British urban form in twentieth-century Brazil

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Abstract. *A number of new towns were created in northern Paraná State,
Brazil, by the British company Parana Plantations as part of a colonization
scheme in the first half of the twentieth century. The urban landscapes created
by these towns are distinct from those associated more generally with the
colonization of Brazil. However, there has been no extended analysis of their
origin, organization, conformation and impact. Drawing on contemporary
sources, this task is attempted here. Set within a broader context, a systematic
colonization is revealed in relation to its British colonial background. The
layouts of the towns founded by Parana Plantations show many features of a
British colonial town model. The colonization scheme reflects some of the
garden city tenets that were circulating widely in the colonial world.*

*Key Words: urban form, new towns, company towns, colonization,
Parana Plantations, Brazil*

In late colonial times, the world became
geographically much more integrated:[1] people,
capital, commodities, and ideas brought
together two contrasting realms.[2] As a result of
imperialist initiatives, inter-relationships
between the developed metropolis and
dependent colonial territories became a
dominant force in economic development.
According to Said, a 'structure of attitudes and
references' was prepared within the imperial
society for the colonial enterprise.[3]
Colonialism, as a cultural process, was a
vehicle by which urban planning was
exported. Physical planning notions and
legislation were introduced as part of the
overall economic and political context of
colonialism.[4] The activities in Brazil of the
British company Parana Plantations were a
striking example of this. Urban and regional
planning can be observed in the colonization

process of the company as a form of
environmental decision-making based on
metropolitan ideas circulating widely in the
colonial world. The task of this paper is to
uncover, in relation to the creation of urban
forms, both the particular aspects of the
colonization process in the case of Parana
Plantations and to draw more general
conclusions from an examination of the
settlements created by this company.

In 1924, the Montagu Mission was sent to
evaluate Brazil's economy and to recommend
measures to be adopted by that country's
government.[5] These measures were imposed
by British banks as a condition for a loan to
the Brazilian government. Lord Lovat, a
member of this economic expedition, subse-
quently bought 1 250 000 ha of unexplored
land in northern Paraná State and formed the
British company Parana Plantations as a

settlement company interested in land speculation. He had previously had experience of other settlement enterprises. He was a member of the board of directors of Sudan Plantations, a company responsible for irrigated cotton growing near Khartoum. He had been responsible also for a settlement company in South Africa, just after the Boer War. Furthermore, as a British Member of Parliament, Lovat had been a member of committees on land and colonial matters, was an 'enthusiastic imperialist'[6] and had taken part in debates on Town Planning Acts. During 1927, Lovat became Parliamentary Under-Secretary of State for Dominion Affairs.

At that time, the northern region of Paraná State was a blank on the map. Indians and small proprietors barely occupied the area, still covered by rain forest.[7] However, coffee growing was leading to the spread of settlements into the western frontier of the neighbouring São Paulo State. Sooner or later, coffee plantations, cities and the railway would reach the fertile soil of Paraná State. Though lacking the necessary resources for such an enterprise, the local government was looking forward to the region's development. Thus, foreign private investors were well received.[8]

Investment by Parana Plantations followed the influx of British capital to Brazil. Britain was the main supplier of capital and services to Brazil at the beginning of the twentieth century. To be more precise, the City of London was the main alternative source of funds for Brazil.[9] Moreover, there was a strong British influence on Brazilian economic and cultural life. Thus an informal imperialism was evident,[10] and there are respects in which the British colonization of northern Paraná exemplifies British imperialism during the course of the first half of the twentieth century.[11]

British dominions and colonies had a major role in the development of British planning ideas. For instance, E. G. Wakefield's proposal for systematic settlement was but a review of previous British colonial experiences, and the systematic colonization of Australia was referred to by Howard as the basis for the garden city idea.[12] The colonial world also represented opportunities for the realization[13] of planning ideas and these were duly exported to late colonial environments.[14] Howard's ideas could be found worldwide, not only in British imperial possessions, but also in America and Brazil. Barry Parker had designed a garden suburb in São Paulo in 1921 which served as a model for many other Brazilian garden suburbs.[15] However, garden city ideas were diluted in this process. Tracing Howard's biography as well as the development of his ideas, S. V. Ward pointed out the selective application of some aspects of the garden-city idea, referring especially to a shift in emphasis from social reform to physical planning.[16]

A major campaign for the garden city was promoted in Britain in the first quarter of the twentieth century.[17] Howard's proposal was evolving into satellite towns and becoming an aspect of regional planning. At the same time Town Planning Acts were being approved. Thus, the development of formally stated 'town planning' theory, ideology, legislation, and professional skills in Britain was the broader context for the colonization of northern Paraná State.

Bearing in mind the planning ideas debated in London as well as the cultural exchange under the Empire's influence, this paper analyses first the general plan for the colonization of the territory of northern Paraná and then focuses on the associated urban forms.

The settlement scheme

To carry out the settlement project in northern Paraná, Parana Plantations formed two Brazilian subsidiaries: a land company – named Companhia de Terras Norte do Paraná – and a railway company, Companhia Ferroviária São Paulo-Paraná. Both subsidiaries were managed jointly. The board of directors of Parana Plantations was British based, and the local manager was a Scottish former employee of Sudan Plantations, who left Gezira to live in northern Paraná. The two
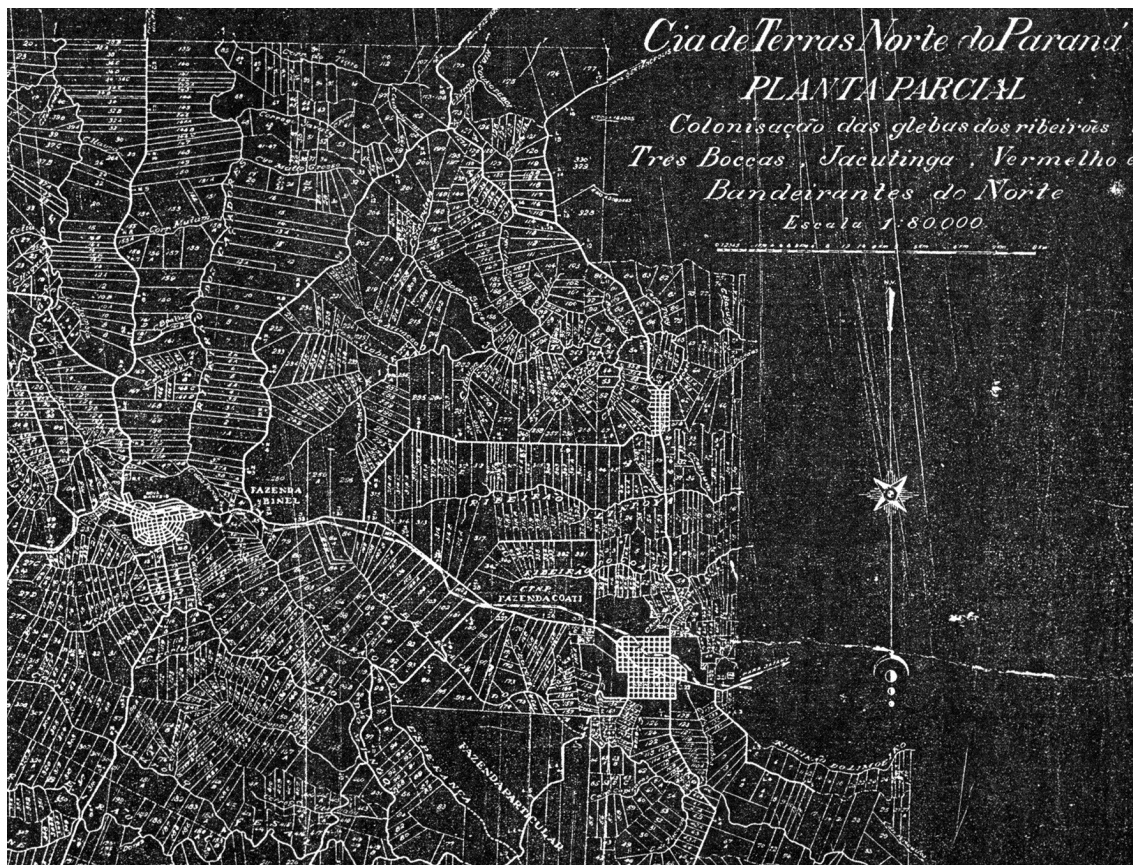
Figure 1. Towns on high points, connected by the railway: Londrina (bottom centre), Cambé (left), and Heimtal (top centre). Small rural plots are divided according to the topography – rectangular strips extend from the roads, on ridges, to the streams. Reproduced from a map dated 1934 in the Museu Histórico de Londrina.

subsidiaries co-ordinated their activities and they were responsible for an integrated land-use plan. Contrasting with other railway-town site developments, the colonization of northern Paraná integrated urban and rural land use, in a manner similar to Australian systematic colonization .[18]

The northern Paraná colonization scheme included a consistent policy of deliberate urbanization.   The urbanization process followed the British colonial town-planning model. The whole territory was surveyed and subdivided, and all the plots numbered. Roads were aligned on the ridges, and the plots were strips of land stretching from the roads on the ridge-tops to the streams in the valleys[19] (Figure 1). Colonial town sites were laid out in advance of occupation, according to a previously prepared plan. Maps of the early 1930s show cities that would only come into existence many years later. In Londrina, the very first British town (whose name means daughter of London), the slow process of laying out the town required that the settlers camp beyond the area planned to be the town centre. The sale of rural plots was conditioned by the expansion of the territory's planned occupation, especially the progressive foundation of towns. Thus, the colonization scheme of Parana Plantations reflects the allocation of town and country land rights by the British colonial regime. This settlement policy, as pointed out by Home, structured a symbiotic relationship between town and country. According to Home, it is not fanciful to see in this the origins of the distinctive wording still used for Britain's system of land-use regulation – town and country planning.[20]
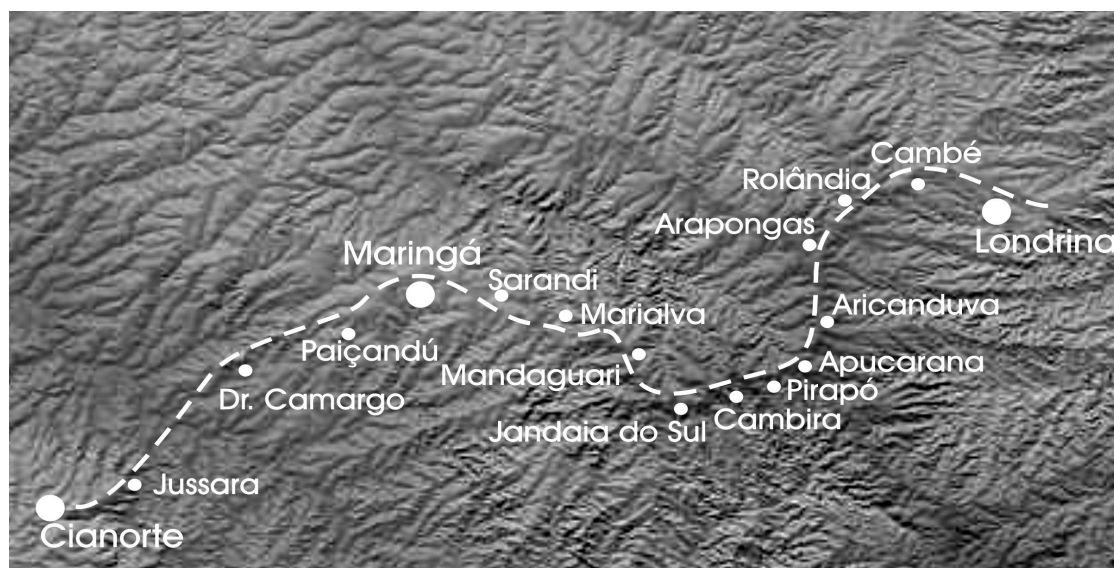
Figure 2. Planned towns on the ridges, connected by the railway (broken line). British company towns are Londrina (1930), Cambé (1930), Rolândia (1932), Arapongas (1935), Apucarana (1938), Pirapó (1938), Jandaia do Sul (1942), Mandaguari (1937). Dates refer to year of town foundation. Reproduced from Rego and Meneguetti (2006) *op. cit.* (note 32).

Although Parana Plantations was mainly interested in the sale of small rural plots, a number of facilities were created as well as the necessary infrastructure to establish basic conditions for settlers. The company's commercial success and developing agricultural activity depended on the facilities the region could offer, with towns functioning as trading centres and exercising a civilizing influence.

As the artery along which flowed the region's economic life, the railway line served as a major structuring element of the landscape. It followed the main ridges, and planned urban settlements were planted at intervals along it. Small rural plots between towns spaced no more than 15 km apart, connected by the railway, were the basic colonization scheme (Figure 1). The urban settlements formed a series of nodes that brought town and country together (Figure 2). The railway link assured not only transport for agricultural produce but also interaction among the population and exchange of services. The short distance between urban settlements benefited the inter-relationship between town and country. Towns worked as 'social cities'.[21] Affinities with Howard's conception are

evident. The colonizing company's scheme recalls at least three of Howard's tenets: first, that 'town and country must be married, and out of this joyous union will spring a new hope, a new life, a new civilization'; secondly, the conception of a group of cities, connected by a railway line, as 'sociable cities'; thirdly, the creation of a green belt surrounding every town for the growing of fruit and vegetables for urban consumption.[22] For this reason the colonization process adopted by Parana Plantations has been subjected to a number of evaluations.[23]

Although there is no direct evidence of the transfer of British town planning ideas to northern Paraná, it is evident that Lovat was acquainted with these ideas.[24] Moreover, colonies were ideal territories to experiment with the new ideas about towns and cities that were being debated in the metropolis. Howard's friends had suggested that the town clusters scheme was suited to a new country.[25] The editors of the *Garden City Review* claimed that they wanted 'not only England but all parts of the Empire to be converted with Garden Cities'.[26] It had already been established that Howard's social cities
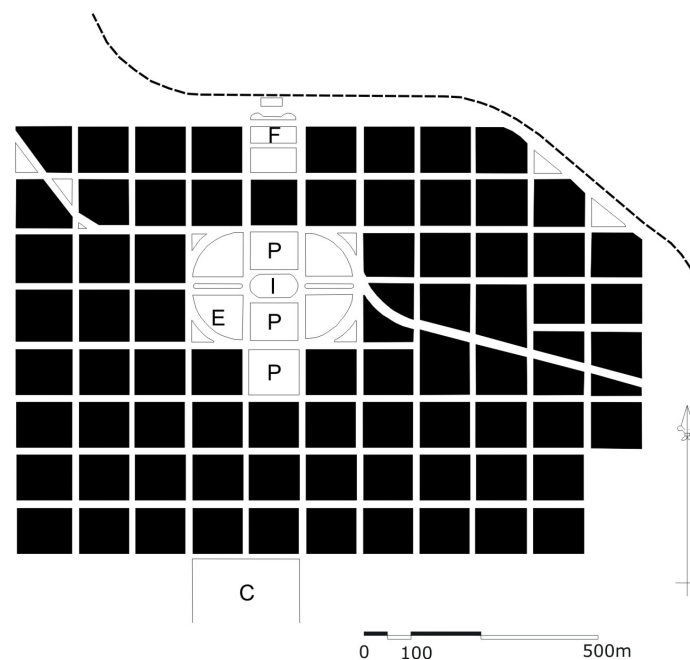
Figure 3. Londrina: a town centre shape influenced by the topography (F - railway station; E - school; I - church; P - town hall; C - cemetery). Reproduced from Rego *et al.* (2004) *op. cit.* (note 29).

diagram was appropriate for agricultural land settlement. Thomas Adams's *Garden city and agriculture* made the link between Ebenezer Howard's initiatives and the range of experiments in land settlement.[27]

Urban forms

The towns founded by Parana Plantations differed from most 'company towns'.[28] Usually, in company towns, most of the town area was owned by the company. In the case of northern Paraná settlements, residents owned their plots, both rural and urban. Moreover, private commercial activities were allowed. However, towns initially owed their livelihood to the land company's activities. Parana Plantations provided public services, notably water and energy supply, the road system and leisure facilities. It was able to promote improvements, found cities, implement facilities and set up public services. Although Parana Plantations sometimes played

roles usually associated with the State, the company was basically a private investor.

The company's towns were designed by its technical department. International surveyors worked under the supervision of the manager of the technical department. Layouts were submitted to the board of directors in London. Additionally, frequent contacts were maintained between London and Londrina, where the technical department was based. The directors travelled regularly to inspect the settlement and the work of railway construction. Consequently, a consistent pattern of urban development was maintained.

Attention to the terrain where settlements were to be planted was a particular characteristic of northern Paraná towns. Sites were often gently sloping. Though this made the supply of running water more difficult, it favoured urban drainage.[29] Sites conditioned town layouts, and hence design standardization was generally avoided and town identity was assured.

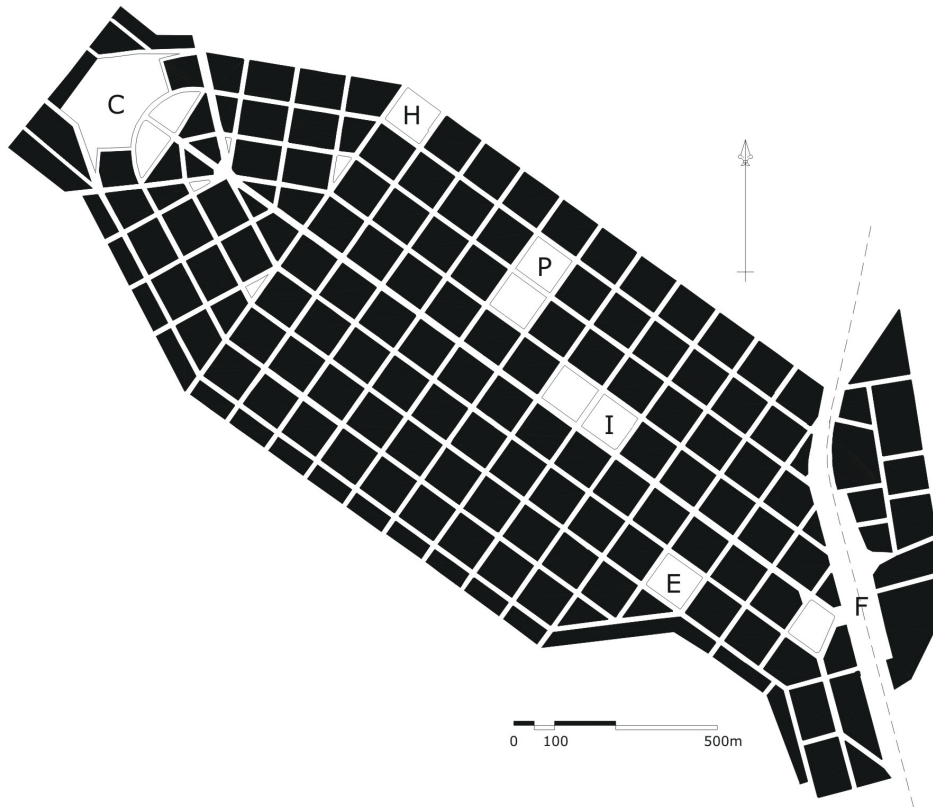On the whole, planned urban settlements

**Figure 4. Arapongas, showing the regular grid and the location of key buildings
(F - railway station; E - school; I - church; P - town hall; H - hospital;
C - cemetery). Reproduced from Rego and Meneguetti (2006) *op. cit.* (note 32).**
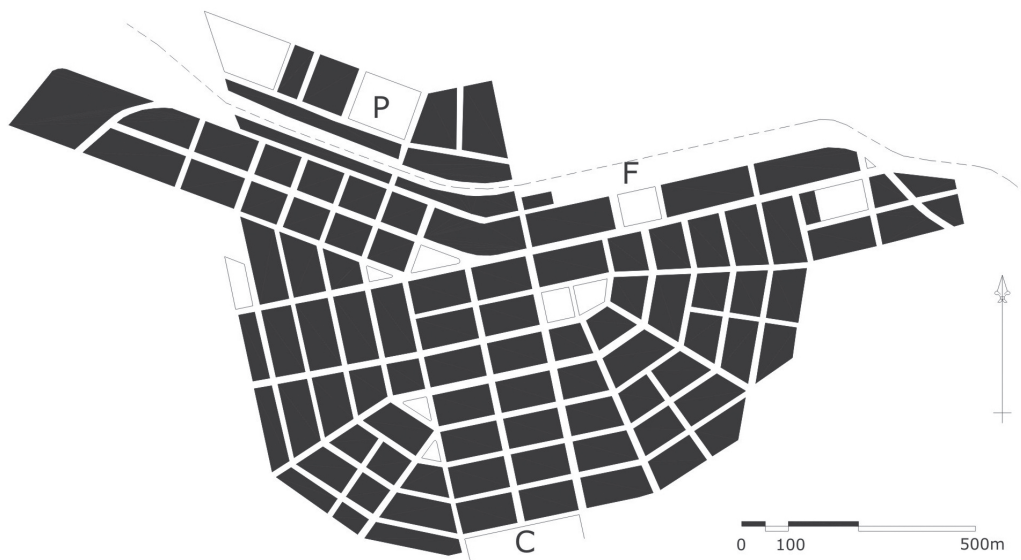

**Figure 5. Cambé: quasi-concentric streets influenced by the topography (C -
cemetery; P - sports ground; F - railway station). Reproduced from Rego and
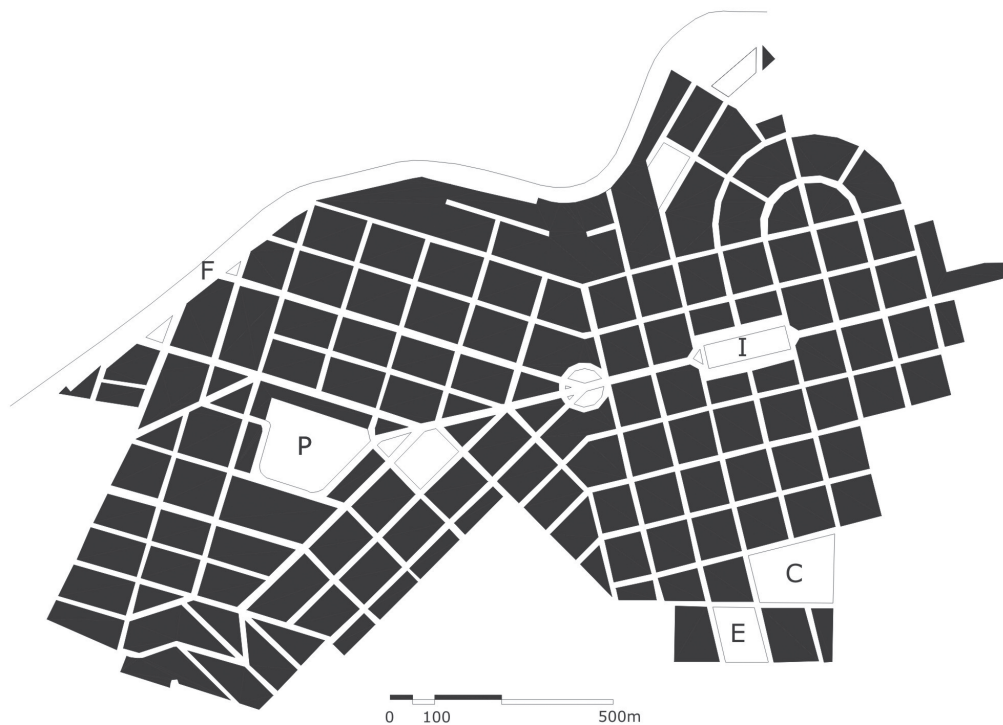Meneguetti (2006) *op. cit.* (note 32).**

**Figure 6. Apucarana: an analysis of several differently-orientated grids
C - cemetery; I - church; E - school; P - sports ground; F - railway station).
Reproduced from Rego and Meneguetti (2006) *op. cit.* (note 32).**

associated with colonization schemes have orthogonal grid street patterns.[30] These also correspond to the British colonial town model of a rectilinear or grid-iron layout of wide streets, embodying classical ideas of symmetry, order and proportion'.[31] In northern Paraná towns there is also a predominance of straight streets, orthogonal grids, symmetrical conformations, well-defined town centres, and a symmetrical layout of institutional buildings. As in many British colonial towns, a one-square-mile urban area was laid out on to which the street system of the planted town was fitted. This is found in the original layout of Londrina (Figure 3), which has an initial rectangular grid of 2.0 x 1.65 km, and in the original designs of other towns.[32]

This regular pattern was adapted to the topography.[33] Different layouts therefore resulted. Londrina's town centre has an oblong format because it was laid out on a high area whose contour lines were followed (Figure 3). Arapongas (Figure 4) has a linear conformation reflecting the flat terrain on which it was laid out. Cambé (Figure 5) has a quasi-circular shape in accord with its site. In contrast, Apucarana's more heterogeneous form is an amalgam of a number of differently-aligned orthogonal layouts, reflecting the use of straight streets in an area of more irregular terrain (Figure 6). Not only did the topography influence the decision of where to plant each new town, but it also affected the street layout.

The railway station was at a key point in the layout, notably the main entrance to the town. In general, there is a square opposite the railway station from which an urban axis leads to the town centre. The town centre, a level area as far as possible, was formed around the main public square. Deviations from this regularity reflected irregularities in site topography (Figures 6 and 7).

Streets orientated north-south preferably contained most lots. Street blocks were subdivided into standard-sized, rectangular lots as in the British colonial towns studied by Home.[34] Basically, lots followed the orthog-
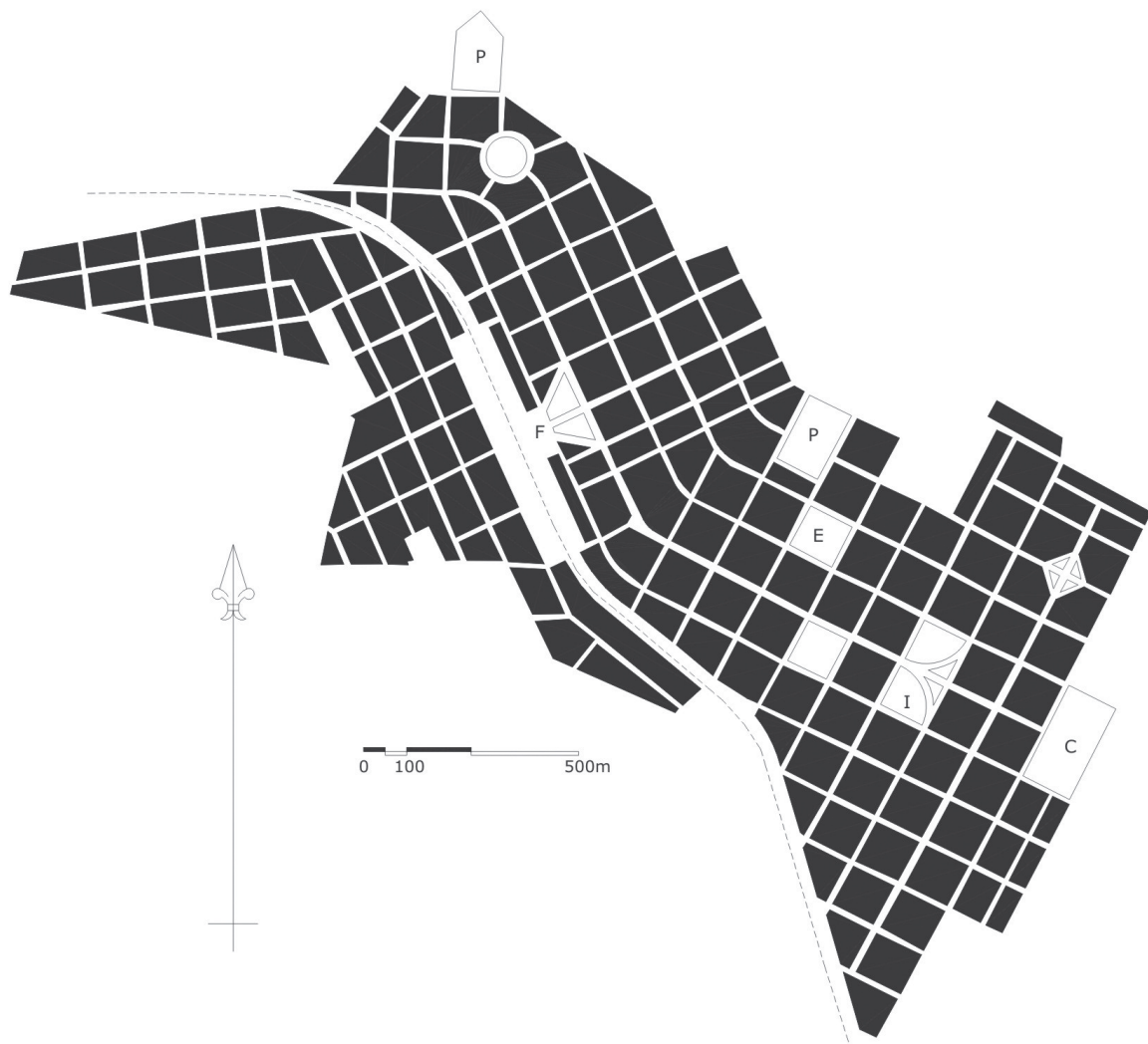
**Figure 7. Mandaguari: orthogonal street pattern adapted to the site (C - cemetery;
I - church; E - school; P - sports ground; F - railway station). Reproduced from
Rego and Meneguetti (2006)** *op. cit.* **(note 32).**

onal pattern of the streets, usually having their longest sides orientated east-west. This was abandoned if necessary in the case of a main avenue so that the lots of facing blocks were orientated to enhance the importance of this wider street. Generally, a single-family, one-floor, wooden house occupied the centre of the plot.

The centrepiece of the layout was reserved for public use, as in the model to which Home draws attention. The main public square was usually regular in shape, although irregularities were sometimes necessary to accommodate the conjoining of differently-orientated grids. A central place was reserved for the Catholic Church, which was generally at the highest point of the town. Lots around the public squares were mainly reserved for public purposes, particularly for institutional buildings, such as the school, the hospital, and the town hall. The cemetery and the railway station were placed at opposite boundaries of the town. Thus the position of certain key buildings to some extent gave a structure to the form of the town.

Conclusion

Although the organization of urban space in

the towns founded by Parana Plantations did not replicate the type of urban design developed in Britain, the main components of the British colonial town-planning model were reproduced. Moreover, the regional planning scheme had affinities with some of the garden-city movement's proposals.

British people did not migrate to northern Paraná, but their planning forged the region's landscape. In a period of nearly 20 years of colonization, the railway line was built and eight cities were located along it. The colonization scheme initiated by the British company, and later carried on by Brazilian entrepreneurs, eventually created more than 60 new cities. Additionally, through the British campaign, families were attracted to migrate to the north of Paraná State.[35] Urban settlement forms and regional planning remain as a British legacy.

Since the British company was liquidated and the land company's assets sold to Brazilian entrepreneurs, some changes can be seen in the original settlement scheme. The railway company, sold to the Brazilian government, gradually connected the towns originally planned. However, owing to Brazilian government policy in the 1950s, railways were abandoned in favour of motorways. Thus, not all the new towns are connected by the railway line as originally planned. Unfortunately, the railway line is not the main means of transportation any longer, only surviving to transport the agricultural production. Moreover, the number of new towns increased considerably. Although the towns founded by the successor land company basically had similar layouts, they were treated differently according to their size, position and role in the regional scheme. Furthermore, rapid urban development led to the growth of major new urban areas, mostly indifferent to the original layouts.

To sum up, Paraná Plantations' regional planning revealed a systematic colonization scheme. The parcelling of the territory into small rural plots, the construction of the railway with towns spaced along it, the integration of town and country, the progressive foundation of new urban areas, and the sale of land only after the implement-

ation of basic urban facilities were key features. In retrospect, northern Paraná State developed into an economically important region partly owing to the agricultural production, notably coffee growing, but even more because of the development scheme of Parana Plantations.

British colonial experience supported this enterprise. A British colonial town model, as defined by Home, is evident in northern Paraná's new towns. Moreover, previous land settlement projects in Sudan and South Africa provided land speculation business knowledge. Additionally, British town and country planning ideas made a significant contribution.

In conclusion, the new towns planted on the ridges along the railway line, conferred 'individuality upon the highest hilltops of red land'.[36] The topographical conditions influenced not only the settlement planning but also the urban forms, whose layout was usually adapted to the circumstances of the site. The strong relationship between towns and country, the recurrent features of urban layout, and the characteristic location of the British urban forms created a regional unity, as defined by Conzen.[37]

Notes

1. A version of this paper was presented to the Fourteenth International Seminar on Urban Form held in Ouro Preto, Minas Gerais, Brazil, 29 August – 1 September 2007.

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30. See Benevolo, L. (1993) *História da cidade* (Perspectiva, São Paulo); Morris, A. E. J. (1992) *Historia de la forma urbana* (GG, Barcelona).

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