

# Planned Occupation in the West of Parana: the Consolidation of the Urban Form in New Cities

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**Keywords:** Long lots, urban form, Marechal Cândido Rondon, Maripá settler, West of Paraná.

**Abstract:** Investigating through a morphological approach, the present paper analyses the changes and continuities of the urban space. The research's study case is the city of Marechal Cândido Rondon, West of Paraná, Brazil, one of the fifteen urban centers created by the private colonization company Industrial Madeireira Colonizadora Rio Paraná S / A – MARIPÁ within a specific context of the history of Brazil of the XX century. It is important to emphasize that the area purchased by the colonization company was originally a British property. Taking into account this historical perspective, the aim of this paper is to investigate to what extent the parceling in long lots practiced by the colonization company influenced the current urban forms of these cities, considering the fact that the practice of land parceling by long lots was originally applied in Germany a century before. The research was methodologically based on a bibliographic review and documentary analysis, and as a result, it is possible to infer that the urban form of the studied city still holds patterns of the original rural long lots, with some particularities regarding logical and social aspects that are behind the current urban configuration.

## 1. Introduction

The present article is part of a postgraduate research still in the process of development, and for this reason presents the first considerations and analyzes regarding the apprehension of the urban form of the New Cities created by Colonising Fronts in the West of the State of Paraná during the decade of 1940.

Considering this perspective, it is necessary to briefly understand the historical formation of this region whose autochthonous population was characterized by several Amerindian groups. The first nations to dispute the domination of the present West of Paraná according to Silva, Bragagnollo and Maciel (1988, p. 29), still occurred in the XVI century by the Spanish crown and later by the Portuguese Jesuits, who put into practice the system of Jesuit reductions. It can be affirmed that the West of Paraná has always been a region of dispute between the Iberian peoples, as Wachowicz (1987, p. 13) adds, and the frontier between Spanish and Portuguese possessions in the region of the present territory of Paraná was only fact materialized within the Treaty of Santo Ildefonso in the middle of century XVIII<sup>1</sup>. Later in the nineteenth century, the

1. In the Treaty of Santo Ildefonso, the delimitation of the physical frontier between Portuguese and Spanish possessions was “drawn” from the Paraná and Iguaçu rivers according to Wachowicz (1987, p. 32). Previously, the Treaty of Torde-

Brazilian government began an effective process of occupation of the West of Paraná, whose strategy promoted the small village created in the vicinity of the present city of Foz do Iguaçu a Military Colony as stated by Wachowicz (1987, p. 21).

While on the one hand the implantation of the Military Colony brought a certain prosperity and recognition to the region, on the other hand it was verified the existence of numerous foreign vanguards of illegal extraction of mate and wood in the West region. Held by companies with foreign capital, they were known as *obrages*. These Paraguayan and Argentine extractive frontiers followed the borders of the Paraná River, and crossed international borders defined by treaties, penetrated the western strip of the Brazilian territory according to Gregory (2002, p. 89). The map below illustrates the configuration and domains of the lands in the west of Paraná in the mid-twentieth century.

The geographic area that comprises the object of study of this research, the city of Marechal Cândido Rondon, in the early twentieth century belonged to the *obrage* named Company of Maderas del Alto Parana, whose property was known as *Fazenda Britânia* as reported by Niederauer (2011, p. 43). In addition, for Wachowicz (1987, p. 164) the use of the British gentile already indicated an English possession in Paraná's lands, since the *Compañía de Maderas del Alto Parana*, represented by Hilary Howard Lang and with a head office in Buenos Aires was in truth one of the ramifications of another important English firm: The High Paraná Development Company Ltd.

In spite of the intermittent attempts to cancel the operation of the *obrages* in the West of the State of Paraná by the Brazilian government, the practice of these extractive fronts persisted until 1937, when the *Estado Novo Vargasista* promoted policies of effective occupation of the frontier under a national context. These policies became known as the March to the West, according to Silva, Bragagnollo and Maciel (1988, p. 51), Gregory (2002, p. 90-91). Other international events also favored the decline of *obrages*, such as the end of World War I (1914-1918), as victorious European nations experienced economic turbulence due to heavy investments in the war.

Thus, in the early 1940s the western region of Paraná had the following scenario: lands with economic potential, whose attractions, wood and maté herb, aroused the interest of a group of shareholders from the South of Brazil. According to Silva, Bragagnollo and Maciel (1988, p. 87), in 1946, these shareholders bought a portion of land from a foreign group – the *obrage Compañía de Maderas del Alto Parana* – known as *Fazenda Britânia*, and by the name of *Industrial Madeireira and Colonizadora Rio Paraná S / A – Maripá*, began the process of colonization, occupation and sale of lands in the West of Paraná.

Under the principles of *Maripá*, the landscape of Western Paraná was redesigned, and the Company's role in colonizing the region was extremely important, not only for the extension of its area, but also due to its agrarian project with a program of smallholdings, whose purpose was to attract a greater number of settlers, who were mostly from Rio Grande do Sul, immigrants of Germanic and Italian origin. Consequently, *Maripá* spread an important model of parceling of the rural soil: the long lots. In definition, for Kohlhepp (2014, p. 57-59), long lots are characteristic of valley bottom occupations originating in Rio Grande do Sul and a priori is an inheritance brought by German immigrants.

In view of the above, the present research questions the influence of the rural parceling in long lots in the composition of the urban form of the New Cities of Colonizing Fronts, taking as a case study the city of Marechal Cândido Rondon, one of the fifteen urban centers created by the Colonizing Company *Maripá* in the 1940s. As an initial hypothesis it is assumed that

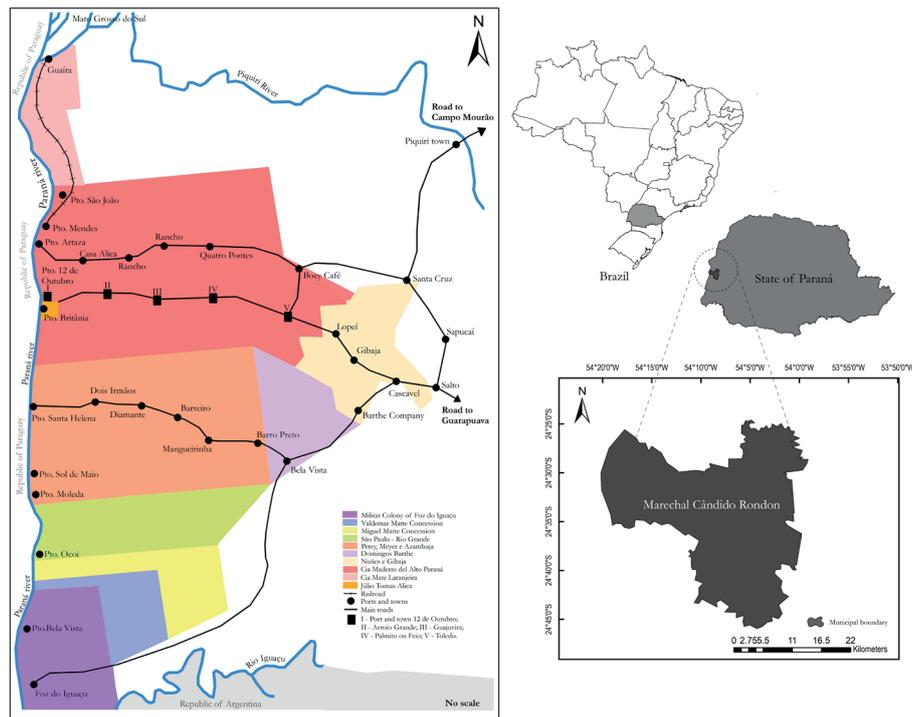


Figure 1. Map with configuration of the land of Western Paraná at the beginning of the 20th century. Source: Adapted from Wachowicz (1987, p. 228) and the Report of the Settlement Plan employed by Pinho e Terras Ltda., 1961. Organized by the author.

the apprehension of the urban form in this study is dependent on a greater degree of social and economic logics rather than just the physical factors of the territory.

The research is based on the cognitive and explanatory principles of the English School of Urban Morphology, whose approach comprises the shape of the city as a physical product of society's actions and proposes a theory about the construction of the city (Conzen, 1960; Conzen 2004; Holanda *et al.*, 2000; Costa e Netto, 2015). The method, therefore, is based on the tactics in historical research presented by Groat and Wang (2013, p. 195), being a descriptive case study (YIN, 2001, p. 19).

## 2. Methodology

The present work has essentially a qualitative and phenomenological approach. Therefore, the appropriate method to carry out this study is inserted in the Historical Research as explained by Groat and Wang (2013, p. 173), since the phenomenon of research will be analyzed from the narrative of its evolutionary process, under a longitudinal perspective.

In addition, the strategy used to answer the research question will be the descriptive case study, which Yin (2001, p. 19) says "is a category of research whose object is a unit that is analyzed in depth" and with few variables. As for tactics, this will be configured as the historical-interpretative, in which the investigation of the phenomenon starts from the interpretation and abstraction of the researcher, considering the behavior of the same in a certain temporal and contextual cut (Groat; Wang, 2013, p. 179).

As a tool of analysis used in this research, it is based on the concepts and parameters of urban morphology. As Kostof (2009, p. 9) describes, past and present are physically materialized

in urban centers. Therefore, if the question of temporality is presented by the action of time on the urban space, there are instruments that can provide the man with the understanding and perception of this overlap of layers or layers of the city.

In response to this research, urban morphology acts as a tool whose methods separate these strata that make up the city and for that some assumptions are established by Scheer (2015, p. 2) and Moudon (1997, p. 7). According to both authors, first, the urban form is defined by three fundamental physical elements: the buildings, the parcels or lots and the road system. Then, it is considered that the urban form can be studied at different scales, and finally, it is reaffirmed that the form of the cities can only be understood by a historical and evolutionary bias (Kropf, 1996, p. 249; Kropf 2013, p. 251 and Coelho, 2015, p. 17).

According to Costa and Netto (2015, p. 33), the term «urban form» is defined as the socioeconomic and spatial configuration of the urban landscape, considering an approach based on its layout and characteristics. In this perspective, the urban form is the result of the other morphological elements that configure the landscape of the cities. Thus, the present work proposed to investigate the influence of the typology of the long lots in the composition of the urban form in the new cities, in particular the city of Marechal Cândido Rondon.

In this morphological perspective, the approach used is based on the principles of the English School of Urban Morphology, which according to Moudon (1997, p. 4) and Whitehand (2001, p. 103) was realized from the studies of the German geographer Michael Robert Gunter Conzen (1907-2000). In addition, the research has a historical-geographical approach that according to Oliveira (2016, p. 65), establishes descriptive explanatory purposes, aiming to develop a “theory of city construction” and understand the reasons that led cities to be as they are.

The general objective of the research is to understand the influence of the rural parceling in long lots in the composition of the urban form of the New Towns of Colonizing Fronts and for this, maps were first produced with the geographical spatialization of the data collected using the free software QGis in the version 2.18 . The intention was to compare, through the overlapping of the maps, the parceling in long lots implanted by the Colonizing Company Maripá in the 1940s and the present configuration of the urban form of the studied New City. It should be noted that the base map used was the one produced by the Technical Office of the Colonizing Company in 1946.

Finally, we considered the historical, social and economic aspects, as well as the current logic of parcelling in the process of formation and configuration of the present urban form of Marechal Cândido Rondon, thus proposing hypotheses about the reasons that led to assume such characteristics. The historical context of the emergence of the city of Marechal Cândido Rondon and its urban configuration in the early 1950s is introduced. Primarily, the focus of this narrative is the relation of its urban form and the parceling in long lots.

### 3. Analysis/Results

The city of Marechal Cândido Rondon is a Brazilian municipality that belongs to the State of Paraná and is located in the Immediate Geographical Region of Cascavel and the Intermediate Geographical Regions of Toledo and Marechal Cândido Rondon<sup>2</sup>.

According to Silva (1988, p. 83), the *Compañía de Maderas del Alto Parana*, whose domain area covered the current region of Marechal Cândido Rondon, was created by a group of Argentine

2. Brazil's Regional Division in Immediate Geographical Regions and Intermediate Geographical Regions was presented by the Brazilian Institute of Geography and Statistics (IBGE) in 2017 (Brazilian Institute of Geography and Statistics, 2017, pages 2-3, introduction).

investors, and became a highly profitable business through the extraction of maté herb and local wood<sup>3</sup>. In the search for nationalization of these border extensions, the Brazilian government favored the purchase of *Fazenda Britânia* by south Brazilian entrepreneurs, who began to operate under the name of the newly established *Industrial Madeireira and Colonizadora Rio Paraná S/A – Maripá*, whose project of private initiative proposed a spatial organization based on smallholdings as Muller (1967, p. 105) and Oberg (1960, p. 27) point out, for an effective occupation of the territory of Paraná.

The *Industrial Madeireira, Maripá*, as shown in the image below, implemented fifteen new urban centers, thus effecting the occupation of their lands. Among the new towns instituted, there is General Rondon, later titled Marechal Cândido Rondon, in 1960.

#### 4. The practice of spatial organization of the Maripá Settlement: rural parceling in long lots

In order for each of the fifteen urban centers presented above to be fully developed, certain actions were required by the Colonizing Company. As for the infrastructure, *Maripá* guaranteed the opening of roads, the implantation of churches, hospitals, commercial houses, airports, etc. (Maripá, 1955).

In addition, as described by Oberg (1960, p. 26), the Company assumed certain state functions, since it enabled the territory with roads, public buildings and infrastructure. Surveyors and cartographers were hired for the correct division of the lands, whose layout resembled the system of colonization of Rio Grande do Sul.

The extensive area of the *Fazenda Britânia* was divided into perimeters, thus facilitating the spatial organization and administration of the company's shareholders and investors. The fifty-four perimeters created by the colonizer were subdivided into colonies and farms, and the fifteen urban centers were evenly distributed among these perimeters, favoring their connections (Maripá, 1955).

Systematically, the bounding factor of these perimeters were the watercourses. In this provision, emphasizing that it was an occupation in valley bottom areas, the rural lots were positioned with the highest part of the site connected to the road. That is, the top of the lot overlapped the ridge line, while its lower part was limited by a stream or river. The total area of these lots was up to 350 square meters (Niederauer, 2011, p. 204).

As already explained, this model of division of the lands in the West of Paraná comes from the diffusion of colonizing experiences in the south of the country, in which this type of rural parceling had already been employed. According to Niederauer (1992, p. 132), Muller (1986, p. 88) and Kohlhepp (2014, p. 58-59), this type of parceling was traditionally an element of the German land structure, and was originally called *Waldhufen*. Jean Roche (1969, p. 320-321) corroborates this fact implying that German immigrants who settled in the mid-nineteenth century in southern Brazil effectively applied their traditional land parceling.

The advantages of long-plot land parceling, a concept presented by Muller (1986, p. 88), goes beyond the natural drainage of the land and equal access to water sources and roads. This type of division considered the existing natural landscape and made it possible to subdivide into small properties.

3. In Paraná, as pointed out by Wachowicz (1987), three important economic cycles are defined: the maté herb, in the 19th and 20th centuries, the wood in the early 20th century, and coffee, specifically in the north of the state.

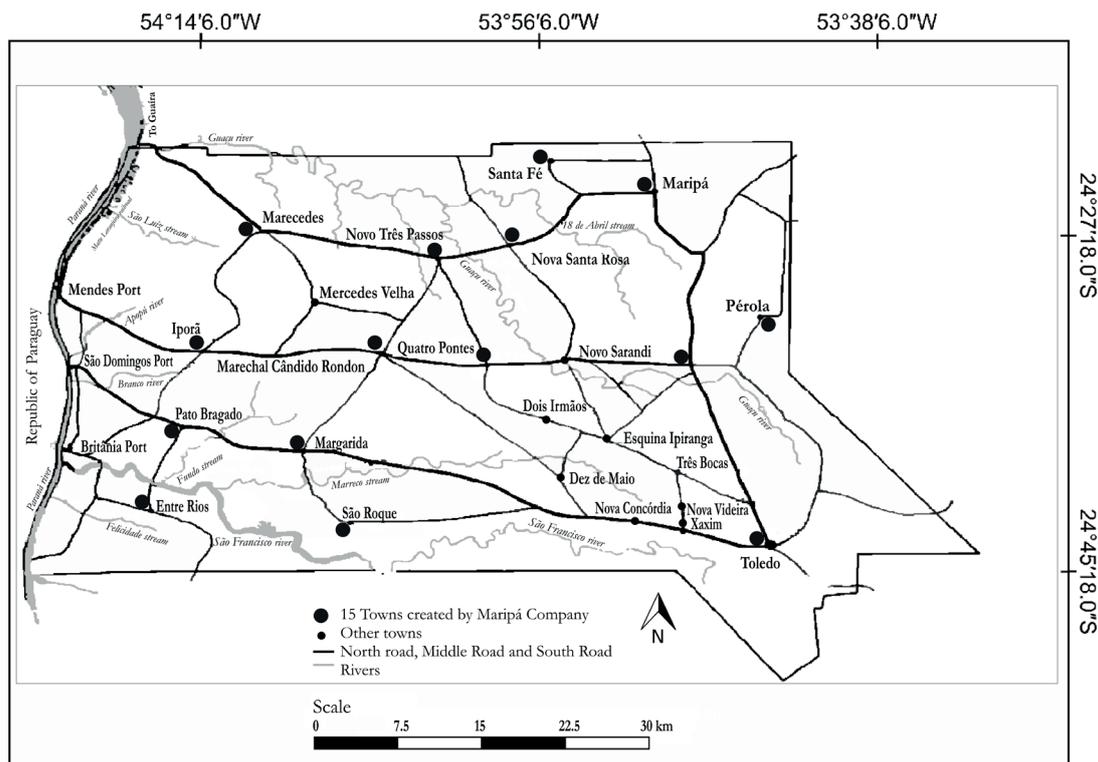


Figure 2. Map with network of cities implanted by Maripá in Western Paranaense, 1950.

Source: Oberg (1960, p. 129), Willy Barth Historical Museum and Office of the Industrial Madeireira Colonizadora Rio Paraná – Maripá. Organized by the author.

As presented in the Colonization Plan by *Maripá* (1955), in what concerns the issue of rural parceling, the small property was privileged before the large latifúndia for the occupation of a greater number of colonists and an alignment with the state policies of the period, being the Company *Maripá* the one responsible for guiding the distribution, sale and occupation of land.

## 5. A New Town: the village of General Rondon

The formation process of the urban center of the General Rondon's village occurred at a concomitant period when considered all the 15 towns created by the *Maripá* Settler in the West of the State of Paraná (Maripá, 1955).

In the years of 1949 and 1950 the first lands were sold to the settlers from the State of Rio Grande do Sul and Santa Catarina, who then effectively started the process of occupation of the areas. Among the first settlers who arrived in the region of the current city of Marechal Cândido Rondon, there were Antônio Rockenback, Erich Ritscher, Oswaldo Heinrich and Benno Weirich. As for the other immigrants who settled in the region, the existence of a selective policy of religious and ethnic bases is commonly agreed, with Lutheran Germans being preferentially directed to the nucleus of General Rondon's Village, as it was initially named by the colonizer, as Gregory points out (2002, p. 173) and Oberg (1960, p. 27).

The process of occupation of the village of General Rondon, as Silva, Bragagnollo and Maciel (1988, p. 102) affirms, took place rapidly as in other towns, with urban progress being leveraged by the agricultural sector. It is noteworthy that the success obtained in the territorial occupa-

tion of the village was due to the careful plan and guidelines drawn by the Colonizing Company *Maripá* under the direction of Willy Barth and Alfredo Paschoal Ruaro, whose precepts of urbanization, colonization and occupation of the soil were exposed in the Colonization Plan, dated 1955 (Maripa, 1955).

It is defined, according to Kostof (2014, p. 27), that the genesis of urban planning can be understood as the first actions of the organization of a territory. In the case of the village of General Rondon, which until 1960 was a district of Toledo, the planning can be exemplified by means of the Plan of Colonization elaborated by Colonizing Company already mentioned. It should be pointed out that, according to Oldoni (2016) and Gregory (2002, p. 117), in the urban plants of General Rondon and its neighbors villages, there was, as a rule, a geometrically streets, squares and squares were placed like a chessboard.

As for the economy of this period, according to the models implemented by *Maripá* (1955), the production of fruit and vegetables and agriculture promoted the subsistence of those families who settled there, thus justifying the importance of rural properties for the local economy.

Already in the early 1950s, there was an emancipationist desire among the cities of Parana, however Marechal Cândido Rondon was not among the possible centers to be emancipated, as described by Silva, Bragagnollo and Maciel (1988, p. 107).

This process of emancipation took place on July 25th, 1960, when the village of General Rondon was risen to the category of municipality with the name of Marechal Cândido Rondon, by state law number 4245, and is then dismembered from Toledo. Following, according to data of the City Hall of Marechal Cândido Rondon, numerous districts were created annexed to the city, being that by the territorial division of 2001, these districts totaled eight localities.

Currently, according to the latest Brazilian Institute of Geography and Statistics (IBGE), conducted in 2010, the population of Marechal Cândido Rondon is up to 46,819 thousand inhabitants, whose economic base is the extraction and transformation of natural resources. However, despite being a specialized agribusiness economy, the primary sector of the municipality has increased its productivity in recent years, expanding the economic scope of the municipality.

## 6. The long lots parcelling method as an urban form element of the New City of Marechal Cândido Rondon

Following the method described above, the map of analysis presented by the image in the sequence was elaborated through the overlap of the map with the original plot in long lots proposed by Colonizing Company *Maripá* and the current urban plant of the city of Marechal Cândido Rondon.

When analyzing the urban plant of Marechal Cândido Rondon presented by the map above, it is evident that there is influence of the long lots on the composition of the existing form. Demarcated in the image, there are the original perimeter implanted by the Colonizing Company *Maripá*, in 1950, and the current perimeter of the city, both in darker dashed lines.

As expressed earlier by Scheer (2000, p. 2) and Moudon (1997, p. 7), the urban form is defined by three fundamental physical elements: buildings, plots and the road system. For this specific analysis were considered only the city as a two-dimensional element by a historical and evolutionary bias. According to Costa and Netto (2015, p. 33), Moudon (1997, p. 4), Whitehand (2001, p. 65), the premise is that cities are conditioned by social, economic, and political forces,

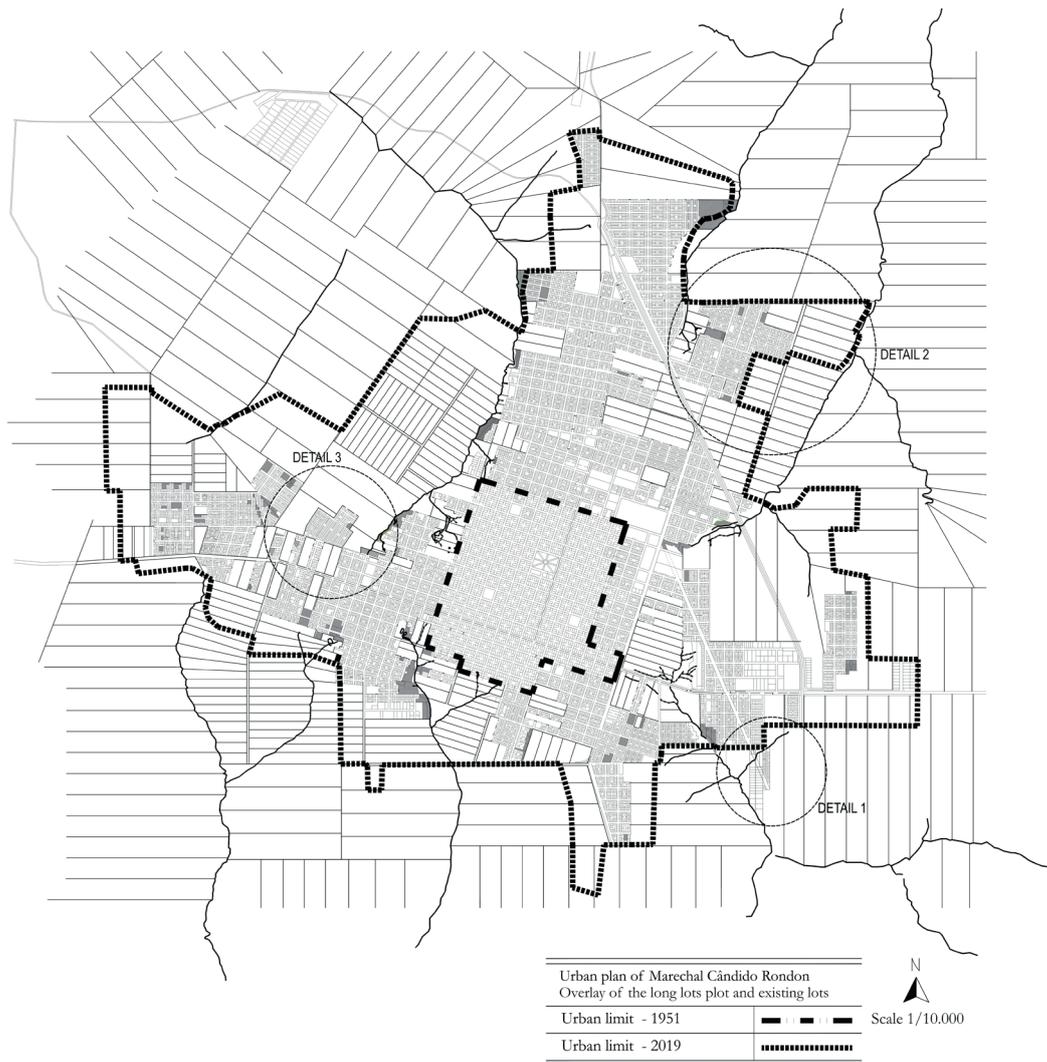


Figure 3. *Urban plan of Marechal Cândido Rondon (2018) with the color indication of the parceling in long lots initially proposed in 1951 by the Colonizing Company Maripá. Source: Willy Barth Historic Museum and Marechal Cândido Rondon City Hall. Organized by the author.*

materializing them spatially in their urban fabric. Thus, the parceling in long lots – in the gray color on the map – was defined as a delimiting element of the urban form.

In the table of enlargements presented in the sequence, the relation of the form of the present subdivisions and the parceling of the long plots deployed by the colonizer in the mid-1940s is perceptible. The stream is the divisor element between the lots, and these, as a consequence are responsible for the subdivisions that later appeared. In this sense, it is known that the existing city is its own model of reproduction, and for this reason, its physical form materializes certain aesthetic and experiential values as Coelho states (2015, p. 17).

Under the morphological approach, it is considered that the process by which the city expands is also a sedimentation phenomenon, in which the reading of the urban fabric will investigate the possible reasons for the cities to have their respective configurations. Thus, for Coelho (2015, p. 14) the physical city is constructed from the dimension of time, and the reading of the current state of its tissues is only reliable if it considers the expression of time.

In the first image of the enlargement table, it can be seen that the subdivision of the blocks

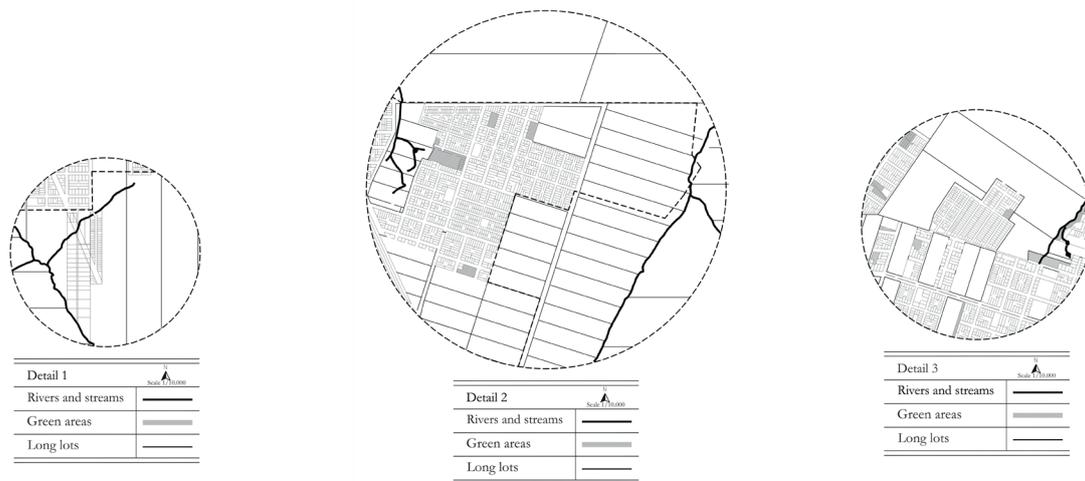


Figure 4. Details of the the urban plan of Marechal Cândido Rondon. Source: Organized by the author.

and respective urban lots of the studied New City have a similar format to the original subdivision, thus confirming the hypothesis that the city is constructed from an overlap of layers that are correlation composing a pattern for the apprehension of form and urban fabric according to Kropf (1996, p. 249).

According to Coelho (2015, p. 17), considering the morphological studies and the dynamic organization of the city, some caveats about the influence of parceling in long lots on the delimitation of the urban form of Marechal Cândido Rondon as presented in the second and third frame of enlargements. In this detail, it is pointed out that the original installment of the colonizer did not restrict the layout of the subdivision to the residential area. A hypothesis that justifies such phenomenon is the real estate interest of the region that, according to the Master Plan of 2017, includes a secondary expansion area.

Considering the information discussed above, we verified a morphological relationship of the parceling in long lots and the current urban plan of the city of Marechal Cândido Rondon. With the comparative analysis of the map, it is possible to verify that the spatial composition of 1950 – layer 1 or initial layer – had a strong influence in the delimitation of the current urban fabric.

## 7. Discussion/Conclusion

The present article is the partial result of a research concerning the influence of the rural parceling in long lots in the consolidation of the urban form of the New Cities implanted by Colonizing Fronts. From the foregoing, returning to the general objective of this research, we sought to understand the influence of rural parceling in long lots in the composition of the urban form of these New Cities, taking as a case study the city of Marechal Cândido Rondon.

The foundation of the research was based on the concepts of Urban Morphology, which considers the city as a product of society's actions on the physical environment. The urban centers assume different characteristics and functions according to their respective social, political and economic contexts. Thus, using urban morphology, it is possible to identify an urban logic about the construction of the city, since, despite the peculiarities of each city,

there must be similar and repeated phenomena in all of them (Conzen, 2004; Kropf, 1996, p. 249; Moudon, 1997, p. 4; Coelho, 2015, p. 17; Costa, Netto, 2015, p. 33; Whitehand, 2001, p. 103; Oliveira, 2016, p. 65).

Based on the historical and urban contextualization of the West of Paraná, the focus was the area acquired by the Colonizing Company *Maripá* and mainly the urban center of General Rondon's village, later named Marechal Cândido Rondon. In addition, the social and economic aspects that were present in the practices of the Colonization Company were analyzed, especially for the understanding of the initial configuration of the studied New City. This process all culminated in the elaboration of the comparative map referring to the urban form of the above-mentioned city.

The planned occupation process in the West of Paraná implemented by the colonizer carried out the use of a rural parcelization known as long lots. The advantages of this typology of subdivision as presented by Muller (1986, p. 88) goes beyond the natural drainage of the land and the equal access to water sources and roads. This type of division considered the existing natural landscape and made it possible to subdivide into small properties, an element that met the interests of the nationalist Brazilian government because it attracted a greater number of settlers to the region and also served the Colonizing Company's land trade and profit.

After the analysis and due consideration, it was verified that the urban form of the city of Marechal Cândido Rondon is, although partially, delimited by the layout of the long lots. The morphological aspect of the urban form – division and orientation of the subdivisions – follows the original subdivision with the peculiarities already presented.

However, considering the initial hypothesis which presupposed that the apprehension of the urban form in this study was dependent on a greater degree of social and economic logics rather than just the physical factors of the territory, it is worth mentioning some notes about it. The urban form of the New Town of Marechal Cândido Rondon was in fact delineated from the long lots as evidenced in the study. Moreover, the installment implemented by *Maripá* took into account the natural territory, especially the relief and hydrography. However, from the perspective of urban morphology, it is understood that the urban context is a product of social, political and economic practices.

For this reason, according to Ferrari (2009, p. 124), the new city expansion of Marechal Cândido Rondon, and consequently its urban form, is closely related to the production of the field. For the author, the “farmers have the practice of ‘investing’ in the city by buying properties (mainly lots), being considered by these, the best way to invest since one has in the private property of the land a guarantee”. [...] Considering the decades of 1980, 1990 and 2000, the period of greatest urban expansion, this phenomenon is aligned with the unstable behavior of the Brazilian economy after the miraculous economic plans failed. National economic stability only resumed in the mid-1990s with the implementation of the Real Plan.

As a result of the economic fragility, “[...] the low interest rates paid by banks in financial investments were important factors in this expansion and after a few abundant crops that enabled farmers to capitalize” there was an incentive for farmers to invest in the purchase of urban land, stable economy to invest whose capital had higher yield and appreciation as Ferrari points out (2009, p. 124).

Expansion of the urban form occurred through the transformation of the rural fabric into urban. That is, the former owners of farms and lots sold by the Colonizing Company *Maripá* most probably bundled their lands with the purpose of capitalization, thus maintaining the shape of long lots analogous to the new allotments that emerged in the following decades.

In view of all the aspects presented, the parceling in long lots spread by the German immi-

grants in Rio Grande do Sul played an important role in the consolidation of the urban form of the New Cities. The typology of a rural lot influenced the configuration of the urban form, and consequently the urban fabric, of numerous cities, whether in the West of the State of Paraná or in the so-called North Pioneer of that same State, as mentioned by Kohlhepp (2014, p. 58).

Finally, it is known that despite the peculiarities of each city, there must be similar and repeated phenomena in most of them, and therefore, the present research becomes relevant to other New Cities in similar contexts when establishing a logic of apprehension of the urban form which can be replicated, even considering a diagnosis about the problems of the current logic of land use and planning.

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