

**CONTEMPORARY URBAN SEGREGATION:
Analysis of fortified enclosures in two neighborhoods of Londrina- PR**
Segregação Urbana Contemporânea:
Análise de enclaves fortificados em dois bairros de Londrina- PR
Segregación Urbana Contemporánea:
Análisis de enclaves fortificados en dos distritos de Londrina-PR

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ABSTRACT

Studies on contemporary urban segregation are related to condominiums, linked to security, violence, and real estate interests. Social inequality and status distinction is fertile ground when it comes to the fear industry, as it generates profit for different industries. The objective of the study was to develop the theme "Fortified enclaves: the new urban segregation, by Tereza Pires do Rio Caldeira (1997)", transposing her concepts about fortified enclaves in two neighborhoods in the city of Londrina - PR. The selected neighborhoods were Gleba Palhano and Terra Bonita, as they have different characteristics in their condominiums, with the aim of translating the phenomena of enclaves into building elements on a meso and micro-scale. The analysis consists of simplified axial maps, interpreting its layout and morphology that translate the identity of the area, as well as the study of images of the condominiums for systematic reading. The article points out that the typologies of gated communities show the distinction on the meso scale, however, they indicate several similarities between the concepts of fortified enclaves on the micro-scale. And vertical condominiums tend to mask hostility, while horizontal condominiums stand out for security systems that alter the characteristics of public interactions.

Keywords: Fortified enclosures, urban segregation, industry of fear, Londrina.

Line of investigation

B2_The Challenges of the City and the Territory in the XXI Century – B2.2_Urban Inequality and Socio-Spatial Segregation;

RESUMO

Os estudos sobre a segregação urbana contemporânea estão relacionados aos condomínios, articulados à segurança, violência e interesses imobiliários. A desigualdade social e a distinção de status é um terreno fértil quando o assunto é a indústria do medo, pois gera lucro para diferentes indústrias. O objetivo do estudo foi desenvolver o tema "Enclave fortificados: a nova segregação urbana, de Tereza Pires do Rio Caldeira (1997)", transpondo seus conceitos sobre enclaves fortificados em dois bairros da cidade de Londrina – PR. Os bairros selecionados foram Gleba Palhano e Terra Bonita, por apresentarem características diferenciadas em seus condomínios, com a finalidade de traduzir os fenômenos de enclaves em elementos edifícios em escala meso e micro. A análise consiste em mapas axiais simplificados, interpretando seu traçado e morfologia que traduzem a identidade da área, assim como, o estudo das imagens dos condomínios para uma leitura sistematizada. O artigo aponta que as tipologias de condomínios fechados apresentam distinção na escala meso, porém, indicam várias semelhanças entre os conceitos de enclaves fortificados na escala micro. E os condomínios verticais tendem a mascarar a hostilidade, enquanto os condomínios horizontais se destacam por sistemas de segurança que alteram as características das interações públicas.

Palavras-chave: Enclaves fortificados, segregação urbana, indústria do medo, Londrina.

Linha de Investigação

B2_Os Desafios da Cidade e do Território no Século XXI: B2.2_Desigualdades urbanas e segregação socioespacial;

RESUMEN

Los estudios sobre la segregación urbana contemporánea están relacionados con los condominios, vinculados a la seguridad, la violencia y los intereses inmobiliarios. La desigualdad social y la distinción de estatus es un terreno fértil cuando se trata de la industria del miedo, ya que genera ganancias para diferentes industrias. El estudio tuvo como objetivo desarrollar el tema "Enclaves fortificados: la nueva segregación urbana, de Tereza Pires do Rio Caldeira (1997)", transponiendo sus conceptos sobre enclaves fortificados en dos barrios de la ciudad de Londrina - PR. Los barrios seleccionados fueron Gleba Palhano y Terra Bonita, por tener características diferentes en sus condominios, con el objetivo de traducir los fenómenos de enclaves en elementos constructivos a escala meso y micro. El análisis consiste en mapas axiales simplificados, interpretando su trazado y morfología que traducen la identidad del área, así como el estudio de imágenes de los condominios para una lectura sistemática. El artículo señala que las tipologías de barrios cerrados muestran distinción en la escala meso, sin embargo, indican varias similitudes entre los conceptos de enclaves fortificados

en la escala micro. Y los condominios verticales tienden a enmascarar la hostilidad, mientras que los condominios horizontales se destacan por sistemas de seguridad que alteran las características de las interacciones públicas.

Palabras clave: Enclaves fortificados, segregación urbana, industria del miedo, Londrina.

Linha de Investigação

B2_Los Retos de la Ciudad y el Territorio en el Siglo XXI – B2.2_Desigualdad Urbana y Segregación Socio-espacial.

1. Introduction

This research is the result of an exercise applied to the subject of Technical Networks and Urbanization, promoted by the Post-Graduation Program in Architecture and Urban Planning of UEM/UEL (PPU), to develop the topic of "Fortified Enclosures: the new urban segregation, by Tereza Pires, do Rio Caldeira (1997)". This exercise is relevant to understanding the role of technical networks in the urbanization process from a social point of view and its impact on relations in socio-spatial segregation.

The concepts defended in Caldeira's analysis in his article deal with urban segregation in the metropolitan region of São Paulo, making a comparison with the city of Los Angeles (California, USA) for presenting similar characteristics to the development of fortified enclosures, which express social segregation as a value. The fortified enclosures, known as closed condominiums, have attracted the middle and upper classes, imposing their logic of neighborhood and distance as a form of status, protection against crime, and changing the character of life and public interactions.

From Caldeira's concepts, the objective of the work is to translate the phenomena of fortified enclaves into constructive elements in two neighborhoods of Londrina - PR, observable on the meso and microscale. Through a summary table and image analysis, it was possible to list the relationships and disparities between the neighborhoods with the author's concepts.

2. Literature review

The urban space is an unintentional product since it causes transformations in social life by the value contained in its location (Villaça, 2011). According to the author, this location considered pure is a value that predominates over the infrastructure and materializes in the land value, reproduced in all city spaces. Through the land value, social structures and the urban zones segregated themselves since the upper classes compete for the most valuable locations, and the more central the areas are, the greater is their use-value and the better the conditions of connection with the other city spaces (Villaça, 1999).

With the resulting transformations of contemporary cities, the traditional center of the upper class neglected the emergence of new centralities driven by globalization and the real estate market (Magagnin; Constantino; Benini, 2018). In this way, urban segregation is fundamental to the territory configuration, operating as a catalyst of growth and on the use-value of space.

The Urban segregation concept argues the contrast between the center and the periphery, where particular geography produced by the dominant class differs from the others (Villaça, 2011). This distinction between rich and poor has existed for decades, but currently, studies on contemporary segregation are related to gated communities, linked to security, urban violence, and real estate interests (Caldeira, 1997; Villaça, 2011). The physical segregation of the dominant class from the popular ones impacts the space configuration since the closed condominiums occupy areas away from the centralities and close to the rural environment (Freitas, 2008).

According to Caldeira (1997) urban segregation in Brazil was the result of four different processes, being:

- The economic crisis of the 1980s: is considered the "lost decade" due to an economic regression, which implied the displacement of the peripheral population to distant regions due to the value of the lands, which provided the beginning of the expansion of the cities;
- The process of democratic opening and consolidation: social movements formed by the inhabitants of the periphery managed, to secure better living conditions with the regularization of land ownership and the insertion of their homes in the real estate market;

- Restructuring of economic activities and their displacement: the emergence of tenements due to the transition of industries from the central region to the peripheral neighborhoods;
- The growth of crime and fear: the increase in violence made the upper-class population adopt forms of protection, such as residential suburbs, promoting distancing as a form of status, changing the character of public interactions.

With the introduction of tenements in the central region, the population of the middle and upper classes related the context of urban violence to the popular layers and created mechanisms of distinction, such as the residential suburbs, to promote security through social difference.

The identification of a suburb implies the idea of fragmentation of the urban space; they are areas that still lack basic infrastructure, categorized as degraded space, making the periphery as the negative effect of development.

American and English suburbs are a meaningful reference to the Brazilian closed condominiums, presenting concepts of nature, elements of segregation between the working class, aesthetic standards as an aristocratic legacy, and the instruments of protection of the upper class. The most frequent typologies of Brazilian suburbs are the prestigious communities and the lifestyle communities, the first is about security, the desire for status and prestigious, searched by the middle class, and the second are high luxury developments away from the centralities, counting with recreation and entertainment areas on natural reserves. The two models differ in the size of the building plots, target public, location, and price of the building plots (Freitas, 2008).

The resulting processes that made the Brazilian suburbs possible were their relationship with the structuring of the road network and the association to new forms of production, distribution, and consumption, such as the expansion of high-tech post-Fordist industrialization; the real estate development based on the construction of high-income residential suburbs; the regional shopping malls; theme parks; the enterprises linked to universities; the existence of pockets of cheap labor (Domingues, 1994; Caldeira, 1997). This new urban scenario with large circulation infrastructures promotes social inequality.

The scenario of social inequality and distinction of status is a rich ground when the subject is the industry of fear because it is a phenomenon that feeds on the alarm and fear of a population generating profit for different segments (Sposito, 2013).

A frightened population does not occupy the public space and spaces labeled by the industry as marginalized, criminal, and unsafe. The proper functioning of the industry of fear happens in a precarious education scene; social-spatial segregation, inequality, misinformation, and mainly crime. Criminals are parts of this dynamic that reinforces the alarm of fear in the public space, assuming the role and protagonist of criminal characters, ready to hurt private security in a cyclical scenario where crime is as lucrative as the sale of the security systems.

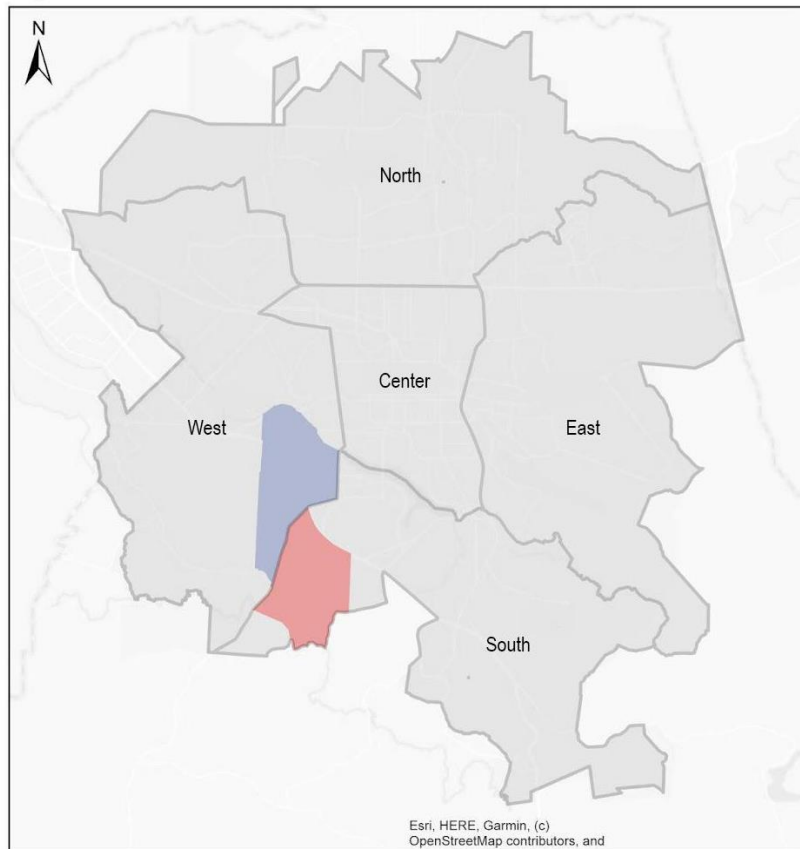
Fortified enclosures are a model of spatial segregation created in the last decade through the dynamics of the industry of fear, where the perception of violence is the justification for its reproduction. By raising walls, the population isolates and weakens the dynamics of the public and private spaces of the city. Additionally, the characteristics of fortified enclosures, such as the denial of the public street and the private security system, tend to promote socially homogeneous spaces through the distinction of status and are represented mainly through the building aspects of the architectural object that shape unequal places and limits (Caldeira, 2000).

2. Methodology

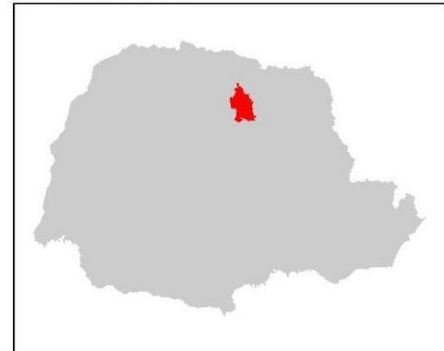
Given the contemporary character of this work, the most appropriate method is the case study (Yin, 2001). The essence of the case study is its focus on understanding a phenomenon associated with its context, from which it is inseparable (Groat; Wang, 2013). A case study is carried out in two neighborhoods in Londrina- PR (Fig. 1), presenting different types of closed condominiums, as vertical and horizontal.

Londrina is a Brazilian city located in the northern region of Paraná state, has a territorial extension area of 1,652.569 km² and an estimated population in 2020 of 575,377 residents (IBGE, 2021), being the second-most populous city in the state, second only to the capital Curitiba. The neighborhoods analyzed are first the Gleba Palhano, located in the western region, with the most vertical condominiums, and second, the Terra Bonita neighborhood, located in the south, with the most horizontal condominiums.

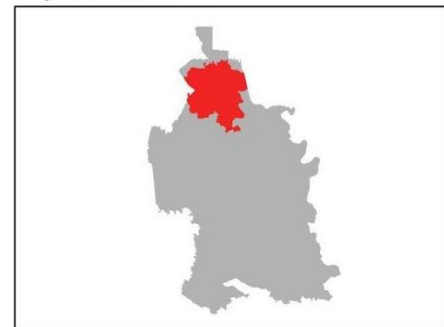
Urban areas of Londrina



State of Paraná



City of Londrina



Neighbourhoods analysed

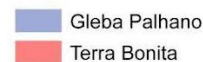


Fig. 1: Location of study districts. Source: the authors (2022).

One of the aspects of this study is the analysis of the neighborhoods on axial maps, analyzing their layout and morphology, which says a lot about the area identity. The streets configurations were organized in a map, and also all residential condominiums are demarcated by their access to understand in the network the concentrations and disparities of these condominiums. In a second step, images of the selected neighborhood condominiums were analyzed, progressing to a systematic reading at the micro-scale through the concepts of the article by Tereza Caldeira.

As explained in the literature review, Caldeira's concepts are a fundamental basis for analyzing the images collected in this study. It is possible to visualize the elements that define a fortified enclosure in the urban environment.

In order to support the analysis, an overview is necessary to organize the concepts. Some of these phenomena are translated into built elements, observable through their building typology, such as:

- Adaptation of what was open: places conceived with semi-open spaces, gardens, esplanades, and pilotis, are adapted in projects to be closed and surrounded by walls. These transformations are accompanied by a hostile aspect of adaptation of a temporary nature;
- Walls and grids: Barrier elements that block both access and visual permeability. These elements guarantee the interruption of the dialogue between pavement, street and built environment;
- The layout turned inside: happens in the typology of the built object and in the resolution of the program of necessities of the project, where all the activities are oriented to the interior of the development, in a way that artificially, everything that is needed in the daily life is in the private area, reducing more and more the connection with the urban space, mainly the public one. This aspect is considered a phenomenon that reduces the affective link with the surroundings, where the user finds it difficult to create mental maps of where they are situated;

- Access control: a security system characteristic of the fortified enclosure, where only authorized users can access the development, in other words, a paid security that only a portion of the population has access to. In addition to restricting the usability of space, lacking opportunities to enjoy as a pedestrian or contemplate as an observer;
- Lack of permeability: Condition removed from the pedestrian to contemplate or minimally anticipate what is in their field of vision from the public space. In enclosures, permeability is restricted at the human scale level on the grounds of safety;
- Hostility: A characteristic coming mainly from the adaptation process. There are aggressive elements in the built environment, both to the visual and the users, removing the opportunity to sit, lean, enter, contemplate, and even circulate. Such elements may be grids, wires, sharp objects, metal panels, or even signs that keep people away;
- Symbol/monumental: If on a human scale, the enclosures are surrounded by grids to prevent visual permeability, on larger scales, the verticalization and the bold design are a status symbol, a dynamic of interest for the real estate market;
- No kindness to pedestrians: Kind is the space that offers eaves for rainy days, a garden to contemplate, a semi-open space to circulate and occupy, or even space for a pedestrian flow with shading and wider quality pavements. Several examples of kindness that the built object can contribute to the public space, are all contrary to the dynamics of fortified enclosures where individualism is the protagonist and the built object closes itself to the events of the urban public space;
- In favor of vehicles: conditions in the space that contribute to the vehicle and leave in second place the pedestrian and the humanization of the space of walkability, for example, private parking spaces, private garages, parking spaces, and gates close to the public road.

Other phenomena are of a socio-economic aspect, which can only be analyzed with an anthropological understanding of the functioning of the enterprises:

- Internalized commerce and services: As the layout and character of fortified enclosures are turned inside, isolating themselves from the public space (street and pavement) all their activities and services are internalized, so that only their users can contemplate and use them, leaving the link with the urban space weaker. This is a phenomenon that can only be observed from the inside. Some condominiums, for example, offer pet shop services, shared workspaces, mini-markets, swimming pools, and gyms, among others;
- Socially homogeneous: segregation is noticeable in closed condominium neighborhoods, whether horizontal or vertical, where the predominant social classes in these spaces are upper classes. The bourgeoisie always isolates itself from the so-called "promiscuity of the city" creating homogeneous and organized spaces.
- Security with tax: The condominium taxes, in addition to guaranteeing the enjoyment of recreational complexes and services, offer a security system composed of guardhouses, gates, cameras, fences, sensors, and other technological devices developed to feed the fear industry. This phenomenon has a segregating character, creating an atmosphere in which only a portion of the population can pay for its security;
- Employees: The supply and operation of fortified enclaves are carried out by employees, from the lower classes, who work in these enclaves where segregation is not understood only from the perspective of the built object, but as a social reality. These can be mentioned as security guards, gatekeepers, concierge, caretakers, babysitters, maintenance crews, delivery men, cleaning staff, etc

After the overview concepts, is formed an analysis table, where each neighborhood receives five representative images of condominiums, all of them analyzed through the nine aspects by Teresa Caldeira. The color green in the table gaps means that an aspect is detected, and when an aspect is not detected the gap is filled with the red color. The table generates a visual framework of the aspects, where it is possible to understand the dynamics of the analyzed factors, that is, the standard prevalence of aspects and frequencies of the analyses.

3. Analysis and Discussions

By Tereza Cristina's study on fortified enclosures, it is possible to analyze the typologies among the closed condominiums in the neighborhoods of Gleba Palhano and Terra Bonita in the city of Londrina - PR. The two neighborhoods were chosen for the differentiation of condominium typologies, being one predominantly vertical and the other horizontal, to conduct a debate about fortified enclosures on the meso and micro-scale in the context of the city.

The Gleba Palhano neighborhood shows a predominance of closed condominiums - all located on the edges - of residential areas, and large urban voids within its limits. One can observe the predominance of vertical condominiums, with higher density in the eastern region, near Lake Igapó. On the other hand, horizontal condominiums influence the southern region, bordering the Ribeirão Esperança valley. The neighborhood includes within its limits the Aurora Shopping Center, the Praça Pé Vermelho (Red Foot Square), the Igapó Lake landfill and the Ribeirão do Cambé valley bottom and borders the State University of Londrina (UEL). The main connecting roads in the neighborhood are State Highway PR - 445, which is responsible for connecting Bela Vista do Paraíso, Cambé, Londrina, and Mauá da Serra, cities that are part of the metropolitan area; State Highway PR - 538 responsible for connecting the headquarters to the district of Guaravera; Av. Me. Leônia Milito which connects the neighborhood to the central region through Av. Ayrton Senna da Silva and Av. Another issue is that both condominiums have entrances on secondary roads, not on main roads.

The Terra Bonita neighborhood has residential areas only in closed condominiums, such as vertical and horizontal condominiums, and has few urban gaps. The neighborhood's boundaries include facilities, such as Catuaí Mall, universities, and natural elements such as the Ribeirão Esperança and Ribeirão do Cafezal valley bottoms, as well as the Botanical public Garden of Londrina. Horizontal condominiums dominate the neighborhood, promoting the spreading out of the neighborhood, especially in the west and south, areas close to the valley bottoms. On the other hand, there is only one cluster of vertical condominiums in the north. The main roads connecting the neighborhood are State Highway PR - 445, which links Bela Vista do Paraíso, Cambé, Londrina, and Mauá da Serra; State Highway PR - 538, which connects the headquarters to the Guaravera district; Av. Me. Leônia Milito, which connects the neighborhood to the central region via Av. Ayrton Senna da Silva and Av. And finally, both condominiums have entrances located on secondary roads, not on main roads.

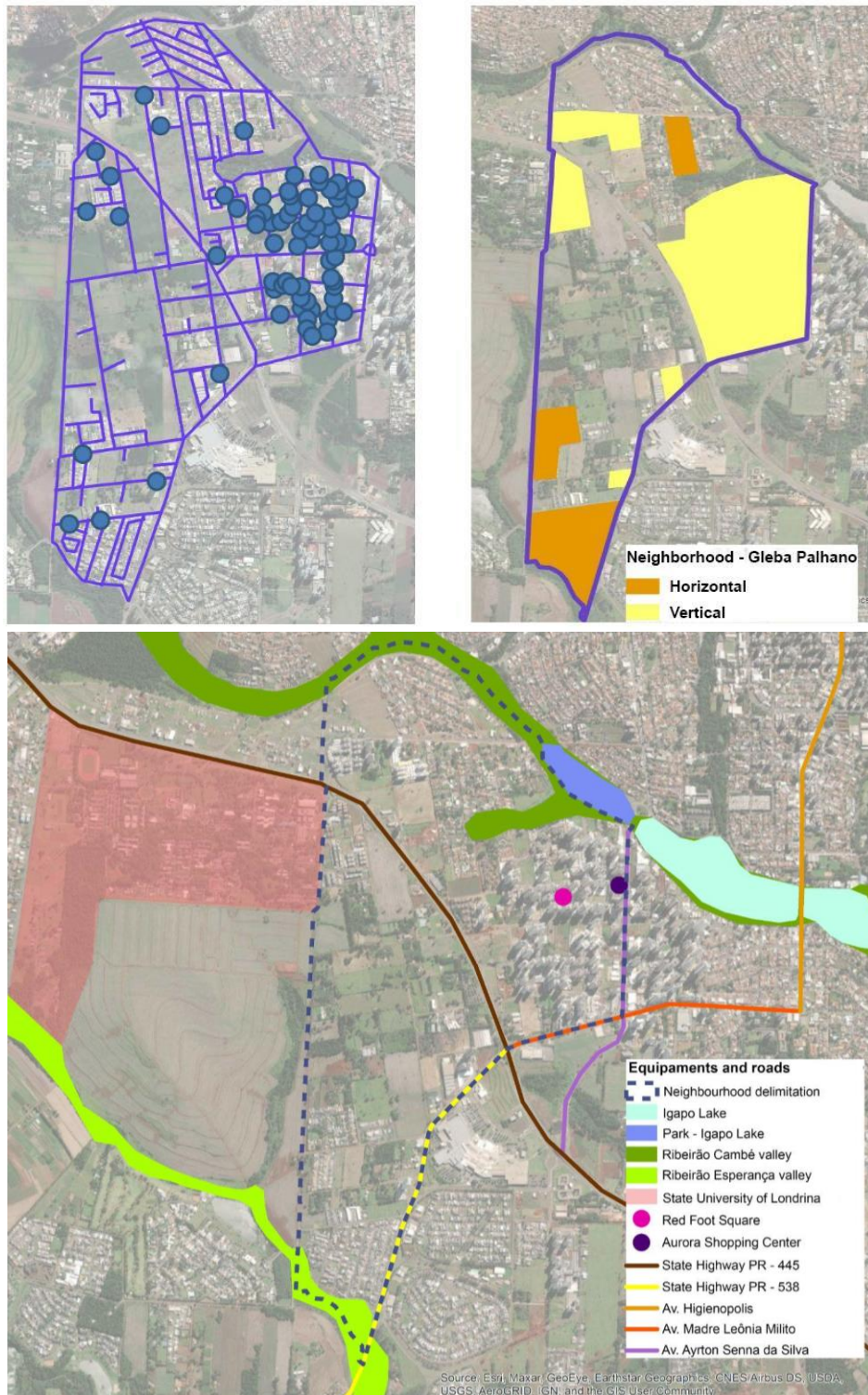


Fig. 2: Axial Map with demarcations of closed condominiums, coverage areas, urban equipment and roads in the Gleba Palhano neighborhood. Source: Google Maps (2022), modified by the authors.

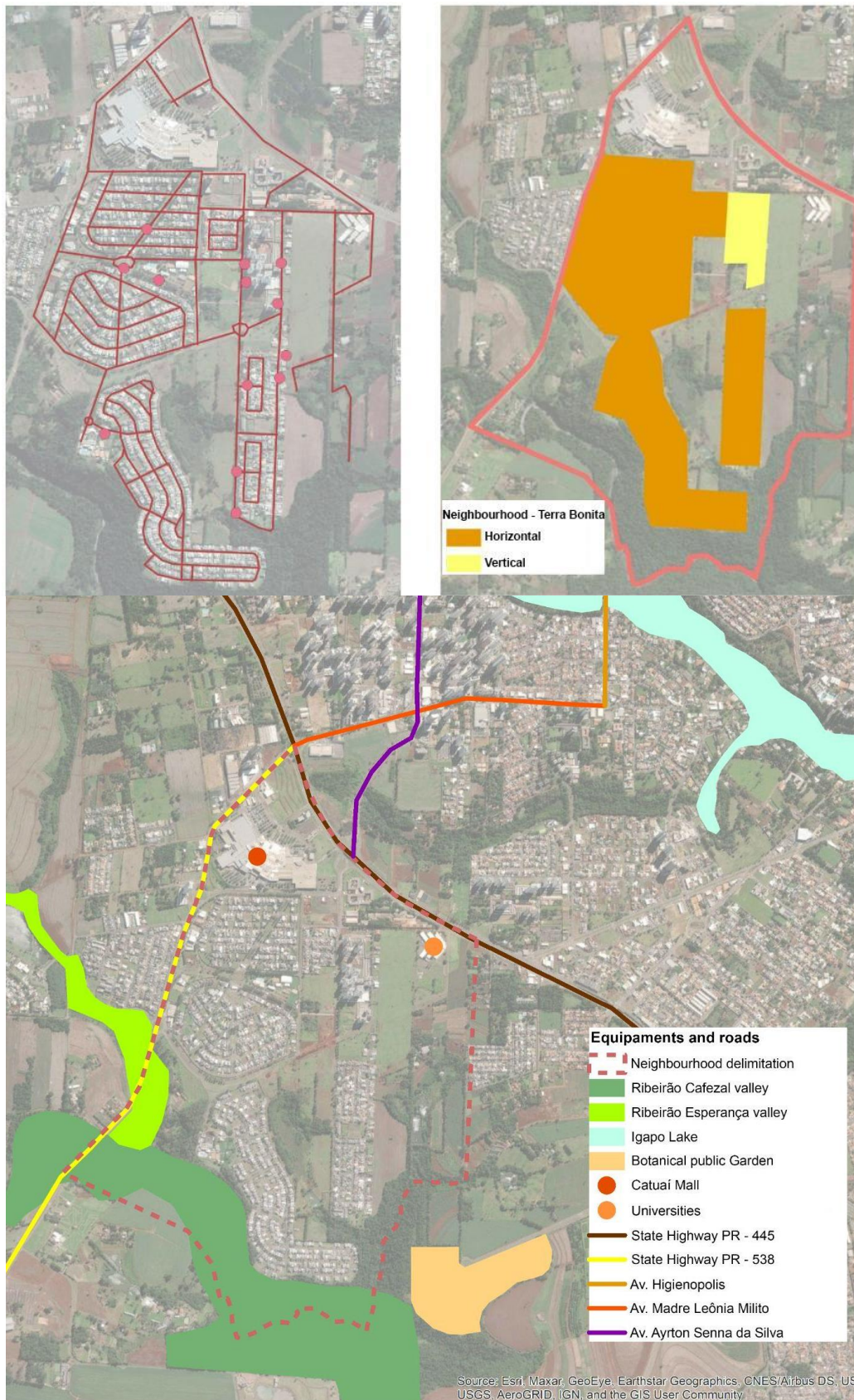


Fig. 3: Axial map with demarcations of condominiums, coverage areas, equipment and roads in the Terra Bonita neighbourhood. Source: Google Maps (2022), modified by the authors.

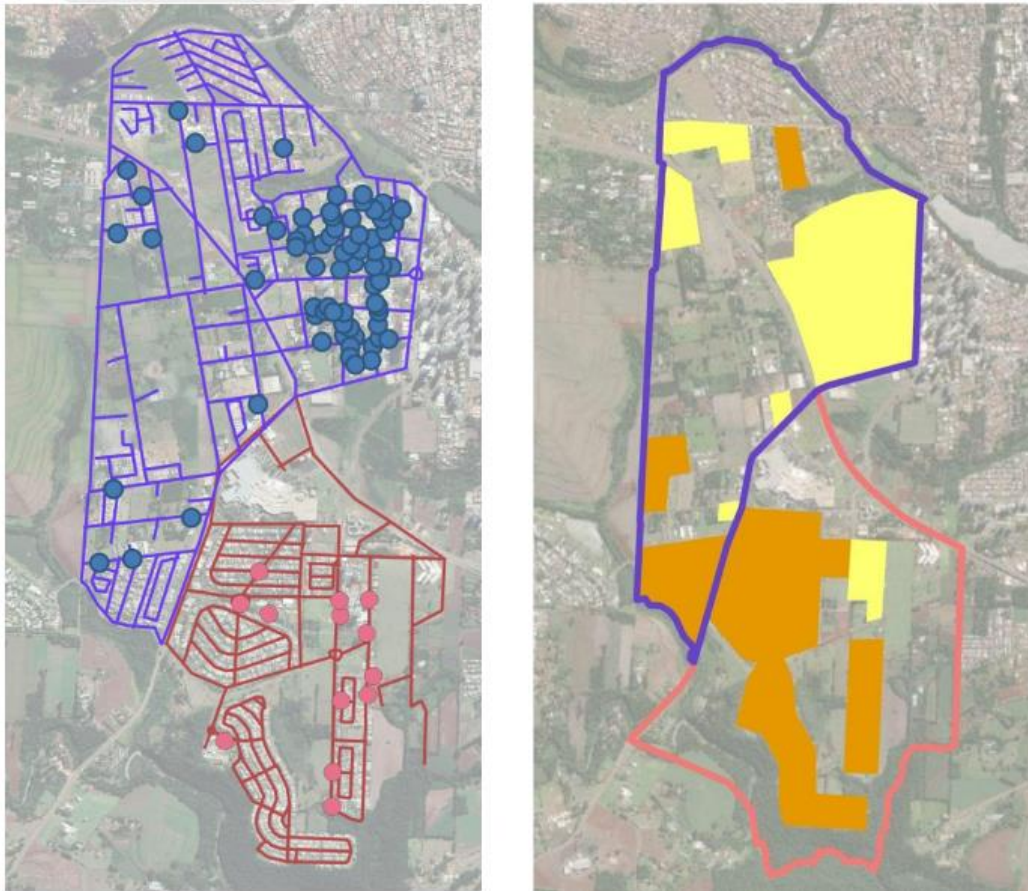


Fig. 4: Map of comparisons between neighbourhoods. Source: Google Maps (2022), modified by the authors.

Analyzing the map, it is possible to notice the a scope of closed condominiums, both horizontal and vertical, as the predominance of urban voids. According the literature review, Freitas (2008) explains that the types of closed condominiums are different concerning the size of the properties, target public, location, and price of the land plots. The same can be seen concerning the two types analyzed in Londrina. The horizontal condominiums are similar to the suburban lifestyle communities, being high luxury developments, spread out, away from the central areas because they contain leisure and entertainment areas and natural landscapes like the Ribeirão Esperança and Ribeirão do Cafezal valley bottoms. While the vertical condominiums are closer to prestigious communities, smaller plots of land with the desire for security, status, and prestige.

The vertical condominiums are closer to the facilities of the State University of Londrina and the main connecting roads, such as PR - 445 Highway, Av. Me. Leônia Milito, and Av. Ayrton Senna da Silva. According to the literature review, Domingues (1994) and Caldeira (1997) mention that the processes that made the Brazilian suburbs viable were their relationship with the structuring road network, Shopping Malls, parks, and Universities, consistent with the location of the vertical condominiums in Londrina.

FACTORS	Gleba Palhano					Terra Bonita				
	Pic. 1	Pic. 2	Pic. 3	Pic. 4	Pic. 5	Pic. 6	Pic. 7	Pic. 8	Pic. 9	Pic. 10
1. Adaptation of what was open	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
2. Walls and grids	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
3. Layout turned inside	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
4. Access control	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
5. Lack of permeability	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
6. Hostility	Red	Red	Red	Red	Red	Green	Green	Green	Green	Green
7. Symbol/monumental	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green
8. No kindness to pedestrians	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red
9. In favour of vehicles	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

Tab. 1: Synthesis of the factors of fortified enclaves. Source: Google Maps (2022), modified by the authors.

The closed condominiums in the Gleba Palhano neighborhood that were used for the photographic analysis are, in order: LandMark Residence (photo 1); Le Blanc (photo 2); Vivere Palhano (photo 3); Torre Ville (photo 4), and L'Harmonie (photo 5). The first aspect to be analyzed in the condominiums of Gleba Palhano is that these are new enterprises, aspects such as hostility and adaptations were not found in the analysis. The residential buildings are vertical towers that keep the minimum relation with the human scale, favoring the car, controlling the maximum access, and guaranteeing the status by their architectural forms designed in the shape of the real estate speculations, that is, with their walls and grids and their security systems attached to the layout and the building morphology of the architectural objects. Another aspect of the Palhano buildings is their setbacks, used exclusively to benefit the car and to access control, without generating any kindness to pedestrians by providing a marquee, seating opportunities, shading, or even the visual permeability, blocked by walls and fences that weaken the relationship between public and private space.

The condominiums in the Terra Bonita neighbourhood that were used for the photographic analysis are, in order: Alphaville I (photo 6); Alphaville Imbuías (photo 7), Alphaville 2 (photo 8), Condomínio Residencial Sonora (photo 9) and Condomínio Residencial Bela Manhã (photo 10). When analyzing the factors of fortified enclosures mentioned, one can observe similarities among the condominiums since they are all horizontal. All the condominiums do not possess adaptation of what was open, since the purpose of the development is to have walls and railings, in the same way, these elements are considered as a hostility for interdicting the pedestrian walk. As these are low-rise buildings, all the horizontal condominiums have access control through sentry boxes with guards and walls with electric fences as security systems, as they fear marginalization and criminal attacks. Another issue is that only Cond. Res. Sonora and Cond. Res. Bela Manhã has a symbol/monument in its entrance gates. It can be concluded that both incorporate the design of status and prestige sought by the middle class, as they are enterprises with smaller plots of land than the others (Freitas, 2008). Alphaville I and Alphaville Imbuías condominiums present the same architectural typology because their entrance gates are close to each other, separated only by a rotatory, which shows that the distinction through design is not a predominant characteristic of high luxury developments. Finally, all of them are kind to pedestrians with pavements, trees, and covered sentry boxes; however, the poor condition of the pavements, such as restricted and obstructed pavements, shows that these spaces designed to be favorable to vehicles.

4. Conclusion

Understanding the role of technical networks in the urbanization process from the point of view of fortified enclosures is relevant to analyzing how contemporary urban segregation operates on the territory. The enclosures are a complex form of segregation because classes are experiencing the same space, from this segregation, assumes another scale, which is the built object.

From the analysis of two neighborhoods, such as Gleba Palhano and Terra Bonita, it is concluded that the closed condominium typologies present distinctions at the meso scale (axial maps), as the remoteness and sprawl of the horizontal developments, where the vertical ones are denser and closer to the main roads and city facilities. As for the micro-scale (table 01), it is concluded that both typologies, vertical and horizontal,

presents several similarities between the factors of fortified enclosures, such as adaptation of what was open, walls and grids, layout turned inside, access control, lack of permeability and favorable to vehicles.

Another issue was the difference between horizontal condominiums by their symbolism/monumentality. This distinction happens due to the different typologies among Brazilian residential suburbs, the prestigious communities aim at the desire for status, and prestige and present smaller land plots, searched by the middle class, as in the Cond. Res. Sonora and Cond. Res. Bela Manhã. While lifestyle communities are high luxury enterprises, with entertainment and leisure areas, such as Alphaville I, Alphaville Imbuías, and Alphaville II. It is worth pointing out that Alphaville I and Imbuías have the same architectural typology, evidencing that these developments do not aim at distinction through design.

And finally, it was analyzed that the newer vertical condominiums, like the ones in Gleba Palhano, tend to attach security and control systems in their design, masking the hostility of this practice in their built object. On the other hand, in horizontal condominiums there is a great fear of the human scale, evidenced by the walls with electric fences and signs often used to protect themselves from the imposed marginalization of the streets, changing the character of public interactions.

As already mentioned, the study is the result of an exercise applied in a post-graduation course, which has a synthesis character in collecting the concepts about fortified enclaves and analyzing condominiums from images and morphological perspectives. Thus, future research should add contexts such as: The multiple scales of the factors of fortified enclaves, such as the macro, meso, and micro, since the gated communities presented similar factors at the micro-scale and different ones at the meso scale; The enclaved displacement and The socio-spatial segregation in Londrina, in order to discuss fortified enclaves in gated communities of lower-income ranges.

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Photographic Annex



Annex. 1: Pic. 1 – Landmark Residence. Source: Google Maps (2022), modified by the authors.



Annex. 2: Pic. 2 – Le Blanc. Source: Google Maps (2022), modified by the authors.



Annex. 3: Pic. 3 – Vivere Palhano. Source: Google Maps (2022), modified by the authors.



Annex. 4: Pic. 4 – Torre Ville. Source: Google Maps (2022), modified by the authors.



Annex. 5: Pic. 5 – L'Harmonie. Source: Google Maps (2022), modified by the authors.



Annex. 6: Pic. 6 – Alphaville I. Source: Google Maps (2022), modified by the authors.



Annex.7: Pic. 7 – Alphaville Imbuías. Source: Google Maps (2022), modified by the authors.



Annex 8: Pic. 8 – Alphaville II. Source: Google Maps (2022), modified by the authors.



Annex. 9: Pic. 9 – Cond. Res. Sonora. Source: Google Maps (2022), modified by the authors.



Annex. 10: Pic. 10 – Cond. Res. Bela Manhã. Source: Google Maps (2022), modified by the authors.