 27).

In 1974 the town layout was revised, mainly

to solve drainage problems, though there was also a corporate demand for expansion of the urban area, cost-savings and, hence, design simplification. The initial town layout had been prepared by the civil engineer Roberto Brandão in 1972 and made no reference to Maringá; it generally depicted a plain grid pattern (Figure 5). The architect Alfredo Clodoaldo de Oliveira Neto produced the new layout just after participating in the 1979 master planning of Maringá. He is a nephew of the former director of SINOP and had recently concluded a postgraduate course in town planning. According to him, his previous knowledge and practice informed the new design. He eventually ‘copied’ certain elements of Maringá’s urban form (Oliveira Neto, 2012).

The revised layout of Sinop had pre-defined regular shapes, a grid pattern, a symmetrical arrangement of some diagonal roads, three urban parks and, its most conspicuous element, ubiquitous roundabouts. In the town planner’s own words: ‘I encourage roundabouts; I copied the pattern from Maringá, from Belo Horizonte and Goiânia; ... with them you ease the layout and organize the traffic, and, at the same time, create green areas, open squares, as in Maringá’ (Oliveira Neto, 2012, p. 10).

According to Oliveira Neto, Sinop’s topography was absolutely flat, like ‘a table’. In accord with the company’s conditions he wanted to simplify the layout. ‘I used the simplest urban fabric – the grid, and then the structural roads were created; I was thinking of wide avenues, I had seen that pattern here [in Maringá]’ (Oliveira Neto, 2012, pp. 10–11). The proposed, fairly symmetrical, gridiron is thus composed of a boulevard of 40 m width, avenues of 50 and 30 m width, and linear streets of 20 m width, which are on average 3 km long in the east-west direction and 7 km long in the north-south direction, enhancing an otherwise flat, monotonous townscape; a fairly typical feature of new towns. The boulevard is the main urban axis and, as in Maringá, it leads to the cathedral in a central setting. However, even though the shape of the civic centre is recognizable and a similar idea of vista and formality was applied to it, the resulting effect

is not the same (Figure 6). ‘What I took from [Maringá],’ recalls the town planner, ‘is what everybody admires: the greenery, areas of natural forest, the parks, the care of greenery and wide avenues’ (Oliveira Neto, 2012, p. 13). Indeed, urban parks were created around urban springs and Oliveira Neto confesses that Maringá’s ‘green lungs’ had influenced him (Oliveira Neto, 2012, p. 10). However, apart from the parks, greenery in Sinop is not nearly as significant as it is in Maringá: streets are not systematically planted (Figure 7). The garden-city image evident in Maringá is not apparent.

Sinop was not designed as a multi-nuclei urban form and the rather uniform layout of the residential areas does not contribute to constructing varied townscapes or different neighbourhoods. The original town layout (Figure 5) proposed superblocs and culs-de-sac, some of which still remain in the central area – the part already built when the design was revised (Figure 2). However, as in other Brazilian new towns, the cul-de-sac was never quite understood: this foreign pattern was not compatible with the local tradition of providing the main house façades with straight, visual and physical communication to the street, and culs-de-sac were either abandoned or turned into courtyards (Rego, 2012c). Thus the street blocks ended up being basically rectangular and the plots were simply the result of the easiest way of parcelling the land, with practical regularity being prevalent. Picturesqueness does not play a part in this design: its main idea is the principle of order.

Oliveira Neto did not attribute greater quality to the irregular urban tissue. According to him, ‘if I had some more uneven region I would have taken a more *organic* urban form, but [dealing] with a ‘table’ I am more American than European’ (Oliveira Neto, 2012, p. 14). By ‘European,’ he clearly had in mind irregular medieval urban tissues, while in the case of ‘American’ he was referring to regular New World town planning. The opposite standpoint can be found in Jorge de Macedo Vieira’s discourse about the planning of Maringá: ‘I intended – don’t know if I succeeded – to design a modern town; a town whose street layout didn’t obey the grid



Figure 6. Sinop civic centre, 2012. The cathedral is in the foreground. Beyond it is the main boulevard. Source: Colonizadora SINOP.



Figure 7. A central avenue in Sinop, 2013. Photograph by the author.

that the Portuguese had taught us, and bequeathed to the colony. I followed a modern process that consisted of responding to the topography as much as possible' (Vieira, 1971). By this he meant adopting the picturesque, irregular street pattern of the English garden city, the design of which he had learned from Richard Barry Parker.

With regard to imaginative geography (Said, 2001, pp. 65, 77, 80), the construction of a model is a historically conditioned exercise. Sinop was designed in a period when the concept of the 'functional city' was strongly favoured. Technical issues were predominant: urban forms such as exist in Maringá had long been supplanted in Latin

America (Leme, 2000; Pinheiro, 2010). A layout closest to that in Sinop can be found in Maringá's sprawling 1950-1960 new suburbs, where speculative initiatives produced a regular street pattern without the qualities of the original urban form and its greenery (Meneguetti, Rego and Beloto, 2012).

Conclusion

Morphological elements slightly reminiscent of Maringá can be seen in Sinop's layout, particularly the shape of the civic centre, and the presence of roundabouts, wide avenues and urban parks. They were taken and assembled as a 'kit of parts' – to recall Ward's expression (Ward, 2013, p. 297).

Even so, rational learning can be identified with regard to street patterns being adapted to site conditions, road hierarchies and green areas for the protection of urban springs. Nevertheless, Maringá's most evocative features do not appear in Sinop, namely the tree-lined streets, the arrangement of the civic centre's buildings, and the irregular layout and overall garden-city aspect. In general, there is no great physical similarity.

Sinop emphasized some aspects of the actual town of Maringá, but minimized others. The representation of the model as an admired idealized place can be regarded as a form of imaginative geography, in that it is comprised of selected aspects of the original. To a large extent, there has been a sympathetic imaginative link between the innovative, beautiful, successful Maringá and the new town that Paraná immigrants were building in the Amazonian region. Thus, an exercise of selective imagination is evident in the case studied here. The time lapse between the layouts of the two new towns and the transformation that occurred in the field of town planning during this period contributed to it.

A model of urban form is historically conditioned. Sinop was designed more than a decade after Brasília, in a period when the concept of the 'functional city' prevailed. Technical issues prevailed in the modernist town planning from 1950 onwards; urban

forms influenced by the *beaux arts* movement had already been superseded in Latin America. This may explain why some features of the original design were downgraded, particularly the more artistic arrangements.

In this particular case, urban morphology cannot on its own explain the intricate relationship between the two urban forms. Instead, by combining urban morphology, town-planning history and imaginative geography, this paper has helped to understand the peculiarities of Sinop's layout and the influential role played in it by Maringá.

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References

- Almandoz, A. (1999) 'Longing for Paris: the Europeanized dream of Caracas urbanism, 1870-1940', *Planning Perspectives* 14, 225-48.
- Almandoz, A. (2004) 'The garden city in early twentieth-century Latin America', *Urban History* 31, 437-52.
- Almandoz, A. (ed.) (2010) *Planning Latin America's capital cities 1850-1950* (Routledge, New York).
- Andrade, C. R. M. de (2000) *Ressonâncias do tipo cidade-jardim no urbanismo de cidades novas no Brasil* (<http://www.anpur.org.br/revista/rbeur/index.php/shcu/article/view/738/713>) accessed 20 September 2013.
- Andrade, C. R. M. de (2010) 'A circulação transatlântica da ideia de cidade jardim: as referências teóricas dos urbanistas brasileiros na primeira metade do século XX', in Salgado, I. and Bertoni, A. (eds) *Da construção do território ao planejamento das cidades: competências técnicas e saberes profissionais na Europa e nas Américas - 1850-1930* (RiMa,

- São Carlos) 27-33.
- Bonfato, A. C. (2008) *Macedo Vieira: ressonâncias do modelo cidade-jardim* (Senac, São Paulo).
- Camargo, J. G. da C. (1973) *Urban-ismo rural* (Ministério da Agricultura/Instituto Nacional de Colonização e Reforma Agrária, Brasília).
- Colonizadora Sinop (1972) *Projeto aprovado pelo INCRA e SUDAM* (Arquivo particular de Roberto Brandão, Curitiba).
- Doula, S. M. and Kikuchi, M. Y. (1998) *A estratégia territorial da Amazônia: a cidade planejada de Sinop* (<http://www.anpur.org.br/revista/rbeur/index.php/shcu/article/view/706/681>) accessed 20 September 2013.
- Leme, M. C. da S. (2000) 'Formação do urbanismo em São Paulo como campo de conhecimento e área de atuação profissional', unpublished PhD thesis, Universidade de São Paulo, Brazil.
- Macedo, J. (2011) 'Maringá: a British garden city in the tropics', *Cities* 28, 347-59.
- Meneguetti, K. S., Rego, R. L. and Beloto, G. E. (2012) 'Espaços livres e paisagem na mancha urbana de Maringá-PR', in Campos, A. C. A. (ed.) *Quadro dos sistemas de espaços livres nas cidades brasileiras* (Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo) 103-16.
- Miller, M. (2012) *Barry Parker: before and after Jardim América* (<http://www.fau.usp.br/15-iphs-conference-sao-paulo-2012/abstractsAndPapersFiles/Sessions/01/MILLER.pdf>) accessed 20 September 2013.
- Oliveira Neto, A. C. de. (2012) *Entrevista concedida em 14/11/2012*. Arte, Arquitetura, Cidade Research Group Archive (Universidade Estadual de Maringá, Maringá).
- Passos, M. L. P. and Emídio, T. (2009) *Desenhando São Paulo: mapas e literatura, 1877-1954* (Senac, São Paulo).
- Pinheiro, E. P. (2009) 'Circulação de ideias e academicismo: os projetos urbanos para as capitais do Cone Sul, entre 1920 e 1940', in Gomes, M. A. de F. (ed.) *Urbanismo na América do Sul* (Universidade Federal da Bahia, Salvador) 119-48.
- Pinheiro, E. P. (2010) 'As ideias estrangeiras criando cidades desejáveis na América do Sul: do academicismo ao modernismo', paper presented at the *XI Coloquio Internacional de Geocrítica* (Universidad de Buenos Aires, Buenos Aires).
- Rego, R. L. (2011) 'A tropical enterprise: British planning ideas in a private settlement in Brazil', *Planning Perspectives* 26, 261-82.
- Rego, R. L. (2012a) 'Ideias viajantes: o centro cívico e a cidade como obra de arte – do *city beautiful* ao coração de Maringá', in Freitas, J. F. B. and Mendonça, E. M. S. (eds) *A construção da cidade e do urbanismo: ideias têm lugar?* (Universidade Federal do Espírito Santo, Vitória) 161-75.
- Rego, R. L. (2012b). 'Importing planning ideas, mirroring progress: the hinterland and the metropolis in mid-twentieth-century Brazil', *Planning Perspectives* 27, 625-34.
- Rego, R. L. (2012c) 'Brazilian garden cities: accommodating urban modernity and foreign ideals', paper presented at the 11th International Conference on Urban History (Charles University, Prague).
- Rego, R. L. and Meneguetti, K. S. (2008) 'British urban form in twentieth-century Brazil', *Urban Morphology* 12, 25-34..
- Rego, R. L. and Meneguetti, K. S. (2010) 'Planted towns and territorial organization: the morphology of a settlement process in Brazil', *Urban Morphology* 14, 101-9.
- Said, E. W. (2001) *Orientalismo. O oriente como invenção do ocidente* (Companhia das Letras, São Paulo).
- Segawa, H. (2004) *Prelúdio da metrópole* (Ateliê Editorial, Cotia).
- Steinke, R. (2007) *Ruas curvas versus ruas retas* (Universidade Estadual de Maringá, Maringá).
- Trevisan, R. (2011) 'Cidades plantadas na floresta Amazônica: ações estatais para ocupação e urbanização do Centro-Norte brasileiro', *Revista Geográfica da América Central*, Special Issue EGAL, 1-18.
- Unwin, R. (1909) *Town planning in practice: an introduction to the art of designing cities and suburbs* (Fisher Unwin, London).
- Vieira, J. de M. (1971) *Entrevista* (Departamento de Patrimônio Histórico, Prefeitura do Município de Maringá, Maringá).
- Ward, S. V. (2012a) 'Cities as planning models', Gordon Cherry Memorial Lecture, 15th International Planning History Society Conference (<http://www.fau.usp.br/iphs/videoStephen.html>) accessed 20 September 2013.
- Ward, S. V. (2012b) 'Soviet communism and the British planning movement: rational learning or Utopian imagining?', *Planning Perspectives* 27, 499-524.
- Ward, S. V. (2013) 'Cities as planning models', *Planning Perspectives* 28, 295-313.