ANPUR 40 years

new times, new challenges in a diverse Brazil

> Edited by José Júlio Ferreira Lima Raul da Silva Ventura Neto

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This book is the result of ANPUR's biannual national conference, held in May 2023 in Belém, Brazil, under the theme "ANPUR 40 years: new times, new challenges in a diverse Brazil." It compiles fourteen chapters selected from the 778 papers presented at the event. The best paper from each session was chosen by the scientific commissions. Over the years, the themes of the annual conferences have evolved, reflecting the state of urban and regional planning in Brazil. The first group of studies addresses urban and regional spaces, public policies, city networks, and the metropolitan issue in Brazil. The second group focuses on housing, environmental issues, and the Right to the City, alongside emerging social themes such as history, cultural identity, and social movements. The third group examines the impacts of the COVID-19 pandemic on cities and regions. The fourth group includes new interpretations of urban and regional concerns, with an emphasis on gender, ethnicity, and resilience in relation to identity and territories. Finally, a fifth group highlights the conference's location, with a focus on land-use changes and socio-environmental conflicts in the Amazon region.

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preface and acknowledgements

In May 2023, the national conference of ANPUR - National Association of Post-Graduation and Urban and Regional planning research - took place in the city of Belém, Northern Brazil, under the title "ANPUR 40 years: new times, new challenges in a diverse Brazil". The biannual national conference of ANPUR celebrates the 40th anniversary of the most important academic association in Brazil dedicated to urban and regional research and teaching. This book is the result of one of the tracks over which the conference is organised . In 2023, 14 different themes came up, enfolding 778 related papers. Counting on the participation of USF, a reliable and long-term partner, the best paper of each session was chosen by each scientific team responsible for selecting sets of works to be presented in the four-day programme.

This book is an outcome of the ANPUR event. It represents a compilation covering different issues approached during the annual conferences. Over time, there have been some changes as well as permanence of themes, according to the state of art of urban and regional planning in Brazil. Therefore, and regarding the organization and clustering of themes, one first group was formed by studies that engage aspects of the urban and regional spaces in Brazil, public policies, cities networks and the metropolitan question in Brazil.

A second group was formed by themes related to dwelling and environmental matters, emphasising the issue of Right to the city and others related to emerging social topics, including history, cultural identity, (socio)technology, social movements mobilisation around contemporaneous questions and the issue of technical assistance for social interest housing projects.

The outbreak of the CORONAVID in Brazil led to a call for papers under a specific group of works. This third group reflects recent researches on the impacts of the pandemics over Brazilian cities and regions.

Group four was composed by themes ranging from what has been called new interpretations of the urban and regional concerns, relationships between genders, ethnics and adaptation and resilience relation with identities and territories.

Brazil's immense territorial breadth and history result in natural cultural plurality with very distinct characteristics in its different regions. This fact exerts significant impact on the forms of organization of societies, reverberates in the terminology used by the authors, with peculiar semantic dimensions and has implications for interpretative and translation processes. These aspects justify the presence of explanatory footnotes and visualization resources that bring the foreign readership closer to the real meanings underlying the lexicon of "apparently" common use, as well as motivating the use of foreignizations in cases in which the English language does not have a corresponding equivalent.

Ensuing from the plurality and multiplicity inherent to Brazilian themes within the scope of urban and regional planning, a wide range of Brazilian current trends are also quoted in the compiled papers, and, their conceptions, in like manner, translated for a wider readership.

To tackle issues related to the place where the conference takes place and highlighting the fact that this edition was held in a city of the Amazonian region - Belém -, one final group was dedicated to works on land use conversions, land and socio-environmental conflicts.

We wish to acknowledge the support provided by the funding agencies, especially the USF which made the conference and the publication of this book possible; and also the contributions of all those who prepared papers for and participated in the conference. We aimed to foster a kind of knowledge bridge connecting Brazil and readers from different parts of the world. The diversity of issues and geographic spots covered by the papers may turn into a difficult task for those not used to the regional division used in Brazil. In order to give international readership a hand, the following map of the country can be used as a tool both to facilitate and expand curiosity for further readings ensuing from ANPUR conferences and scholars engaged on regional and urban research challenges.



Real Estate Investment Trusts and Land Subdivisions

New Frontiers of Financialization in Agribusiness Cities

Giselle Mendonça Abreu University of California, Berkeley

Introduction

In 2021, specialized media announced a new highlight in the world of Real Estate Investment Trusts (REITs) in Brazil: the land subdivision segment. "REITs that should be in the spotlight for investors in 2021 are in the multiproperty and land subdivision segments," stated an article on the E-Investidor portal of O Estado de S. Paulo newspaper (APUD, 2021). "The market points to the third wave of REITs, with products that go beyond the obvious" such as "residential land subdivisions", mentioned another article, this time in the newspaper Valor Econômico (LISKAUSKAS, 2021). The recent interest of the Brazilian capital market in investing in residential land development stems from various reasons, including the expectation of high yields that this type of investment could theoretically provide by "turning hectares into square meters." This is a very recent trend: investment by real estate funds in land subdivisions, especially through Real Estate Receivables Certificates (RERCs), has accelerated and become more common only in the last five years.

The field of research on the financialization of urban space in Brazil is extensive, encompassing a wide variety of research objects (KLINK; SOUZA, 2017; SHIMBO; RUFINO, 2019). On a national level, there is a significant number of studies that have analyzed large urban projects and public-private partnerships, focusing on the financialized instruments for capturing resources for urban policies, such as the certificates allowing additional construction known as CEPACs (FIX, 2000; PEREIRA, 2015; STROHER, 2019). There is also an extensive body of work on the commercial real estate market, particularly examining the activities of large publicly-traded real estate developers (FIX, 2007; MIOTO; PENHA FILHO, 2019; SANFELICI, 2017). More recently, there is a growing literature examining the financialization of urban infrastructure (RUFINO, 2021; STROHER et al., 2022). This article aims to contribute to this broad field of research by deepening the understanding of the financialization of the production of urban space through the securitization of real estate debt in a relatively understudied segment: urban land subdivision. It is crucial that we expand our knowledge of this segment, as small and medium-sized Brazilian cities primarily expand through new land subdivisions, rather than through verticalization, which is more common in metropolises. The article also places a greater emphasis on financialization itself, i.e., on the analysis of the instruments, ideologies, and narratives that legitimize it and the elements that constitute it, rather than on the socio-spatial effects and consequences of financialization, which typically form the focus of research on the financialization of urban space (KLINK; SOUZA, 2017, p. 396).

The interest in investing in land development drives a new spatiality of financial capital, with the distribution of investments in real estate projects located in small and medium-sized cities in

different regions of the country — no longer concentrated in large metropolitan areas (ABREU, 2019a; MELAZZO; ABREU, 2019). As a real estate fund market analyst noted, with the new interest in subdivisions, the financial market began to "irrigate" mainly the real estate market in the Brazilian Central-West region (interview with financial analyst, 22/sep/2022). More specifically, the focus of part of these new investments has been on cities associated with agribusiness, such as Nova Mutum, Sorriso, and Rondonópolis, in *Mato Grosso*. These cities have been growing at higher rates than the country's average over the last two decades, driven by the expansion of production of commodities such as soybeans, corn, and cotton. Unlike large metropolises, where the densification process accommodates a significant part of population growth, the expansion of these cities occurs mainly through the opening of new subdivisions that horizontally extend the urban fabric of the city.

In this article, I present two interrelated arguments regarding the relationship between the financial and real estate markets in the specific context of "agribusiness cities" (ELIAS, 2011). On the one hand, the identification of the forms of entanglement of financial capital in the production of agribusiness cities relativizes the idea that these cities are driven solely by agribusiness — whether at the service of agribusiness from a functional point of view, or based on the availability of capital for city-making deriving from these activities. There is also interest and investment from the financial capital market in the production of these cities. On the other hand, the narrative of "agribusiness cities" is important to support REITs investments — which contradicts the idea that the securitization process, by grouping different properties, ends up eliminating their typological and geographic particularities. On the contrary, what we observe is that the

specific characteristics of some cities — such as the fact that they are the "soybean capital" or similar characterizations — are highlighted in investment documents and advertisements.

The article is structured in three sections, in addition to this introduction and final considerations. In the first section, I present a summarized trajectory of REITs and RERCs in Brazil, from their legal constitution to the current moment. Particularly, I highlight the process of expansion and diversification of RERCs to situate the moment of addition of land subdivisions. In the second section of the article, I present in greater depth the specificities of the land development segment as a basis for investments through RERCs, also focusing on the particularities of land subdivisions located in agribusiness cities. Finally, in the third section, I examine the empirical case of urban land development in agribusiness cities invested by REITs to demonstrate the arguments presented above, focusing on the municipalities of Nova Mutum and Sorriso, in the state of *Mato Grosso*, Brazil.

For the first section, I mainly rely on a literature review on the topic, supported by my own interviews with experts in the field. The second and third sections of the article are based on the analysis of documents, including monthly reports and management reports of selected real estate funds (available on Bovespa's "Fundos Net" platform) and annual reports on REITs and RERCs from the financial consultancy company Uqbar; videos published on specialized YouTube channels; and six semi-structured interviews conducted in 2022. For this study, I interviewed three representatives of real estate developers based in Sorriso, Nova Mutum, and Rondonópolis, a representative of a securitization company, a representative of a real estate investment trust operating in the region, and an investment analyst in real estate funds. Additionally, the analysis is supported

by eight weeks of fieldwork in the municipalities of Sorriso and Nova Mutum in 2019 and 2022, which allow the data obtained through documentary analysis and interviews to be contextualized. Finally, it is important to note that the analysis presented in this article is part of ongoing research and, therefore, introduces preliminary reflections and results.

Trajectory of REITs and RERCs in Brazil

Real Estate Investment Trusts (REITs) are composed by pooled resources invested in different types of assets related to the real estate market, from properties such as residential buildings, shopping malls, and warehouses, to real estate debt instruments or even the acquisition of shares in other REITs. These funds are raised through the sale of shares on the capital market. The instrument was created, institutionally, through Federal Law 8,668, of June 25, 1993, in the context of reforms that aimed to strengthen the financial market in Brazil. REITs were introduced as a strategy for expanding financing possibilities for the real estate sector, at a time when an economic recession had taken a toll on both the real estate and construction industries.

From the beginning, as highlighted by Sanfelici and Halbert (2019), there was a lack of definition of the scope of the instrument regarding the impact — expected or desired — on urban development. The authors report that, both in the law that regulates the instrument and in the drafts and justifications that circulated before the approval of the final text, there was no indication about specific market segments (e.g., infrastructure, residential, commercial), property typologies (e.g., warehouses, vertical buildings, single-family houses), or social groups to be prioritized. This observation reinforces the understanding that

the instrument was established primarily as a strategy for diversifying the possibilities of transforming land and the built environment into financial assets — and not for intervening on the urban development of Brazilian cities.

REITs, however, took a long time to be established. It was only from the 2000s onwards — that is, almost a decade after their creation — that REITs began to expand faster, both in quantity and in the amount of assets. Two key factors led to this growth: (i) changes in the tax regime and (ii) the overall economic situation. Since its inception, REITs had a unique tax policy; however, the exemption did not apply to dividends distributed to shareholders. This rule changed in 2004, when the income tax exemption was extended to dividends, making REITs more attractive to investors. The economic situation also contributed, with a reduction in interest rates from the mid-2000s onwards. The high interest rates of the previous period made investments in fixed-income security and Treasury bonds more attractive and safer than REITs.

Especially from 2017 onwards, with the sudden drop in interest rates, REITs multiplied and began to raise substantial amounts of money. There were R\$9.1 billion in REIT issuances that year, rising to a value of R\$49.1 billion in 2021. The exponential spread of REITs in the last five years can also be attributed to the intense diffusion of the idea of investing in them by retail banks (SANFELICI; HALBERT, 2019). Thus, individual investors have become essential for a sector that, previously, was more dependent on institutional investors. As Sanfelici and Halbert (2019) point out, part of the convincing strategy used by retail banks to attract more investors was to reinforce REITs' link with the real estate market, acting on the traditional narrative that "Brazilians like to invest in property ownership".

Yet, REITs do not only invest in property ownership. It is customary to divide REITs, in Brazilian investment jargon, into "brick funds" and "paper funds". "Brick funds" are those that effectively invest in "real" assets and, therefore, have income from renting, selling or leasing space in a shopping mall, warehouse, or a commercial or residential property. "Paper funds", on the other hand, correspond to those that invest the majority of their resources in bonds and securities in the real estate market and, thus, have income from the returns distributed across assets. REITs with a majority of investments in Real Estate Receivables Certificates (RERCs), for example, are "paper funds". Currently, REITs are the main investors in RERCs, making these two types of instruments deeply linked to each other (NAKAMA; RUFINO, 2022).

RERC is an investment that refers to real estate credit arising from financing or long-term rental contracts. The instrument was created and regulated by Federal Law 9,514, of November 20, 1997, which established Brazil's Real Estate Financing System (SFI, in the Brazilian acronym). RERCs are the main link from REITs to land subdivisions. In the case of subdivisions, a land development company that provides financing to those interested in purchasing a land allotment can sell its receivables portfolio (in this case, the future installments of the financing it offered to lot buyers), transforming it into a RERC that can be negotiated in the market. Real estate receivables are linked to a RERC through the securitization process (MELAZZO et al., 2021).

The process of issuing real estate credits and preparing a RERC involves a complex chain of stages, agents and legal obligations (ABREU, 2019b, p. 60). One of the central components of this process is the securitization agreement, which outlines the value of the debt,

indexers, interest rate, among other parameters (PEREIRA, 2015, p. 101–2). A RERC can be linked to a single real estate loan or to a pool of credits from a receivables portfolio. By bundling multiple credits, the securitization agreement is often seen as an instrument that "groups different properties, reducing them to a format defined exclusively by the aspects of the debt originated by real estate financing", thereby "[eliminating] the particular typological-constructive characteristics of the properties and their uses" (ABREU; MELAZZO; FERREIRA, 2020, p. 5).

Since this instrument was created, in 1997, RERCs have expanded significantly. According to data from the securitization consultancy company Uqbar, in 2001 there were 14 RERCs issued with an amount of R\$223 million; in 2011, there were 195 RERCs with R\$13.6 billion issued; and in 2021, 479 RERCs with R\$40.5 billion issued. If, in the beginning, long-term rental contracts were more representative, currently RERCs are composed almost exclusively of real estate financing debts (UQBAR, 2022a).

In addition to the expansion of RERCs, there was also a process of diversification of invested segments. The new "frontiers" of RERCs in Brazil, as announced in specialized channels and confirmed by interviewees, are the multiproperty and land subdivision segments. If the initial advance of RERCs referred mainly to high-standard investments, concentrated in the country's largest metropolises (PEREIRA, 2015; SANFELICI, 2013), the new wave of investments based on the multi-property and subdivision segments suggest a tendency towards the geographical spread of financialization, since such segments are more prevalent in small and medium-sized cities. In 2021, around 15% of RERCs issued were in the land development segment, only behind the residential (25%) and commercial (20%)

segments (UQBAR, 2022a). This is, therefore, a segment that — although it is a new "investment thesis" (an expression used by market actors) — already finds a consolidated space among REITs. The next section focuses on the subdivision segment with more attention.

A new product under the "investor spotlight"

Specificities of land subdivisions as an "investment thesis"

Land subdivision is a segment with specificities that impact its financing possibilities. In this section, I highlight issues that most frequently emerged in interviews with professionals in the real estate and financial market sectors. The first set of issues pertains to the availability of financing sources: land developers cannot access resources from a government-controlled fund, and the capital market was (initially) hesitant to provide financing to this particular segment. The second set of issues relates to the peculiarities of land subdivisions as a real estate business, such as their specific temporality and the fragmentation of developer actors.

The first issue to consider is that land subdivisions, unlike other products in the residential real estate market, are excluded from the Brazilian Central Bank's "Map 4", a database that collates information on the allocation of resources from the federal Severance Indemnity Fund (FGTS, in the Brazilian acronym) in real estate financing. By stating that land subdivisions "are not on Map 4" (interview with real estate fund representative, 23/nov/2022), what is meant is that land developers cannot access subsidized bank financing options — unlike residential developers, who might be able to access

resources through the Brazilian Savings and Loan System (SPBE, in the Brazilian acronym) or the "Minha Casa Minha Vida" Program. Furthermore, a person looking to buy a house or an apartment can also more easily acquire a normal bank loan, which is not the case for someone buying a plot of land. This means that, traditionally, land developers are forced to finance themselves both the construction of the subdivision and the purchase of the lots, offering installment-based sales to buyers. This model often results in lengthy payment plans extending over several months or years.

The creation of REIT and RERC instruments to raise funds in the capital market through the securitization of real estate debt would, in theory, suit the financing format of land subdivisions. However, it was not immediately that these instruments began to be used more intensely in this real estate segment. As a securitization expert explains, "there was little understanding of what land subdivision was"; in other words, "investors' lack of knowledge" was what made investment in subdivisions through RERCs still scarce a decade ago (interview with director of a securitization company, 04/nov/2022). Some of the specificities of land subdivisions as a business model, detailed below, were at the heart of the distrust. Besides, there was another motivator for the market's suspicion in relation to the segment: the bankruptcy, around the 2010s, of a large company in the sector, causing a series of defaults in the market, which fueled the perception that it was a high-risk sector. Over time, as the "investment thesis" based on land subdivisions gained wider acceptance, the use of these instruments increased.

The temporality of land subdivisions is a critical aspect to consider in order to understand the entry of the capital market as a financier of new developments through RERCs and REITs. In a subdivision, a large amount of money is invested at the beginning of the operation and, as the subdivision owners themselves usually offer the financing option to buyers, their return is spread over a long period of time. The investment may take years to recoup before realizing a profit. As the director of Hectare Capital, manager of the Hectare CE REIT, explains:

"What is the 'pain' of this entrepreneur, what is his difficulty? It's the cash flow mismatch. Why? Because he has to build, that is, spend his money in two years (which is the deadline for the construction) and he will only receive the profit from what they sell within 20, 30 years, because he needs to finance his clients — his clients cannot access credit. ... So, by giving credit to this entrepreneur who has always had little access, we can solve his problem and, by solving his problem, charge a high interest rate" ("HCTR11 managers evaluate the fund's differentials, IGP-M and other Hectare Real Estate Funds", 2021).

The payment structure for the sale of a lot in a new subdivision was not always configured this way. Before the 2010s, it was common for the sale to be split over 24 installments. Since then, as property values have increased, so have the number installments, with sales now being extended for a period of 120, 180, or even more than 200 months. The extension of payment deadlines led developers to more actively seek the alternative of securitization, so that they could anticipate the revenue from installments and, thus, guarantee an earlier "recomposition of their capital" (interview with director of a securitization company, 04/11/ 2022). With such a "recomposition", it would then be possible for the entrepreneur to redirect capital towards new investments in a shorter period of time.

It is worth noting that the longer term of installments to be paid not only *results* from the increase in property values, but also — arguably — *enables* it. As the director of a securitization company stated, "the extension of the deadline was to be able to accommodate the price that the developers wanted to set" (Ibid.). In other words, the expanded timeline of installments enabled by RERCs also contribute to the possibility of inflation of the amounts charged for a plot of land in a new subdivision.

Another characteristic of the land subdivision sector emphasized by interviewees is the fragmentation of actors involved in the land development process. If the relationship between major real estate developers and the capital market through REITs and RERCs marked a phase of financialization of urban space in Brazil (SANFELICI, 2013), in order to comprehend the land subdivision segment, it is necessary to turn attention to small developers. Other segments of the real estate market (e.g., residential or commercial vertical building incorporation, shopping centers, logistics warehouses) have major "players," as they are called in the industry jargon. In the land subdivision sector, differently, there is no single company that holds a significant share of the national market. Instead, the companies that create land subdivisions are local or regional and have a limited number of ventures. Moreover, these companies typically emerge from families that own the land where the subdivision will take place — or, alternatively, families become partners in the project. The role of the "regional real estate entrepreneur" — and how it is perceived by investors in the capital market — is, therefore, crucial in understanding the financialization of land developments in Brazil.

On the one hand, actors in the securitization market recognize the importance of regional real estate entrepreneurs and show no signs that consolidation of the market would be ideal. Instead, they emphasize the significance of the continued presence of these local and regional actors in this segment. Their are valued for their specific knowledge of local dynamics that are crucial for the "success" of the venture, especially concerning the demands of local customers and the approval process of the subdivision (considered especially complex and filled with local peculiarities by the interviewees). On the other hand, the regional entrepreneur also poses challenges to the capital market. Firstly, because there is little knowledge about the securitization process, and since these entrepreneurs rarely undertake more than one venture, there is no time to acquire expertise in this type of financial operation. From the perspective of funds and securitization companies, this means that a greater effort is required in recruiting, explaining, and training these dispersed actors. Secondly, there is the issue of governance. According to a representative of a REIT, regional entrepreneurs "lack the minimum governance standards expected by a real estate fund." He adds:

"This minimum governance, only [appears in] companies that are publicly traded on the stock market or state-owned companies... and that's why the market is limited to them; nobody wants to deal with someone who is less diligent. If we think about it (even from personal examples we have of these small developers), accounting — which is one of the most important things for a fund – is done by the brother-in-law or the son-in-law... [they are] much more focused on the Tax Authority than having accounting done precisely as a fund requires. Speaking of auditing... I'm not even talking about [having one of the] 'Big Four' auditing companies; in most cases, there isn't even an audit. The guy measures the venture's performance based on cash

availability. If there's cash, things are going well, and construction accelerates; if there's no cash, things are going badly, and construction doesn't accelerate" (interview with a representative of a real estate fund, 23/nov/2022).

As a result, funds interested in investing in land developments impose a series of metrics and specific governance practices on these regional actors to make the investment more "palatable" or "suitable" for the capital market. Funds begin to make certain demands, such as "maintaining a low default rate," and sometimes they even become involved "in the operation, portfolio management, monitoring, and audits" (interview with a real estate entrepreneur representative in Sorriso, 24/nov/2022). In fact, the funds end up expanding their teams to provide these support and monitoring services to regional entrepreneurs, as is the case of the asset management firm TG Core, which oversees the TG Ativo Real REIT. In an interview with a specialized channel, a representative of TG Core stated that if the problem in accessing "Faria Lima's capital" was governance, then "governance is something we can implement" ("Real Estate Fund in Agricultural Expansion Regions," 2021). Today, TG Core is still an exception in the market, but it may indicate the emergence of a specific type of fund that, in addition to managing assets, also offers controller services, audits, digital platforms for metric tracking, and more to regional real estate entrepreneurs.

Specificities of land subdivisions as investments in agribusiness cities

In Brazil's Center-West region, cities with a dominant agriculture economy add another set of specificities to the process of financing land subdivisions through the capital market. I highlight two

of them that emerged as most prominent in interviews. First, there is a perception that agribusiness cities are exceptional due to their economic strength. Second, commercial negotiations in these cities often rely on metrics and temporal benchmarks linked to agricultural production activities, which are usually incompatible with the metrics of the capital market.

"Agribusiness cities" are often praised for their economic dynamism by professionals from the capital market. While the rest of the country was experiencing an economic crisis, "if you went to these regions that have a strong link with agribusiness, it seemed like they were having a party" (interview with a director of a securitization company, 04/nov/2022). This perception of an economy that functions "apart" from the rest of the country is explained by two reasons. Firstly, because there was a significant appreciation of agricultural commodities, such as soybeans and corn, in the last decade. Second, because an increase in the U.S. dollar value that generally accompanies a moment of crisis in the Brazil's economy is, in fact, profitable for those who trade their product in dollars, as is the case with commodities — "this guy makes a lot more money [with a strong U.S. dollar]", emphasized one of the interviewees (interview with a representative of real estate fund, 23/nov/2022). For capital market actors, this process then leads to "more job creation, there is greater GDP per capita, there is greater urban growth" (Ibid.), that is, they consider that there is a boosting effect on the local economy as a whole, followed by a population increase and urban expansion.

^{1. &}quot;Agribusiness city" is a term that has been used in Brazilian academia since the mid-2000s to designate an urban area located in a region where the economy is mainly driven by large-scale and globalized agricultural production, and that functionally supports these activities (ELIAS, 2011: p. 161–2).

In their brief descriptions of the assets from their investment portfolios, REITs describe "agribusiness cities" prominently. In the management report of the REIT Habitat II from August 2022, for instance, these cities are portrayed as a "safe haven" for investments. While other cities are merely mentioned by name, without specific characterization, agribusiness cities receive special attention. The same report states that "one of the land developments is located in Sorriso, MT, a municipality considered the largest agricultural producer in the country and the largest global soybean producer." In another passage, Sorriso is characterized as a "thriving municipality, considered the largest soybean producer in the country." Similarly, a subdivision located in Nova Mutum, MT, is said to be in a municipality that is "the second-largest grain producer in the state." This demonstrates the significance of these cities' association with the production of agricultural commodities for REITs' managers and investors.

The economic strength of these cities is praised to highlight the safety of investments, yet it also makes these territories, in principle, less dependent on raising funds in the capital market. According to a director of a securitization company, "we see that in these regions there are very, very strong players ... and they try to enter the operation without having the financial need. Many of these people don't even need to carry out a [financial fundraising] operation, they have their own resources" (interview with director of a securitization company, 04/nov/2022). However, there has been an increase in funding through RERCs as a strategy to accelerate investments in subdivisions. As the securitization expert explains, "without the resources from RERCs, until I start selling, building the portfolio, building up resources... this development could take

20, 30 years. So, in a region that I could be building supermarkets, shopping malls, stores, developing commerce, housing... I could densify it in 10 years with resources raised outside, [but] it will take me 30 years to do so if I wait for my own resources. RERCs speed up the development of the city" (Ibid.).

On the other hand, the interviews also reveal that there are particularities of the economic context of agribusiness cities that do not easily fit into the expectations of the capital market. One of them is the incompatibility of the timing of payments. In a RERC operation, it is essential to have structured monthly payments. However, many lot buyers in agribusiness cities are tied to the seasonal nature of agricultural production and, therefore, prefer to make semiannual payments, timed with the commercialization of the harvest. Additionally, sales and purchase negotiations may involve unconventional "currencies," such as soybean bushels or luxury cars, such as a Hillux, or even a tractor. This represents a "problem" for capital market actors: "for us [securitization company], it was an impossible metric to bring to the capital market here... imagine that I will convince an investor to take the risk of soybean harvest, you know?" (Ibid.). It is worth noting that these metrics are not exclusive to high-income buyers such as large-scale farmers, but also extend to the middle-class real estate negotiation market in the region. It is not uncommon to see signs advertising the sale of land in new subdivisions aimed at the middle class where vehicles are accepted for payment, or for lower-tier professionals (e.g., farm operators, truck drivers) who earn payments in soybean bushels to use this currency to make a down payment on the purchase of a land or a house.

Case Study: Investments in land subdivisions in Nova Mutum and Sorriso, MT, Brazil

The securitization of real estate debt associated with land subdivisions has led to a dispersion of financial market investments across the territory, moving away from metropolitan areas towards small and medium-sized cities (ABREU, 2019a; MELAZZO; ABREU, 2019). In order to gain a deeper understanding of real estate funds and their assets, this study focused on two rapidly-growing small cities as case studies, Nova Mutum and Sorriso. They are located in the hinterland state of *Mato Grosso*, Brazil, at the heart of the country's soybean producing region. Both cities are representative of "agribusiness cities," that is, they are "urban spaces (...) where local or regional management of globalized agribusiness takes place, performing many new urban functions directly inherent to it" (ELIAS, 2011, p. 161–2).

In this section, I provide an overview and characterization of the REITs that invest in land ventures located in these two municipalities, followed by an analysis of the specific subdivisions invested by the funds. Since obtaining systematic data on the subject can be challenging, a brief methodological note is important here. As there is no single database where one could search for the municipality where the ventures associated with the funds are located, it is not possible to state that this is an exhaustive survey. To overcome this challenge, I conducted a survey of funds that invest in the land subdivision segment through news in specialized media and triangulated this data with rankings of REITs prepared by specialized consultancy companies. I also sought input from professionals in the

sector, asking them directly about which funds were investing in the "thesis" of subdivisions. As a result, I identified twelve REITs² that had been investing in land development. I analyzed their management reports³, where all their assets are identified, and so I was able to determine more specifically the funds that had investments in Sorriso and Nova Mutum, which are analyzed below.

Real Estate Investment Trusts linked to Nova Mutum and Sorriso

As of August 2022, four Real Estate Investment Trusts linked to subdivisions in Nova Mutum and Sorriso were identified: Habitat II, TG Ativo Real, Hectare CE, and Devant Recebíveis (Table 1). These investment funds are not small players in the market, but rather significant ones. In a ranking of REIT shares, Hectare CE and Devant Recebíveis are in the second and sixth position, respectively, with R\$1.9 million and R\$1.2 million in shares issued in 2021 (UQBAR, 2022b). The information presented here is, of course, a snapshot of a specific moment in time, as these titles can be bought and sold at any time. It is also possible that, before or after that, other funds would start to invest in these cities (or that these investments were discontinued).

^{2.} The following REITs were identified: Banestes Recebíveis (BCRI11), Devant Recebíveis (DEVA11), Habitat II (HABT11), Hectare CE (HCTR11), Iridium Recebíveis (IRDM11), Mérito Desenvolvimento Imobiliário (MFII11), REC Recebíveis Imobiliários (RECR11), TG Ativo Real (TGAR11), Tordesilhas (TORD11), Urca Prime Renda (URPR11), Valora Hedge Fund (VGHF11), and Versalhes RI (VSLH11). Codes refer to their registration at the Brazilian stock exchange B3, formerly known as BM&FBO-VESPA.

^{3.} Management reports analyzed refer to the month of August, 2022. These documents can be found at "Fundos Net" website (*fnet.bmfbovespa.com.br*), managed by the Securities Commission (CVM, in the Brazilian acronym) and the Brazilian stock exchange B3.

Table 1. REITs with investments linked to land subdivisions in Sorriso and Nova Mutum, MT, Brazil: subdivisions, assets, and shareholders (source: prepared by the author).

REIT	Habitat II (HABT11)	TG Ativo Real (TGAR11)	Hectare CE (HCTR11)	Devant Recebíveis (DEVA11)
Land subdivisions invested by REITs in Nova Mutum or Sorriso, MT, Brazil	- RERC Por do Sol II (Sorriso) - RERC Parque dos Poderes (Sorriso) - RERC Serra Dourada Residencial (Sorriso) - RERC Montserrat Polo Residencial (Nova Mutum)	- Equity in Residencial Braviello (Sorriso)	- RERC Quatto Atlantis (Sorriso)	- RERC Quatto (Sorriso)
Asset on 12/2017	-	R\$ 45,142,570.80	-	-
Asset on 12/2018	-	R\$ 260,244,959.78	R\$ 10,098,013.32	-
Asset on 12/2019	R\$ 238,800,675.25	R\$ 580,964,004.59	R\$ 122,079,728.76	-
Asset on 12/2020	R\$ 565,785,072.44	R\$ 1,005,333,224.63	R\$ 791,731,183.26	R\$ 220,459,039.76
Asset on 12/2021	R\$ 739,932,290.77	R\$ 2,091,419,207.65	R\$ 2,394,148,362.64	R\$ 1,356,186,915.44
Total of shareholders on 12/2021	45,155	80,194	158,097	76,289
Total of individual shareholders ("natural persons") on 12/2021	44,962	79,736	157,661	76,009

Note: Land subdivision data taken from REITs' management reports for the month of August, 2022; data on assets and shareholders taken from REITs' monthly reports for the month of December of each year. Amount of assets in Brazilian Reais (BRL).

The table above exposes the recent growth of this process and the significant increase in investment volume in a short amount of time. The oldest fund in this survey, TG Ativo Real, emerged in 2017 — the others were established in 2018, 2019, and 2020. Between 2020 and 2021, the assets of these funds doubled, tripled or even increased by six (as the case with Devant Recebíveis). In 2021, both TG Ativo Real and Hectare CE closed the year with assets above 2 billion Brazilian reais. In its last published annual report, the consulting company Uqbar, specialized in the securitization market, referred to 2021 as an "incredible year" (UQBAR, 2022a).

A real estate entrepreneur in Rondonópolis — another "agribusiness city" in *Mato Grosso* — reported a surge in investment from REITs in recent years: "in the last two and a half years, there has been a rush of [real estate] investments trusts towards agribusiness. The amount of money they offer us is impressive This year alone, I have already received more than five people from São Paulo offering money. ... If I pick up the phone now and ask for R\$5–10 million, within a week the money will be in our account" (interview with real estate developer, 26/oct/2022). The trend is similarly observed in Sorriso, where local real estate developers have also been approached by investors offering funding through RERCs. Frequently, after a first experience, they looked for the securitization company and the fund to carry out a second operation with another project (interview with real estate developer, 24/ nov/2022). Therefore, there was first a movement by investors in the capital market towards cities in the interior of the country, in search of investment opportunities to generate dividends; then, with some consolidated cases, local entrepreneurs themselves began to seek financing support in the capital market.

The driving force behind these REITs are individual investors, which is also typical of RERCs. Nearly all investors in the four funds analyzed are individual shareholders ("natural persons") — not institutional or corporate investors — who purchase shares through retail banks such as *XP Investimentos*. In terms of type of asset, the majority is debt securitization through RERCs, but there are also cases in which funds are equity partners. Among the investments made in Sorriso and Nova Mutum, only *Residencial Braviello* of the REIT TG Ativo Real is structured as equity participation. In fact, this particular REIT stands out as the only fund with a significant portion of its assets in equity, with only 8.6% in RERCs, compared to 75–92% of RERCs in other "paper funds" (Table 2).

Finally, it is worth noting that these are funds that strongly uphold the "investment thesis" in subdivisions and that their assets are distributed across a territory far beyond the Southeast region of Brazil, which typically concentrates most investment from the financial market. In other words, investments in subdivisions in Nova Mutum and Sorriso are not an exception within their investment portfolios, but rather represent the type of investment that these funds commonly carry out. REITs Habitat II and TG Ativo Real, in particular, stand out with 44.0% and 57.1% of investments linked to subdivisions, while the other two funds have a higher than average investment in the segment when compared to REITs in general. Regarding geographic distribution, once again Habitat II and TG Ativo Real stand out, with 30.0% and 58.4% of investments in ventures located in the Central-West region of the country. This reinforces the observation that the expansion of the securitization of real estate debt has facilitated the financialization of the production of urban space beyond the Southeast and major metropolitan areas that, until a few years ago, dominated the REIT market.

Table 2. REITs with investments linked to land subdivisions in Sorriso and Nova Mutum, MT, Brazil: distribution of investments by type of asset, segment, and geographic location (source: prepared by the author).

REIT	Habitat II (HABT11)	TG Ativo Real (TGAR11)	Hectare CE (HCTR11)	Devant Recebíveis (DEVA11)		
Distribution by type of asset						
RERC	87.1%	8.6%	74.9%	91.6%		
Equity (subdivision)	-	47.6%	-	-		
Equity (others)	-	21.3%	-	-		
Others (e.g., other REITs)	12.9%	22.6%	25.1%	8.4%		
Distribution by segment						
Land subdivision	44.0%	57.1%	12.2%	17.0%		
Multiproperty	24.0%	(undefined)	15.2%	26.0%		
Incorporation (vertical buildings)	19.0%	(undefined)	0.5%	12.0%		
Corporate	7.0%	(undefined)	46.8%	33.0%		
Others (e.g., Energy, Shopping Mall, Theme Park, Warehouse)	6.0%	(undefined)	25.4%	11.0%		
Distribution by region						
Midwest (Central-West)	30.0%	58.4%	(undefined)	17.0%		
Southeast	24.5%	14.3%	(undefined)	25.0%		
South	23.0%	9.1%	(undefined)	31.0%		
Northeast	19.1%	10.4%	(undefined)	8.0%		
North	3.3%	7.8%	(undefined)	4.0%		

Note: Land subdivision data taken from REITs' management reports for the month of August, 2022.

Land subdivisions invested by REITs in Nova Mutum and Sorriso

The specific investments in land development projects in Sorriso and Nova Mutum make up a small proportion of the analyzed REITs' overall portfolios. However, they are interesting case studies because they are representative of the "investment thesis" that has been promoted by these funds, that is, the idea of investing in subdivisions in cities in the Central-West region of the country, especially those associated with agribusiness.

The case of Residencial Braviello stands out from the others, as it is the only one in which the REIT joined with equity participation and not through the acquisition of RERCs. The gated community of ready-made houses is located on a relatively small area close to high-income neighborhoods in Sorriso (Figure 1). The venture was created from a partnership between TG Core Asset Management, the manager of the REIT TG Ativo Real, and Masterplan Urbanismo, a real estate operations structuring company. TG Core Asset saw an advantage in having an equity invesment, as it allowed them to be "on the same side of the table" with the real estate developer — unlike a RERC, where the real estate developer "will see [the REIT manager] as someone at the other side of the table who is taking away part of what is his every month" (interview with real estate fund representative, 23/ nov/2022). In advertisement materials, they justify their locational choice: Sorriso is presented as "the largest soybean producer in Brazil", "the largest corn producer in Brazil", "the seventh largest exporter in Brazil", among other titles.

The RERCs collected refer to two types of ventures: a closed condominium with ready-made houses (*Atlantis Almaclara*) and open subdivisions with plots of land ranging from 200 to 700 sqm (all others). In some subdivisions, such as *Santa Clara* and *Monte Líbano* in Sorriso, almost all plots of land have been sold and there are multiple houses under construction. Others, such as *Parque dos Poderes*, are still in the process of infrastructure implementation. This demonstrates that the process of securitization of real estate debt from subdivisions can be carried out at different moments during the development and implementation of a project. However, in general, investors prefer projects that have already been approved and are in the construction phase, as the interviewees point out, since approval constitutes a great risk to the operation.

The land development projects in Sorriso and Nova Mutum that are linked to RERCs, despite being six different projects, belong to just two companies: Pôr do Sol Urbanizações and Quatto Empreendimentos. Both are incorporating companies founded by members of the same family (Alves de Freitas), large land owners in the region, who have also been involved in the agribusiness sector for decades. The concentration of land ownership in "agribusiness cities" is one of its defining characteristics, affecting the local real estate market and shaping political and economic power groups (FIORAVANTI, 2019; VOLOCHKO, 2016). The penetration of financial capital through large local landowners further accentuates this process.

Consequently, the land development ventures invested by the analyzed REITs are concentrated in the southern vector of urban expansion in Sorriso (Figure 1), an area that was largely owned by the Alves de Freitas family. Pôr do Sol Urbanizações, a leading developer in the region, launched its first venture, *Rota do Sol*, to connect the established urban fabric of Sorriso to this new vector of expansion. Over the years, new subdivisions such as *Santa Clara*, *Monte Líbano*, and, more recently, *Parque dos Poderes* have been implemented around *Rota do Sol. Parque dos Poderes*, in particular, in addition to having residential uses, will also include a new institutional center for City Hall, effectively redirecting the urban development of Sorriso towards the South, with support from the municipal public authorities and accelerated by financial capital.

Finally, it is important to note that the subdivisions and condominiums are all targeted towards a middle- or high-income buyer. There are no affordable housing developments invested in by REITs in Sorriso or Nova Mutum. In the Santa Clara subdivision, aimed at a more traditional middle class, a plot of land was sold for R\$52,500 at the time of launch, in 2013, and now the 288 sqm lots are sold for no less than R\$135,000 in the secondary market. Meanwhile, in Parque dos Poderes — still under construction —, the cash value of a 300 sqm plot of land was R\$150,000, but the developer offers a financing option through a down payment of R\$7,500 and 256 installments starting at R\$1,055, totaling R\$277,523 at the end of the process (personal communication with representative of Pôr do Sol Urbanizações, 15/dec/2022). This financing model for buying land in *Parque dos Poderes* exemplifies the process previously described of a simultaneous extension of the timeline of installments (in this case, more than 21 years) and a significant increase in the value of properties. With securitization, the incorporating company obtains a greater financial advantage in the installment model, as they will receive the amount in advance from the REIT, than with a cash payment — which, in fact, real estate brokers do not usually offer as an option a priori, only if asked.

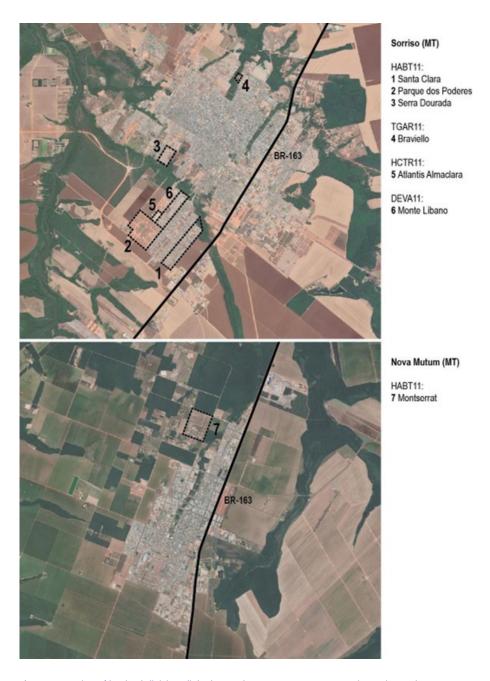


Figure 1. Location of land subdivisions linked to Real Estate Investment Trusts in Sorriso and Nova Mutum, MT, Brazil (source: prepared by the author; aerial photo: Google Earth, 2022).

Final remarks

In this article, I bring together observations, data, and analysis from an ongoing research. In these final remarks, I highlight points for further reflection and examination, with the intention of expanding discussions on the financialization of the production of urban space.

First, a key insight from this study is that the land subdivision, as a real estate product that can be converted into a financial asset, has several specificities that set it apart from more conventional assets such as commercial buildings, residential complexes, shopping malls, or warehouses. The lack of access to traditional bank financing, anchored in savings, has made RERCs a potential source of funding for this sector. In future studies, it will be important to pay attention to the ways in which investment funds and securitization companies address the challenges of dealing with the longer-term timeline of land developments and the fragmented nature of regional real estate entrepreneurs to consolidate the incorporation of this segment into capital market investments.

Second, there are noteworthy implications of securitizing real estate debt associated with land subdivisions on urban development. Real Estate Investment Trusts, and the use of RERCs as a financing strategy for land development, allow for an acceleration of the urban expansion process by providing land developers with a cash flow advance, which then enables them to make new investments in land developments earlier on. In addition, RERCs also facilitate the inflation of land values, since the subdivision owner can more easily increase the price for a plot of

land and still make it fit within the buyer's budget by extending the number of installments. Since they can receive the value in advance by securitizing their debt portfolio, they will not need to wait years or decades to recoup their capital.

Finally, two arguments related to the specific context of "agribusiness cities" were presented in the introduction and are reaffirmed here. Firstly, the study highlights the significance of processes of financialization of urban space beyond large metropolises, moving towards "agribusiness cities." In these cities, financial capital is also a key driver — in addition to agribusiness capital — of urban growth, which is an observation that challenges the characterization of these cities as solely driven by "agribusiness." Secondly, it is intriguing to note that, although securitization is often seen as a process that homogenizes assets and dilutes the specific characteristics of ventures, in the case of ventures located in agribusiness cities, the location of the subdivision is emphasized. In management reports, specialized media, and advertisements, the fact that assets from a REIT are located in cities with intense economic activity linked to agribusiness is frequently highlighted. The research thus sheds light on multiple connections between the real estate, financial, and agribusiness markets that have been shaping deep transformations of urban and regional spaces in Brazil.

References

- ABREU, M. A. DE. O mercado habitacional confiscado pelas finanças: uma análise a partir dos Certificados de Recebíveis Imobiliários. Em: SHIMBO, L. Z.; RUFINO, B. (Eds.). **Financeirização e estudos urbanos na América Latina.** Série Acadêmica. Rio de Janeiro: Letra Capital Editora, 2019a. p. 233–259.
- ABREU, M. A. DE. Produção imobiliária e os espaços da financeirização: entre o abstrato da riqueza financeira e o concreto da cidade produzida. Tese (Doutorado em Geografia)—Presidente Prudente: Universidade Estadual Paulista "Júlio de Mesquita Filho", 2019b.
- ABREU, M. A. DE; MELAZZO, E. S.; FERREIRA, J. V. DE S. Produzindo casas de papel: As engrenagens da securitização de ativos imobiliários residenciais no Brasil. **Confins**, n. 47, 22 set. 2020.
- APUD, M. FIIs de multipropriedade e loteamento devem se destacar em 2021. **O Estado de S. Paulo**, 5 fev. 2021.
- ELIAS, D. Agronegócio e novas regionalizações no Brasil. **Revista Brasileira de Estudos Urbanos e Regionais**, v. 13, n. 2, p. 153, 30 nov. 2011.
- FIORAVANTI, L. M. Concentração fundiária e dinâmica imobiliária em uma cidade que já surgiu como negócio: um estudo a partir de Primavera do Leste, MT. **Geosul**, v. 34, n. 71, p. 448–472, 7 maio 2019.
- FIX, M. A "fórmula mágica" da parceria público-privada: operações urbanas em São Paulo. **Cadernos de Urbanismo**, n. ano 1, n.3, p. 23–27, 2000.
- FIX, M. **São Paulo cidade global**: fundamentos financeiros de uma miragem. 1a. ed ed. São Paulo, SP: Boitempo Editorial : Anpur, 2007.

Fundo Imobiliário em Regiões de Expansão Agrícola. YouTube, Canal Liberta Investimentos, , 5 jun. 2021. Disponível em: https://www.youtube.com/watch?v=43d8BYTZF9Q. Acesso em: 20 out. 2022

Gestores do HCTR11 avaliam os diferenciais do fundo, IGP-M e demais Fundos Imobiliários da Hectare. YouTube, Canal Clube FII, , 1 fev. 2021. Disponível em: https://www.youtube.com/watch?v=_3LAdo4Dblw. Acesso em: 20 out. 2022

KLINK, J.; SOUZA, M. B. DE. Financeirização: conceitos, experiências e a relevância para o campo do planejamento urbano brasileiro. **Cadernos Metrópole**, v. 19, n. 39, p. 379–406, ago. 2017.

LISKAUSKAS, S. Diversificação de FII inclui loteamentos e cemitérios. **Valor Econômico**, 15 abr. 2021.

MELAZZO, E. S. et al. Securitization of housing and financialization of the city in Brazil. **Mercator**, v. 20, out. 2021.

MELAZZO, E. S.; ABREU, M. A. DE. A expansão da securitização imobiliária: uma prospecção a partir da cidade de Ribeirão Preto/SP. **GEOUSP Espaço e Tempo (Online)**, v. 23, n. 1, p. 022–039, 14 mar. 2019.

MIOTO, L.; PENHA FILHO, C. A. Crise econômica e o setor imobiliário no Brasil: um olhar a partir da dinâmica das maiores empresas de capital aberto (Cyrela, PDG, Gafisa e MRV). Em: SHIMBO, L.; RUFINO, B. (Eds.). **Financeirização e estudos urbanos na América Latina**. Série Acadêmica. Rio de Janeiro: Letra Capital Editora, 2019. p. 29–59.

NAKAMA, V. K.; RUFINO, B. Os fundos de investimento como movimento do complexo financeiro-imobiliário no Brasil. Revista Brasileira de Estudos Urbanos e Regionais, v. 24, n. 1, 28 nov. 2022.

PEREIRA, A. L. DOS S. Intervenções em centros urbanos e conflitos distributivos: modelos regulatórios, circuitos de valorização e estratégias discursivas. São Paulo (SP): Faculdade de Direito da Universidade de São Paulo, 2015.

RUFINO, B. Privatização e financeirização de infraestruturas no Brasil: agentes e estratégias rentistas no pós-crise mundial de 2008. **urbe. Revista Brasileira de Gestão Urbana**, v. 13, p. e20200410, 2021.

SANFELICI, D. Financeirização e a produção do espaço urbano no Brasil: uma contribuição ao debate. **EURE (Santiago)**, v. 39, n. 118, p. 27–46, set. 2013.

SANFELICI, D. DE M. La industria financiera y los fondos inmobiliarios en Brasil: lógicas de inversión y dinámicas territoriales. Economía Sociedad y Territorio, p. 367–397, 1 maio 2017.

SANFELICI, D.; HALBERT, L. Financial market actors as urban policy-makers: the case of real estate investment trusts in Brazil. **Urban Geography**, v. 40, n. 1, p. 83–103, 2 jan. 2019.

SHIMBO, L.; RUFINO, B. Financeirização e estudos urbanos na América Latina: teoria, processos e desafios para construção de uma agenda de pesquisa. Em: SHIMBO, L.; RUFINO, B. (Eds.). Financeirização e estudos urbanos na América Latina. Série Acadêmica. Rio de Janeiro: Letra Capital Editora, 2019. p. 7–25.

STROHER, L. Operações urbanas consorciadas: financeirização urbana sem investidores financeiros? Em: SHIMBO, L.; RUFINO, B. (Eds.). **Financeirização e estudos urbanos na América Latina**. Série Acadêmica. Rio de Janeiro: Letra Capital Editora, 2019. p. 113–146.

STROHER, L. E. et al. Infraestruturas de papel: novos instrumentos de financeirização do espaço. **Scripta Nova. Revista Electrónica de Geografía y Ciencias Sociales,** v. 26, n. 2, 1 jul. 2022.

UQBAR. **Anuário Uqbar CRI 2022**. [s.l.] Uqbar, 2022a. Disponível em: https://lp.uqbar.com.br/anuarios2022/cri.php. Acesso em: 12 dez. 2022.

UQBAR. **Anuário Uqbar FII 2022**. [s.l.] Uqbar, 2022b. Disponível em: https://lp.uqbar.com.br/anuarios2022/fii.php. Acesso em: 12 dez. 2022.

VOLOCHKO, D. Terra, poder e capital em Nova Mutum-MT: elementos para o debate da produção do espaço nas "cidades do agronegócio". **GEOgraphia**, v. 17, n. 35, p. 40–67, 15 fev. 2016.

Local responses to fiscal austerity in Brazil

A study on Brazilian states expenditures between 2014 and 2019

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Introduction

After a decade of economic growth (2004-2014), price stability and reduction of social inequalities in Brazil, the country underwent a different trajectory from 2015 onwards. A serious political crisis was established, the economic activity suffered one of the greatest declines in Brazilian history, and a consequent substantial drop in public revenues combined with increases in public expenditure on debt interest payments – interest rates on the rise in the chaotic scenario that was established took place (ROSSI et al., 2018; CARVALHO, 2018). In this context, in 2015, the State began to implement a lower spending approach on public policies in order to clean up its accounts, given that the trajectory of public debt was increasing. It was then, with Constitutional Amendment 95 [CA 95], that Brazil began to officially adopt fiscal austerity (DWECK et al., 2020; TAVARES; RAMOS, 2018).

The word austerity comes from the Latin austeritas or austerus, meaning "bitter, sour, rigid, severe", and holds essentially the same meaning in several Western languages (Portuguese, Spanish, Catalan, English, Italian, French). Fiscal austerity, therefore, refers to measures with bitter characteristics within the scope of the public sector budget, which deals with public revenues (taxes, fees and property income) and public expenditures and investments. 'Fiscal austerity', like 'neoliberalism', is, therefore, not a theory or a school of thought. In addition to the more direct definition, an interpretation of the concept from the lens of urban studies points out that austerity is a programmatic reform initiative to change the institutional matrix of the State (THEODORE, 2019). The methods within this reform agenda include fiscal contraction, such as that carried out in Brazil in 2015, but also those reforms that followed in 2016, 2017 and 2019, namely, the reforms to the fiscal regime ("Expenditure Ceiling"), labor, and social security, respectively. In fact, Theodore (2019, p. 4) points out as one of the programmatic measures of the austerity agenda a "voluntary deflation of prices and wages." Thus, this work understands the concept of fiscal austerity as a programmatic initiative that aims to reform the institutional matrices of the State, and which is manifested on a perceptible level as spending cuts in the public sector, among other measures.

In the field of urban and regional planning, the global scenario of austerity, which followed the 2008 post-crisis countercyclical measures fading, generated a two-fold vision about what was happening at the scale of local public finances in the Global North. The "austerity urbanism" would be the way governments react on a local scale (states, but mainly municipalities) to the austerity imposed by national governments. In this sense, national States

"push down" restrictions on public budgets, subsequently affecting states and municipalities, which "download" these forms of governing (PECK, 2012, 2014). On the other hand, the literature of "pragmatic municipalism" uses databases for cities or counties in the US to indicate that, in general, the most common response to the wave of austerity promoted by the central government was not a drop in spending, but a series of devices to keep services functioning despite the pressure from the federal government (ALDAG et al., 2019; KIM; WARNER, 2018, 2021; WARNER; ALDAG, 2019). These devices include remunicipalizations of public services (MCDONALD, 2018; WARNER, 2021), which become cheaper when out of the control of the private sector (BEL et al., 2010; HUNGARO; ALMEIDA, 2021), and tax increases on urban land ownership, which affect the assets of the less vulnerable population (KIM, 2019). In this view, emblematic cases such as Detroit (PECK, 2014) and Vallejo, California (DAVIDSON, 2020) are the exceptions. This literature does not deny the perverse effects of austerity, nor its actual existence, but seeks to show the possibility of real alternatives to avoid fiscal austerity (KIM; WARNER, 2021), in a kind of Polanyi-like movement according to which society protects itself and "pushes back" market advances (WARNER; CLIFTON, 2014). So far, no work has been identified in the literature search that brings the discussion of the penetration of fiscal austerity in the territory to the Brazilian scenery, either on a theoretical level or in large-scale empirical works.

This work, therefore, seeks to analyze the trajectory of expenses in social areas in Brazilian states in the context of fiscal austerity. Total expenditure as well as partial expenditure on education, health, social security, sanitation, housing, social assistance and urban planning areas were taken into account. The creation of the database,

relying on Finbra - "Finanças do Brasil" [Brazilian Finances], a public database, and the analyzes carried out in different ways (statistics and spatial analysis techniques, notably, Local Indicator of Spatial Association, LISA) considered the expenses of state governments, as austerity may occur in different ways across the territory.

Overall, the results corroborated the broader narrative, as it became clear that at the total account level, there was a drop in expenses indeed. Despite this, not all states showed negative variations in their expenses. Brazilian states, mainly in the Central-West and South regions, showed positive variations between the years analyzed, such as *Mato Grosso, Mato Grosso do Sul* and *Paraná*. In the North, *Tocantins* stands out in some areas. On the other hand, most states in the North, Northeast and Southeast showed a negative variation in their expenses. The state of Rio de Janeiro showed a notorious significant drop, thus, accounting for its indication as the epicenter of austerity at the state level in Brazil according to the spatial analysis techniques.

This work is divided into five sections, including this introduction. Subsequently, the other sections are: literature review, methodology, results, and conclusions.

Literature Review

We witnessed in Brazil that economic policies are having a strong inclination towards fiscal austerity from 2015 to 2022, and one of the objectives underlying such policy would be the reductions of the role of the State, of the fiscal deficits and of the public debt level. To achieve this goals, social spending should be reduced. However, austerity presents weaknesses from a empirical point of view:

Economic austerity is supported by weak arguments and controversial studies that, for the most part, propagate alleged conventional reasoning not supported by evidence. [...] In a context of economic crisis and public debt growth, austerity has been presented and practiced as a necessary remedy that requires structural reforms in the actions of the Brazilian State (ROSSI et al., 2018, p. 361).

One of the arguments adopted by defenders of austerity would be that, "in times of crisis, restrictive social policies (increased taxes or, preferably, reduced spending) can have an expansionist effect, increasing economic growth" (Rossi et al., 2019, p. 4). The literature names this hypothesis as "expansionary fiscal contraction". According to this hypothesis,

This adjustment would have positive effects on economic growth as it improves agents' confidence in the economy. In other words, by showing 'responsibility' towards public accounts, the government gains credibility among economic agents and, given the improvement in expectations, the economy undergoes a recovery resulting from the increase in business investment, family consumption and external capital attraction (ROSSI et al., 2019, p. 4-5)

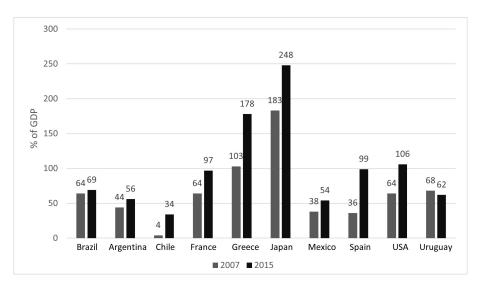
However, scientific evidences on the issue indicate that fiscal contraction is contractionary, that is, when public spending is reduced, the most prominent effect is a reduction in economic activity (SERRANO; BRAGA, 2006; BARBOSA FILHO, 2017). As public sector activity is an inexorable part of economic activity in general, reductions in the former generate reductions in the latter. Furthermore, in a country where public policies are as vital as in Brazil, cuts in public spending discourage private investment, as they reduce growth expectations and do not guarantee effective demand for private sector production. The obsession with pre-defined levels of public

debt, followed by austerity policies, is likely to produce the opposite effect, precisely causing an increase in debt. This occurs due to the vicious circle of austerity: with increasing cuts in public spending, there is a reduction in growth, which produces new drops in revenue and consequently new cuts in spending. According to Stiftung (2016, p. 22): "In the midst of a recession, if a government seeks to avoid deepening the public deficit by increasing taxes or cutting expenses, this government will simply be worsening its financial situation and that of the private sector."

Furthermore, those who advocate expansionary fiscal contraction tend to compare public and domestic budgets, and as a family should not spend more than it earns, the government should do the same. However, the government has methods and tools a family is devoid of. Two of them are: the State can plan on how much it will collect, that is, it can define its budget in different possible ways; while families, conversely, are unable to issue currency, bonds, much less define the interest rate at which they pay their debts, tools that are in the hands of any sovereign national state (BELLUZZO et al., 2021).

Analyzing the largest economies in the world, it is clear that the levels of Brazilian public debt in relation to its economic activity are not alarming as advocates of austerity argue. In fact, there is no optimal number in the literature or an acceptable debt consensus among economists (BARBOSA FILHO, 2017).

Graph 1 provides us with a visualization of the gross debt of some selected countries. This graph indicates at which debt level the countries were in 2007 and 2015 (before and after the Global crisis). It is possible to see that high debt is usual for many countries, and Brazil is not the only one to show an increase in debt.



Graph 1. Gross Debt of Selected Countries. Source: Stiftung (2016, p.30)

Public debt becomes problematic mainly in two situations. The first situation is when the debt has a very high interest rate. In this scenario, costs related to debt services will increase, with a chance of being a very steep increase. In Japan, despite the debt being very high, the country often manages to roll over the debt with negative interest rates. The second situation is when the State's debt is not payable in the currency it issues. The necessity to analyze the interest rate on the debt and whether the debt is internal or external becomes evident (BELLUZZO et al., 2021).

Considering this panorama, literature in the fields of urban and regional planning and urban and regional studies has been investigating how the phenomenon of fiscal austerity has penetrated differently across national territories. Soon after the 2008 crisis, national governments around the world were called upon to "save capitalism from itself" (FRIEDMANN, 1987) via reduction in interest rates (Central Bank) and fiscal packages (National Treasury). As

these policies were able to generate a recovery in economic activity and a gradual reduction in unemployment, pressure grew to make adjustments to public accounts, which generated a series of austerity measures from 2012 onwards. As National States had absorbed the private debts during the crisis, the level of debts had grown a lot. Public debt holders put pressure on central governments to adopt austerity, and these, in turn, pressured local governments (states and municipalities) to do the same. In this scenario, the idea of "austerity urbanism" emerged as reflection and was developed by the British geographer established in Canada, Jamie Peck (PECK, 2012, 2014). The antecedents of this formulation go back to research on "neoliberal urbanism" (PECK et al., 2009). The literature on "austerity urbanism" was based on several case studies about localities that cut expenses and plunged into profound urban and social crises (DAVIDSON, 2020; THEODORE, 2019). The concept gained notoriety in British academia as well (GRAY; BARFORD, 2018; LOBAO et al., 2018).

As a reaction to "austerity urbanism", emerged the hypothesis of "pragmatic municipalism" – the most general response of USA localities, meaning that localities did not necessarily adhere to fiscal pressures from national governments in the context of fiscal federalism. Both "pragmatic municipalism" hypothesis and the term were coined by the American historian, regional scientist and planner Mildred Warner, based at Cornell University (ALDAG et al., 2019; KIM; WARNER, 2018; WARNER; ALDAG, 2019) and students under her orientation. The antecedents of this approach go back to the debates on privatization of local services and the trends towards deprivatization and remunicipalization in these services (BEL et al., 2010; WARNER; ALDAG, 2019; WARNER; CLIFTON, 2014).

In Europe, much of the literature on the issue focuses on studies about England, which can be explained not only by the country's trajectory of spending cuts and economic decline but also by the dominance of Anglo-Saxon academia in intellectual production (KIM; WARNER, 2021). In England, due to the budget centralization in the hands of the central government and the non-existence of a federative system, there is strong evidence that "austerity urbanism" has been the predominant form of response by local governments to this scenario (GRAY; BARFORD, 2018; KIM; WARNER, 2021; LOBAO et al., 2018). The system of fiscal federalism in the USA, which gives relative autonomy to local governments to raise their own revenues, conversely, has been cited as one of the reasons why the general response of municipalities has been identified as "pragmatic municipalism" (KIM; WARNER, 2021).

The austerity policy in Brazil started in 2015, but it was in 2016 with CA 95/2016, which freezes public spending for the subsequent twenty years, that the policy reached a new level. So, according to Pitombeira and Oliveira (2020, p.1702), we can assure that since 2016 Brazil has experienced a profound setback, threatening the social gains achieved in the 2000s, thus weakening the living and health conditions of the population. In other words, austerity mainly penalizes the most popular classes of a nation.

Fiscal austerity is often seen as a way for the government to keep its accounts organized and balanced, but, according to Rossi et al. (2018, p. 362), "CA 95 is a macroeconomic mistake, as it prevents the anti-cyclical action of fiscal policy and imposes a contractionary character on it, since the contribution of public demand to growth will be systematically null". Furthermore, by following the new fiscal rule, total government spending in the economy would go from 19.8%

of GDP in the year 2017 to just 12.4% in 2037. Even though the government's accounts will, in fact, be more balanced, austerity turns unfeasible any plan to consolidate/expand access to social rights, in addition to compromising investments and the functioning of the public machine itself. In this way, the public spending dimension may return to the levels of the 1990s.

With the implementation of the CA 95/16, subnational entities began to have more difficulty managing their accounts, precisely due to the drop in revenue in which they were launched. Furthermore, according to Corrêa and Dweck (2020, p.128), "the growing importance of states and municipalities in the direct provision of services contrasts with the existing limits on the action of subnational entities." Since subnational entities have great relevance in the provision of essential public services, and revenue is lower, the same resources are not being made available adequately. As Corrêa and Dweck explain:

CA 95, by imposing a policy of public spending contraction, profoundly affects the availability of municipal resources. This occurs both directly, by reducing transfers from essential areas such as health, education, investments, via reduction in mandatory (SUS) and voluntary transfers, and indirectly, by affecting the growth rate of the economic activity and, consequently, of the in-house tax collection as well as the tax divided between states and the Union. (CORRÊA E DWECK, 2020, p. 139-40)

Thus, subnational entities are subject to collections from their own tax revenues as well as from revenues transferred by the Union. According to Corrêa and Dweck (2020, p. 129), "Faced with the drop in its own revenues or transfers, Brazilian fiscal federalism imposes on subnational units a single alternative: cutting expenses – which affects the ability to provide public services to the population,

with local and regional impacts", given the local political inertia to raise property taxes. Although it is not the scope of this article, it can be assumed that the emergence of the "Secret Budget" from 2022 onwards is related to this phenomenon.

The next sections empirically address this issue – how the penetration of fiscal austerity has affected state expenditure in the country in recent years.

Methodology

The methodology employed for the analysis of this study is based on descriptive statistics and spatial analysis. The use of tables, at first, is essential for the research, as it provides a better visualization of the comparison between the collected values – one of the ways leading to data analysis – and consequently, to the study conclusion. After descriptive statistics – boxplot and LISA (Local Indicator of Spatial Association) – LISA maps are used. GeoDA software is used to make the boxplot and LISA maps – commonly used for the purpose of spatial data analysis, geovisualization, spatial autocorrelation and spatial modeling.

According to Bastos and Gomes (2010, p. 113), LISA can be calculated for a standardized variable. The indicator of local association patterns may be any statistic that satisfies two criteria, according to Anselin (1995, p. 94):

i) The LISA statistics for each observation shows an indication of how significant the spatial grouping of similar values around that observation is;

ii) the sum of all LISA observations is proportional to the global spatial association indicator.

The years selected for the comparison were 2014 and 2019. It is, therefore, necessary to deflate the values collected in 2019. For deflation, the Central Bank tool was used, which can be found on its official website. Furthermore, the correction index chosen was the Índice Nacional de Preços do Consumidor Amplo (IPCA) [Broad National Consumer Price Index], which is calculated by the Instituto Brasileiro de Geografia e Estatística (IBGE) [Brazilian Institute of Geography and Statistics].

It is worth mentioning that this work, given its originality, did not use, in its empirical effort, all the variables that make up public finances (spending, revenue, deficit and public debt). The variables used are detailed below.

Data

Finbra is a public database sent by Brazilian states to the Union, which contains a series of fiscal and accounting information. Finbra allows the selection of data about the states and the Federal District, capitals or municipalities. The data that can be searched are: Balance Sheet, Equity Variations, Budget Revenues, Budget Expenses, Expenses by Function, Execution of Remains to be Paid and Execution of Remains to be Paid by Function.

For the purpose of this study, the Expenses by Function were chosen as it contains all the government accounts, which is currently divided into 27 topics and each topic has its own particular subtopics. In addition, the subtopics present five different values

related to debts, namely: Committed Expenses, Settled Expenses, Executed Expenses, Registration of Unprocessed Remains Payable (RP), and Registration of Processed RP.

The Expenditures Executed were chosen for the analysis, a phase in which the resources have already been committed and paid off. The periods analyzed were 2014 and 2019. This option is due to the fact that the pandemic momentarily interrupted the logic of austerity, replacing it with the logic of protection and survival, which resulted in increases in expenditure on health and assistance. In Brazil, after the acute phase of the pandemic, the narrative of the need for austerity has resumed, and life protection measures are under sharp focus at the time this article is being written – the federal government did not include the emergency aid, for example, in the 2023 Annual Budget Bill. On the other hand, the so-called "Secret Budget" has been increasing discretionary expenses through agreements in Congress with the government's allied base. The studied area corresponds to the entire Brazilian territory, that is, the states of the North, Northeast, Center-West, Southeast and South regions and the Federal District.

The selected variables were those directly focused on social spending, according to the Brazilian government. The variables are: Social Assistance; Social Security; Health; Culture; Education; Urbanism; Sanitation; Housing; and Agriculture.

^{1.} The rapporteur's amendments are tools that give the parliamentarian who is the rapporteur of the Annual Budget Law the right to include amendments that need to be prioritized by the Executive. From a technical point of view, they are called RP-9 identifier amendments. They have been nicknamed the "secret budget" because, unlike other parliamentary amendments, there is no defined criterion for the distribution or destination of the money.

Results

Table 1 shows the variation in total selected expenses between 2014 and 2019.

Table 1. Variation in Expenses between 2014 and 2019. Source: Elaborated by the authors.

	North		Northeast			
	2014	2019	%	2014	2019	%
Social assistance	1.618.130.601,73	1.192.984.202,90	-26,27	1.643.520.013,54	1.339.149.788,73	-18,52
Social security	6.468.551.867,13	8.840.940.998,95	36,67	24.287.632.472,30	31.736.790.949,00	30,67
Health	10.511.984.537,85	10.139.082.857,00	-3,54	25.230.921.872,07	24.352.095.510,00	-3,48
Culture	452.303.805,10	346.181.818,07	-23,46	765.238.684,79	494.158.239,30	-35,42
Education	11.568.117.845,36	11.541.497.854,30	-0,23	23.128.869.930,43	20.912.408.801,00	-9,58
Urbanism	1.722.159.744,15	356.291.886,43	-79,31	2.126.108.428,18	1.728.433.248,20	-18,70
Sanitation	841.396.290,83	268.680.437,73	-68,06	3.458.779.778,59	933.608.516,24	-73,00
Agriculture	1.128.626.046,37	842.692.312,72	-25,33	3.097.792.622,49	1.721.406.666,60	-44,43
Housing	289.774.802,42	89.612.785,77	-69,07	682.760.738,10	243.020.110,79	-64,40
TOTAL	34.601.045.540,94	33.617.965.153,87	-2,84	84.421.624.540,49	83.461.071.829,86	-1,13

	Central-West			Southeast		
	2014	2019	%	2014	2019	%
Social assistance	1.036.461.120,34	749.742.212,23	-27,66	2.441.708.480,58	955.024.092,25	-60,88
Social security	9.804.907.986,80	14.201.504.525,00	44,84	67.082.398.420,94	74.319.735.639,00	10,78
Health	9.593.861.717,78	9.863.992.633,00	2,81	39.492.239.006,42	36.159.102.853,00	-8,44
Culture	314.843.301,86	202.381.348,08	-35,72	1.655.799.001,38	973.655.815,79	-41,19
Education	14.015.622.960,97	14.060.162.590,00	0,31	54.634.968.558,20	46.252.964.192,00	-15,34
Urbanism	2.232.419.918,52	1.467.612.543,70	-34,26	3.399.264.971,83	175.250.500,78	-94,84
Sanitation	30.534.209,39	37.406.360,14	22,50	1.233.238.535,35	588.967.940,59	-52,24
Agriculture	720.851.493,96	737.004.487,60	2,24	2.175.503.008,96	1.499.481.595,30	-31,07
Housing	171.514.980,12	95.910.741,57	-44,08	2.343.618.202,77	606.990.636,17	-74,10
TOTAL	37.921.017.689,74	41.415.717.441,32	9,21	174.458.738.186,43	161.531.173.264,88	-7,41

(cont.) Table 1. Variation in Expenses between 2014 and 2019. Source: Elaborated by the authors.

	South		Brazil			
	2014	2019	%	2014	2019	%
Social assistance	814.039.661,50	576.442.236,60	-29,18	7.553.859.877,69	4.813.342.532,71	-36,28
Social security	24.152.217.594,68	32.086.750.617,00	32,85	131.795.708.341,85	161.185.722.728,95	22,30
Health	13.212.396.894,78	13.142.725.068,00	-0,52	98.041.404.028,90	93.656.998.921,00	-4,47
Culture	235.160.890,23	149.952.000,33	-36,23	3.423.345.683,36	2.166.329.221,57	-36,71
Education	19.239.476.661,11	15.788.154.983,00	-17,93	122.587.055.956,07	108.555.188.420,30	-11,44
Urbanism	142.673.746,73	180.672.754,76	26,63	9.622.626.809,41	3.908.260.933,87	-59,38
Sanitation	39.215.808,70	53.698.632,84	36,93	5.603.164.622,86	1.882.361.887,54	-66,40
Agriculture	2.011.019.840,21	1.458.812.487,30	-27,46	9.133.793.011,99	6.259.397.549,52	-31,47
Housing	224.284.371,86	81.860.044,43	-63,50	3.711.953.095,27	1.117.394.318,73	-69,90
TOTAL	60.070.485.469,80	63.519.068.824,26	5,74	391.472.911.427,40	383.544.996.514,19	-2,02

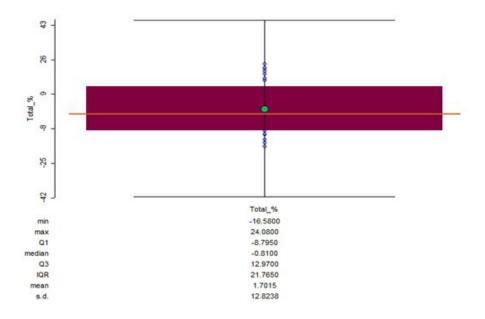
As table 1 shows, three of the five Brazilian regions showed a drop in expenses when comparing the years 2014 and 2019. The regions that showed an increase in expenses – Central-West and South – spent around R\$ 6 billion more (adding them together). As for the North, Northeast and Southeast regions, when adding up their expenses, it is possible to see that they fell by around R\$15 billion, with a very large burst from the Southeast region, which, alone, showed a drop of around R\$13 billion.

Only the Central-West region had more accounts with increased expenses than accounts with lowered expenses. They were: Social Security, Health, Education, Sanitation and Agriculture. The South region had a total increase in expenses due to the accounts of Social Security, Urban Planning and Sanitation.

One finding that points to the fact that fiscal austerity is possibly, in fact, occurring in the country is that in the other three regions (North, Northeast and Southeast), all accounts, excluding Social Security, showed a percentage drop in their levels, that is, of the nine selected accounts, only one obtained a positive result. According to Brumer (2002, p. 50), citing Oliveira (1997, p. 1), "among the aspects that have direct implications on social security in Brazil are the rapid drop in fertility and the increase in life expectancy [...], affecting the period of enjoyment (and receiving of benefits) from retirement"

Accounts showing the most negative results in distinct regions were: Urbanism in the North region with -79.31%, Sanitation in the Northeast region with -73.00%, Housing in the Central-West region with -44.08%, Urbanism in the region Southeast with -94.84%, and Housing in the South region with -63.50%. Among the accounts that obtained a positive result, the South region presented Sanitation at the top of the list, and in the other four regions of the country, Social Security was the one that presented a positive variation.

Although all accounts are extremely important for the well-being of the population, one can ensured, that spending on Education is among the most worrying, not only looking at the total figures, but also at the impact on the future that this account allows us to. Only the Central-West region of the country showed an increase in Education expenses, but even so, a small increase of 0.31%, or R\$44 million. In regard of spending on Education, the South region showed the worst drop in total numbers: -17.93%.



Graph 2. Boxplot of the variation in total public expenditure in the states (2014-2019). Source: Elaborated by the author.

The boxplot above was based on the percentage of total expenditure variation in public accounts between the years 2014 and 2019. Analyzing, firstly, the highest and lowest values in this graph, we can see that the maximum value was 24.08%, represented by the state of *Mato Grosso do Sul*, and the minimum value was -16.58%, represented by the state of Espírito Santo.

Both median and mean were very close to each other. While the median value is -0.81%, the average is 1.70%. It is noticeable that according to the median, at least half of the Brazilian states showed a negative variation in their expenses during the period of this study. The most commonly used measure of dispersion – the standard deviation – had a value of 12.82, indicating great heterogeneity. Finally, it is important to note that no outliers were presented.

Exploring the territorial variability of this phenomenon, the images obtained using the LISA technique made it possible to analyze whether there is a spatial correlation in Brazilian territory for variations in state government expenditure. First, a map with the total variation in state expenditure is presented, before the LISA results. Figure 1 shows that expenditure variations were positive, mainly in the Central-West states (Goiás, Mato Grosso and Mato Grosso do Sul); and, separately in their macro-regions, in the South, *Paraná* and in the Northeast, Piauí. On the other hand, the most outstanding negative variations occurred in the Southeast, mainly in Espírito Santo, Rio de Janeiro and Minas Gerais, and in the North, in Amazonas and Acre, besides Pernambuco in the Northeast, and in the South, Rio Grande do Sul. However, Figure 1 does not focus on the statistical significance of these variations nor on the spatial correlations (neighborhood relationships) of these patterns. Therefore, the analysis of LISA-type Figures was carried out next.

Figure 2 represents the LISA statistics of the total variation in expenses between the years 2014 and 2019. The result obtained was the existence of high-high clusters in the states of *Mato Grosso*, *Mato Grosso do Sul* and *Tocantins*, and a low-low cluster in the state of *Rio de Janeiro*. Both high-high cluster and low-low cluster indicate positive spatial autocorrelation. In this case, the presence of the high-high type is related to high values combined with the presence of high values from its neighbors. The same is true for the low-low type, but in negative variations. In other words, *Rio de Janeiro* presented low values and is surrounded by other states that also presented low values.

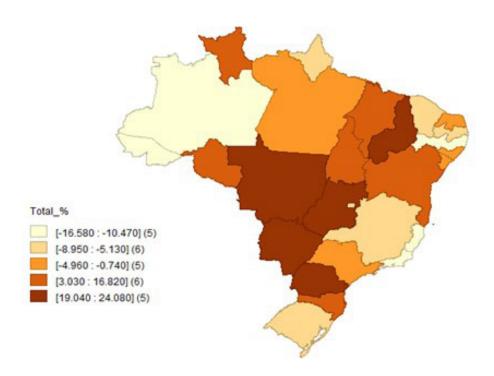


Figure 1. Variation in total public expenditure in the states (2014-2019). Source: Elaborated by the author.

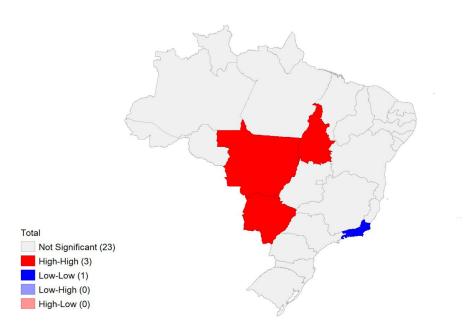


Figure 2. LISA of the variation in total public expenditure in the states (2014-2019). Source: Elaborated by the author.

Figure 3 represents the LISA of the variation in Education expenses between 2014 and 2019. It is possible to observe the existence of high-high and high-low clusters. The states belonging to the first group are: Amazonas, Pará, Rondônia, *Mato Grosso* and *Tocantins*. The states belonging to the second type of cluster are Paraíba and Santa Catarina. Unlike the high-high and low-low types, high-low and low-high clusters indicate the presence of negative spatial autocorrelation, and, therefore, can be considered spatial outliers. In such wise, the states of Paraíba and Santa Catarina achieved a much higher variation compared to its neighbors, that is, its variation is very far from being similar compared to its neighbors.

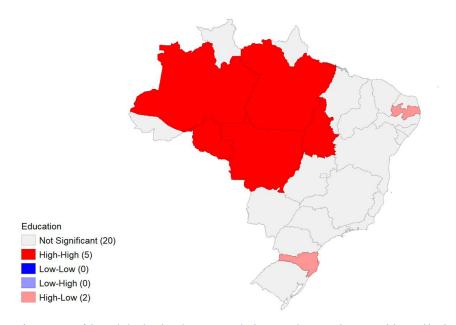


Figure 3. LISA of the variation in Education expenses in the states (2014-2019). Source: Elaborated by the author.

Figure 4 presents the LISA of the variation in Health expenses between 2014 and 2019. Unlike the other two Figures, this one does not present any type of cluster. In other words, the values did not indicate any type of spatial autocorrelation.

Figure 5 represents the variation in Social Security expenses between 2014 and 2019. The presence of low-low clusters for the states of *Rio de Janeiro* and *Rio Grande do Norte* can be observed. As previously explained, these states presented a low variation in the Social Security bill, and are surrounded by states that presented similar values. The Social Security account is an excellent example to contextualize the functioning of LISA. The low-low grouping does not necessarily mean negative values, but that the values were low, since Social Security was the only account that showed a positive variation in all Brazilian states.

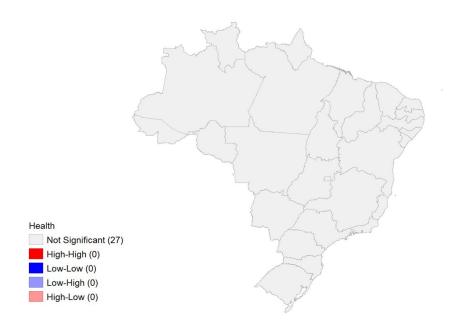


Figure 4. LISA of the variation in Health expenses in the states (2014-2019). Source: Elaborated by the author.

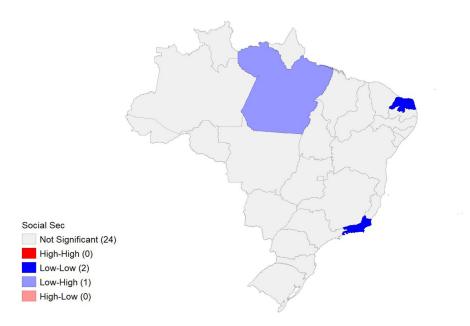


Figure 5. Variation in Social Security expenses in the states (2014-2019). Source: Elaborated by the author.

The other type of cluster in this account was the lowhigh type, represented by the state of Pará. As previously seen, the low-high type indicates a negative spatial autocorrelation. The state of Pará, then, presented a low variation in this account and is surrounded by states that presented a high variation in this account.

Figure 6 shows us the LISA of the variation in the Sanitation . The presence of low-high and high-low clusters is observed. The first situation corresponds to the state of Santa Catarina and the second corresponds to the state of *Tocantins*.

Figure 7 shows the LISA of the variation in expenses in the Housing account between 2014 and 2019. No type of spatial autocorrelation was found in this account.

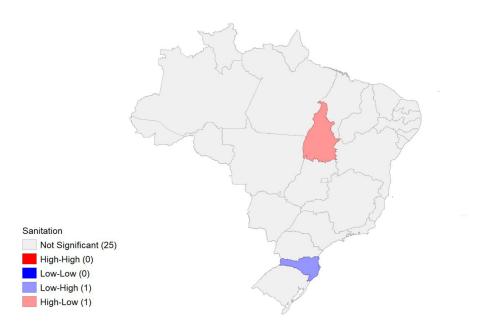


Figure 6. Variation in Sanitation expenses in the states (2014-2019). Source: Elaborated by the author.

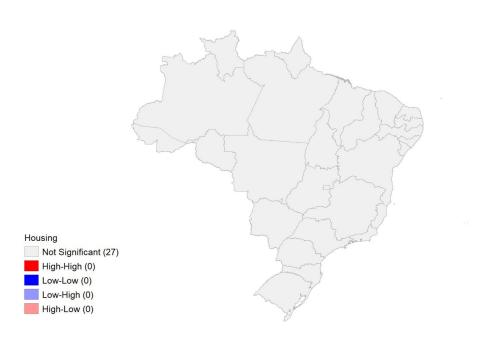


Figure 7. Variation in Housing expenses in the states (2014-2019). Source: Elaborated by the author.

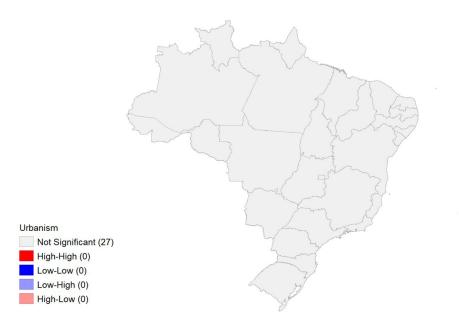


Figure 8. Variation in Urban Planning expenses in the states (2014-2019). Source: Elaborated by the author.

Finally, Figure 8 demonstrates the LISA of the variation in expenses in the Urban Planning account between the years 2014 and 2019. It is also not possible to observe any type of cluster.

Final Considerations

Fiscal austerity is a global, or at least Western, phenomenon that has penetrated national territories in different ways. Countries with federative systems and where local governments are able to increase their revenues, particularly by means of urban land taxation, such as the USA, have presented reactions of the "pragmatic municipalism" type. More centralized countries and locations with declining economies tend to give in to pressures (im)posed by national governments and financial markets (KIM; WARNER, 2021).

As far as we know, this is the first study that seeks to bring this discussion into the literature of urban studies and urban planning in Brazil. From the analysis of fiscal data, evidence was found that the federal government's austerity policies are reducing public expenditure observed in Brazilian states. The achieved objective of austerity policies comes at the expense of the country's most vulnerable population and has harmed the general growth of the Brazilian economy, given the importance of investments in education, health and infrastructure - investments that typically take place at the local level. Ultimately, austerity affects the realization of citizenship, since the most essential services for achieving it occur on a local scale.

Furthermore, arguments of those who defend this form of governance are disconnected from the reality faced by the Brazilian economy since 2015, as the austerity measures did not result in GDP growth. Austerity is going against the historical need to carry out countercyclical spending and investments – opportunities for the increase in spending and investments in public policies, which can help countries counterbalance recessions.

As expected, fiscal austerity proved to be unproductive for fiscal indicators and the country still undergoes a serious crisis. Even one year prior to the pandemic, Brazil's GDP was already showing signs of decline². Furthermore, spending cuts reduce the government's direct investments. In other words, companies

^{2.} https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/24653-pib-tem-resultado-negativo-de-o-2-no-1-trimestre-

⁻de-2019. Accessed in October 10, 2022.

benefiting from these investments, which would formerly have hired staff and purchased materials, no longer contribute to the country's growth (crowding-in effect). Important sources of federal revenue, such as the IPI [Brazilian Tax on Industrialized Products] and IR [Income Tax], were greatly affected by this low dynamism of the economy, that affects the Union's revenue, and consequently the transfers to the municipalities. States were also affected by the dynamics of the ICMS [Tax on the Circulation of Goods and Transportation and Communication Services], and municipalities by the ISS [Tax on Services] and ITBI [Real Estate Transfer Tax], -also related to economic growth or decline. Additionally, in the municipal case, outdated generic value maps generate revenues that are in fact much lower than those that could be obtained via IPTU [Property Tax] by municipalities.

Considering the results obtained, there is strong evidence of spatial heterogeneity, with some regions of the country showing a drop in their expenses, namely, the North, Northeast and Southeast; and the Central-West and South regions showing an increase in their expenses. After the implementation of the "expenditures ceiling", it became clear that there is underfunding or even "defunding" in several areas of the government, such as Health and Education. Areas such as Housing, Urban Planning, and Sanitation, in some cases, practically disappeared from the public budget of states in the context of fiscal austerity. Much of the drop in expenses analyzed in this work occurred in the Southeast region.

As the results indicate, some states were greatly affected by fiscal austerity, particularly *Rio de Janeiro*, *Minas Gerais* and *Espírito Santo*. Whereas other states showed an increase, such as *Mato Grosso*, *Goiás* and *Tocantins*. The state of Rio Grande do Sul was the only one that showed a drop in its expenses in the South region. A similar situation was observed regarding the Federal District – the only one to show a drop in the Central-West region. These results suggest pragmatic variations in local responses to austerity in Brazilian territory. Although explaining the origins of these trends far exceeds the scope of this work, it is possible to raise some hypotheses.

The first and most obvious is that states that have suffered stagnation or economic decline are more vulnerable to accepting austerity measures, and, therefore, experiencing drops in their social expenditure. This could be the case of Rio de Janeiro, with a scenario of deindustrialization, drop in investment in the oil and gas sector, and dependence on the export of services to other Brazilian states which also present little economic growth. This condition caused the state adhere to the Fiscal Recovery Regime imposed by the federal government. On the other hand, it is assumed that states with greater economic growth are more resilient to adopting austerity measures, such as Mato Grosso, for example, which saw progress in its expenses. It is likely that this increase in revenue came from the increase in its own in-house revenue stemming from the growth of agribusiness and the expansion of the agricultural frontier. Considering recent Brazilian territorial dynamics, and as the ultimate cause of economic growth or decline is always territorial, the hypotheses to explain these trends need to be spatial.

A second hypothesis to analyze the determinants of expenditure variations is the initial fiscal conditions of each state. That is, states that were already in a large fiscal deficit tend to adhere to "fiscal recovery" programs (that is, adopt austerity measures). Both the first hypothetical line presented here and the second open up research possibilities through the use of various controls to study the determinants of austerity at the local level.

One possibility to explain the patterns of penetration of fiscal austerity in the national territory is to approach Political Science and relate the adoption of this form of governance to political parties or power coalitions of state representatives in each period. Works on Political Philosophy could also go in this direction. It is worth highlighting that the work has limitations and does not consider initial and subsequent conditions to investigate the trajectory of fiscal austerity in the country. Therefore, it is hoped that this work will open the way for deeper investigation into the topic, and that the research will be able to offer concrete alternatives for the country's territorial and fiscal planning.

References

ALDAG, A. M.; KIM, Y.; WARNER, M. E. Austerity urbanism or pragmatic municipalism? Local government responses to fiscal stress in New York State. **Environment and Planning A: Economy and Space**, v. 51, n. 6, p. 1287–1305, set. 2019.

ANSELIN, L. Local Indicators of Spatial Association – LISA. **Geographical Analysis**, 27, n.2, pp. 93-115, 1995

BARBOSA FILHO, N.H. E a contração fiscal é ... contracionista! 2017; Tema: Economia Brasileira. (Blog). **Blogdoibre.fgv.br**, 2017. Available at: < https://blogdoibre.fgv.br/posts/e-contracao-fiscal-e-contracionista.> *Access in*: 17 de out. de 2022.

BASTOS, S.Q. de A; GOMES, B. S. de M. Distribuição dos profissionais de saúde: Uma análise para os estados brasileiros, 2010. **Revista Brasileira de Estudos Regionais e Urbanos**, v. 8, p. 109-122, 2015

BRUMER, A. Previdência Social Rural e Gênero. **Sociologias**. 2002; s/v (7): 50-81.

BEL, G.; FAGEDA, X.; WARNER, M. E. Is private production of public services cheaper than public production? A meta-regression analysis of solid waste and water services. **Journal of Policy Analysis and Management**, v. 29, n. 3, p. 553–577, 3 jun. 2010.

BELLUZZO, L. G.; RAIMUNDO, L. DA C.; ABOUCHEDID, S. Gestão da riqueza velha e criação de riqueza nova: uma crítica à Modern Money Theory (MMT). **Economia e Sociedade**, v. 30, n. 1, p. 1–14, jan. 2021.

CARVALHO, L. Valsa brasileira. Do boom ao caos econômico. São Paulo: Todavia, 2018.

- DAVIDSON, M. Extreme municipal fiscal stress and austerity? A case study of fiscal reform after Chapter 9 bankruptcy. **Environment and Planning C: Politics and Space**, v. 38, n. 3, p. 522–538, maio 2020.
- DWECK, E.; ROSSI, P. & OLIVEIA, A. L. M. **Economia pós-pandemia**: Desmontando os mitos da austeridade fiscal e construindo um novo paradigma econômico. São Paulo: Autonomia Literária, 2020.
- FRIEDMANN, J. **Planning in the Public Domain**: From Knowledge to Action. Princeton, New Jersey: Princeton University Press, 1987.
- GRAY, M.; BARFORD, A. The depths of the cuts: the uneven geography of local government austerity. **Cambridge Journal of Regions, Economy and Society**, v. 11, n. 3, p. 541–563, 29 out. 2018.
- ALMEIDA, R. P.; HUNGARO, L. Water and sanitation governance between austerity and financialization. **Utilities Policy**, v. 71, p. 101229, 2021.
- KIM, Y. Limits of Property Taxes and Charges: City Revenue Structures After the Great Recession. **Urban Affairs Review**, v. 55, n. 1, p. 185–209, jan. 2019.
- KIM, Y.; WARNER, M. E. Shrinking local autonomy: corporate coalitions and the subnational state. **Cambridge Journal of Regions, Economy and Society**, v. 11, n. 3, p. 427–441, 29 out. 2018.
- KIM, Y.; WARNER, M. E. Pragmatic municipalism or austerity urbanism? Understanding local government responses to fiscal stress. **Local Government Studies**, v. 47, n. 2, p. 234–252, 4 mar. 2021.

- LOBAO, L. et al. The shrinking state? Understanding the assault on the public sector. **Cambridge Journal of Regions, Economy and Society**, v. 11, n. 3, p. 389–408, 29 out. 2018.
- MCDONALD, D. A. Remunicipalization: The future of water services? **Geoforum**, v. 91, p. 47–56, maio 2018.
- PECK, J. Austerity urbanism: American cities under extreme economy. **City**, v. 16, n. 6, p. 626–655, dez. 2012.
- PECK, J. Pushing austerity: state failure, municipal bankruptcy and the crises of fiscal federalism in the USA. Cambridge Journal of Regions, Economy and Society, v. 7, n. 1, p. 17–44, 1 mar. 2014.
- PECK, J.; THEODORE, N.; BRENNER, N. Neoliberal Urbanism: Models, Moments, Mutations. **SAIS Review of International Affairs**, v. 29, n. 1, p. 49–66, 2009.
- PITOMBEIRA, D. F.; OLIVEIRA, L. C. Pobreza e desigualdades sociais: tensões entre direitos, austeridade e suas implicações na atenção primária. **Ciência & Saúde Coletiva**. 25(5), p. 1699-1706. 2020.
- ROSSI, P.; DWECK, E.; OLIVEIRA, A. L. **Economia para poucos**: impactos sociais da austeridade e alternativas para o Brasil. São Paulo: Autonomia Literária, 2018.
- ROSSI, P.; OLIVEIRA, A. L. M.; ARANTES, F.; DWECK. E. Austeridade fiscal e o financiamento da educação no Brasil. **Educação & Sociedade (Impresso)**, v. 40, p. 1-17. 2019.
- SERRANO, F.; BRAGA, J. O mito da contração fiscal expansionista nos EUA durante o governo Clinton. **Economia e Sociedade**, v. 15, n. 2, p. 27, 2006.
- STIFTUNG, F. E. et. al. **Austeridade e Retrocesso** Finanças públicas e política fiscal no Brasil, v. 1, São Paulo, 2016.

TAVARES, F.; RAMOS, P. O novo regime fiscal brasileiro e a democracia: interpretações sobre uma incompatibilidade. **Boletim Goiano de Geografia**, v. 38, n. 3, p. 450–472, 17 dez. 2018.

THEODORE, N. Governing through austerity: (II)logics of neoliberal urbanism after the global financial crisis. **Journal of Urban Affairs**, p. 1–17, 12 jul. 2019.

WARNER, M. E. Key issues in water privatization and remunicipalization. **Utilities Policy**, v. 73, p. 101300, dez. 2021.

WARNER, M. E.; ALDAG, A. M. Re-municipalization in the US: a pragmatic response to contracting. **Journal of Economic Policy Reform**, p. 1–14, 25 set. 2019.

WARNER, M. E.; CLIFTON, J. Marketisation, public services and the city: the potential for Polanyian counter movements. **Cambridge Journal of Regions, Economy and Society**, v. 7, n. 1, p. 45–61, 1 mar. 2014.

Commuting movements in metropolitan region of Rio de Janeiro in 2000 and 2010

A social stratification analysis¹

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Introduction

This paper aims to present results regarding the dynamics of socio-occupational aspects in the Metropolitan Region of Rio de Janeiro (RMRJ) and the characteristics of people who commuted between the years 2000 and 2010 based on a class analysis. In this sense, we discuss two guiding concepts from our literature review: 'social structure' and 'social stratification'. To this end, different approaches to the topic are presented and we also shed light on how reading from this perspective contributes to understanding the phenomenon of social transformations in the RMRJ between

^{1.} Part of this research has been sponsored by means of a research grant from the Brazilian Institute of Geography and Statistics [IBGE].

2000 and 2010. It is noteworthy that this study focuses, as one of its objectives, on the appropriation of the class debate in different traditions of sociological thought in order to use a model of social stratification based on individuals' occupations. The social stratification carried out in this study constitutes an approximation of what the social structure is according to Ribeiro (2016) with the purpose of discussing social differences in Brazilian metropolitan and non-metropolitan areas in 2000 and 2010.

Another important discussion concerns the mobility to workplaces. In this paper, it is not understood only as movements from one point to another in the RMRJ. In other words, displacements do not only represent the points of departure and arrival of workers. It is noteworthy that we do not understand these flows as random phenomena or as the result of each worker's rationality. Bearing in mind that workers need to enter the job market as a survival condition, if job offers are concentrated in a different municipality, these workers have no other alternative than traveling to workplaces.

To understand these issues, we use a social stratification model developed by Observatório das Metrópoles (OM) and which has already been used in several academic works such as those by Ribeiro and Lago (2000); Lago and Mamarela (2010) and Ribeiro (2016). By using this model, we propose to discuss the quantitative aspects of occupational hierarchies in RMRJ in 2000 and 2010 and analyze the profiles of commuting in different classes.

Finally, in the next sections we discuss the concept of social structure, put forward a debate on the spatial displacement of the population and commuting movements, discuss the OM social stratification model and analyze and discuss the results.

Social Structure and Population Spatial Displacement: a theoretical debate

Social Structure: a debate on the concepts of class in different traditions of social perspective

The concept of 'class' presents major conflicts in different traditions of the sociological thought. In this sense, discussing this concept broadly approximates us of the general understanding of how a social structure-based analysis approached by social stratification, corroborates the objectives of this article.

The model of social stratification we adopt is based on a social division of labor. According to Marx and Engels (1973), it is the division of labor that allows the appropriation of social production to be carried out differently among people, hence the abolition of such distributive conflict could only take place with the end of the social division of labor. In other words, the social division of labor is an instrument on which the study about classes must be based and, therefore, the choice of social stratification scales that presuppose the division of labor is elementary for the investigation that this study focuses on.

This interdependence will become more evident when we discuss the social structure of the RMRJ changes and evolutions based on the social stratification model developed by the OM. This process is also the starting point for investigating the differences and similarities in the profiles of people who carried out intrametropolitan commuting between 2000 and 2010.

According to Stavenhagen (1971), the scientific concept of social class was proposed by Karl Marx and Friedrich Engels and by the Marxist school that stemmed from these authors' ideas. However, they also highlight that this concept lost its original meaning and ended up being confused with the concept of social stratification. This occurred mainly in North American sociology and to some degree in Latin American sociology. It is very important not to misinterpret the concepts, as social stratification presupposes a hierarchy and a measurement scale, which can be used as a way of objectively and approximately analyzing the class structure of a society (RIBEIRO, 2016).

According to lasi (2008), the Marxist approach perceives the concept of class in two senses — objective and subjective. The objective mode can be understood based in the positions of individuals in their occupations, according to which it is somehow possible to divide these people in order to locate them in the productive process between those who have the means of production and those who only have the power of work (Wright, 2015). However, the subjective mode is not measurable from quantitative databases, this aspect enters a more complex area of the class consciousness formation movement that this article will not cover. Ribeiro, Ribeiro and Costa (2013) argue that this approach incorporates political and ideological dimensions, making the analysis of the social structure complex and the empirical assessment of this social structure more difficult by quantitative means.

This means the class analysis of the Marxist school does not understand this phenomenon based exclusively on the position of individuals in the production process – through their occupations in the labor market. The concept of social class also takes into account political and ideological aspects that are more linked to subjective interpretation. It is noteworthy that these two aspects are not disjoint, but form a dialectical pair that allows a totalizing interpretation of the concept under debate (IASI, 2008).

Regarding the objective or measurable aspect, we turn to Wright (2015) when he advocates that the study of social classes based on occupation is one way among a diversity of possibilities to address the topic. In other words, class relations as a production relationship. Understanding these two relationships is fundamental to the process of social stratification, as the metrics developed by the OM were, to some extent, concerned with distinguishing capital and labor between its criteria, which is one of the pillars of the Marxist approach. Obviously, this proposal adopts other criteria that are not necessarily fully aligned with the Marxist conception.

It is also worth highlighting that the individuals' occupations reveal interesting information for the analysis of the social structure. But the transformations in the labor market in the capitalist world have complicated the analysis even in an objective approach. This is explained by the fact that occupations inserted in this context are intertwined with the process of social division of labor. The result is a socio-occupational hierarchy even among those who do not own the means of production, creating social gradations in each position of these hierarchies.

On this issue, Wright (2015) cites an interesting example regarding individuals who occupy administrating positions, considering that their duties involve hiring or firing employees, proposing changes in the work process, among other things. The author argues that with these assignments, administrators, in a

certain sense, become close to the position of holders of the means of production. On the other hand, these professionals cannot use the means of production for their own benefit and can be fired, therefore being in a position closer to the workers.

This understanding corroborates the analysis of the social structure based on a model of social stratification, since this measure is capable of capturing approximate quantitative transformations in the composition of the social structure. In other words, to some extent it is possible to measure gradations in the social structure – a useful way to discuss the transformations of the metropolitan space of Rio de Janeiro over time. It is important to emphasize that such gradations captured by models of social stratification do not necessarily constitute gradations in the social class system.

Therefore, this article is clearly based on an objective perspective of social structure analysis. Thus, other approaches such as Max Weber's can also contribute to the empirical and approximate understanding of social class. Wright (2015) even says that the Weberian class perspective is a subset of what Marxist theory provides. This Erik Wright's statement is a provocation, as Weberian scholars understand that the concept of class is an important part of social analysis, but that it does not have an isolated meaning in the social stratification procedure. Thus, these authors point out, for example, other notions that complement this concept, such as the idea of status (SALATA, 2016; BREEN, 2015; SCALON, 1999).

According to Breen (2015), the concept of class for Max Weber is consistently linked to the understanding of common interests shared by a set of individuals based on a premise of economic segmentation. Furthermore, the understanding of 'class'

in this tradition of sociological perspective is a product of market dynamics. In other words, the situation 'classes' find themselves in society is a reflection of the market dynamics in a capitalist society (BREEN, 2015). For Weber (1971), this concept is presented considering three main points: proximity to people's opportunities and living conditions; economic interests and income opportunities; and labor market conditions.

When explaining the difference in understanding class concept between the Weberian and the Marxist perspectives, Wright (2015) states that both start from the rights and powers that individuals have in relation to production goods. However, according to the author, exploration and domination are not central elements in the Weberian tradition.

Breen (2015) states that for Weberians these aspects, originating from the Marxist perspective, are not used. This is because Max Weber did not believe that changes in historical patterns could be explained by tensions between classes. He also adds that in this aspect "it is not assumed that the classes are necessarily in a total conflict in such way that the benefits of one occur (illegitimately) at the expense of the other" (p. 48).

Thus, it is possible to state that Max Weber's concern is not to understand class conflict, but to investigate the distribution of power, which can be interpreted based on three main notions: class; status groups and political parties. And Weber (1971) understands power as: "[...] the possibility of a man or a group of men carrying out their own will in a communal action, even against the resistance of others who participate in the action" (p. 61). Salata (2016) highlights that the Weberian approach to social stratification concerns the

distribution of power in society. That is, in Max Weber's sociology, class is not the only possibility of stratifying the social structure, as such stratification is understood in the field of power and the position that individuals occupy in the labor market, their income and their consumption possibilities. They are part of a process of power stratification, thus representing a level of economic power.

Still regarding the concept of class in Weberian sociology, Scalon (1999) points out that in this tradition of thought, class gains a strictly economic dimension, but contrary to what Marxists claim, this is not the only possibility of social differentiation, considering that classes "may be based on status, social prestige and other factors" (p. 33).

The third possibility of stratification – political parties –, according to Weber (1971), constitutes the acquisition of social power. For the sociologist, this aspect acts with the purpose of influencing common actions, whether to gain power in the management of a club or even the power of the State. He also highlights that parties may be instruments of class interests, status interests or none of them.

From an operational point of view or from the empirical measurement of the social structure, the Weberian tradition allows a two-dimensional interpretation as we are able to discuss the social structure based on the positions of individuals in the labor market and the recognition they have in society. Thus, in the Weberian approach, class is an exclusively economic phenomenon (WEBER, 1971; SCALON, 1999; BREEN, 2015).

Furthermore, we can affirm that the Weberian approach is a discussion 'in fact' about social stratification. This is because, by understanding this theoretical current about classes we come to a premise of scale between groups of individuals who fit into a segment of a certain class or status, taking into account, among other things, differences in income. View classes through this perspective, allows the development of more analytical and empirical instruments of social structure based on stratification techniques. This is because a scaling process to discuss both the economic aspect and the status that individuals or groups of individuals find themselves in society is intrinsic to Max Weber's proposal.

Another tradition of sociological thought for the study of social structure within classes is that by Pierre Bourdieu, who, according to Weininger (2015), is one of the main contemporary theorists on this topic. Bourdieu states that in this aspect, class analysis is also seen in a two-dimensional way: through economic and symbolic criteria. Economic criteria are those that can be directly measured, whether by income distribution, by the amount of work performed by individuals or y the possession of material properties. With regard to symbolic aspects, the French sociologist discusses the cognitive aspects and social meanings based on which people act.

Bourdieu (2013) makes it clear that these distinctions are intrinsic, not disjoint, for the purpose of understanding social structure. He criticizes those who believe that only one of these aspects is capable of producing knowledge about social structure. Thus, it is evident that the class debate for the French sociologist occurs via these two aspects together and, in addition, there is an empirical attempt to capture the economic and the symbolic at the same time. For Bourdieu (2013), having an exclusively economic vision in class debate is limited as much as believing that subjective aspects are observable from a group of individuals arising from collective classifications, as if the 'collective' were an expression of individual sums.

Unlike what happens in sociology inspired by Max Weber, this economic and symbolic pair is not seen as something separate, but rather as simultaneous elements for apprehending the social structure. In other words, the two dimensions pointed out by Pierre Bourdieu do not represent a distinction in the stratification by economic or symbolic elements as the Weberian school defends. This separation could even occur in an objective or pragmatic way for the analysis, however, Pierre Bourdieu was very resistant to this procedure (WEININGER, 2015).

Furthermore, according to Weininger (2015), Pierre Bourdieu's theoretical production is greatly influenced by the logic of non-separation of theory and practice, with empirical observation being very influential in the construction of this school of sociological thought. Under this argument, the author emphasizes that this aspect is closely associated with the period in which the French sociologist developed his class theory focused on the concept of social space, in which classes would be defined based on the location of people in a three-dimensional space. According to the author, the development of this concept was based on great empirical efforts based on quantitative data analysis. He also highlights that the social space was formed by three axes of investigation and analyzed using a statistical technique called Multiple Correspondence Analysis.

The concept of social space is an important analytical tool for the study of classes, especially with regard to the social gradations that exist in different occupational groups. This means that it is more intuitive to classify individuals into a given class, considering those occupations that are better paid, require more educational background or have more prestige in society can constitute a class. Thus, doctors, engineers and lawyers can share the same class

position, the same way domestic workers, cooks and bricklayers, for example. This class differentiation system is presented by Bourdieu (2008) as 'primary differences', of capital volume, which almost always result in secondary differences, composition of capital and which, in turn, determines people's trajectories in certain contexts.

Finally, the OM proposal was built in order to be analyzed as an approximation of the social structure based on a class division, even though it mainly takes into account the objective aspects of the social class debate inspired by Pierre Bourdieu's theory (RIBEIRO, RIBEIRO and COSTA, 2013. Based mainly on the occupation of individuals, a social class scheme was developed at three levels: dominant class², middle class and popular class.

Spatial Movement of the Population

Commuting movements, characterized by people who live in one municipality and work in another (OJIMA; MONTEIRO; NASCIMENTO, 2015), are fundamental to understanding the social and urban dynamics of RMRJ. According to Brito and Souza (2005), the urbanization process in Brazil occurred very quickly between the 1960s and 1970s. The authors highlight that in the 1960s the urban population surpassed the rural population in Brazil, with great influence from migratory movements of people leaving the countryside towards the cities. This concentration of people used to live mostly in large urban agglomerations. Still according to the

^{2.} Translation Note: The term *dominant class*, in this article, refers to the social layer of entrepreneurs, used in contrast to the other less economically favored groups of the population.

authors, this large population concentration living in metropolitan areas was a consequence of this dynamics in the country. By the end of the 20th century around a third of the Brazilian population lived in these areas.

According to Gaudemar (1977), commuting to work cannot be seen as a mere decision by workers about where to sell their labour power. The author highlights that capitalism offers workers a double freedom: the first is that the worker must be a free person, who disposes of his labour power as a commodity, and the second is that he must be free from everything, he would have only his workforce to sell and thus guarantee his existence. In other words, displacements should not be read as a natural process or just a decision made by people. In this sense, movements towards a different municipality or set of municipalities are not private decisions, but the result of the best conditions for the reproduction of capital.

Traditional studies on labor mobility investigate: the measurable aspect of entry and exit of the labor force from one municipality to another; the cities that gain and lose labor forces, or the poles of attraction and repulsion of labor force. work. All of these aspects are essential to understand the mobility of workers across space, but it is important to go beyond quantitative balances and reflect on who are the workers mobilized by this dynamic.

That is, being able to discuss the profile shows us which activities are being most requested in the production process. From commuting movements, we are able, for example, to follow the transformations leading one city move from an industrial status to one of service provider, in which we observe reductions in the workforce in the secondary sector, from industrial activities,

to sectors more related to services. It is noteworthy that not all occupations are important in this process, some activities will be more demanded than others, resulting in a non-dichotomous process of mobilization and immobilization of the workforce (GAUDEMAR, 1977).

It is noteworthy that pendular movements are present in the genesis of RMRJ. The occupation of areas furthest from the economic centers by the poorest workers highlights the role of this movement in the constitution of the region. Therefore, the majority of trips towards the city of Rio de Janeiro reinforce the historically concentrated nature of the metropolitan core, where the majority of job opportunities, schools, universities, leisure activities, health services, state administration bodies are concentrated and federal, large company headquarters, etc. On the other hand, movements towards the periphery³ point to new functions that these spaces can assume, such as, places of study or work for middle or dominant social strata.

According to Aranha (2005), in the United States the definition of 'metropolitan areas' takes into account the flows of commuting movements. Branco, Firkowski and Moura (2005) argue that the intensity of commuting movements highlights the urban

^{3.} Translation Note: In the Portuguese language (source text) there is a convergence of definitions between *periphery* and *outskirts*. This is due to the fact that the geographical and social dimensions converge in the term Periphery. In this article, however, the term periphery is used to refer to the outer boundary – the outer limits of a city – thus, a geographical concept, while outskirts, encompasses both geographical and social connotations – an area where the less acquisitive power social levels use to live in the Brazilian context.

dynamics of territories, being important for the reasoning of a large urban or even metropolitan area. According to the authors, research and statistics institutes use this data with this intention.

According to Branco, Firkowski and Moura (2005), it is important to analyze these displacements associated with other indicators such as income, occupation, education, among others. They argue that, taking into account these indicators, makes it possible to highlight population distribution patterns, spatial segregation, new centralities, among other aspects. In this article, the basis for interpreting these movements is via the different social strata organized by the OM class typology, in which the shifts between classes are debated: popular, middle and dominant.

In this article, the emphasis is on intrametropolitan travel, as the so-called metropolitan periphery underwent transformations that placed it as an important work destination between the 1980s and 2010. In this process, Lago (2008) argues that the metropolitan periphery of Rio de Janeiro became "center". The periphery as a center is an apparent contradiction for the author, she highlights that the notion of periphery consolidated in urban sociology understands this space as a territory which lacks basic services, is distant from the job market, lacks property ownership, etc.

The apparent contradiction between the notions of center and periphery gives rise to the possibility of analyzing work flows not only in one direction (metropolitan core), but also pointing to the importance of understanding who made these trips in the RMRJ and, with such data, it's possible to understand the basis of the region spatial transformations, as a whole, in the period studied. Analyzing the movements of people who live in

one municipality and work in another is, therefore, an important analytical key to understanding the challenges of urban mobility in metropolitan areas.

The OM Stratification Model

When talking about social stratification, we are inevitably discussing procedures that result in social hierarchies, in which scales and measurements are employed to determine the position of individuals in different social groups or strata. This analytical tool allows statements to be made in order to describe how the social structure has progressed or retreated or remained the same over time, configuring itself as an approximation of the social structure.

This is exactly why the OM's social stratification proposal is used, given that it is performed in such a way as to capture the social transformations of Brazilian metropolitan regions. This proposal is grounded in several aspects, such as: the opposition of capital and work, manual and intellectual work, supervisory and execution positions, modern and traditional occupations, small and large employers, income and education (RIBEIRO; LAGO, 2000; RIBEIRO, 2016). The model is built, considering a set of variables - the occupation of individuals, the sector of economic activity, education and income levels in some categories (RIBEIRO, 2016).

This model has been built to be analyzed as an approximation of the social structure based on a division of classes into three types: popular class, middle class and dominant class. These classes are formed from the grouping of eight class fractions: administrators, higher education professionals, small employers,

medium occupations, specialized tertiary workers, secondary workers, non-specialized tertiary workers and agricultural workers. Which, in turn, are grouped into 24 occupational categories based on the Classificação Brasileira de Ocupações (CBO-Domiciliar) [Brazilian Classification of Occupations – Domiciliar].

To reach these categories, the first step was to search for microdata from the 2000 and 2010 demographic censuses. Once this was concluded, people who had Rio de Janeiro as a federation unit were selected and then filtered to people who lived in municipalities that composed the RMRJ. At this point, it is necessary to highlight that there were changes in the composition of the RMRJ between the two censuses. The reason is that in the time elapsed between the two surveys Mangaratiba was no longer officially part of the RM and there was a fragmentation of the municipality of Nova Iguaçu which resulted in the creation of the municipality of Mesquita. Therefore, for the 2010 Demographic Census, in addition to what was the official RMRJ that year, the municipality of Mangaratiba was added to the data analysis. This made it compatible, in terms of areas, with the same extension for the two years under study and subdividing the RMRJ into four areas: North Periphery, South Periphery, Baixada⁴ Fluminense and Rio de Janeiro and Niterói. The area under study can be seen in Figure 1.

^{4.} Translation Note: Baixada Fluminense constitutes a geographic region in the State of Rio de Janeiro. It is part of the Metropolitan Region of Rio de Janeiro, or Greater Rio. The term *baixada* which refers to lowlands, is foreignized in this text.



Figure 1. Map of RMRJ subdivisions. Source: IBGE.

Sequentially, the socio-occupational categories of the OM were grouped based on the Brazilian Classification of Occupations - Domiciliar (CBO – Domiciliary) used in the 2000 Census based on the variable V4452 and V6462 in the 2010 Census. After the socio-occupational categories were constructed, they were grouped according to Table 1 to get to the class fractions used to analyze the social structure of the RMRJ. In this way, we analyze commuting movements based on this proposal of stratification at the class level. This decision was necessary, since at more disaggregated levels (fractions of classes and socio-occupational categories, for example) the data presented a high coefficient of variation.

Table 1. Socio-ocupational Structure. Source: Ribeiro, Ribeiro e Costa (2013, p.31).

Classes	Class Fractions	Socio-occupational categories		
Dominant		Large employers		
	Administrators	Public sector administrators		
		Private sector leaders		
		Higher-level freelancers		
	Higher Education Professionals	Higher-level employees		
		Higher-level statutes		
		Higher-level professors		
	Small Employers	Small employers		
Middle	Medium Occupations	Artists and similar		
		Office occupations		
		Supervisory occupations		
		Technical Occupations		
		Education and health averages		
		Public Security, Justice and Postal Service		
	On a staller of Tanklan (Manhaus	Commerce workers		
	Specialized Tertiary Workers	Specialized service providers		
		Modern industry		
Popular	Secondary Workers	Traditional Industry		
		Auxiliary service workers		
		Construction workers		
		Non-specialized Service Providers		
	Non-specialized Tertiary Workers	Domestic workers		
		Street vendors and handymen		
	Agricultural Workers Farmers			

Results and Discussions

Regarding the socio-occupational structure, the RMRJ presents some curious results as shown in Table 2. The first of them is the drop, in absolute and relative numbers, of people classified as administrators according to the OM criteria. In 2000, this class fraction represented 1.7% of employed people and, in 2010, this contingent was 1.5%. This observation is also true for small employers, which were 81,184 people in 2000 and 59,216 individuals in 2010.

Workers, on the other hand, increased their relative and absolute weight in the RMRJ's social structure in this decade. The variation in this occupational category was 31.5% in ten years. We call attention to the fact that, during this period a series of investments were made in RMRJ, boosting the hiring process in this segment, such as: the Programa de Aceleração do Crescimento (PAC) [Growth Acceleration Program] launched in 2007; the beginning of constructions of Arco Metropolitano [Metropolitan Arch] in 2008; and of the Complexo Petroquímico do Rio de Janeiro (COMPERJ) [RJ Petrochemical Complex] also in 2008; the launch of the Minha Casa, Minha Vida Program (PMCMV) in 2009, among others.

Regarding tertiary workers, there was also significant growth among those who were employed in commerce. The variation in the decade, which was 38%, is also very significant, even if it does not result in significant changes in the weight of the class fraction to which it is associated. However, it is not uncommon to refer to this period as one in which economic development was linked to family consumption, increased by income gains, obtained either by means of income transfer policies or through real wage gains, above inflation (POCHMANN, 2012).

Table 2. Socio-occupational structure of RMRJ between 2000 and 2010. Source: microdata from the 2000 and 2010 demographic census – IBGE.

Fractions	Categories	2000			2010		
		Total	% C	% F	Total	% C	% F
Administrators	Public sector	11.619	0,3		11.889	0,2	1,5
	Private sector	13.093	0,3	1,7	18.577	0,4	
	Large Employers	45.657	1,1		40.381	0,8	
	Freelancers	100.451	2,4		147.421	3,0	13,8
High Educational	Employees	169.409	4,1	٥٦	318.839	6,6	
Level	Statutory	39.335	1,0	9,5	63.261	1,3	
	Professors	84.204	2,0		143.405	2,9	
	Education and Health	173.888	4,2		198.759	4,1	25,8
	Security, Justice and Posts	126.337	3,1		79.786	1,6	
	Artistic	21.097	0,5	27,1	17.706	0,4	
Medium Ocupations	Supervision	172.030	4,2		220.868	4,5	
	Office	395.048	9,5		496.871	10,2	
	Technician	234.224	5,7		243.979	5,0	
	Commerce Workers	396.402	9,6	00.5	547.317	11,2	21,3
Tertiary Workers	Specialized Service Providers	450.117	10,9	20,5	490.669	10,1	
	Modern Industrial Workers	163.752	4,0		180.172	3,7	20,6
Occupies Welling	Traditional Industry Workers	163.472	4,0	00.0	155.613	3,2	
Secondary Workers	Assistants	212.471	5,1	20,3	269.633	5,5	
	Construction Workers	300.587	7,3		395.345	8,1	
Non-Specialized Tertiary Workres	Non-Specialized Service Providers	243.862	5,9		240.900	4,9	15,2
	Domestic Workers	364.825	8,8	18,4	454.897	9,3	
	Street vendors	151.776	3,7		44.785 0,9		
Agricultural Sector	Agricultural Workers	23.012	0,6	0,6	26.562	0,5	0,5
Small Employers	Small Employers	81.184	2,0	2,0	59.216	1,2	1,2
	TOTAL	4.137.852	100	100	4.866.851	100	100

Table 2 presents more results of great social relevance. Observe that in the class fraction of non-specialized tertiary workers there is a drop in absolute and relative terms causing a huge impact on the category of street vendors. The number of people employed as street vendors went from 151,776 in 2000 to 44,785 in 2010. This reduction in workers in these occupations represents an immense social gain, as it is a job that does not require qualifications and has little prestige and social recognition.

Still according to Table 2, the most significant result, in the class fraction, is that of personnel in higher education jobs, the jump was 71% in ten years. This category includes all those people in occupations that require higher education and work as independent and self-employed professionals; professors; public servants and employees in general. In each of these categories, professors and employees in general stand out. Among the first, the variation in the decade was 70% and in the second, 88%.

The analysis of the social structure in an aggregated way for the RMRJ has pointed out important changes in the participation of each class fraction in the social structure, with significant changes such as that of higher education professionals or with little or no variation in other class fractions. This result motivates us to continue evaluating the social structure at even lower levels than that of the RMRJ, thus, fostering debates on how such changes in social classes occurred at the level of some areas such as Rio de Janeiro, Niterói and outskirts. Table 3 presents the social class structure for different areas of RMRJ. It is observable that the popular class is the most substantial one in all areas, but with the greatest positive variation between 2000 and 2010 in the dominant class.

Table 3. Social classes by different territorial units of the RMRJ in 2000 and 2010. Source: microdata from the 2000 and 2010 demographic census – IBGE.

Territorial Unit	Class	2000	%	2010	%
RMRJ	TOTAL	4.137.852	100,0	4.866.851	100,0
	Popular	2.470.276	59,7	2.805.893	57,7
	Middle	1.203.808	29,1	1.317.185	27,1
	Administrators	463.768	11,2	743.773	15,3
Rio de Janeiro	TOTAL	2.228.784	100,0	2.676.931	100,0
	Popular	1.221.054	54,8	1.363.301	50,9
	Middle	663.847	29,8	793.095	29,6
	Administrators	343.883	15,4	520.535	19,4
Niterói	TOTAL	193.162	100,0	211.949	100,0
	Popular	82.275	42,6	80.714	38,1
	Middle	66.494	34,4	65.124	30,7
	Administrators	44.393	23,0	66.111	31,2
Outskirts	TOTAL	1.612.956	100,0	2.071.702	100,0
	Popular	1.164.008	72,2	1.455.975	70,3
	Middle	373.468	23,2	458.963	22,2
	Administrators	75.480	4,7	156.764	7,6

All these results point to subtle changes in the social and occupational hierarchy of the RMRJ municipalities between 2000 and 2010. Although at the top of the social stratification model no changes were observed in the composition of these cities, there is, evidently, some type of movement at the base of the social pyramid of the area under study. This evidence already constitutes an important element to explain the dynamics of commuting to work and how these mild changes are clues to explain, for example, the dispersion of intrametropolitan commuting movements.

On the other hand, we should not ignore the significant growth of people employed in the dominant class, which brings together workers with higher income, educational level and prestige. Even though this growth has not been able to change hierarchies, it, somehow, represents social gains. This is also quite significant as it allows us to state that the variations in the decade under study occurred in higher social strata, thus indicating a movement towards a new social configuration even in the peripheral areas of RMRJ.

Therefore, it is necessary to understand how the variations and stabilizations observed in the social structure of RMRJ are reflected in the metropolitan space. Furthermore, it is important to understand how this result is able to explain not only the intensification of pendular movements in the area under study. From the point of view of the debate on class structure, the data discussed so far also contribute to understand the stabilizations and small changes in the positions of social strata.

Commuting Movements

The increase in the number of people from the managing class throughout the RMRJ already highlights a positive transformation in the living conditions of the metropolitan population, as they are professionals with higher salaries and higher education. It is noteworthy that in the metropolitan outskirts (periphery) this growth more than doubled in the decade. This already indicates a new role, from a socio-occupational point of view, being formed in the periphery.

Therefore, it is necessary to discuss whether the intensification of commuting occurred homogeneously across all social classes, and in all areas of the RMRJ. Beforehand, it is possible to say that the number of people who lived in the same municipality as they worked varied by 25% positively. Growth, in terms of variation, was more intense in the peripheral municipalities, where during this period it varied by 56%. In the state capital, this contingent increased by 23%. In Niterói, the variation was smaller, having changed positively by around 15%.

In the outskirts, there was a guite significant growth. And most of this growth can be explained by workers from Baixada Fluminense, which, during this period, varied by 70%. While in the northern and southern peripheries there was a variation of 34% and 45%, respectively. According to Jannuzzi and Montagner (2020), income transfer policies (such as Bolsa Família) and social security programs, significantly impacted local commerce, resulting in the generation of jobs in small municipalities and on the outskirts. For the authors, these policies made it possible to open small businesses that "absorbed" the local workforce. Complementing these data, we analyzed the proportion of workers who carried out commuting movements in RMRJ. This information is present in Table 4 and shows that even with the increase in people residing in the same municipality where they work and of those who carried out commuting, the periphery was the only area that showed a drop, in relative terms, in the number of people who carried out this type of displacement.

Table 4. Ratio of people who commuted to those who lived in the same municipality and worked in 2000 and 2010. Source: microdata from the 2000 and 2010 demographic census – IBGE.

Territorial Unity	2000			2010			
	Same Municipality	Commuting	Ratio(*)	Same Municipality	Commuting	Ratio(*)	
ERJ	4.697.340	857.077	18,2	5.878.861	1.219.499	20,7	
RMRJ	3.436.301	736.996	21,4	4.262.644	999.129	23,4	
Rio de Janeiro	2.312.401	34.923	1,5	2.837.383	71.960	2,5	
Niterói	141.774	53.898	38,0	162.688	69.017	42,4	
Periferia	809.346	556.207	68,7	1.262.573	858.152	68,0	
Baixada Fluminense	470.464	371.066	78,9	800.520	600.810	75,1	
Periferia Norte	280.304	168.754	60,2	377.030	230.242	61,1	
Periferia Sul	58.396	16.387	28,1	85.023	27.100	31,9	

^(*) Ratio = Commuting / Same Municipality

It is worth highlighting that in 2000 and 2010 jobs in the state of Rio de Janeiro continued to be concentrated in the RMRJ. It is observable that the ratio in 2010 has increased when compared to the 2000s in all areas or territorial units, except in the periphery, which showed a slight drop from 68.7% to 68%. This drop can be explained based on the dynamics presented by Baixada Fluminense, as a workplace, with a relative decrease in this percentage, going from 78.9% in 2000 to 75.1% in 2010. This occurred at the same time as the other peripheral areas showed small increases in this indicator. It is also important to call attention to the significant growth of people who commuted and lived in the state capital. In one decade, this contingent more than doubled; thus, indicating an increase in travel from the center of RMRJ.

The periphery has stood out as a place of work for the popular, middle and dominant classes, while displacements towards the core were gradually reducing its ability to attract people on a daily basis. Among these new functions of the metropolitan core is the concentration on activities linked to management and services, while industrial activities are relocated to other points, both RMRJ and in the inner areas of the state. Thus, the reduction, even if subtle, of these displacements towards the nucleus does not mean a loss of strength for the metropolis, but rather the fact that a change could be taking place in its role as a metropolitan nucleus, in the same way that changes could be taking place on the outskirts as a place of work.

In this way, a study of this process was carried out with social stratification based on social classes as the investigative horizon. The data collected shows what was already expected, that is, in all areas of RMRJ the largest class is the popular one, followed by the middle class and finally the dominant one. However, the dominant class stratum was the only one that grew between 2000 and 2010 among workers who did and did not commute, as shown in Table 5.

Table 5 brings evidences that only the dominant class has increased in percentage figures between 2000 and 2010 throughout the state, including in the periphery. It is still possible to see that, in this class, there was also an increase in the percentages of people who carried out commuting movement. That said, it is also indicated that in 2000 the ratio between people who did and did not commute in the periphery was 54% and in 2010 this same ratio was approximately 75%. It is noteworthy that the dominant class is made up of people in management occupations in the public and private sectors, large employers and professionals with higher educational level.

Table 5. Class structure of territorial units in Rio de Janeiro for workers who lived in the same municipality they work and who commuted between 2000 and 2010. Source: microdata from the 2000 and 2010 demographic census – IBGE.

Territorial Unity	Class	2000				2010			
		Same Municipality	%	Commuting	%	Same Municipality	%	Commuting	%
ERJ	TOTAL	4.641.930	100,0	846.974	100,0	5.386.001	100,0	1.117.445	100,0
	Popular	2.909.858	62,7	525.849	62,1	3.275.567	60,8	634.514	56,8
	Middle	1.243.215	26,8	254.514	30,0	1.344.822	25,0	332.553	29,8
	Dominant	488.857	10,5	66.611	7,9	765.612	14,2	150.378	13,5
RMRJ	TOTAL	3.395.902	100,0	728.059	100,0	3.891.050	100,0	917.723	100,0
	Popular	2.000.740	58,9	456.821	62,7	2.239.334	57,6	526.539	57,4
	Middle	986.308	29,0	217.104	29,8	1.036.400	26,6	273.103	29,8
	Dominant	408.854	12,0	54.134	7,4	615.316	15,8	118.081	12,9
Rio de Janeiro	TOTAL	2.284.069	100,0	34.140	100,0	2.587.692	100,0	65.157	100,0
	Popular	1.202.553	52,6	8.803	25,8	1.330.084	51,4	18.340	28,1
	Middle	748.123	32,8	15.477	45,3	766.052	29,6	23.457	36,0
	Dominant	333.393	14,6	9.860	28,9	491.556	19,0	23.361	35,9
Niterói	TOTAL	139.978	100,0	53.040	100,0	147.746	100,0	61.159	100,0
	Popular	71.430	51,0	10.790	20,3	71.862	48,6	8.323	13,6
	Middle	42.132	30,1	24.342	45,9	40.593	27,5	23.734	38,8
	Dominant	26.416	18,9	17.908	33,8	35.291	23,9	29.102	47,6
Periphery	TOTAL	971.854	100,0	640.880	100,0	1.155.612	100,0	791.407	100,0
	Popular	726.756	74,8	437.230	68,2	837.388	72,5	499.877	63,2
	Middle	196.054	20,2	177.284	27,7	229.755	19,9	225.912	28,5
	Dominant	49.044	5,0	26.366	4,1	88.469	7,7	65.618	8,3

In absolute terms, commuting grew significantly between 2000 and 2010, having presented variation by just over 35% in that decade, reaching almost one million people in 2010. This process did not occur uniformly throughout the RMRJ. In the city of Rio de Janeiro, the number of people who commuted more than doubled during this period. Even though in the general scenary the data from Rio de Janeiro are not so expressive, representing just over 7% of the total of these trips, this information shows an important dynamic of work in the RMRJ, since these are trips that go towards Niterói and the outskirts.

Commuting in the state of Rio de Janeiro reveals a metropolitan character, since more than 85% of this movement occurred in RMRJ in 2000. In 2010, there was a small drop in this percentage, but in RMRJ more than 80% of these displacements still occurred. It is worth remembering that most of the jobs in the state of Rio de Janeiro are still concentrated in RMRJ and more than 70% of the state's workers lived in RMRJ in 2000 and 2010.

Note that, the intensification of commuting occurred mainly in the dominant class, with emphasis on the periphery – the area that showed the greatest growth in this decade. Furthermore, it is interesting to observe that Niterói showed a reduction in absolute numbers regarding the popular and middle social classes, even among those who lived and worked in that municipality, except for the dominant class.

Table 5 also shows that the intensification of commuting movements among people who lived in the state capital occurred, mainly, among the popular and dominant classes. This result is quite different from that observed in other areas, since the middle class and the dominant class were the ones that showed the greatest variation in this decade, except in Niterói.

The changes in the classes profiles that move around within the RMRJ highlight the transformations in the social structure. It can be seen that the dominant classes, made up of large employers, public and private sector administrators and higher education professionals, were those that showed the greatest intensification of commuting movements. In this sense, the commuting flows point to the areas in which this type of worker was being most demanded, not randomly, but in order to guarantee the dynamics of capitalism reproduction on a metropolitan scale.

The middle class has also revealed an intensification in their commuting flows in the RMRJ. This stratum made up of technical professionals, office workers, health, education and security workers, among others, shows a class of medium-paid workers in a very visible social space on the outskirts and in poorer areas of the metropolis. Activities linked to commerce and services are highly demanded by the core of metropolitan regions in the new phase of the metropolization process of urban space.

The popular class, made up of people from the lowest social strata, working as street vendors, domestic workers, agricultural workers and non- specialized service providers, among others, have maintained or even reduced their commuting in percentage figures. Thus, there is a double process: one indicating increase in the number of employed people in the dominant class throughout RMRJ and, another with greater increases in commuting and a small reduction in the popular class in percentage terms, but with an increase in people working and living in the same domicile. It becomes clear that the dominant classes have more possibilities

to look for jobs throughout RMRJ, that is, they can move to more municipalities. It also becomes clear that the popular class has been "absorbed" by the local economic dynamics, mainly as a result of the impacts of social policies (JANNUZZI; MONTAGNER, 2020).

Final Considerations

The objective of this article was to investigate class differences in commuting movements in RMRJ. For this purpose, we debate the concept of social structure as a class discussion. In this process, we evidenced that different traditions of sociological thought present different opinions on this topic. According to the Marxist tradition, social class is the analytical key to understanding the social structure of society and its understanding occurs through class conflict. For Weberians, the social structure is three-dimensional, consisting of class, status groups and parties. And for those who have the French sociologist Pierre Bourdieu as a reference, this analysis occurs through the social space, which involves two aspects: the economic and the symbolic.

To analyze the social structure, we chose to approach social stratification through a socio-occupational segmentation presented in several OM studies and which is inspired by the social space proposed by Pierre Bourdieu. As a result, three classes are presented in this thesis: the popular class, the middle class and the dominant class. Although no change in class hierarchies has been observed through this stratification, we were able to show that the dominant class grew in all municipalities in RMRJ. This growth is mainly explained by the large volume of employed people with higher educational level.

Based on this socio-occupational stratification, we were able to analyze the profile of people who carried out commuting movements in the three classes under study. As results, we demonstrate that, throughout RMRJ the popular class maintained and even reduced the volume of commuting movements in some subdivisions of RMRJ. However, in the dominant class there was a significant increase in employed people and an increase in people who carry out this type of movement.

On this wize, we can say that there is a double process, an increase in people from the popular class residing and working in the same municipality at the same time that the dominant class intensifies commuting movements. This result indicates that the dominant class has more possibilities to look for jobs throughout RMRJ. Finally, other data remains open, such as the flow of these movements through the RMRJ, what are the main destinations and the starting point of these people.

References

- AARANHA, V. Mobilidade pendular na Metrópole Paulista. São Paulo Perspectiva, v. 19, n. 4, 2005. P. 96 109.
- BRANCO, M. L. C.; FIRKOWSKI, O. L.; MOURA, R. Movimento pendular: abordagem teórica e reflexões sobre o uso do indicador. *In*: XI Encontro Nacional da ANPUR, 2005, Salvador. **Anais do XI Encontro Nacional da ANPUR**, 2005. p. 1-19.
- BOURDIEU, P. A distinção: crítica social do julgamento. São Paulo: Edusp; Porto Alegre: Zouk, 2008.
- BOURDIEU, P. Capital simbólico e classes sociais. **Revistas Novos Estudos**, v. 32, n. 2, 2013. p. 105-115
- BREEN, R. Fundamentos de uma análise de classe neoweberiana. *In*: WRIGHT, E. (Org.). **Análise de classes**: abordagens. Rio de Janeiro: Editora Vozes, 2015. p. 16-65.
- BRITO, F.; Souza, J. de. Expansão Urbana nas Grandes Metrópoles: o significado das migrações intrametropolitanas e da mobilidade pendular na reprodução da pobreza. São Paulo em Perspectiva, v.19, n. 4, 2005.
- GAUDEMAR, J. P. **Mobilidade do trabalho e acumulação do capital**. Lisboa: Editorial Estampa, 1977.
- IASI, M. Do grupo à classe. *In*: IASI, M. **As metamorfoses da consciência de classe**: o PT entre a negação e o consentimento. São Paulo: Editora Expressão Popular, 2008. P. 313 354
- IBGE. **Documentação do Censo Demográfico 2000**. Rio de Janeiro. 2000
- IBGE. Microdados do Censo Demográfico 2000. Rio de Janeiro. 2000

- IBGE. **Documentação do Censo Demográfico 2010**. Rio de Janeiro. 2010
- IBGE. Microdados do Censo Demográfico 2010. Rio de Janeiro. 2010
- LAGO, L. O mercado de trabalho na metrópole do Rio de Janeiro: a "periferia" que virou "centro". *In*: Encontro Nacional de Estudos Populacionais, 16, **Anais**, 2008
- LAGO, L,; MAMMARELA, R. Da hierarquia de classes à organização social do espaço intraurbano: um olhar comparativo sobre as grandes metrópoles brasileiras. **Cadernos Metrópole** (PUCSP), v. 12, p. 65-84, 2010.
- MARX, K.; ENGELS, F. As condições das transformações históricas. *In*: IANNI, Octávio. (Org.). **Teorias de estratificação social**: leituras sociológicas. São Paulo: Editora Nacional, 1973. p. 67-83.
- OJIMA, R.; MONTEIRO, F. F.; NASCIMENTO, T. C. L. Urbanização dispersa e mobilidade no contexto metropolitano de Natal: a dinâmica da população e a ampliação do espaço de vida. **Urbe. Revista Brasileira de Gestão Urbana**, v. 7, p. 9-20, 2015.
- POCHMANN, M. **Nova Classe Média?** O trabalho na base da pirâmide social. São Paulo: Editora Boitempo, 2012
- RIBEIRO, L. C. de Q.; LAGO, L. O espaço social das grandes metrópoles brasileiras: Rio de Janeiro, São Paulo e Belo Horizonte. Cadernos Metrópole (PUCSP), São Paulo, v. 4, n. julho-dez, 2000. p. 173-203
- RIBEIRO, L. C. de .; RIBEIRO, M. G.; COSTA, L. Estrutura social no Brasil metropolitano. *In*: RIBEIRO, M. G.; RIBEIRO, L. C. de Q.; COSTA, L. (Org.). **Estrutura social das metrópoles brasileiras**: análise da primeira década do século XXI. Rio de Janeiro: Editora Letra Capital, 2013. p. 19-40.

- RIBEIRO, M. G. Estrutura social e desigualdade de renda: uma comparação entre os municípios metropolitanos e os nãometropolitanos do Brasil entre 2000 e 2010. **Revista Brasileira de Estudos de População REBEP**, v. 32, p. 237-256, 2016.
- SALATA, A. R. Uma nova abordagem empirica para a hierarquia de status no Brasil. Revista Brasileira de Ciências Sociais (online), v. 31, p. 01, 2016.
- SCALON, C. **Mobilidade Social no Brasil**: padrões e tendências. Rio de Janeiro: Editora REVAN, 1999
- STAVENHAGEN, R. Estratificação social e estrutura de classe. *In*: VELHO, O. G.; PALMEIRA, M.; BERTELLI, A. (Org.). **Estrutura de classe e estratificação social**. Rio de Janeiro: Zahar Editores, 1971. p. 117-148.
- WEBER, M. Classe, status, partido. *In*: VELHO, O. G.; PALMEIRA, M.; BERTELLI, A. (Org.). **Estrutura de classe e estratificação social**. Rio de Janeiro: Zahar Editores, 1971. p. 57-76.
- WEININGER, E. Fundamentos de uma análise de classe de Pierre Bourdieu. *In*: WRIGHT, E. (Org.). **Análise de classes: abordagens**. Rio de Janeiro: Editora Vozes, 2015. p. 97-132.
- WRIGHT, E. **Análise de classes**: abordagens, Rio de Janeiro: Editora Vozes, 2015.

Risk, disaster and production of space in the Doce River basin

Considerations based on the collapse of a tailings dam¹

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Introduction

Gladismar was in a square when he heard the noise of mud destroying everything. He ran home as fast as he could, in search of his family. Then, he tried to find Mauricélio, but both got lost in the chaos. While escaping, he saw Marcolino fall from the pickup and thought, "Do I save him or save myself?" Despite all the widespread destruction, fortunately, both of them are still alive. Teresinha, who initially thought it was just another dust storm, soon realized that the houses in the square were all collapsing. She ran to her house as fast as she could, and before fleeing into the woods, she rescued her phone, grabbed a small bag and an umbrella, and remembered to say goodbye to her mother's bedroom one last time.

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The commotion coming from the square also served to alert Sônia. If there were no sirens, at least people's panic and rush made her realize they should leave right away. Unfortunately, she realized that there was no more time to run, because mud had invaded the garage. The situation required her to stay strong, zig-zagging through the sticky mud, and overcoming the water current alongside her son and nephew. In the end, the three of them also arrived safely at a stable point.

The previous paragraph was written based on narrative fragments from survivors of the destruction of Bento Rodrigues, a district in the municipality of Mariana, which were published in the first edition of Sirene magazine (MARQUES et al., 2015, p.5). Created aiming at open circulation of information and strengthening the demands of affected people, both the title of the magazine and the first published memory records chosen to begin this essay allude to despair, the struggle to survive and the lack of any warning or prior communication about the collapse of the mining tailings dam that created the biggest socio-environmental disaster in the country (LACTEC, 2020b, p. 38).

The collapse of the Fundão dam, managed by Samarco Mineração S.A. (Samarco), a privately held company controlled by the mining companies BHP Billiton Brasil Ltda. (BHP) and Vale S.A. (Vale), serves as the starting point for the discussions in this article. From the perspective of capitalist production of space, the primary objective is to examine the connections between disaster events and the social production of risks. To achieve this, this text delves into the contradictions of a disaster that devastated both the urban and rural reality of municipalities within the hydrographic basin of the Doce River. Besides, this research seeks to discuss some concepts and interpretations based on these contradictions.

In this path, the first section deals with the characteristics of the disaster sometimes referred to as the Samarco/Vale/BHP disaster-crime. The aim of this part of the text is to succinctly outline the magnitude of its consequences, particularly concerning the volume and composition of the tailings and the implications for the lives of the affected people. Following that, the antecedents of the dam's collapse are explored, in an attempt to uncover the processes and conflicts that led to the disaster. This is an endeavor to comprehend and discuss the social production of a risk-prone dam. Lastly, the concept of disaster is examined in order to criticize the modern notion of progress.

The article is the initial trajectory of research being conducted for the doctoral program in Planning and Territorial Management at UFABC [Federal University of ABC - São Paulo]. Therefore, it represents a contribution primarily based on a critical review of the relevant literature and document analysis, aiming to establish connections between the debate on the social production of risks and urban studies. It is worth noting, however, that the knowledge about the Samarco/Vale/BHP disaster involves participation in a collective research project conducted by the Getúlio Vargas Foundation between the years 2019 and 2022. With the goal of assessing the socio-economic damages caused throughout the Doce River basin, this initiative allowed involvement and execution of bibliographic and document surveys, interviews, field research, as well as participation in collective and interdisciplinary discussions on the case.

The Collapse of the Fundão Dam

The collapse of the Fundão Dam, located in Mariana, state of Minas Gerais, occurred on November 5, 2015. As widely known, from this moment onwards, one of the world's largest technological disasters involving mining tailings became a reality. It is estimated that this event released approximately 44 million cubic meters of tailings sludge into the Doce River basin (LACTEC, 2020b, p. 222).

Starting from the Gualaxo do Norte River, which was connected to the dam, this immense volume of liquefied solid waste followed the Carmo River and, through it, reached the Doce River shortly before colliding with the Risoleta Neves Hydroelectric Plant, commonly known as the Candonga Hydroelectric Plant. The described section is highlighted in Figure-1, which is a map created during the Territorial Caravan of the Doce River Basin, conducted in April 2016 by the Associação dos Geógrafos Brasileiros [Brazilian Association of Geographers] (BARCELOS et al., 2017).

The area in light yellow, in the map, refers to the Doce river basin, with the representation of the main river course and some tributary rivers and streams. The watercourses affected by the waste discharge are shown with a brown line. Although not all affected municipalities are named in Figure-1, it contains other important elements to understand and discuss the consequences of the collapse of the Fundão dam, such as the Samarco mining complex and its pipeline, the Doce river hydroelectric plants, the reference point from which the tailings plume spreads into the Atlantic Ocean, indigenous lands that were affected, state parks and environmental protection areas.

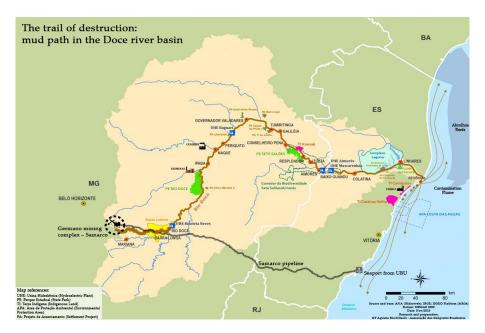


Figure 1. Graphic map of the trail of destruction. Source: (BARCELOS, et al., 2017, p. 227 adapted into English by Ana Luiza Vieira Gonçalves).

Due to the characteristics and consequences of what happened, the tailings path between the dam and the Risoleta Neves/Candonga HPP became known in the affected territories as the "mud path" and is represented in Figure-1 with a thicker brown line. Until they collided with the plant, waves of industrial mud caused by the rupture reached, on average, 9 meters in height, with peaks of up to 20 meters, as was seen in the community of Bento Rodrigues, the first rural district destroyed by the disaster (LACTEC, 2019a, p. 41-42). In this context, the physical shock with this first hydroelectric plant was able to partially reduce the strength of the released material, a situation that also involved the deposition of part of the waste in the lake created to dam water.

The situation triggered in Candonga by the shock with the waste was and still is the target of numerous conflicts. Located between the municipalities of Santa Cruz do Escalvado and Rio Doce, both in Minas Gerais, and managed by Consórcio Candonga, the structure is owned by the companies Aliança Energia and Vale, the first being a partnership between Cemig and Vale itself, which holds 55% of the shares. In other words, this equipment is mainly managed by one of the companies that also controlled Samarco, responsible for the Fundão dam. Due to the plant's shutdown since 2015, Vale received more than 700 million reais for its shutdown via the "Mecanismo de Realocação de Energia" [Energy Reallocation Mechanism], a benefit only interrupted by a court decision in September 2021 (RODRIGUES, 2022).

Another issue related to the case concerns disputes over the restoration of the power plant's operation and the cleaning of its reservoir. In addition to interrupting the energy production, studies on tailings management indicated that by 2019, approximately 9 million cubic meters of the material still remained in the lake (RAMBOLL, 2019). The analyses suggested that removing the waste from the power plant's facilities would require over 800,000 18-ton dump trucks. Furthermore, as of the date of this research, the only authorized tailings disposal site for the reparations efforts was Fazenda Floresta, a property that was affected and subsequently expropriated for this purpose. Nevertheless, even four years after the dam collapse, there were still unresolved issues regarding the environmental licensing for its full operation.

The consequences of this situation remain current. On the one hand, municipalities and committees of affected people fight to ensure that the hydroelectric plant only returns to operation after

the removal of the waste, a position justified by fears regarding the structure and new cycles of contamination due to the increase in flow (BRASIL, 2022, p. 1 -6). On the other hand, there is pressure from the companies that control the plant and from Samarco itself to resume production activities only with the partial removal of the deposited material. In line with this pressure, studies carried out by AECON with a focus on resuming the operation of the hydroelectric plant suggested filling the plant's reservoir in December 2022 so that the work already done is not lost. This proposal was reiterated by a judicial decision and is waiting for new manifestations (BRASIL, 2022, p. 8-16).

Far beyond this path, as shown in Map-1, the volume of tailings traveled approximately 650 kilometers during 17 days. Starting from Mariana, Minas Gerais, and extending to the mouth of the Doce River, in Espírito Santo, tailings of iron ore extraction and processing spread across a vast territory. Portions of this material were deposited in the beds of the Gualaxo do Norte, Carmo, and Doce rivers, in their respective floodplain areas and islands, entering into lacustrine systems and leading to the backflow of various streams. Additionally, there are potential impacts of the tailings on the groundwater table and, as a result, on numerous artesian wells used for both livestock watering and human consumption.

Considering the geomorphological conformation of the river valleys and the presence of hydroelectric plants (Risoleta Neves/Candonga, Baguari, Aimorés, and Mascarenhas), there is a significant variation in the extent of the tailings' coverage on the surface of the affected territory. It is estimated that the area of passage and deposition involves approximately 28,000 hectares, with variations of up to 1,000 meters in length. This means a

broader contact surface than the riverbeds or even the floodplain areas. Furthermore, without delving into the complexities of how the tailings dispersed into the ocean, it is essential to note that upon reaching the coastal region, the mining tailings sludge created a visible plume over the ocean. In its milder concentration, this plume traveled up to 93 kilometers to the north (reaching São Mateus, Espírito Santo), and 325 kilometers to the south (reaching Campos dos Goytacazes, Rio de Janeiro) (LACTEC, 2020b, 258).

Describing the composition of the material stored in the Fundão dam, especially with regard to its toxic and contaminating conditions, requires going through studies and reports that specify chemical and organic elements. However, far beyond the challenges implied by the necessary interdisciplinarity of the object, including contact with the field of natural sciences, the discussion faces a true "war of reports". The term used recurrently in public speeches by Dulce Maria Pereira, professor at the Federal University of Ouro Preto (UFOP) and leading researcher on the impacts of the disaster on the health of the affected population, indicates disputes around the dangers and concrete threats to life, difficulties for the social recognition of losses and damages caused by the dam rupture and corporate strategies for not creating legal precedents for reparation.

Studies have already confirmed that the passage and deposition of waste produced a vast chain of contamination risk, poisoning and illness due to the discharge of chemical and biological elements with a high level of danger (AMBIOS, 2019; LACTEC, 2019a; 2020a; 2020b), the so-called potentially toxic elements (PTEs). Although "the results of the reports proved to be quite controversial, not allowing a conclusion about the real condition of

the river" (GONÇALVES, PINTO and WANDERLEY, 2016, p. 153), after the waste discharge, tons of arsenic, mercury and lead were identified, in addition to phenols, in soil and water, all with potentially harmful effects and chronic toxicity (LACTEC, [s.d.]).

Regarding health, research carried out using public databases shows the increase in certain diseases in the affected municipalities, with emphasis on respiratory and skin diseases, various types of cancer, mental disorders and various forms of violence (FGV, 2021a). In addition, investigations at municipal health departments showed different levels of overload involving increased demand for clinical and laboratory tests, as well as specialized medical care, such as psychologists, psychiatrists and dermatologists (FGV, 2020a).

It is essential to consider the future implications of this high-risk contamination context in the affected territories. The floods that occurred in the Doce River in 2020 highlighted that the extent of damage and destruction caused by the tailings intensifies in the face of cyclic climate behavior, although relatively atypical, induced by increased precipitation. On one hand, situations of flooding and inundation were exacerbated by the siltation caused by the deposition of tailings. On the other hand, heavy rains stirred up a portion of the sediment rich in EPTs from the riverbeds, leading to new cycles of tailings deposition. As a result, in addition to the increase of environmental and socioeconomic damage, the 2020 floods made it clear that the risk situation is not static, and the spread of tailings to new locations remains a reality that is likely to worsen in the context of climate emergencies (LACTEC, 2020a).

In this context, it is essential to draw attention to violence spread in the lives of people who were affected. If the destruction caused takes different forms, loss of possession prevails over this vast territory, involving land, work and ways of life. Given the countless particularities experienced by so many groups and communities, it would be impossible to achieve a synthesis of this scenario. However, before dealing with processes that precede the dam rupture, in search of dynamics related to the social production of a risk of this magnitude, we highlight two of its consequences: the overdetermination of money in the daily lives of the affected people and the reiteration of the disaster itself through the repair process.

Throughout all the affected territory, traces of destruction of trading markets and forms of access to food, medicine, and other consumer goods not entirely mediated by money can be identified. Among the primary consequences of the disaster in this new reality are the aforementioned contamination risks of water, agricultural areas and backyards, as well as fish mortality and concerns about heavy metal bioaccumulation in the remaining fish species, unavailability of sand, gravel, and other materials previously used for self-construction of homes. These difficulties are increased due to the challenges of maintaining open-air markets and exchange circuits among local communities that used to exist. In all of these cases, apart from the income derived from various types of work, including often informal "side jobs," the family budget relied significantly on access to certain products not mediated by money. This aspect is understood by the IBGE (Brazilian Institute of Geography and Statistics) as non-monetary acquisition, because it involves donations, trading, withdrawals from businesses, and homemade production.

Due to the dam rupture, restrictions on this access were administered by imposing money as the only way to buy essential goods, especially through small and insufficient reparation programs, such as the "Auxílio Financeiro Emergencial (AFE) [Emergency Financial Aid] and the "Programa de Indenização Mediada" (PIM) [Mediated Indemnity Program]. It is not being stated that this mediation did not exist before the serious crisis situation began. It is understood that the subjection affects populations that already found it difficult to reproduce. As Sanders Filho (2019) discusses, if the transformations brought by the collapse of the Fundão dam imposed new layers of violence, in Espírito Santo, one of the fishing communities that was affected and began to demand reparation actions and programs was already experiencing processes of expropriation related to other economic dynamics.

In contexts like that, which are widespread throughout the Doce river basin, the countless prohibitions on the use and appropriation of what can be fished and "collected" at sea, in rivers and in floodplain lands are added to the intense over determination of money as unique and definitive means for fulfilling basic social needs. Considering food issue as a fundamental aspect of this new condition (RIBEIRO JR., CRUZ, A. and ANTIPON, 2021), it is possible to observe that as money became the only mediation to access food for a large part of the affected people, there was severe worsening in their quality of food, deepening the situation of poverty and even experiencing new scenarios of hunger, previously reduced by the possibilities of cultivation in small family farms and backyards or by direct access to fish for consumption. These aspects involve a deterioration that is not only material but symbolic as well, in the social reproduction of the daily lives of the affected people (FGV, 2020b; 2021c; 2021d).

While the goal of this article is to address risk production, it's worth highlighting that one way to understand the preceding process involves Seabra's (2004) reflections on the generalization of urban living. Based on the author's work, it's possible to relate the transformation process triggered by the collapse of the Fundão Dam with the meanings of urbanization itself. This doesn't necessarily mean there is an urbanization of life, although this did occur in some cases, as exemplified by the profound dispossession involved in the destruction and resettlement of Bento Rodrigues (SILVA, 2022).

If we consider that the production of urban space becomes the primary driving force for capitalist social reproduction (LEFEBVRE, 1973), and if the general mobility of labor in support of industrial development is at the root of a way of life that becomes generalized due to renewed and highly monetized social needs (SEABRA, 2004), it can be argued that the transformations caused by the disaster abruptly fulfill some of the social determinations historically demanded and imposed by the production of urban space.

In this regard, it's interesting to consider that, from a capitalist perspective, the collapse of the Fundão Dam seems to put into effect aspects of urbanization, even when there is no actual production of the urban, with a particular emphasis on the complete monetization of the experience of social reproduction. This is because the abrupt and drastic deterioration of the material conditions involved in the reproduction of the lives of those affected simultaneously intensifies the circulation of money and fosters circuits of indebtedness, including through microcredit.

The second consequence mentioned concerns the reproduction of the disaster through the repair process. Regarding this aspect, it is worth highlighting that shortly after the rupture, Samarco, Vale and BHP signed an agreement with the Union and created a non-profit entity to carry out reparatory actions and programs. As a result, the Renova Foundation began operating the repair in 2016 as a social entity controlled by the companies that caused the disaster. This conformation made violating companies responsible for recognizing damages, for compensation parameters and for socio-economic and environmental reparation actions and programs.

In other words, based on a set of agreements that later includes the Federal Public Ministry, the same companies that caused the described destruction become the agent promoting the repair. In addition to operating in favor of corporate interests, such as the non-recognition of damages to reduce repair costs and the non-creation of legal precedents based on the case, through this new legal persona, Samarco, Vale and BHP disappear from the scene. Among the countless gains of this configuration, the creation of the Renova Foundation allowed companies to detach themselves from the conflicts caused by reparations in different territories.

It would be impossible to summarize contradictions and critical implications of this way of conducting an unachievable reparation. There is extensive documentation on the case, in addition to technical studies and academic research. In different ways and with different approaches, research shows all kinds of disrespect, brutality, omission and violence that, in general, have served to "renew" the disaster over the years. Among the many contributions in this regard, the following considerations stand out about the damage

matrix created by the Renova Foundation to operate compensation programs: (i) lack of transparency and access to information throughout the construction process; (ii) insufficient recognition of material and non-material damage caused by the disaster; (iii) insignificant social participation in the preparation of this matrix; (iv) lack of updating of eligibility criteria to access compensation for recognized damages; (v) difficult correlation between identified damage and ongoing repair programs; (vi) distance from programs aimed at indigenous peoples and traditional communities; and, in general, (vii) there is a restrictive interpretation of the damages caused in relation to the agreements signed with the Union (FGV, 2019).

There are many other contributions that highlight the violative nature of the Renova Foundation's actions, still, the list would be insufficient to demonstrate all the social suffering generated by this process. Based on this concept, which seeks to qualify sensitive aspects of a social phenomenon that results from experiences of trauma and/or disorder caused by political, economic and/or institutional power (TEIXEIRA, 2014), it can be considered that reparation perpetuates an experience that reproduces suffering as a shared phenomenon. As stated by Zhouri et al. (2016, p. 38), "[...] the institutional treatment given to affected people constitutes the main factor capable of engendering the social suffering of them". In this sense, in addition to the objective ban on reparatory measures, the non-recognition of affected people, the lack of communication and information, as well as other actions and omissions by companies and the Renova Foundation reiterate daily rituals of sacrifice, exhaustion and sadness of people who fight to survive the ruins.

The social production of a dam at risk

If the rough and abrupt pace of the transformations summarized in the previous section is caused by the collapse of a dam, subsequently it is interesting to discuss two of its antecedents. First, it should be noted that the Fundão dam was part of the Germano Complex, an industrial mining plant focused on the extraction and processing of iron in two mines located in Mariana/MG, Alegria Norte and Sul. Unlike hydroelectric plants, in which the dam aims to contain water to boost energy production, in mining extractivism these structures are built to store what is called "tailings", that is, to allocate "leftovers" from production.

From an institutional perspective, waste from ore extraction is covered by the "Política Nacional de Resíduos Sólidos" [National Solid Waste Policy]. Under this regulation, the majority of waste produced in this area is classified as non-hazardous material, although its evaluation is recommended when it comes to management actions. To get an idea of what this means, of the almost 239 million tons of waste produced by the extraction and treatment of minerals in 2021, it was computed in the IBAMA panel that 99.92% (238,727,489.28 tons) were non-hazardous waste and only 0.08% (201,308.90 tons) consisted of hazardous waste.

Considering these facts, it is more interesting to analyze the Fundão case. In this dam, the material stored as tailings was produced in a process called flotation, which aimed to remove mineral components extracted along with iron, such as silica, so that the final product would meet the compositions defined by the steel industry. To achieve this, in addition to the removed ore

components, various types of chemical reagents were added in a process that generated approximately 17 million tons of sand waste and 5 million tons of clay waste per year (LACTEC, 2020b, p. 131-135).

As previously described, the material released by the collapse of the Fundão Dam contained potentially toxic elements in its composition. This changes the magnitude of the destruction caused, including both the ruins created by the impact of the tailings waves and the contamination spread over water, soil, and biodiversity. In contrast to the classification of most of the tailings deposited in Fundão as non-hazardous/non-inert, biochemical analyses conducted after the collapse identified numerous substances considered potentially toxic in significant quantities, thus, sufficient to classify the released material as hazardous (LACTEC, 2020b, p. 131-135).

From a chemical perspective, the presence of arsenic, antimony, chromium, lead, nickel, barium, cadmium, selenium, mercury, and silver in various proportions would already be sufficient to confer hazardousness to the tailings (LACTEC, 2020b, p. 157-162). Additionally, the analysis of the organic composition of the tailings sludge also identified the presence of phenols, a highly dangerous pollutant due to its toxicity and environmental persistence (LACTEC, 2020b, p. 163-169).

Thus, we point out the inaccuracies, the uncertainty and the inability to previously measure what was evolving in this structure focused on the industrial extraction of iron. Assumed by risk, threat and danger analyses, the situation produced by the collapse of the Fundão dam seems to reveal the impossibilities of observation and

prediction. For this reason, instead of drawing attention to the lack of research, regulations, inspection and monitoring by the State, which would also be true, in this article, elements of the social theory developed by Ulrich Beck are recovered (2010, p. 35), for whom "risk findings are based on mathematical possibilities and social interests, even and precisely when they have technical certainty".

While the monopoly of scientific and social rationality suggests that risks are quantifiable, accidents are predictable, and sustained technological development can be managed using highly hazardous substances and structures, what is observed, on the contrary, is an overproduction of risks whose scope seems to be constantly expanding (BECK, 2010, p. 34-36). This consideration is evident in the analyzed case, as until the dam's collapse, the waste stored in the Fundão Dam was classified as non-hazardous/non-inert, however, this classification was completely changed based on studies conducted on the material released by the collapse.

Defined as "latent side effect" (BECK, 2010, p. 41-42), risk becomes central to the analysis. The problem tensions the notion of reject or residue, as it historicizes its condition, which is not related to characteristics inherent to the materials. As Beck (2010, p 40) points out, risks are initially goods of waste, whose non-existence is assumed until proven otherwise. In the case of mining waste, there are several initiatives, including law projects (AGÊNCIA SENADO, 2019), aimed at transforming it into merchandise for new sectors, such as civil construction.

However, despite recognizing differences in subjection to risk and in the capabilities to deal with the situations produced by it, Beck (2010, p. 41-42) reinforces the universalism and indeterminacy

of risks in relation to social cleavages. For the author, the current moment of social reproduction exacerbates risks and threats, which would imply the erasure of class relations in the face of the new scale of destruction. In contrast to this perspective, our research interest focuses on the social stratifications generated by the overproduction of risks and threats. From this point of view, it is considered that there is an accumulation of technological risks in rural and urban peripheries and that this accumulation can be understood in terms of the production of space.

Class distinctions include those of race and gender, which together make up a process of vulnerability in multiple dimensions, including those related to people's health and physical integrity. In the event of Fundão, this circumstance is more than evident, especially when we incorporate the notion of environmental racism into the analysis (ACSELRAD; 2002). From a racialized perspective, it is noted that the definition of the location of the dam installation intensively made rural and urban communities, mostly black and poor, vulnerable, just as it is possible to recognize the presence of racial discrimination in different actions and programs of the process of ongoing repair (FGV,2021b).

Unlike what Beck (2010) states, it is considered that the dynamics of the overproduction of risks and threats have a locus of concentration in urban and rural outskirts, even if sometimes they do not refer only to them. This criticism is also supported by Acselrad (2002) and Teixeira (2014). However, to discuss the social production of risk, as well as the waste itself, Beck (2011) appears as an open path to reflect on the fissures between scientific rationality and the destructive power inherent to technical development.

Returning to Fundão collapse, we move on to the second point related to the production of a dam at risk. To this end, it is necessary to point out that the infrastructure responsible for the iron ore tailings dam was made up of two dikes licensed between 2008 and 2009, and aimed to supply the exhaustion of storage capacities of two other buildings of the same type, the Germano I and Germano II dams. In view of this, it is necessary to consider that both its origin, as well as the terms of use and maintenance that precede its rupture, are related to a broader productive context, without which it is not possible to understand the case.

With support from research by Wanderley et al. (2016) and Milanez et al. (2016), the collapse of the Fundão dam can be related to the commodities boom that occurred between 2003 and 2013. The authors analyze corporate behaviors based on the financialized determinations of the international commodities market and, therefore, address the systematic production of risks that occur as disasters. According to Wanderley et al. (2016, p. 30-31), variations in the price of minerals on the international market interfere with the occurrence of disasters in the sector. Reinforcing this research, Milanez et al. (2016, p. 19-21) show that a characteristic of this market moment is the concentration of dam failures shortly after periods of high ore prices.

Starting with the commodities megacycle, it is observed that in the indicated period there was rampant increase in global imports and prices of goods produced in industrial extractivism, a context that rises the percentage of minerals in the country's exports from 5% to 14, 5%. With regard specifically to iron ore, it is necessary to consider that it accounted for more than 90% of these figures, an aspect that reinforces the connection of this process

with all strategies involving the Fundão dam, from the formulation of the project, through for the licensing, construction and operation of the dikes. Jointly, the two works cited use this discovery to analyze the production of risks that precede the collapse of Fundão, thus, establishing a link with the process of financialization. In other words, Wanderley et al. (2016) and Milanez et al. (2016) reinforce that the dynamics of financialized capital accumulation, as well as business strategies and corporate actions and behaviors subordinate to them, operate locally to the rupture of one of the mineral tailings dams.

The arguments contribute to relating the transformations in the dynamics of capital accumulation with the intensity of the social production of risks and threats, especially with regard to the overdetermination of finance over production (HARVEY, 2009; CHESNAIS, 2019). In order to understand the impact of this context on Samarco's behavior, it is necessary to consider, first, the complex web of investments and market and financial agents involved in its remuneration chain. This is because the owner of the dam is a joint venture controlled by shareholders BHP Billiton Brasil and Vale. In other words, the control and operation of the Fundão dam was carried out by two of the largest mining companies in the world. In 2014, a year before the collapse, Samarco was elected the best and second largest mining company in the country in an award promoted by Exame magazine. Besides, in that year the company had among its attributes for social recognition the Green Mine Award and the Findes/Senai Environment Award (SAMARCO, 2015).

According to Wanderley et al. (2016, p. 31), "The ownership and control arrangements of both groups [Vale and BHP] present fragmented and financialized shareholding structures, revealing a broad network of responsibility for the technological disaster at

Samarco/Vale/BHP". In this context, the authors show that the decision-making that preceded the rupture aimed to maintain shareholder remuneration rates, an aspect that at the time of falling ore prices could only be guaranteed by the scale-up of production. As a result of this perspective, the share focus was on increasing the company's production capabilities (37% increase in 2014) and on intensifying work and control over workers (260% increase in occupational accidents between 2011 and 2014), two operations that were developed along with the escalation of Samarco's absolute debt from 2009 onwards, an aspect that integrates the same economic rationality mentioned.

Such pressure on the results of industrial iron ore extraction was overdetermined by the imperative of high rates of financial return for shareholders and translated into an increase in net profits at the expense of debt, even in a scenario of recession for the sector (WANDERLEY et al., 2016). If, from the point of view of capital, the movement described appeared as gain and recognition, a trait that marks Samarco's annual reports before the collapse, in this article the focus is to draw attention to the determinations of this movement on the local process of production of goods, that is, its translation into the industrial mining plant, in the organization of work and, especially, in the production and management of waste, which also intensified in response to the same financialized overdeterminations of capital.

In addition to the inherent risks related to the chosen technology – raising dam –, the project to contain mining waste in the Fundão dikes required adequate drainage structures for the material produced. In this context, studies carried out shortly after the event drew attention by indicating that the dam collapse occurred

in a critical situation that involved circumstances of previous risk and threat on a smaller scale (MORGENSTERN, 2016). The first of these situations occurred shortly after the construction of the dike, still in 2009. It was a case of internal erosion directly related to failures in the construction of the drainage system (MORGENSTERN, 2016, p. 8). Subsequently, the inoperability of the drains required the construction of an intermediate dike, entitled 1A. Finally, among other relevant technical details, the report highlights that both the measures to recover from the incident caused in 2009 and the new projects and buildings aimed at the dam's containment capacity proved to be "structurally deficient" in relation to the mass of mining waste stored there, resulting in infiltrations and even the cracking of a supporting slope (MORGENSTERN, 2016, p. 9-18).

The sequence of occurrences precedes the collapse itself, which occurs on November 5, 2015. From this perspective, it is possible to read the "urgencies" and "delays" that prevail over the subsequent "drainage failures" based on the contributions of Wanderley et al. (2016) and Milanez et al. (2016). Instead of naturalizing the collapse of the dam over bodies and territories, the case can be interpreted within the movement of capital. In this point of view, the existence of a complex chain of personifications stands out, involving businesspeople, economists, engineers and lawyers who, when operating subjections of interest-bearing capital, act as an agent for a crime.

General notes following the occurrence of a disaster

So far, this article discussed the relationship between a particular disaster and the social production of risks and threats that precede its occurrence. Thus, although some interpretations were outlined for general phenomena and processes, the aim was to present the disaster caused by Samarco, Vale and BHP in the Doce river basin to establish connections between the social production of a dam at risk and its collapse. In order to complement the discussion, in this section our interest turns to the general movement of capital and products. So, from the perspective of the production of space in general and urbanization in particular, the analyzed case will be used to present and discuss two issues: tensions over the concept of disaster and the search for a categorical review on the notion of progress.

Initially, it is observed that when looking at the collapse of the Fundão dam, a concept of disaster that includes the social production of risk is assumed. From an institutional point of view, the concept of disaster is related to the document "Política Nacional de Proteção e Defesa Civil (BRASIL, 2016) [National Civil Protection and Defense Policy] and corresponds to the notion of "adverse, natural, technological or of human origin events, in a vulnerable scenario exposed to threat, causing human, material or environmental damage and consequent economic and social losses" (BRASIL, 2016, Annex VI). The definition supports the "Codificação Brasileira de Desastres" - COBRADE (BRASIL, 2016) [Brazilian Codification of Disasters], a classification system that involves intensity, evolution, periodicity and origin. Regarding to origin, an aspect of greatest interest for the proposed debate,

two primary causes stand out: (i) natural processes or phenomena, which constitute *natural disasters*; and (ii) technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, which designate *technological disasters*.

In contrast to the duality operated by the institutional field, we use the critique of the causal naturalness of disasters elaborated by Neil Smith (2020[2006]). In his analysis about the passage of Hurricane Katrina in New Orleans, United States of America, the author radically argues that natural factors do not give rise to risk and disaster situations. On the contrary, the same climate phenomenon may or may not trigger calamity situations due to the social production of socio-spatial vulnerabilities. In addition to drawing attention to *location* as a fundamental analytical element, the development of this statement connects the theme to the general context of the production of space and suggests a new approach to the concept of nature.

According to Smith (1988), industrial capitalism imposed a dual vision of nature, sometimes as universal – a totality in which human nature is inserted – sometimes as an externality – frontier for development and object of appropriation. Supported by a Marxist reading of the production of space, the author opposes this perspective and integrates the concept of nature with capitalist social reproduction. In his words,

The first question is not whether or to what extent nature is controlled; This is a question posed in the dichotomous language of first and second nature, of pre-capitalist dominion and non-dominance over nature. The question, in fact, is how we produce nature and who controls this production of nature. (SMITH, 1988, p. 104-105)

If nature itself is a social product, the distinctions that support the classification of disasters as natural or technological disappear. The approach changes and the emphasis of the debate becomes the interaction between socially produced risks and threats and the socio-spatial vulnerabilities shaped by the production of space. Furthermore, in this formulation, disasters are not thought of as punctual critical events circumscribed in time and space. On the contrary, the concept itself includes the conformation of risks and threats to a particular population.

There are also works in this direction in Brazilian literature. Although they assume the concept of *technological disaster*, many studies on the collapse of the Fundão dam extend the conceptual framework to cover the complexity involved. Whether to question the meaning of "human intention", problematizing the notions of mistake, negligence and flawed behavior in the face of economic logic (ZHOURI et. al., 2016); whether to recognize "inadequate corporate practices that intensify socio-environmental risks and state inaction regarding supervision and control" (MILANEZ et al., 2016, p. 35-36); a conceptual field is identified that is consolidated based on a critique of the notion of technological disaster as "the result of an adverse event".

According to these authors, the origin of occurrences of this type must be investigated based on a set of actions and decisions, both in the public and private spheres, as well as the accumulation dynamics that determine the production process. It is, therefore, a conceptual path that privileges the procedural nature of disasters, opposed to their understanding as an extraordinary event. New concepts can even be noted, such as *socio-technical disaster*, which aims to demarcate a radical denial of the term adverse event

and reinforce its procedural character (ZUCARELLI, 2018); *created disaster*, which understands its origin in social calculations that evaluate the cost of repairing the damage caused and consider them more economically viable than preventive measures (SOUZA and CARNEIRO, 2019); and *disaster-crime*, reinforcing accountability on the causative agent and strengthening the organizations and social movements of affected people (PENIDO, 2018).

the nature-society/technology Despite maintaining separation, the search for new nomenclatures seems to make explicit the desire to include aspects of the origin and future developments of this type of occurrence. In our view, this is an attempt to include in the concept the situations of risk and threat that precede or originate from these occurrences. Reinforcing the conceptualization of disaster as a process and product of economic and social dynamics, it is considered that this set of formulations greatly contributes to relating the theme to the expanded reproduction of capital. If the cited authors have different theoretical-methodological approaches, the result of their efforts reinforces that the meanings and dimensions of a disaster and its repair are due "not only to the actions of this or that local or federal administration, but to the functioning of the capitalist market in a broader perspective" (SMITH, 2020[2006]).

The second problematization concerns the necessary categorical criticism of notions of progress. The discussion in based on Horácio Aráoz (2020) due to the links that the author establishes between industrial mining extractivism, modernity and colonialism. To continue this debate, it is necessary to consider that the author understands modernity as "civilization of Capital", that is, a period historically determined by the nexuses of capitalist social

reproduction; refers to colonialism as "the factual plan of concrete social, economic, political and military practices and processes of appropriation of wealth and resources, of domination, exploitation and racial hierarchization of populations and territories" (ARÁOZ, 2020, p. 50); and considers colonial logic to be one of the civilizing pillars of modernity, therefore, of capitalism and the reason of the modern State (ARÁOZ, 2020, p. 113).

Based on this theory, Aráoz (2020, p. 94) suggests that the mineral extraction carried out by colonialism in the Americas caused a historical inflection that not only dynamized and integrated the world economy, but also "represented a decisive change in the conception of economic and place of the economy in the hierarchical order of social existence". The author also demonstrates through historical documentation how this experience boosted the development of metallurgy, including the mass production of weapons for European warfare. In this context, the extraction of silver in Potosí, Bolivia, is presented as an impulse for the technical-scientific development that led to the Industrial Revolution.

From a historical point of view, it is important to recognize that the technical impulse for mining exploration in Potosí occurred at the same time that English enclosures began, around 1550. In other words, according to Marx (1985), simultaneously with this colonial experience, peasants from different locations in Europe experienced an intense expropriation of land by extraeconomic means in conjunction with the promulgation of laws to combat vagrancy that aimed to subject the dispossessed peasant masses to the insurgent labor market, the so-called "bloody laws". Furthermore, it is important to recover that the objective of this

process, which involved the expansion of sheep farming on land previously occupied by peasants, was the production of wool for the increasing manufacturing in the urban centers of England.

Marx (1985) identified at that time the concrete terms of a primitive accumulation necessary for the development of large industry. A milestone in the transition from the European feudal regime to the society of capital, enclosures date back to the institution of modern private property and, in this sense, are at the origin of the inequality that support the production of goods and the exploitation of surplus value: the expropriation of means of production, a social determination that drove to work all those ones who were left having only their own labor power.

Based on Marx (1985), Aráoz (2020, p. 111) states that the colonial logic "evokes the origins of this history, of the civilizing myth of modernity". However, in this perspective, he suggests a new way of thinking about the relationship between colonialism and the development of the capitalist mode of production. If, reinforcing Marx's argument (1985), it is a process of plunder that drives the transformations experienced in 18th century Europe; additionally, it is considered that the colonial experience is responsible for the formulation and development of principles of modernity, including industrial extractivism.

Understood in terms of the formation of the modern world, colonial reason operates processes of expropriation that are not necessarily oriented by and for the formation of a free and salary-based labor market, but of a kind of objective subordination to captive labor. In the author's words, if the expropriation promoted by enclosures involved "the historical process of separation

between production and the means of production" and, therefore, the transformation of "producers into salaried workers" (MARX, 1985, p. 262), paying attention to the Potosí Principle, "the modern-Potosian economy, that of gold and silver as an end, based on lead and steel as a means, implies (...) expropriation and removal of the means of reproduction" (ARÁOS, 2020, p. 255), that is, "it does not only imply the deprivation of the means of work, but of life on all fronts" (p. 199).

In our point of view, the conceptual and historical flexibility strengthens the sense of a critique to modernity, that is, to the society of capital. The author's effort examines colonial conditions of the advent of modernity that can be associated with Mike Davis' research (2022) on what he calls the *colonial holocaust*. From this perspective, progress and civilization are not separated from the advent of colonization, which means that capitalist social reproduction objectively presupposes competitive violence, the notion of conquest and the racialization of the Other – non-white – as an annihilable being.

In addition to this scenario, there is the constitution of a spatial dialectic translated by the center-periphery relationship (ARÁOZ, 2020, p. 124). To the detriment of a Cartesian and absolute perspective of space, generally restricted to notions of location, center and periphery are understood as a social relationship, or even as a socio-spatial manifestation of the accumulation dynamics that determine the process of social reproduction. On this approach, subjection to risk reveals itself to be an integral part of the capitalist production process of space.

This discussion approaches contemporary expropriation processes. In dialogue with Harvey's (2013) reflections on the dynamics of accumulation through dispossession, Aráoz (2020, p. 199) presents the concept of *ecobiopolitical expropriation* to elucidate "a modality of domination based on the integral control of the fundamental dimensions constitutive of human life". The initial emphasis is on political expropriation, which refers to the act of removing the Other from their human condition as a justification for depriving them of all material and immaterial conditions of life. However, for its effectiveness, a set of expropriations are necessary, related to the bases for maintaining life, such as land and territory, means of production, reproduction and housing, food, physical integrity, among other aspects.

The collapse of the Fundão dam highlights the concrete terms of *eco-biopolitical expropriations*. In addition to the political dimension, there are bioecological and socioeconomic-cultural expropriations (ARÁOZ, 2020, p. 243-244) that abruptly transform bodies and territories. The case also reinforces that there is a spatial logic in the dynamics of accumulation of risks and threats, resulting in their concentration on outskirt areas. Complementary to environmental racism, an aspect previously mentioned. Although it is a less well-known topic than the impacts of the disaster on outskirts in the countryside and in the coastal zone, there are varied consequences of the destruction in the urban context, with emphasis on the overaccumulation of risks and threats in urban outskirts.

A paradigmatic situation occurred in the municipality of Barra Longa, Minas Gerais. This municipality was the only one that experienced the invasion of waste mud into the urban center, which caused the destruction of Manoel Lino Mol central square and historical buildings, such as the parish church of São José de Botas. Waste management fronts were added to the ruins of the central region, that transported it to the outskirts of the city. As a consequence, the repair itself subjected more people to the risk of exposure to contaminants due to the use of solid waste with EPTs in the paving of streets such as Santa Terezinha and José Alves Xavier, both located in the Rosário neighborhood, on the outskirts of the city (FGV, 2020a).

Finally, examining the most recent strategies of mining extractivism allows us to identify transformations in the scale and scope of destruction processes. From the crushing of bodies and poisoning, aspects that characterize the colonial extractive enterprise in Potosí, we find a perspective of collapse and ruins that reaches the dismantling of geological structures and the contamination of extensive river basins (ARÁOZ, 2020). In direct dialogue with the risks and threats involved in the collapse of the Fundão dam, it is important to highlight that, from this perspective, the social production of risks, threats and disasters is nothing other than ongoing progress itself.

Final remarks

In addition to presenting general characteristics of the disaster caused by the collapse of the Fundão dam and reflecting on the social production of risks that precede its occurrence, the article aimed to connect the formation of risks and threats caused by the development of industry with the debate on the production of space. If the case analyzed involves the extraction and processing of iron ore, the object of knowledge that drives this reflection is

the production of space in its transformations and permanence. For this reason, it is considered that part of the arguments and considerations developed transcend the particular situation and can serve to understand distinctive aspects of the social production of risk and reach broader territorial dynamics.

The work of Araóz (2020), explored to indicate the importance of criticizing the notions of process and modernization, is in contact with reflections on the production of space in general and urbanization in particular. Thus, we state that the urban phenomenon is indispensable for the survival of capitalist social reproduction and its reproduction involves a modern social experience inseparable from the development of large industry (LEFEBVRE, 1973). It is not just the production of the built environment, but the social reproduction of production relations and renewed social needs that sharpen the contradictions implied by the movement of capital and merchandise.

It is in these terms that some paths for a radical critique of progress were proposed. The formulation requires a profound questioning of the pretensions of rationality (scientific and social) regarding the uncertainties that integrate the industrial production mode and the technological management of accident probabilities. In this sense, an analytical potential can be identified in the work of Beck (2011). Even refuting the social theory that the author develops, with emphasis on the indeterminacy and universality of risks and the erasure of social stratifications, it is understood that his discussion on the social production of risks as an immanent aspect of modernity contains fundamental elements for the criticism that we intend to trace. This is because, by explaining that the entire order of destruction generated [pollution, contamination, intoxication, local

threats and civilizational risks] operates as a "systematic side effect of modernization processes", Beck (2011, p. 32) qualifies an aspect that characterizes capitalist social reproduction and questions the possibilities of predicting and controlling risks, dangers and threats.

Finally, it is considered that the contemporary imperatives of transformation in scale and scope of the destruction produced within the industry involve the overdetermination of interest-bearing capital, in terms of a "victory of capital-as-property over capitalas-function" (CHESNAIS, 2019, p. 82 – our translation). As is also observed in other spheres of social reproduction (SANFELICI, 2016; PITTA, MENDONÇA and BOECHAT, 2018), the collapse of the Fundão dam allows us to demonstrate that the intensification of finance changes the pace and volume of production so that there is a correspondence between perspectives of commodity-mediated profit and capital return rates in futures markets. In this view, the case analyzed reinforces that the financialized dynamics of accumulation interfere in the overproduction of risks, as well as in the dynamics of their socio-spatial concentration, aspects that in the future should serve as a basis for problematizing the spatial dialectic shaped by the center-outskirts relationship.

References

ACSELRAD, H. "Justiça ambiental e a construção social do risco". **Desenvolvimento e meio ambiente**. Paraná: n.5, pp. 49-60, 2002.

AGÊNCIA SENADO. Projeto destina rejeitos de mineração à construção civil. **Senado Notícias**, Brasília, 18, março, 2019.

AMBIOS. Estudo de avaliação de risco à saúde humana em localidades atingidas pelo rompimento da barragem do Fundão — MG. São Paulo, 2019. Disponível em: https://apublica.org/wp-content/uploads/2019/11/ambios-arsh-mariana-e-barra-lingafinal-20190417.pdf>. Acesso em: 30 mar. 2022.

ARÁOZ, H. M. Mineração, genealogia do desastre: o extrativismo na américa como origem da modernidade. São Paulo: Elefante, 2020.

BARCELOS, E. et al. A Caravana Territorial da Bacia do Rio Doce: Mineração e territorialidades em tensão. **Revista Terra Livre**, [S. l.], v. 2, n. 43, pp. 225–266, 2017.

BECK, U. **Sociedade de risco**: rumo a uma outra modernidade. São Paulo: Editora 34. 2010.

BRASIL. **Ministério da Integração Nacional**. Instrução normativa n. 02, de 20 de dezembro de 2016. Brasília: Ministério da Integração Nacional, 2016.

_____. Justiça Federal da 6ª Região: Subseção Judiciária de Belo Horizonte. Processo Judicial Eletrônico n. 1000406-84.2020.4.01.3800. **Decisão – Eixo prioritário n. 5**: retorno operacional da usina hidrelétrica Risoleta Neves "Candonga". 5, dez. 2022.

CHESNAIS, F. Financialization and the impasse of capitalismo. **The Japanese Political Economy**, v. 45, p. 81-103, 2019.

DAVIS, M. Holocaustos coloniais. São Paulo: Veneta: 2022. FUNDAÇÃO GETULIO VARGAS (FGV). Análise das matrizes de danos no contexto da reparação do desastre do Rio Doce. Rio de Janeiro; São Paulo: FGV, 2019. . O rompimento da barragem de fundão na perspectiva da administração pública municipal: uma análise qualitativa a partir de estudos de caso em Barra Longa (MG), Resplendor (MG) e Linhares (ES). Rio de Janeiro; São Paulo: FGV, 2020a. _____. Parâmetros e Subsídios para a Reparação dos Danos Socioeconômicos nos Territórios de Rio Doce, Santa Cruz do Escalvado e Chopotó. Rio de Janeiro; São Paulo: FGV, 2020b. _____. Diagnóstico em saúde dos municípios atingidos pelo rompimento da barragem de Fundão, Mariana (MG), em **5 de novembro de 2015**: estimativa de anos de vida perdidos por incapacitação. Rio de Janeiro; São Paulo: FGV, 2021a. . **Nota técnica**: Racismo e o Processo de Remediação do Desastre da Barragem de Fundão. Rio de Janeiro; São Paulo: FGV, 2021b. _____. Matriz indenizatória territorial para os municípios de Aracruz, Conceição da Barra, Fundão, Linhares, São Mateus e Serra, na Região Estuarina, Costeira e Marinha do Espírito Santo. Rio de Janeiro; São Paulo: FGV, 2021c. . Matriz indenizatória territorial para os municípios de Tumiritinga, Galiléia, Conselheiro Pena, Resplendor, Itueta e Aimorés, no Médio Rio Doce. Rio de Janeiro; São Paulo: FGV, 2021d. GONÇALVES, R.; PINTO, R. & WANDERLEY, L. Conflitos ambientais e pilhagem dos territórios na bacia do rio Doce. In: ZONTA, M. e TROCATE, C. (org). Antes fosse mais leve a carga: reflexões sobre o desastre da Samarco. Marabá, PA: Editorial

iGuana, 2016. pp.139-182.

HARVEY, D. **Condição pós-moderna**. São Paulo: Loyola, 2009. HARVEY, D. **O novo imperialismo**. São Paulo, Boitempo: 2013.

LACTEC. Diagnóstico Socioambiental dos Danos Decorrentes do Rompimento da Barragem de Fundão na Bacia do Rio Doce e Região Costeira Adjacente — Resumo Executivo. Curitiba: Institutos Lactec, 2019a.

Contibal institutes Lacted, 2019a.
Relatório parcial de resultados : cheias de 2020. Curitiba: Institutos Lactec, set. 2020a.
Diagnóstico Socioambiental dos Danos Decorrentes do Rompimento da Barragem de Fundão na Bacia do Rio Doce e Região Costeira Adjacente TOMO I — Contextualização. Curitiba: Institutos Lactec, 2020b.
Folder – Diagnóstico socioambiental dos danos decorrentes do rompimento da barragem de Fundão na bacia do rio Doce: rejeitos. Curitiba: Institutos Lactec, [s.d.].

LEFEBVRE, H. A re-produção das relações sociais de produção. Porto: Anthropos, 1973.

MARQUES, E. et al. Quem foi sua sirene? **Sirene**. Minas Gerais: edição n. o, p. 5, 2016.

MARX, K. **O Capital**: crítica da economia política. Volume I, Livro Primeiro. Tomo 2. São Paulo: Nova Cultural, 1985.

MILANEZ, B. et al. Antes fosse mais leve a carga: introdução aos argumentos e recomendações referente ao desastre da Samarco/Vale/BHP Billiton. *In*: ZONTA, M.; TROCATE, C. (org). **Antes fosse mais leve a carga**. Marabá: Editorial iGuana, 2016. pp. 17-49.

MORGENSTERN, N. et al. Comitê de Especialistas para Análise da Ruptura da Barragem de Rejeitos de Fundão: Relatório sobre as Causas Imediatas da Ruptura da Barragem de Fundão. Ago. 2016. Disponível em: <chrome-

extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fundacaorenova.org/wp-content/uploads/2017/10/relatoriosobre-as-causas-imediatas-da-ruptura-da-barragem-defundao.pdf>. Acesso: dez. 2022.

PENIDO, M. Bio(necro)política da mineração: quando o desastre atinge o corpo-território. **Revista Brasileira de Geografia**, Rio de Janeiro, v. 63, n. 2, p. 38-51, 2018.

PITTA, F. T.; MENDONÇA, M. L.; BOECHAT, C. A. A produção do espaço na região do MATOPIBA: violência, transnacionais imobiliárias agrícolas e capital fictício. **Estudos Internacionais: revista de relações internacionais da PUC Minas**, v. 5, n. 2, p. 155-179, 28 fev. 2018.

RAMBOLL. Folder – Monitoramento dos programas 23 e 24: manejo de rejeitos. São Paulo: Ramboll, 2019. Disponível em: <www.mpf.mp.br/grandes-casos/caso-samarco/documentos/relatorios-ramboll/pg23e24_folder_nov2019.pdf>. Acesso em dez. 2022.

RIBEIRO JR., J.; CRUZ, A. e ANTIPON, L. Fome e modernização no maranhão: os projetos de desenvolvimento em Itaqui—Bacanga e o comprometimento das práticas alimentares na comunidade de Camboa dos Frades (São Luís) (1970-2021). **Revista Ciência Geográfica**, v. XXV (4), pp. 1218-1235, 2021.

RODRIGUES, R. Usina soterrada pela Samarco pode voltar a operar em 2023. **Valor econômico**, São Paulo, 21, junho, 2022.

SAMARCO. **Relatório anual de sustentabilidade**: 2014. Belo Horizonte: Samarco, 2015.

SANDERS FILHO, L. P. **De ribeirinho a atingido**: a luta pela terra da comunidade de Entre Rios, no contexto do Desastre da Samarco. Dissertação (Mestrado em Geografia Humana) - Faculdade de Filosofia, Letras e Ciências Humanas, USP, São Paulo, 2019.

- SANFELICI, D. Centralização do capital no setor imobiliário e reconfiguração das metrópoles. Mercator, Fortaleza, v. 15, n. 2, p. 7-21, 2016.
- SILVA, F. **Novo Bento Rodrigues e a permanência do desastre**. UOL, 11, novembro, 2022.
- SEABRA, Odette Carvalho de Lima. **Territórios do uso**: cotidiano e modo de vida. Cidades, Presidente Prudente, Grupo de Estudos Urbanos, v. 1, n. 2, p. 181-206, jul-dez, 2004.
- SMITH, N. **Desenvolvimento desigual**. Rio de Janeiro: Bertrand Brasil, 1988.
- SMITH, N. Não existe desastre natural. **Blog da Igrá Kniga**, 28 de ago. 2020[2006]. Não paginado.
- SOUZA, T.; CARNEIRO, K. O direito das "pessoas atingidas" à assessoria técnica independente: o caso de Barra Longa (MG). Revista Sapiência: Sociedade, Saberes e Práticas Educacionais, v.8, n.2, p.187-209, 2019.
- TEIXEIRA, R. 'A gente tem que falar aquilo que a gente tem que provar': a geopolítica do risco e a produção do sofrimento social na luta dos moradores do bairro Camargos em Belo Horizonte/MG. Tese. Doutorado em Sociologia, Faculdade de Filosofia e Ciências Humanas da UFMG, 2014.
- WANDERLEY, L. et al. Desastre da Samarco/Vale/BHP no vale do rio doce: aspectos econômicos, políticos e socioambientais. **Ciência e Cultura**, v. 68, n. 3, pp. 30-35, 2016.
- ZHOURI, A., et al. O desastre da Samarco e a política das afetações: classificações e ações que produzem o sofrimento social. **Ciência e Cultura**, v. 68, n. 3, p. 36-40, 2016.
- ZUCARELLI, M. A matemática da gestão e a alma lameada. Tese (doutorado) Faculdade de Filosofia e Ciências Humanas, UFMG, Belo Horizonte, 2018.

The production of real estate developers in Brazilian public housing policy (2009–2020)

The large-scale residential projects and the case of Ribeirão Preto, Brazil (SP)¹

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Introduction

In Brazil, there was massive housing production and an intense expansion of urbanized territories at the beginning of the 21st century. The program Minha Casa Minha Vida (MCMV), since 2009, has played a prominent role in directing and enabling these residential developments on land plots located on the outskirts of

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urban areas. In the city of Ribeirão Preto, in São Paulo inner city, it stands out for its numerous housing production and for hosting the largest housing complex in the country, called Jardim Cristo Redentor. In face of this scenery, the general objective of this article is to analyze the strategies that made the MCMV large production and the residential developments scale gain viable, seeking to answer the following question: 'What has made the MCMV megadevelopments viable regarding the context of Ribeirão Preto (RP)?'...

Based on a qualitative approach, this analysis was developed by means of documentary research, focusing on municipal legislation on land use and occupation, master plans, local housing plans, official data on MCMV production and property registrations; field research, including visits to the city and MCMV housing complexes, to construction sites and to sales stands; semi-structured interviews with two city hall representatives, three CEOs (or partners of developers), four sales managers from developers, nine real estate agents and seven residents of the Jardim Cristo Redentor housing mega-development; and secondary database analysis (Geoimóvel real estate research).

The paper is structured into two segments. It begins by introducing the MCMV, its housing production in Ribeirão Preto and the scale gains of the ventures, with emphasis on the case of the mega-project Jardim Cristo Redentor. Next, we sought to systematize the strategies that have made this mega-project viable and also contributed to understanding the gains in scale of MCMV's

by Fapesp (2020/06243-6), in which the authors of this article are collaborators, and also of the master's research "Real Estate Brokers and the commercialization of housing in the Minha Casa, Minha Vida Program" being developed by Maiara Oliveira Silva de Aguiar, with funding from Fapesp (2020/13210-7).

residential ventures. It is argued that the gain in scale of real estate enterprises has been a practice in the incorporation of low-income residential projects, strengthened during the MCMV Program. This practice has been observed beyond the context of the capital of São Paulo and the production of large publicly traded developers. To enable this gain in scale and, especially, the leap in scale with the mega-project, developers adopt strategies with regulatory, technological and land dimensions, which will be detailed in this study.

MCMV housing production and the venture scale gains

Launched in 2009, the MCMV Program worked as a countercyclical program to the international subprime crisis of 2008, designed through a collaboration of large publicly traded developers and construction companies with the national government (ROLNIK, 2015). It was a quick reaction by the government to stimulate real estate and infrastructure production through massive transfers of public resources, attracting international financial capital, in the face of an unfavorable international economic scenario (RUFINO, 2019). The program structured the provision of low-income housing based on the production of units built by developers and construction companies whereas financing and subsidies were guaranteed by the State, with credit directly granted to producers and consumers. (KLINK, 2020).

The MCMV was developed in three phases: phase 1, starting in March 2009; Phase 2, in June 2011; and Phase 3, started in March 2016 and lasted until August, 2020. With massive housing production, more than 6 million housing units (HU) were

built divided by income ranges, each one having a corresponding fund (MINISTRY OF ECONOMY, 2020). Range 1 serves lower-income families, being classified as 'social housing', with its units almost fully subsidized. Range 2 and Range 3 provide house units to families via financing, mainly from the Fundo de Garantia por Tempo de Serviço (FGTS) [Length-of-Service Guarantee Fund], with little or no subsidies from public resources. In 2016, Range 1.5 was created intermediating Ranges 1 and 2, providing for subsidies and financing. In this text, we will name Ranges 1.5, 2 and 3, whose production is based on developers and construction companies, as the "economic segment".

Nationally, housing production, over the years, has not been homogeneous, with an upward curve being observed until 2013, following the increase in real estate activities and housing construction, which began in 2007. The international crisis was only felt in Brazil from 2013 (KLINK, 2020), with the establishment of the country's economic and political crisis coupled with the presidential impeachment of Dilma Rouseff in 2015, thus exposing a period of recession that resulted in a drop in production and the restructuring of developers (SHIMBO; BARDET; BARAVELLI, 2022).

In RP, more than 35 thousand housing units (HU) were produced within the MCMV Program in the period from 2009 to 2020, as shown in Figure 1. This production is equivalent to an increase of more than 17% in the number of urban houses in the municipality, in relation to the 2010 census, and corresponds to around 53% of all residential production in the same period, according to data from Geolmóvel. Furthermore, the HU numbers reveal the prioritization of the economic segment, to the detriment of demands for social housing, which represented only 5%.

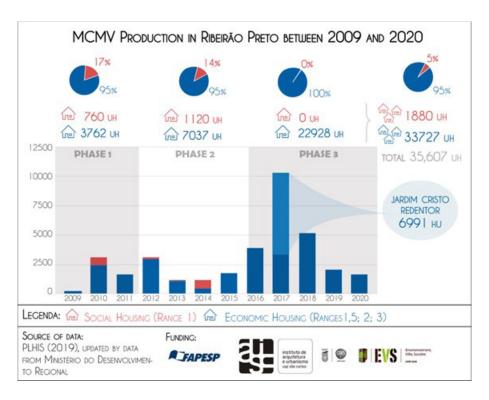


Figure 1. Iconographic in one column. Source: Prepared by the authors, 2022.

The impact of the MCMV Program on the housing market is reflected in the significant production of units and also in the direction of developers during its validity. In addition to the increase in production by developers who were already operating in the first phases of the MCMV, other developers, especially at a local and regional levels, started to incorporate in this territory for the first time in the last phase (Figure 2). While in Phase 1, seven developers or construction companies worked on MCMV housing production, in the following phases this number increased to 18 and 24, respectively.

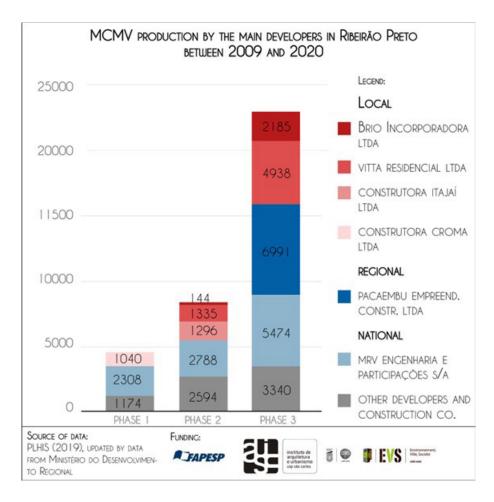


Figure 2. Graph of MCMV production by the main developers in Ribeirão Preto between 2009 and 2020. Source: Prepared by the authors, 2022.

Despite the significant and progressive number of developers operating in the MCMV, there is a strong concentration of housing units production in the hands of few developers. Among these, it is evident that there is a solid performance of a publicly traded national company with operations already consolidated in the housing economic segment, but at the same time there is a significant production of some regional and local companies —

characterized as new family businesses. According to the data collected, MRV company had a significant housing production in the municipality, occupying the first position in number of units in the sum of the three phases. On the other hand, the relevance of Pacaembu (regional company) and Brio and Bild (local companies) with more significant housing production in the territory can also be observed. In Phase 3, these companies were responsible for the largest number of units built, totaling 66% of the period's production in RP, with emphasis on Pacaembu, with the largest number of units in a single project and also the largest enterprise (GARCIA, AGUIAR, MACHADO, 2022).

Another characteristic of this production was the progressive increase in scale of the enterprises. This can be identified by comparing the increase in units produced per enterprise over the three phases in RP (Figure 3). The average number of units in vertical developments was 210 HU (Phase 1), with the largest development having 656 apartments, and now 260 HU (Phase 3), with the largest development having 2,226 apartments.

Increases in the magnitude of projects sometimes reach extreme proportions resulting in vertical or horizontal mega-projects, as in the case of Jardim Cristo Redentor, the largest horizontal MCMV housing complex in the country. In Figure 4, it is possible to visualize the spatial relationship between the complex and the consolidated network of the city in the background, in addition to its size, totaling an increase of 283 ha of urbanized area.

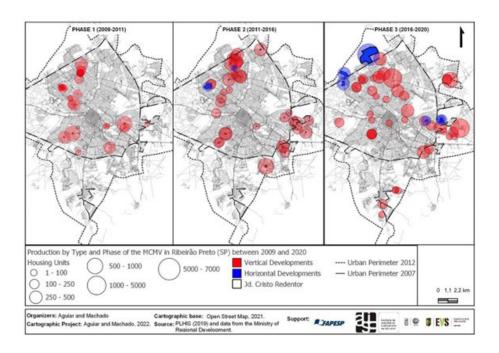


Figure 3. Production by Type and Phase of the MCMV in Ribeirão Preto (SP) between 2009 and 2020. Source: elaborated by the authors, 2022.

Also called Vida Nova Ribeirão by the developer, the housing complex is located on the outskirts of the extreme north of the city. It is accessed via the beltway on the northern contour and possesses a total of 6991 housing units measuring 46.70m² - 627 commercial lots and 134 industrial lots – in addition to infrastructure and urban equipment (Figure 5). The isolated houses on the lot were sold for R\$119,990.00 and served families in Ranges 1.5 and 2 of the Program with monthly income starting at R\$1,600.00. The impact that Jardim Cristo Redentor had on RP is also evidenced by the transfer of approximately 30 thousand people - 4% of the municipality's population (2010) - to the region until then, occupied by sugar cane plantations.





Figure 5. Pacaembu flyer presenting the MCMV Cristo Redentor project, in RP. Source: Grupo Pacaembu, 2017.

At a national level, these MCMV mega-residential developments have impacted different cities beyond the metropolitan region of São Paulo, such as Manaus, Londrina, Campo Grande, Belo Horizonte, among others (Figure 6). These horizontal projects begin to occupy large rural areas, in less valued regions, with greater availability of area and lower added value, constituting fronts for expansion of the urban network.

This gain in scale of popular residential developments had already been evidenced by Shimbo (2010), even before the MCMV, with MRV vertical housing complexes showing an increasing average of 60 units per development in 2004 and, later, 180 to 250 in 2009. This phenomenon, defined by the verb 'scaling up' (in English) has also characterized the MCMV's residential production, and "after

2014, under the conditions of the crisis, there was a refinement of the housing standard and an exacerbation of the scale of projects, that is, the trend of mega-projects implemented on large plots of land, on the scale of entire neighborhoods, was accentuated (SHIMBO, 2020, p.155). This process, especially in metropolises, is also aligned with the verticalization and the "condominialization of the city" (PEREIRA, PETRELLA, 2018).



Figure 6. Residencial Vista Bela, in Londrina and Complexo Aluízio Campos, in Campina Grande. Source: Zanon, et. al., 2015 and Prefeitura Municipal de Campo Grande, 2019, respectively.

Furthermore, the increase in the size of enterprises has sometimes reached extreme proportions, providing, in addition to massive, large-scale production, the design of vertical megaenterprises (Figure 7), such as in Pirituba, in the capital of São Paulo, which presented a "somersault in scale" (SHIMBO, 2020).



Figure 7. Grand Reserva Paulista Villa Lobos Condominium, Pirituba, São Paulo. Source: MRV. Grand Reserva Paulista. [s.d.]. Available at: https://www.blogdamrv.com.br/grand-reserva-paulista-vila-lobos. Accessed on: 05/06/2022).

Large-scale residential developments have also been observed in other countries, especially on the Asian continent, such as Vietnam, Saudi Arabia and China (POTTER, LABBÉ, 2020; ALSHIRI, 2016; PERNICE, 2021). The studies focus on analyzing, with special emphasis, the impacts of these projects and their relationship with the rural exodus, based on a process of massive urbanization in the last decade.

The large-scale housing production feasibility

As analyzed, above, the phenomenon of scale gain in popular residential developments, observed by Shimbo (2020) in the metropolitan context from a publicly traded developer, was also identified in Ribeirão Preto (SP) throughout the MCMV HU production. In addition to the gain in scale, this production revealed a huge leap forward, with the creation of the largest horizontal housing complex in the country by a regional developer, with huge proportions in numbers and extensive territories. Seeking to deepen this analysis, this segment of the paper proposes to identify, from the context of Ribeirão Preto (RP), 'What makes MCMV mega-projects viable?'. To this end, it was observed that the increase in scale depends on strategies adopted by developers in different dimensions – regulatory, land tenure and technological – and arising from the relationships among developers and different agents - State, owners, financial institutions and consumers.

Financing availability for production and consumption from the PMCMV

As previously pointed out, the Program – in line with the interests of developers and construction companies – made significant resources available for financing housing production, being this mechanism an essential one to enable housing provision, as highlighted by one of the interviewees:

The popular market is currently limited by funding from the MCMV, which later became the Casa Verde e Amarela program. This program has an annual (resource) availability [...]. So, our popular market can't be much bigger than that. Because this is the funding that is made available for companies to produce the units. (developer founder, 2021)

The role of the FGTS [Length-of-Service Guarantee Fund] in maintaining and guiding the pace of the popular housing market was highlighted in the various interviews carried out: "There is no way to think about civil construction without funding" (Regional Director of a developer, 2021). Despite the possibility of incorporating other financing mechanisms, the popular housing market continues to be anchored in the resources made available by the FGTS. The possibility of consumer (family) financing in the sale – intervening and facilitating their purchasing conditions – guaranteed the viability of this affordable housing market. In this context, a consumer having 80% of the value of the unit financed by Caixa Econômica Federal Bank of Brazil (CEF) is one of the main conditions for making this production viable. But, in addition, developers have also adopted the strategy of dividing the down payment (20%), even after delivery of the key.

Impacting a guaranteed demand

The decrease or absence in HU production for Range 1 adds to a scenario of dismantling of public agents in the housing sector, such as the Companhia Habitacional Regional de Ribeirão Preto-COHAB-RP (SANTOS, 2017). The Company was responsible for directing housing demands to the public authorities, registering and selecting the priority families that would be included in Range 1 of the Program and, by means of a partnership with developers, makes this list of registered low-income families available for developers to ensure a captive consumers' demand.

... when we propose a project of social interest, the first place we talk at is the city hall. And normally, the city hall opens this contact channel at Cohab and gives us this list, so that we can offer this product to this list of people who are waiting there for a property to be given, purchased, as cheaply as possible. (Interview with regional sales manager of a developer, 2022.)

This partnership acts in favor of developers who are able to use the municipal social register, both to define demands (housing deficit) and to obtain personal information of this public. Based on this list, developers seek to develop a lower-cost product aimed at these families - who are now classified as Range 1.5 consumers. In this context, looking for what is cheapest on the formal market, families often purchase the property without personally seeing its characteristics or location, as this becomes the only option available to them (Interview with regional sales manager of regional developer, 2022).

Influencing municipal legislation

The forces of real estate market agents have encouraged the elaboration of laws and and motivated changes to municipal legislation, such as the enlargement of urban areas delimitations and urban expansion itself. In RP, in 2012, there was a significant increase in the urban expansion zone compared to 2007 (Figure 9). Later, in 2018, another expansion took place, reaching the limits of the municipality and practically doubling the urban area in relation to 2012. Moreover, demarcations of new areas classified as Special Zones of Social Interest (ZEIS) in urban fringes has occurred, providing broad territories for flexible urban planning and

construction parameters for social housing. These changes have fostered the approval of numerous projects installed in these areas, with lower added value, such as the Jardim Cristo Redentor project.

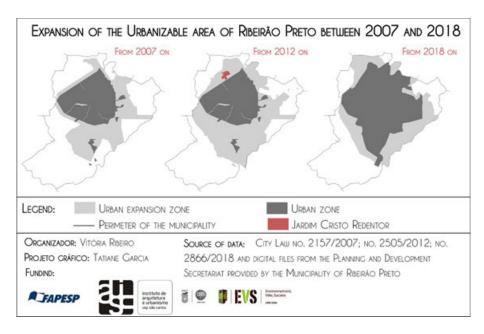


Figure 8. Expansion of the urbanizable area of Ribeirão Preto between 2007 and 2018. Source: Elaborated by the authors, 2022.

These strategies to facilitate the incorporation of land plots with lower added value on the outskirts have been achieved through coordination with local public authorities and land owners. This participation in local public decisions was evidenced in an interview with a regional manager, while he explained the intention of incorporating a new continuous development into Jardim Cristo Redentor: "We are making an adjustment to the city's Master Plan, together with the city hall and proposing a change in the Plan Director" (Interview with regional sales manager of a regional developer, 2022). These mechanisms turn previously rural land plots available and interesting to the real estate market due to their dimensions, cost, and flexibility in urban and construction rates.

Establishing financial partnerships for the acquisition of large land plots

The acquisition of these large portions of land for large-scale production has been possible due to two main strategies, depending on size and the social capital available. Large companies that opened their capital on the Stock Exchange began to buy plots of land in cities, which until then, were not part of their real estate circuit, forming large landbanks, as a long-term investment plan (FIX, 2011). Developers with lower social capital, on the other hand, make their projects viable by seeking to avoid direct purchases so as not to decapitalize the project's cash flow, even before its approval, aiming at prioritizing the acquisition of land via partnerships: (i) the financial partnership directly with the land owner or (ii) the financial partnership with an external investor, such as Banks (GARCIA; AGUIAR; MACHADO, 2022). These strategies enhance the viability of projects in the case of local and regional construction companies and developers, including in vertical projects.

In the case of Jardim Cristo Redentor mega-project, the financial partnership turns up almost mandatory for its viability, even though this makes incorporation more complex. The area where this project was developed was made up of two farms, which were inserted into the urban expansion zone in 2012, as already mentioned. They were properties of the Cooperativa de Crédito dos Produtores Rurais e Empresários do Interior Paulista (COCRED-SICOOB) [Credit Cooperative of Rural Producers and Entrepreneurs of the Interior of São Paulo], since 1976. In 2016, the value and partnership were negotiated between the developer and owner. In this financial partnership, the owner would receive part of the value

of the land as sales progress. After the partnership was officialized, the use of the area changed, from rural to urban, on 04/2016.

In this kind of transaction, a developer without publicly traded capital is able to avoid its decapitalization and shares the risks of the operation. Furthermore, this partnership, in the case of previously rural land, also guarantees the capture of land value, resulting from the transition from rural land to urbanized subdivision.

Prioritizing preferential demand for the "house" product

By overcoming the land availability issue and after acquiring it at a price in line with the developer's profit margin, the developer is now able to prioritize the production of the isolated house on the lot. This product, which has a designated area and the possibility of expansion – opposed to condominium blocks with 4 floors of apartments – constitutes a consumer preference, according to data from developers. This type of offer (Figure 8), even in a more peripheral area of the city, stimulates sales, as evidenced in the sales speed index of Jardim Cristo Redentor. According to RP cuty hall data, 991 contracts were signed in the first month of sales, exceeding the sales target of 15%, reaching 32% of the units available in the first phase of the project, even before works had effectively begun.

Despite the preference for houses, this product had not been offered until 2017 in the MCMV, as all previous projects were vertically integrated. This is because the financial viability of these horizontal projects requires the incorporation of large plots of land at a lower cost, targeting rural properties on the outskirts. Therefore,



Figure 9. Ground plan of the housing units in Jardim Cristo Redentor. Source: Pacaembu Construtora, 2017. Available at: http://pacaembu.homebrasil.net/produto/vida-nova-ribeirao Accessed on: 05/06/2022.

houses correspond to incorporations that take more time, complexity and require greater capital, unlike vertical production that occurs in already urbanized lots, remaining in consolidated areas or in already subdivided expansion areas.

Establishing architectural and production standardization

Architectural and production standardization has been a prerogative in this trend of enterprises increasing scale. Shimbo (2020) points out that mega-projects implemented on large plots of land became an accentuated tendency after the 2014 crisis and is in line with the phenomenon of "condominialization of the city" for vertical developments (PEREIRA; PETRELLA, 2018).

Just as pointed out by developers, standardization reduces costs and time in project elaboration and approval by municipal public bodies, as well as by the CEF – responsible organ for financing. This

architectural standardization aims to ensure the economic viability of a product that has a pre-determined expenditure ceiling by the program, as it rationalizes and reduces production time. Thus, it is directly linked to a productive standardization (Figure 10) as one feeds the other, creating the possibility of reproduction on a scale, in different locations (SHIMBO, 2010; 2020).



Figure 10. Scale production of the Jardim Cristo Redentor project. Source: Pacaembu. Available at: http://pacaembu.homebrasil.net/produto/vida-nova-ribeirao. Accessed on: 06/05/2022.

Architectural and Production standardization are directly related to the construction time, deadline and with risk and return as well.

Over the years, we have developed a scalable and modular production model, which allows us to replicate, on industrial scale, in different locations and simultaneously, a uniform construction pattern, whose projects are based on aluminum form structures, adaptable and reusable, adjusting to local consumption preferences, which can be replicated in different types of enterprises. (MRV, 2019, p.84 apud SHIMBO, 2020, p. 158)

This rationalization of housing production on the national scale of MRV can also be identified in Pacaembu's production with the replication of the construction model not only in this large project, but in other housing complexes in the cities of São Paulo and Paraná. For a successful replication, the developer seeks to operate in municipalities with the same proportion of population, large plots of land available and topographic surveys developed for the implementation of their standardized projects.

Ensuring hyper-management during incorporation

Along the MCMV, there was a restructuring movement by developers towards hyper-management of housing production (SHIMBO, 2020). Due to the recession period after 2014, the number of employees was reduced and technical services were outsourced to specialized construction companies in certain stages of the work. At the same time, developer companies 'verticalized' the entire cycle, managing and controlling the acquisition of the lot, the definition of the project, the construction and marketing processes.

[The provision is developed] by subcontracting. But not full subcontracting. You will hire companies specialized in each activity. [...] When I say verticalization, it means that you can't have a company that will take over the entire project [...] here you hire specific companies and you do all the management, and you provide all the intelligence of the enterprise and all the planning. All control is done by our company. (Interview with co-owner of developer, 2021).

We work in all parts of the development, from acquisition to post-construction [...]. What I see in this low-income market is that verticalization is important. [...] because the margins are narrower

compared to a medium-income, high-income product. So, in general, what I see, every market and all successful companies are those that have verticalized the entire process, which they take care of from prospecting to post-construction. (Interview with Co-owner of a regionally operating developer, 2021).

These strategies are identified in the incorporation of Jardim Cristo Redentor by Pacaembu, as well as by other developers operating in the municipality of RP. This restructuring of companies, starting in 2014, was fundamental for a growing and massive housing production, including large-scale projects.

Final Considerations

This paper analyzed the massive production of housing projects in the economic segment developed by construction companies and developers with financing from the MCMV Program in RP. According to data, this production showed a gain in scale for the enterprises, in number and in territorial extension. In this context, despite the economic recession, post-2014 housing production began to grow again, with the largest MCMV housing enterprise in Brazil being approved in 2017 by a developer with regional operations in the municipality.

The gain and also the leap in scale had already been identified by Shimbo (2020) when analyzing a publicly traded developer operating in the metropolitan region of São Paulo. In this sense, the paper corroborates the author's view, according to which this phenomenon is considered a trend in low-income residential production by also highlighting it in other urban contexts and with the production of local and regional developers. Furthermore, the

paper goes on analyzing strategies that have enabled the increase in the proportion of these projects, especially in extreme cases, such as Jardim Cristo Redentor in Ribeirão Preto.

Seven strategies adopted by developers have been identified in different dimensions and arising from relationships between agents to enable the production of mega projects. Based on strategies with regulatory dimensions, developers, now, are able to access public financing (1); Impact a guaranteed demand (2); influence municipal legislation (3) (this strategy also has a landholding dimension, as well as the strategy of establishing financial partnerships for the acquisition of large plots of land (4) and consequently, prioritizing the preference of demand for the "house" product (5). Finally, developers adopt technological strategies seeking to establish architectural and production standardization (6) and guaranteeing hyper-management in incorporation (7).

These considerations made, research on the issue has currently advanced, seeking to understand how these strategies direct the financial issues of projects and influence the expansion of the profit margin of developers. Among the strategies identified, we have delved into the analysis of financial partnerships for the acquisition of large plots of land and hyper-management in incorporation. The importance and recurrence of financial partnerships has been questioned, especially in this case, which is an agribusiness bank. Furthermore, efforts have been made to understand the expertise acquired by smaller developers following the restructuring movement of publicly traded developers on the stock exchange, which, in addition to hyper-management, can mean the incorporation of financialized instruments in the projects viability analysis.

References

AL-SHIRI, F. S. Impacts of large-scale residential projects on urban sustainability in Dammam Metropolitan Area, Saudi Arabia; 2016. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0197397516302788?via%3Dihub. Access on: May 16, 2022.

GARCIA, T. B; AGUIAR, M. O. S; MACHADO, G. S. As incorporadoras e as estratégias atreladas à inserção urbana da habitação econômica no MCMV em Ribeirão Preto, In: XIX Encontro Nacional da ANPUR. 2022. 22 a 27 mai. 2022.

KLINK, J. METROPOLIS, MONEY AND MARKETS. Brazilian urban financialization in times of re-emerging global finance, 2020

KUANG, W; LIU, J; DONG, J; CHI, W; ZHANG, C. The rapid and massive urban and industrial land expansions in China between 1990 and 2010: A CLUD-based analysis of their trajectories, patterns and drivers, 2016. Available at: https://doi.org/10.1016/j.landurbplan.2015.10.001. Access on: May 16, 2022

MINISTÉRIO DA ECONOMIA, Relatório de Avaliação: Programa Minha Casa Minha Vida, 2020

PEREIRA, P. C. X.; PETRELLA, G. Introdução: imediato, global e total na produção do espaço. *In*: PEREIRA, P. C. X. (ORG.). **Imediato, global e total na produção do espaço**: a financeirização da cidade de São Paulo no século XXI. São Paulo: Universidade de São Paulo. Faculdade de Arquitetura e Urbanismo, 2018. DOI: 10.11606/9788580891492.

PERNICE, R. Verticality and Conflicting Identities in the Contemporary Chinese City: The Urban Development of Suzhou Industrial Park, 2021. Available at: http://journals.innosciencepress.com/index.php/JCAU/article/view/1026/903. Access on: May 16, 2022.

POTTER, C; LABBÉ, D. Gentrification or...? Injustice in large-scale residential projects in Hanoi, 2020

RIBEIRÃO PRETO, Lei no 2157 de 8 de Janeiro de 2007. Dispõe sobre o Parcelamento, Uso e Ocupação do Solo no Município de Ribeirão Preto. Available at https://www.ribeiraopreto.sp.gov.br/legislacao-municipal/pesquisa.xhtml?lei=21377. Access on: May 07, 2022.

RIBEIRÃO PRETO, Lei no 2505 de 17 de janeiro de 2012. Dispõe sobre o Parcelamento, Uso e Ocupação do Solo no Município de Ribeirão Preto. Available at https://www.ribeiraopreto.sp.gov.br/legislacao-municipal/pesquisa.xhtml?lei=33955. Access on: May 07, 2022.

RIBEIRÃO PRETO, Lei no 2866 de 27 de abril de 2018. Dispõe sobre a Revisão do Plano Diretor implantado pela Lei Complementar n. 501, de 31 de Outubro de 1995 e modificado pela Lei Complementar n. 1.573, de 13 de Novembro de 2003, na forma que especifica, e dá outras providências. Available at https://www.ribeiraopreto.sp.gov.br/files/splan/planod/18-2866-lc-revisao-pd.pdf. Access on: May 07, 2022.

RIBEIRÃO PRETO, Lei no 2927 de 13 de dezembro de 2018. Disciplina as normas edilícias para habitação de interesse social, empreendimento de habitação de interesse social e empreendimento em zona especial de interesse social no Município de Ribeirão Preto e dá outras providências. Available at. https://leismunicipais.com.br/ Access on: May 07, 2022.

RIBEIRÃO PRETO, **Decreto no 273 de 5 de novembro de 2019**. Dispõe quanto às contrapartidas a serem exigidas a título de medidas mitigadoras e compensatórias de empreendimentos que geram impactos urbanísticos significativos, regulamentando o 50 do artigo 53 e 40 do Artigo 177 da Lei Complementar no 2866, de 27 de Abril de 2018. Available at: http://www.pmrp.com.br/legislacao-municipal/pesquisa/lei/39324. Access on: May 07, 2022.

RIBEIRÃO PRETO. 10 Cartório de Registro de Imóveis de Ribeirão Preto. **Matrículas de imóveis**. Consultation on March, 29, 2022.

RIBEIRÃO PRETO. Companhia Habitacional Regional de Ribeirão Preto - COHAB-RP. Contrato de permissão de uso do cadastro de inscritos da Companhia Habitacional Regional de Ribeirão Preto - COHAB-RP, firmado com a empresa Pacaembu Empreendimentos e Construções LTDA - Contrato no o1/2017, 2017a. Available at https://www.ribeiraopreto.sp.gov. br/transparencia/exibir-extratos?cliente=08. Access on: May 07, 2022.

RIBEIRÃO PRETO. Companhia Habitacional Regional de Ribeirão Preto - COHAB-RP. Contrato de permissão de uso do cadastro de inscritos da Companhia Habitacional Regional de Ribeirão Preto - COHAB-RP, firmado com a empresa Pacaembu Empreendimentos e Construções LTDA - Contrato no 05/2017, 2017b. Available at https://www.ribeiraopreto.sp.gov. br/transparencia/exibir-extratos?cliente=08. Access on: May 07, 2022.

ROLNIK, R. **Guerra dos lugares**: a colonização da terra e da moradia na era das finanças. São Paulo: Boitempo, 2015.

RUFINO, M. B. 2019. Ascensão da Associação Brasileira de Incorporadoras (ABRAINC) na financeirização do setor imobiliário-habitacional. **Anais**: Tempos em/de transformação-utopias.

SANTOS, D. B. O papel da COHAB-RP na produção do espaço urbano em Ribeirão Preto (SP), São Carlos, 2017

SHIMBO, L. Z. **Habitação Social, Habitação de Mercado**: a confluência entre Estado, empresas construtoras e capital financeiro, 2010

SHIMBO, L. Z. O concreto do Capital: os promotores do valor imobiliário nas cidades brasileiras, 2020

SHIMBO, L. Z; BARDET, F; BARAVELLI, J. **The financialisation of housing by numbers**: Brazilian real estate developers since the Lulist era, 2022

Sem autor. Ribeirão Preto ganha o maior empreendimento do Minha Casa Minha Vida, **Grupo Pacaembu, online**, em Maio de 2017. Edição 14. Available at: http://pacaembu.homebrasil.net/uploads/ebooks/ebookmaio-ed-1-8.pdf. Access on: May 06, 2022

UNITED NATIONS. **World Demographic Trends, 2018**. Available at:https://www.un-ilibrary.org/content/books/9789210042130/read. Access on: May 16, 2022.

Urbanization in *Pernambuco* in the first half of the 19th century

Political-administrative, judicial and ecclesiastical networks

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Introduction: the territory and the sources

This article analyzes urbanization in the state of *Pernambuco* at the end of the first half of the 19th century, when the then province had a significantly reduced territorial configuration compared to the end of the previous century, and already corresponded to the territory of the current state of *Pernambuco*¹. In terms of population, the province had around one million inhabitants, 609,000 of whom were free (VILLIERS DE L'ILE-ADAM, 1848).

^{1.} Pernambuco went through several separatist movements during the first half of the 1800s. The most significant of them – the Revolution of Pernambuco (1817) and the Confederation of Ecuador (1824) – had republican characteristics and managed to gain the union of some neighboring captaincies/provinces, resulting in the

In physiographic terms, this territory was marked by the predominance of two quite distinct landscapes: the coast and surrounding areas, with a humid climate, dense and large vegetation, flat or slightly rugged terrain and several rivers flowing towards the Atlantic Ocean; and the *sertão*, with a semi-arid climate, sparse and medium-sized vegetation, terrain marked by the existence of plateaus, *chapadas*, residual massifs, a large relative depression and intermittent rivers whose courses converged on the *São Francisco* River. Currently, these landscapes are called *Zona da Mata* and *Sertão* respectively, and to them is added the *Agreste*, which is a transition area between these two biomes.

In the first three centuries of colonization, the relationships established between colonizers, the native population, and the environment produced different forms of occupation and organization of the territory of *Pernambuco*, which reflect distinct characteristics of the urbanization process analyzed here. The Zona da Mata, occupied by the Portuguese since the mid-1500s, was exploited with the production of sugar cane directed for export, which was based on enslaved labor, especially the Black population, the existence of large estates, and the concentration of the population around the sugar mills.

This configuration resulted in a dense network of small population centers scattered throughout the sugar-producing area, especially along the main rivers, as well as the establishment of

fragmentation of Pernambuco territory as a form of retaliation. Pernambuco lost the county of Alagoas in 1817, which was elevated to the status of independent captaincy; as well as the west of Bahia, which, called the county of São Francisco since 1820, was incorporated into the territory of the province of Minas Gerais in 1824, becoming, in 1827, domain of the province of Bahia (ANDRADE, 1971; 2004).

larger, urbanized settlements along the coastal strip. Their main purpose was to facilitate commercial exchanges with the rest of the Colony, Europe, and Africa, in addition to serving for military and religious functions. In the *Sertão*, whose characteristics can be extended to the *Agreste*, colonial occupation expanded in the 17th century, especially after the expulsion of the Dutch people from Portuguese America², and was consolidated from the 18th century through livestock activities combined with other crops such as cotton.

In addition to the enslaved labor used on large estates, there was a significant contingent of pioneering *sertanejos* who worked in partnership with large landowners, as reported by Andrade (2004). The livestock raised was usually transported to the sugarcane area, where it was initially sold live and, over time, also processed into leather and jerked meat. Unlike the Zona da Mata, the occupation of the *sertão* led to more dispersed population nucleations, due to their connection to cattle farms, which were located at considerable distances from each other.

This article presents an overview of the urbanization of the province of *Pernambuco* during the first half of the 19th century (1801-1849), highlighting a central element of this process: the urban nucleations existing in the territory, their main functions and the hierarchical relationships established between them. The work is part of a research effort carried out by a group of researchers spread

^{2.} The Dutch occupied the coast of the then captaincy of Pernambuco in 1630, which included the current coast of Alagoas. According to Andrade (2004), in 1637, the Dutch occupation had already reached the captaincies of Itamaracá, Paraíba do Norte and Rio Grande. The Dutch were expelled and the control of the territory was definitively regained by the Portuguese in 1654.

across the country who aim to understand the urbanization of each Brazilian captaincy during the 1800s³. In the case of *Pernambuco*, with the exception of the classic texts by Andrade (1979 [1978]; 2004), whose perspective of analysis is based on the long term, the absence of works dealing with the urbanization of the province during the 19th century is noticeable, more specifically during the imperial period, despite the existence of a small production referring to the colonial period⁴.

Urbanization in this study is understood from the perspective of Reis Filho (1968), who defines it as a social process that is perceived through its structural characteristics and its mechanisms of change, which are the mechanisms of urban evolution. For the author, urbanization also has a physical meaning, expressed through two organizational levels: the nuclei and the network, which together form an urban complex. The urban network is a set of responses to the urbanization process, and the urban nuclei can only be understood when they are referenced to their broader context, i.e., the network itself. According to Corrêa (2006), the urban network consists of a set of urban centers that are functionally linked to each other, reflecting the social and economic characteristics of a particular territory. According to the same author, the existence of an urban network requires three primary conditions: i) a market economy in which different products are exchanged between different places; ii) the presence of fixed points in the

^{3.} A book was published in 2023 with the first results of the national research (FRIDMAN; FERREIRA, 2023)

^{4.} Such as the works of Neves (2003), Derntl and Carvalho (2010), Andrade (2013) and Arraes (2017).

territory, where the aforementioned exchanges take place; and iii) the occurrence of articulations between these fixed points, in order to make commercial exchanges feasible.

These three conditions are noticed in the province of *Pernambuco* in the studied period, just as they were in previous eras. The market economy and its different productions were mentioned earlier, as were the fixed points in the territory. The connections between the urban centers, a central element in making the network viable and concrete, were made by a series of roads, paths and waterways through which not only goods but also people, capital, political orders, decisions by the courts and the church circulated. For analytical purposes, this work highlights the size of the nuclei present in the province of *Pernambuco*, which per se evidences the existence of a network. Although it is not the central scope of the article, the connections will be explained whenever possible.

The data presented is based on six research sources. Three sources are coeval with the period analyzed (first half of the 19th century) and, using them, the urban centers and the statistical data presented here were identified; Additionally, three sources are more recent, two of which are online research tools, which were fundamental in validating and/or opposing older sources. Among the sources produced during the 19th century, the following stand out:

• Dicionário Histórico, Geográfico e Descritivo do Império do Brasil [Historical, Geographical and Descriptive Dictionary of the Empire of Brazil], by Jean Claude-Rose Milliet de Saint-Adolphe, published in 1845 and reissued by the João Pinheiro Foundation (FJP) and the *Instituto de Pesquisa Econômica Aplicada* (IPEA) [Institute for Applied Economic Research] in 2014 (SAINT-ADOLPHE, 2014[1845]);

- Carta Topográfica e Administrativa das Províncias do Pernambuco, Alagoas e Sergipe [Topographical and Administrative Chart of the Provinces of Pernambuco, Alagoas and Sergipe], created by Viscount J. de Villiers de L'ile-Adam and published in 1848 (VILLIERS DE L'ILE-ADAM, 1848); and
- Ensaio sobre a Estatística Civil e Política da Província de Pernambuco [Essay on the Civil and Political Statistics of the Province of Pernambuco], written by Desembargador Jeronymo Martiniano Figueira de Mello, originally published in 1852 and reissued by the Conselho Estadual de Cultura de Pernambuco [Pernambuco State Council of Culture] in 1979 (MELLO, 1979[1852]).

Although published in the middle of the 19th century, these works were produced over a long time, reaching 26 years, as in the case of the dictionary of Saint-Adolphe's. As such, the information contained in the sources does not accurately portray the urban configuration of *Pernambuco* at the end of the research (1849), since in many cases they present data from previous decades. The effort undertaken here was to put these three sources into perspective, in order to recognize the concordances and contradictions observed between them and thus reconstitute the set of urban nucleations existing at that time, their respective nomenclatures, natures (political-administrative, judicial or ecclesiastical) and statistical information. Table 1 shows the number of urban nucleations indicated in each of the sources cited, exposing the lack of regularity in some of the information.

Three more recent sources were also used, which contributed to check the information present in the previous sources, in addition to checking the toponymy and dates of creation, extinction and recreation of cities, towns, parishes and counties. The sources are:

- Volume XVIII, referring to *Pernambuco*, of the *Enciclopédia dos Municípios Brasileiros* [Encyclopedia of Brazilian Municipalities], published by the *Instituto Brasileiro de Geografia e Estatística* (IBGE) [Brazilian Institute of Geography and Statistics] in 1958 (IBGE, 1958);
- the *Cidades@portal*, organized by IBGE, which has historical and statistical information on all municipalities and federation units in the country (IBGE, c2017); and
- Atlas Digital da América Lusa [Digital Atlas of America Lusa], a collaborative platform organized by the Laboratório de História Social (LHS) [Social History Laboratory] of the University of Brasília (UnB) (LHS, [2011?]).

Table 1. Urban nucleations existing in *Pernambuco* at the end of the first half of the 19th century according to the three historical sources consulted. Source: designed by the author based on Saint-Adolphe (2014[1845]), Villiers de L'ile-Adam (1848) and Mello (1979[1852]).

	Dicionário Histórico, Geográfico e Descritivo do Império do Brasil (1845)	Carta Topográfica e Administrativa das Províncias do Pernambuco, Alagoas e Sergipe (1848)	3Ensaio sobre a Es18tatística Civil e Polític57a da Província de Pernambuco (1852)
Counties	11	13	13
Cities	3	3	4
Towns	14	18	15
Parishes	18	57	54
Settlement / Hamlets Indigenous villages/ Chapels	35*	countless **	87***

^{*} Includes 27 settlements, six hamlets and two indigenous villages.

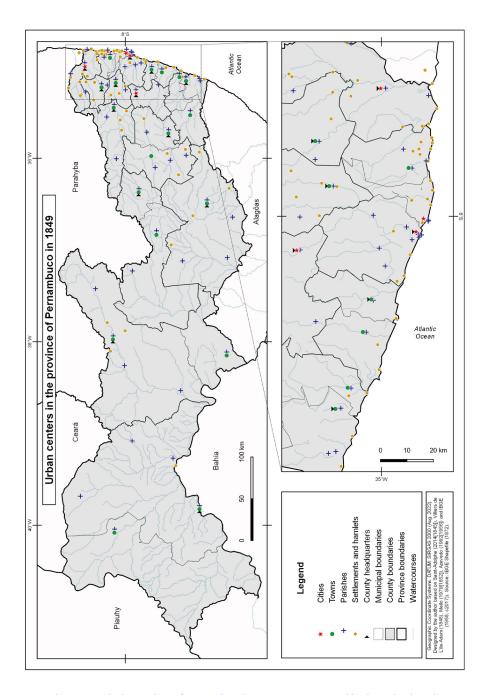
^{**} The author indicates the existence of numerous chapels but does not quantify them.

^{***} Includes settlements, of which 27 were also parish quarters, with 60 settlements without this title.

Finally, we highlight the use of the Google Maps tool to verify some so far unknown locations, especially in the case of parishes, considering that the majority of churches that were previously parish headquarters remain with the same position as at the time of their creation.

In the province of *Pernambuco* at the end of the first half of the 1800s, it is possible to identify the existence of 13 counties, four cities, 18 towns, 56 parishes and 80 settlements and hamlets, as shown in Map 1. This group of nucleations shows the existence of a broad urban network that covered the whole area of *Pernambuco*, although it was denser in the sugarcane-growing *Zona da Mata*, connected by a series of roads, paths and watercourses. As highlighted by Azevedo (1992[1956]) when dealing with colonial towns and cities. The main contents and functions of these urban agglomerations were political-administrative, commercial and religious activities, which can still be seen for the period analyzed, corresponding to the transition from colony to empire. In addition, it is possible to recognize hierarchical relationships between these nucleations, which depended not only on the functions performed but also on the status attributed to them.

In addition to this introduction and final remarks, this work is divided into four parts. The first three sections present the set of urban centers existing in *Pernambuco*, at the end of the first half of the 1800s, organized according to three dimensions that will be called networks here: political-administrative network (towns and cities), judicial network (counties) and ecclesiastical network (parishes). The fourth and final part deals with settlements and hamlets, that is, the centers that did not hold institutional status, even though they fulfilled their own functions in the urban network, especially in commercial and religious aspects. Finally, in the final remarks, a summary of *Pernambuco's* urbanization observed during the research period is presented, as well as some challenges to be faced in future works.



Map 1. Urban centers in the province of *Pernambuco* in 1849. Source: prepared by the author based on Saint-Adolphe (2014[1845]), Villiers de L'ile-Adam (1848), Mello (1979[1852]), Azevedo (1992[1956]) and IBGE (1958; c2017).

The political-administrative network

In the 19th century, *Pernambuco's* political-administrative network expanded significantly compared to previous centuries, expanding its presence towards the *sertão* region. It covered both towns and cities, the only centers that constituted the headquarters of a territorial jurisdiction, at the time called a "term", and were responsible for managing all other centers existing in that territory (ABREU, 1997). During the 1800s, becoming the concept of municipality currently used, the word "municipality" began to be used to designate towns and cities and their respective terms. In this sense, a town or city constituted the "headquarter" of a municipality.

In 1849, *Pernambuco* had four cities and 18 towns (Table 2 and Map 1). Among the cities were *Olinda*, elevated to this status in 1676, when the then town became the base of the Diocese of *Pernambuco*, and *Goiana*, *Recife* and *Vitória*, all elevated to the category of city precisely in the first half of the 19th century. *Recife* and *Goiana* have been important urban centers since previous centuries, being located at strategic points in the territory both due to the production and export of sugar and the flow of livestock activity originating from the *sertões*. *Recife*, established as a town by a royal charter in 1709, was elevated to the category of city by an imperial charter in 1823, shortly before taking *Olinda's* place as capital of the province of *Pernambuco* in 1825⁵. *Goiana* had been a town since 1685, when it was still part of the captaincy of *Itamaracá*⁶ and was elevated to the status of a city by a provincial law in 1840.

^{5.} The elevation of towns that were capitals of provinces to the status of cities represented, according to Fridman (2022), strengthening of territorial unity by Brazilian imperial policy. In addition to Recife, Ouro Preto, Natal, Desterro (currently Florianópolis), Fortaleza, Porto Alegre and São Cristóvão (later replaced by Aracaju) went through the same process.

^{6.} According to Andrade (2004, p. 30), Itamaracá was a "[...] frustrated captaincy, which had a large part of its territory dismembered to form, in 1585, the captain-

Table 2. Towns and cities in the province of *Pernambuco* in 1849. Source: prepared by the author based on Saint-Adolphe (2014[1845]), Villiers de L'ile-Adam (1848), Mello (1979[1852]), Azevedo (1992[1956]) and IBGE (1958; c2017).

Name	Date of	creation	Current name	
Name	Town	City	Guitetil Haitle	
Olinda	1537	1676	Olinda	
Igaraçu	1550 (?)	-	lgarassu	
Formosa do Sirinhaém	1627	-	Sirinhaém	
Goiana	1685	1840	Goiana	
Recife	1709	1823	Recife	
Flores de Ribeira do Pajeú	1810	-	Flores	
Cabo	1811	-	Cabo do Santo Agostinho	
Garanhuns	1811	-	Garanhuns	
Limoeiro	1811	-	Limoeiro	
Paudalho	1811	-	Paudalho	
Vitória	1811	1843	Vitória de Santo Antão	
Brejo da Madre de Deus	1833	-	Brejo da Madre de Deus	
Nazaré	1833	-	Nazaré da Mata	
Rio Formoso	1833	-	Rio Formoso	
Pesqueira	1836	-	Pesqueira	
Boa Vista	1838	-	Santa Maria da Boa Vista	
Bonito	1939	-	Bonito	
Água Preta	1846	-	Água Preta	
Caruaru	1848	-	Caruaru	
Ipojuca	1849	-	lpojuca	
Ouricuri	1849	-	Ouricuri	
Tacaratu	1849	-	Tacaratu	

cy of Paraíba, remaining for more than a century under the total dependence of Pernambuco, to whose captaincy was annexed in 1763".

Unlike the previous towns, *Vitória* only achieved political autonomy in the 19th century, although it had been a parish since 1712, due to the town's importance for livestock and sugar production. It was elevated to the status of a town under the name of *Santo Antão* in 1811 and became the city of Vitória by provincial law in 1843. *Vitória* was located on the banks of the *Tapacurá* River and, according to Andrade (2004), was part of one of the routes for occupying the interior of the captaincy of *Pernambuco*, the so-called *Ipojuca* Route, which started in *Recife* in the direction of *Vitória*, going to *Buíque*, *Tacaratu* and reaching the *São Francisco* River at *Boa Vista*, continuing to the mouth of the *Carinhanha* River.

Regarding towns, of the 18 existing in the province of *Pernambuco* in 1849, 16 were created in the first half of the 19th century. It is possible to recognize three moments of greatest intensity in the creation of towns. The first between 1804 and 1811, when *Flores da Ribeira do Pajeú, Garanhuns, Cabo, Paudalho* and *Limoeiro* were established, in addition to *Vitória*. The second period goes from 1833 to 1839, when *Brejo da Madre de Deus, Nazaré, Rio Formoso, Pesqueira* and *Boa Vista* were created; while the third moment corresponds to the period from 1846 to 1849, in which *Bonito, Água Preta, Caruaru, Ipojuca, Ouricuri* and *Tacaratu* were established.

The first moment of creation of towns (1810-1811) occurred during the government of Caetano Pinto de Miranda Montenegro (1804-1817). According to Figueira de Mello, (1979 [1852]), letters sent by the governor between 1805 and 1809 requested the creation of new towns and another county in *Pernambuco* territory, in order to guarantee the presence of Justice and the Crown in areas which, until then, were scarcely accessed by the bureaucratic structure

of the colony. The answer came with the foundation of the most interior of the towns, *Flores da Ribeira do Pajeú*, established by a royal charter in 1810. *Flores* remained as a parish from 1783 through 1810, when it was elevated to the status of a town, along with the creation of the County of the *Sertão de Pernambuco*, which covered not only the *sertão* belonging to the current state, but also the territory corresponding to the current west of *Bahia*, separated from *Pernambuco* in 1824.

In 1811, as part of the same demands made by the governor, five more towns were created: Garanhuns, located in the high lands of the Agreste and dedicated to livestock, by means of a royal charter that elevated the then julgado settlement and parish to the status of a town; and Cabo, Limoeiro, Paudalho and Santo Antão, all of them created by the same royal charter. The settlement of Cabo had a parish constituted since 1622 and was located on the south coast of the captaincy, in an area of intense sugar production activity. Paudalho, also related to sugar cane mills, was formed at the beginning of the 18th century and became a parish in 1799. It was located on the margins of the Capibaribe river, which was the second route of occupation of the interior of *Pernambuco* territory, crossing the Borborema plateau and reaching the Pajeú river in the sertão (ANDRADE, 2004). Similar to Paudalho, Limoeiro was located on the margins of the Capibaribe, but at a higher point, where there had previously been an indigenous settlement. It became a parish a few decades before becoming a town in 1779.

^{7.} According to an 18th century Dictionary, julgados [courts] consisted of a "population without a pelourinho [pillory], nor the privilege of a town, even though it has a judge, and its own justice." (JULGADO, 1789). Arraes (2017) argues that, during the colonial period, the creation of julgados was a strategy adopted to guarantee the presence of justice in distant places, but not granting of power and administrative autonomy to local elites through the creation of towns.

After this first moment, twenty years passed without any new towns created in *Pernambuco*. Regionally, the captaincy/ province was facing a series of internal revolts and lost the counties of *Alagoas* and *São Francisco* from its territory in 1817 and 18248 respectively. At the national level, Brazil was going through the process of independence from the Portuguese Crown, which was followed by a political centralization around the figure of the Emperor, represented by the Constitution of 1824 and the law of October 1, 1828, which changed the attributions of the municipal councils. According to Cigolini (2015), with the enactment of the law of 1828, the councils became purely administrative departments, whose decisions were referred to the provincial government for approval or revocation.

The second period (1833-1839) was marked by the combined creation of towns and counties, with only one exception, the town of *Pesqueira*. Nationally, the period was marked by decentralization, because of the promulgation of the *Código de Processo Criminal* [Criminal Procedure Code], in 1832, which authorized the creation of new counties, which were associated with the creation of new towns, and the Additional Act of 1834, which created the Provincial Assemblies and gave them the authority to create municipalities⁹.

^{8.} See note 1.

^{9.} For a more detailed analysis of imperial legislation with territorial impacts, see the works of Cigolini (2015) and Fridman (2022).

In 1833, *Brejo da Madre de Deus, Nazaré and Rio Formoso* were elevated to the status of town at the same time that they became the headquarters of their respective counties. *Rio Formoso* and *Nazaré* were located in sugarcane producing areas. *Rio Formoso* in the southern area of the captaincy, close to the homonym river and mills that date back to the first half of the 17th century; and *Nazaré* in the northern area of the captaincy, close to the *Tracunhaém* River, also linked to sugar mills. *Brejo da Madre de Deus* started to be occupied later, in the mid-1700s. Since 1797, it had been a parish located close to the upper reaches of the *Capibaribe* River

The town of *Pesqueira* was established in 1836. Its origins date back to the creation of the town of *Cimbres* in 1762, one of the three *indigenous* towns established in *Pernambuco* during the government of Marquês de Pombal¹⁰. Cimbres was located at the top of the *Serra do Ororubá* in the *Agreste* region. It was built upon an ancient settlement that had been a parish since 1660. By a provincial law in 1836, the municipal headquarters of *Cimbres* was transferred from the old town to the settlement of *Santa Águeda de Pesqueira*, formed around the cattle farm *Poço do Pesqueira*, established in the region in 1800. According to Neves (2003), the transfer was due to the rapid development of *Pesqueira*, besided the less strategic and difficult-to-access location of *Cimbres*, considered distant from the road where cattle passed.

^{10.} The other towns were Santa Maria da Boa Vista and Assunção, created on islands in the middle course of the São Francisco River in 1761, as part of a regulatory project aimed at indigenous populations that elevated several indigenous villages to the categories of settlements and towns (FLEXOR, 2017). These towns are not mentioned in the documents relating to the 19th century consulted for this paper, unlike the town of Cimbres.

In the 1830s, the towns of *Boa Vista* and *Bonito* were established. *Boa Vista*, a parish since 1762, originated from a cattle farm located along the *São Francisco* River. At the time of its creation, it was the most interior town in the province and was established concurrently with the homonym council, of which it became the headquarters in 1838. On the other hand, *Bonito* was established as a parish and town by a law in 1839, becoming the headquarters of the council with the same name. *Bonito* was located in the Southern *Agreste*, in a mountainous area that had been encompassed by the *Quilombo dos Palmares* in the past.

The third period of creation of towns (1846-1849) occurred after the promulgation of law no. 105, of 1840, which reestablished the centralization of power around the imperial government, even though the creation of towns remained under the responsibility of the provincial assemblies. The five towns created were distributed in *Zona da Mata, Agreste* and *Sertão*, which contributed to interiorizing the network of nucleations with political-administrative functions throughout the territory, in addition to densifying it in areas of previous colonizing occupation. Cigolini (2015) recognizes the same trend for the vast national territory during the imperial period, evidencing a process of concentrated dispersion of created municipalities and their headquarters, as well as a greater institutionalization of old regions of occupation in relation to new ones.

Água Preta and Ipojuca were located in Zona da Mata. The first, located on the banks of the Una River – in an area of intense sugar cane production, despite being around 50 kilometers from the

coast – was elevated to parish status in 1809. It became a town by provincial law in 1846. *Ipojuca*, located on the banks of the river of same name, was a very old hamlet, with a parish prior to the period of the Dutch invasion. The former parish of *São Miguel de Ipojuca* received the title of town by provincial law in 1849, after the transfer of the headquarters which, since 1846, had been in the hamlet of *Nossa Senhora do* Ó, located closer to the coast.

Caruaru, in the Agreste of the province, originated from a cattle farm and was located on the banks of the Ipojuca River, one of the main routes of interiorization for the occupation of the former captaincy. It received, by a provincial law of 1848, both the status of town and parish. Tacaratu and Ouricuri, both in the sertão of Pernambuco, were established by provincial laws of 1849. Ouricuri, close to the limit with the provinces of Piauí and Ceará, originated from livestock farms and received the title of parish shortly before becoming town, in 1844. Tacaratu was located on the banks of the São Francisco river and, since the 17th century, was a settlement of indigenous people. In 1761, it was elevated to the status of parish.

It is necessary to mention that four other towns created at the end of the 1840s and soon suppressed. Located in the *sertão* and whose parishes were established at the turn of the 18th century to the 19th century. *Floresta* and *Exu* were established as towns in 1846 and replaced, respectively, by *Tacaratu* and *Ouricuri* as municipal headquarters in 1849. *Bom Conselho* and *Correntes*, both in the Southern *Agreste*, close to the town of *Garanhuns*, were established in 1848 and suppressed a year later, in 1849.

The judicial network

The province of *Pernambuco* encompassed thirteen counties at the end of the first half of the 19th century. According to a dictionary from the end of the 18th century, the counties corresponded to a "[...] number of towns with their territories, whose justice is administered by the Corregidor, and more ministers, who reside at the head of the Council, which is a city, or notable town" (COMARCA, 1789). The counties were responsible for maintaining justice in the territory and, in Brazil, they had the *ouvidor* [judicial officer] as their authority. They covered one or more municipalities, with the only or most important of them adopted as the head (seat) of the county.

According to the Ensaio sobre a Estatística Civil e Política da Provincia de Pernambuco [Essay on the Civil and Political Statistics of the Province of Pernambuco], the territory of Pernambuco was divided into the following counties at the beginning of the 1800s: the county of *Itamaracá*, existing since the period when *Itamaracá* was an independent captaincy (suppressed in 1808 when it was incorporated into the county of Goiana); the county of Paraíba do Norte, created in the late seventeenth century that includes, besides the territories of the Paraíba and Rio Grande captaincies, the term of the town of Goiana; the county of Alagoas, created in 1706, covering the territory of Alagoas, which was part of the captaincy of Pernambuco until 1817; the county of *Jacobina*, created in 1725, which covered a part of the captaincy of *Bahia* and a significant portion of the *Pernambuco* captaincy; and finally, the county of Pernambuco, existing since the first grantee of the captaincy, with its headquarters in Olinda at the beginning of the century (MELLO, 1979 [1852]).

Still according to *Ensaio...*, the governor of the captaincy between 1804 and 1817, Caetano Pinto de Miranda Montenegro, argued that the few judicial officers were not in a position to resolve justice issues, as "[...]they could not handle half of what was in their charge; which, due to the great distance, never covered their entire district [...]", and required the creation of new counties (MELO, 1979[1852], p.114). In this direction, *Comarca do Sertão de Pernambuco* was created in 1810, which comprised, in addition to the town of *Flores da Ribeira do Pajeú* (headquarters), the towns of *Cimbres*, *São Francisco das Chagas* and *Pilão Arcado*, the courts of *Garanhuns, Flores da Ribeira do Pajeú, Tacaratu* and *Cabrobó* and the settlements of *Campo Largo* and *Carinhanha*. Some of these nucleations were located in the territory dismembered from *Pernambuco* in 1824.

Again, due to the demands of the governor of the captaincy, expressed in letters from 1814, according to Figueira de Mello (1979[1852]), the county of *Pernambuco* was divided into two by royal charter of 1815: the county of *Pernambuco*, with headquarters in the town of *Recife* and covering the areas of the towns of *Santo Antão, Cabo* and *Sirinhaém*; and the county of *Olinda*, headquartered in the city of *Olinda* and bringing together the areas of the towns of *Igaraçu, Paudalho, Limoeiro* and *Goiana*, which had finally been separated from the county of *Paraíba*. In 1820, a new county was installed by royal charter on the third of June, county of *Rio São Francisco*, which, separated from the county of *Sertão de Pernambuco*, comprised the territory of the current west of *Bahia*, separated from the territory of *Pernambuco* in 1824. Its headquarters was the town of *Barra*.

A new restructuring of the province's judicial division took place in 1833, by deliberation of the *Conselho do Governo Provincial* [Provincial Government Council] and in correspondence with the Criminal Procedure Code of 1832, mentioned in the previous section, when nine counties were established: *Recife* (taking over the county of *Pernambuco*, significantly reduced and incorporating the old county of *Olinda*), *Goiana, Nazaré, Limoeiro, Santo Antão, Rio Formoso, Bonito* (whose headquarters moved from *Bonito* to *Caruaru* in 1848, with the creation of this town), *Brejo* and *Flores* (replacing the former county of *Sertão de Pernambuco*). In the following years, four more counties were created: *Garanhuns* (1836); *Boa Vista* (1838); and *Paudalho* and *Cabo* (1840). In 1849, the province of *Pernambuco* had 13 counties (Table 3 and Map 1).

Table 3 also shows the number of "fogos¹¹" and inhabitants of each county of the province and their respective municipalities in 1839, which leaves out the municipalities (and their respective towns) created after that date¹². According to Figueira de Mello (1979[1852]), the number of inhabitants in the province was 353,121 in 1839, which differs significantly from the author's own projections for the end of the first half of the century (around 650 thousand inhabitants), as well as the number stated by Villiers de L'ile-Adam (1848), who estimated the population of *Pernambuco*, in the middle of the 19th century, at around one million people.

^{11.} As defined in Figueira de Mello (1979[1852]), the number of fogos is considered as the number of dwellings and not houses. A house with two floors, for example, could have two dwellings, one on each floor.

^{12.} Amongst the towns that do not appear in Table 3, Pesqueira was the seat of the municipality of Cimbres and belonged to the county of Brejo. The five towns created between 1846 and 1849, not identified in the table, were organized as follows: Água Preta was part of the municipality and county of Rio Formoso; Caruaru, part of Bonito; Ipojuca, part of Cabo; Ouricuri, part of Boa Vista and Tacaratu, part of Flores.

Table 3. Number of *fogos* and inhabitants per county and municipality of *Pernambuco* in 1839. Source: prepared by the author based on Mello (1979[1852]).

County	Fogos	Inhabitants	Municipality	Fogos	Inhabitants
	26.693	72.926	Recife	16.890	46.276
Recife			Olinda	3.594	9.689
			Iguaraçu	6.209	16.961
Santo Antão	6.673	19.822	Santo Antão	6.673	19.822
Boa Vista	8.299	19.705	Boa Vista	8.299	19.705
Bonito	6.524	10.753	Bonito	6.524	10.753
Droio	4.970	18.106	Brejo	2.051	9.013
Brejo			Cimbres	2.919	9.093
Cabo	8.164	27.549	Cabo	8.164	27.549
Flores	7.925	28.526	Flores	7.925	28.526
Garanhus	9.610	46.581	Garanhuns	9.610	46.581
Goiana	7.944	31.390	Goiana	7.944	31.390
Limoeiro	8.229	24.320	Limoeiro	8.229	24.320
Nazaré	5.177	15.772	Nazaré	5.177	15.772
Paudalho	5.235	12.196	Paudalho	5.235	12.196
Rio Formoso	23.995 25.475	95 <i>(</i> .75	Sirinhaém	12.700	14.413
KIU FUITIUSU		20.470	Rio Formoso	11.295	11.062
TOTAL	129.438	353.121	TOTAL	129.438	353.121

Despite the statistical inaccuracies, considering the data available in Table 3, as a coherent set of information, it is possible to notice a greater population concentration in the counties located in the *Zona da Mata*, with emphasis on *Rio Formoso, Limoeiro, Goiana, Cabo* and *Recife*. However, the populations of the counties of *Flores* and *Garanhuns*, located, respectively, in the *Sertão* and *Agreste*, were also relevant in the period, which explains an effective occupation of the interior of the province. According to Map 1, it is highlighted that the areas covered by the interior counties were significantly larger than those of the counties closest to the coast and the capital. In this perspective, probably the population in *Sertão* had limited access to justice, as reported by the governor of the then captaincy at the beginning of the century, given the significant distances to be covered by the *ouvidores* in the interior of the province.

Table 4 shows the number of employees working in the judicial service in the year of 1842, according to Figueira de Mello (1979[1852]). These data evidence the importance of the judicial function in the urban dynamics of the province, because of the necessity for these agents to circulate throughout the territory, which connected the heads of counties with the headquarters of parishes and other hamlets. These are the municipalities that existed in 1842, so municipalities (and their respective villages) created after that date are left out.

Table 4. Justice officials by county and municipality in *Pernambuco* in 1842. Source: prepared by the author based on Mello (1979 [1852]).

County	Law judges	Prosecutors	Municipality	Municipal judges	Police chief	Juror	Court clerk
			Recife	2	2	530	20
Recife	4	3	Olinda	1	1	153	2
			Iguaraçu	1	1	203	2
Santo Antão	2	1	Santo Antão	1	1	308	3
Boa Vista	2	1	Boa Vista	1	1	145	3
Bonito	2	1	Bonito	1	1	231	3
Brejo	1	1	Brejo	1	2	199	Ц
ыбјо	l	1	Cimbres				4
Cabo	2	1	Cabo	1	2	200	2
Flores	2	1	Flores	1	1	192	3
Garanhus	2	1	Garanhuns	1	1	220	2
Goiana	1	1	Goiana	1	1	205	6
Limoeiro	2	1	Limoeiro	1	1	192	2
Nazaré	2	1	Nazaré	1	1	299	3
Paudalho	1	1	Paudalho	1	2	154	2
Rio Formoso	2 1	1	Sirinhaém	-	1	150	-
KIU FUITIUSU			Rio Formoso	1	1	232	4
TOTAL	25	15	TOTAL	16	20	3613	61

The ecclesiastical network

The province of Pernambuco encompassed a vast network of parishes in the mid-1800s, distributed throughout its territory, although their concentration gradually decreased in an east-west direction, similar to what used to happen concerning political-administrative and judicial networks. Also called *paróquias*, parishes played a central role in the organization of society, as they were responsible for the birth, marriage and death records of a territory called a district at the time. They were associated with a series of chapels, the most important being the branch chapels, which were responsible for a sub-area within the district. According to Marx (1991), during the colonial period, the creation of parishes represented the recognition by the Crown, organized in conjunction with the Catholic Church, of a certain undefined area or one that was expanding in population. Fifty-six parishes were surveyed, which can be added to at least another 160 linked chapels, many of which were considered branches (Table 5 and Map 1).

Figueira de Mello (1879[1852]) indicates the number of chapels associated with each parish imprecisely. In some cases, he mentions that there were more than two or four chapels, not informing the exact number, at the same time he points out the existence of chapels linked to sugar mills within the districts, but not quantifying them. Despite the uncertainties, the number of chapels evidences the presence of a significant number of urban nucleations, considering that churches were basic elements for the emergence of a population. In addition to the list of parishes, organized according to the region to which they belonged, Table 5 indicates the number of chapels linked to each parish and the current locations of their

former headquarters. In 43 of the 56 parishes, the headquarters coincide with the central areas of contemporary municipalities, which highlights the existence of past urban structures marked by centralities that persist to this day in these places.

Table 5. Parishes and number of chapels linked by county in *Pernambuco* in 1842. Source: prepared by the author based on Mello (1979[1852]).

		Chapels	Current name		
County	Parish	linked	Municipality	Neighborhood/ District	
	N. S. da Assunção de Cabrobó	2	Cabrobó	Centro	
	S. Maria da Boa Vista	4	Santa Maria da Boa Vista	Centro	
Boa Vista	S. Antônio do Salgueiro	-	Salgueiro	Centro	
	S. Sebastião do Ouricuri	-	Ouricuri	Centro	
	Senhor Bom Jesus do Exu	-	Exu	Centro	
	Bonito	1	Bonito	Centro	
Bonito	S. Caetano	1	São Caetano	Centro	
	S. José dos Bezerros	1	Bezerros	Centro	
	N. S. da Conceição da Lagoa de Baixo	2	Sertânia	Centro	
Brejo	N. S. das Montanhas de Cimbres	3	Pesqueira	Cimbres	
<i>y</i> .	S. José do Brejo da Madre de Deus	3	Brejo da Madre de Deus	Centro	
	N. S. do Rosário da Muribeca	7	Jaboatão dos Guararapes	Muribeca	
Cabo	S. Antônio do Cabo de Santo Agostinho	3	Cabo de Santo Agostinho	Centro	
	S. Miguel de Ipojuca	4	Ipojuca	Centro	
	N. S. da Conceição de Flores	2	Flores	Centro	
	N. S. da Penha da Serra Talhada	1	Serra Talhada	Centro	
Flores	S. José da Ingazeira	4	Ingazeira	Centro	
	Senhor Bom Jesus da Fazenda Grande	-	Floresta	Centro	
	Tacaratu	1	Tacaratu	Centro	

(cont.) Table 5. Parishes and number of chapels linked by county in *Pernambuco* in 1842. Source: prepared by the author based on Mello (1979[1852]).

		Chapels	Current name		
County	Parish	linked	Municipality	Neighborhood/ District	
	Altinho	-	Altinho	Centro	
	Jesus Maria José de Papacaça	1	Bom Conselho	Centro	
Garanhuns	N. S. da Conceição de Águas Belas	-	Águas Belas	Centro	
udidililulis	S. Antônio de Garanhuns	3	Garanhuns	Santo Anônio	
	S. Félix do Buíque	-	Buíque	Centro	
	Senhor Bom Jesus de Panelas	-	Panelas	Centro	
	N. S. da Conceição de Itamaracá	7	Ilha de Itamaracá	Vila Velha	
	N. S. do Desterro de Itambé	4	Itambé	Centro	
Goiana	N. S. do Rosário de Goiana	3	Goiana	Centro	
	N. S. do Rosário do Cruanji	-	Timbaúba	Cruanji	
	S. Lourenço de Tejucupapo	7	Goiana	Tejucopapo	
	N. S. da Apresentação do Limoeiro	4	Limoeiro	Centro	
Limoeiro	S. Ana do Bom Jardim	2	Bom Jardim	Centro	
	S. Amaro de Taquaritinga	4	Taquaritinga do Norte	Centro	
Nazaré	N. S. da Conceição de Nazaré	+4	Nazaré da Mata	Centro	
Ναζαισ	S. Antônio de Tracunhaém	2	Tracunhaém	Centro	
Paudalho	Divino Espírito Santo de Paudalho	1	Paudalho	Centro	
Paudallio	N. S. da Glória do Goitá	1	Glória do Goitá	Centro	
	Afogados	4	Recife	Afogados	
	Pasmado	-	Igarassu	Pasmado	
Recife	Poço da Panela	-	Recife	Poço da Panela	
	Santíssimo Sacramento da Boa Vista	13	Recife	Boa Vista	
	S. Amaro de Jaboatão	-	Jaboatão dos Guararapes	Centro	

(cont.) Table 5. Parishes and number of chapels linked by county in *Pernambuco* in 1842. Source: prepared by the author based on Mello (1979[1852]).

		Chapels	Current name		
County	Parish	linked	Municipality	Neighborhood/ District	
	S. Antônio do Recife	11	Recife	Santo Antônio	
	S. Cosme e Damião de Igaraçu	+5	Igarassu	Centro	
	S. Frei Pedro Gonçalves	4	Recife	Bairro do Recife	
Recife	S. José do Recife	4	Recife	São José	
	S. Lourenço da Mata	1	São Lourenço da Mata	Centro	
	S. Pedro Mártir de Olinda	5	Olinda	Carmo	
	Sé de Olinda	7	Olinda	Carmo	
	N. S. da Conceição de Sirinhaém	6	Sirinhaém	Centro	
D.	N. S. da Purificação de Una	+2	Barreiros	Zona Rural	
Rio Formoso	Rio Formoso	-	Rio Formoso	Centro	
	S. José d'Água Preta	-	Água Preta	Centro	
	S. Miguel dos Barreiros	-	Barreiros	Centro	
Santo	Escada	10	Escada	Centro	
Antão	Santo Antão	10	Vitória de Santo Antão	Centro	

Arraes (2017) highlights the importance of the ecclesiastical network in the process of occupation and urbanization of the region called by the author *Sertões do Norte* – covering the interior of the current states of the Northeast region. In the case of *Pernambuco*, this is what has been called *Agreste* and *Sertão*. According to the author, the ecclesiastical network of chapels and parishes preceded, in chronological aspects, the civil network structured by towns, cities and courts (see footnote 7). The role of the State, as a form of control and organization of social life in these regions, was materialized through the presence of the Catholic Church. A concrete element of this dynamic is the number of public employees in the parishes, who were responsible for civil registrations and, in cases where they were located outside the municipal headquarters, also for maintaining social order.

In the province as a whole, between 1842 and 1845, there was a body made up of 90 judges of the peace, 80 sub-delegates, 63 clerks of the peace and 804 block inspectors. As an example and comparison, the important parish of Santo Antônio do Recife had, in the same period, two judges of the peace, a sub-delegate, a clerk of the peace and 36 block inspectors. The parish of Poço da Panela, located on the outskirts of the city of Recife, had a judge of the peace, a sub-delegate, a clerk of the peace and eight block inspectors (MELLO, 1979[1852]). These data highlight the tied relationship between the State and the Church, as the parishes, which made up the ecclesiastical network, provided civil services that met judicial demands, organized around the counties.

The non-institutionalized network of settlements and hamlets

In addition to the networks presented in the previous topics, which correspond to the political-administrative, judicial and ecclesiastical dimensions of organization of urban centers, there were, in the province of *Pernambuco* at the end of the first half of the 19th century, a significant number of settlements and hamlets that were not institutionalized, but which were later elevated to the status of parish and/or town. There were 80 small nuclei dispersed throughout the territory, although concentrated in the Zona da Mata area, of which it was possible to recognize the current location of 61 of them (Map 1). The other 19, for probable reasons of name change or disappearance, were not identified.

These nucleations indicated varied degrees of insertion and were part of the existing urban network at the time, thus, it is important to include them, as Bueno (2016) states. Although she deals specifically with colonial Brazil, the author draws attention to an aspect that is also important to the analysis of urbanization during the imperial period: the need for interpretations that consider other forms of urban nucleations in addition to just towns and cities, such as places, *arraiais*, chapels, parishes, courts, rural neighborhoods, indigenous villages, missionary villages, resting sites, registrations, passages, barriers, farms, ranches, corrals and fortresses, which allows expanding the concept of urban nucleus and, in the same perspective, its relationship with the urban network.

In the case of the province of *Pernambuco*, among the hamlets and settlements found, it is possible to distinguish some patterns. There is a group of settlements that became autonomous towns and municipalities after the period in focus, both in the second half of the 19th century (such as *Correntes, Gravatá* and *Timbaúba*) and throughout the 20th century (such as *Itapissuma, Lagoa de Itaenga, Tamandaré* and *Capoeiras*). There are also localities that did not become independent towns, but that became headquarters of districts, remaining so to this day, such as *Nossa Senhora do* Ó (*Ipojuca*), *Ponta de Pedras and Tejucopapo* (*Goiana*), *Barra do Sirinhaém* (*Sirinhaém*), *Caricé* and *Ibiranga* (*Itambé*), among others.

Another group that stands out are towns that were created close to sugar mills and that today are neighborhoods in *Recife* and municipalities adjacent to the capital, such as *Várzea* and *Boa Viagem* (*Recife*), *Pau Amarelo* and *Maria Farinha* (*Paulista*), *Candeias* (*Jaboatão dos Guararapes*) and *Rio Doce* (*Olinda*). Finally, we highlight two hamlets that were important nucleations in the past and that today are small places, which evidences the dynamic nature of the urbanization process: *Vila Velha*, on the Island of *Itamaracá*, where the old town of *Conceição de Itamaracá* was founded, and extinct in 1846; and *Nazaré do Cabo*, in *Cabo de Santo Agostinho*, where there was an important colonial fortress and where the town of *Nazaré do Cabo* was created and destroyed during the Dutch invasion, according to Saint-Adolphe (2014[1845]).

Although these nucleations did not reach the status of parish, town or city during the period studied, they were inserted into the urban network through commercial exchanges and their religious functions, given the existence of churches and chapels with their ceremonies and festivities. Just like the most important

centers, these hamlets and settlements were located in strategic locations, such as on the coast and on the banks of rivers, paths and roads, contributing to the materialization of the connections that gave shape to the urban network of the period.

Final remarks: particularities of urbanization in *Pernambuco* and the limits of this paper

As Fridman (2022) pointed out when analyzing Brazilian urbanization during the 19th century, urbanization is a long-term process with different temporal rhythms and different scales. In this point of view, *Pernambuco* is different from what the author recognizes for the Southeast and South of Brazil, where the "planning of the barons" (linked to the coffee culture) and "imperial urbanism" contributed to ordering of space, organization of local and provincial administrations and creation of new and regular urban areas.

In the province of *Pernambuco*, as it is believed to have happened in other provinces in Northeastern Brazil, the first half of the 19th century was marked by the consolidation of areas occupied since the first century of Portuguese colonization, especially the *Zona da Mata* and the coast, where a dense network of urban centers was structured around the sugar industry, still present in the region today. In this highly populated area, during the period covered by the research, counties were dismembered, some towns were elevated to the status of a city, new towns were created from old parishes, countless parishes were created over existing hamlets, as well as a myriad of smaller settlements and hamlets were established tying up the urban network.

In the *Agreste* and *Sertão*, whose colonizing occupation was consolidated during the 18th century, although it began after the expulsion of the Dutch in the previous century, the first half of the 1800s represented the emergence of new settlements linked to cattle farms and old indigenous villages, many of them elevated to the status of town and/or parish, which were located far from each other compared to those in *Zona da Mata*. The region also began to have the presence of Justice and public administration in a more effective way, due to the creation of counties with headquarters located in their respective towns.

As pointed out in the introduction, this work sought to deepen the analysis of the urban nucleations existing in the province of *Pernambuco* at the end of the first half of the 19th century, their main functions and the hierarchical relationships established between them. Thus, three dimensions were considered: politicaladministrative, judicial and ecclesiastical. Although separated for analytical purposes, it is noticeable that these three networks overlapped territorially, considering that the towns and cities, in most cases, were also heads of counties, as well as basis for several parishes. What we intend to highlight is the urban character of these agglomerations, which occupied strategic locations in the territory of the province and, through the political-administrative, judicial and ecclesiastical activities they carried out, contributed to the circulation of people, goods and capital and to the accumulation of desired wealth, firstly, by the colonial administration and, at the end of the period analyzed, by the imperial government.

In addition to the existence of counties, towns, cities, parishes, settlements and hamlets, understanding urbanization necessarily demands the understanding of the flows and connections perceived between the ties that make up an urban network. In this work, the focus was on the urban nucleations, which highlight the urbanization process, according to Reis Filho (1968), following one of his two perspectives. However, the network perspective was secondary in the analysis. It is known that an interpretation considering these two dimensions would allow the understanding of urbanization in a broader and more complex way, which would include both the urban nuclei and the circulation routes existing in the territory, and the flows that passed through them, such as goods, people, norms and capitals. In any case, this limitation of the text, whose responsibility lies entirely with its author, presents not only an indication of the need to advance the research presented here, but also as an invitation to new investigations into the urbanization of *Pernambuco* during the imperial period, as well as in past times, in order to contribute to the understanding of Brazilian urbanization in general.

References

ABREU, M. A. A apropriação do território no Brasil Colonial. *In*: CASTRO, I. E.; GOMES, P. C. C.; CORRÊA, R. L. (Org.). **Explorações geográficas**. Rio de Janeiro: Bertrand Brasil, 1997. p. 197-243.

ANDRADE, A. B. A ocupação dos sertões no século XVIII. O caso do oeste baiano. **Geosul**, Florianópolis, v. 28, n. 55, p. 77-102, jan./jun. 2013.

ANDRADE, M. C. Movimentos nativistas em Pernambuco: setembrizada e novembrada. Recife: Universidade Federal de Pernambuco, 1971.

_____. O processo de ocupação do espaço regional do Nordeste. Recife: SUDENE, 1979[1978].

_____. **Pernambuco**: cinco séculos de colonização. João Pessoa: Grafset, 2004

ARRAES, D. E. A. **Ecos de um suposto silêncio**: paisagem e urbanização dos "certoens" do Norte, c.1666-1820. Tese (Doutorado em Arquitetura e Urbanismo) — Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, 2017.

AZEVEDO, A. "Vilas e cidades no Brasil colonial (ensaio de Geografia Urbana retrospectiva)". **Terra Livre**, n. 10, p. 23-78, jan./jul. 1992[1956].

BUENO, B. P. S. "O Brasil-colônia: em que medida mais urbano do que parece à primeira vista?" *In*: CONGRESSO IBERO-AMERICANO DE HISTÓRIA URBANA, 1., 2016, Santiago do Chile. Atas [...]. Santiago: Asociación Iberoamericana de Historia Urbana, 2016. p. 825-834.

CIGOLINI, A. A. "Ocupação do território e a geopolítica da criação de municípios no período colonial brasileiro". **Boletim Gaúcho de Geografia**, Porto Alegre, v. 38, p. 53-72, maio. 2012.

_____. "Ocupação do território e a criação de municípios no período imperial brasileiro". **Mercator**, Fortaleza, v. 14, n. 1, p. 7-19, jan./abr. 2015.

COMARCA. *In*: **DICIONÁRIO** da Lingua Portugueza composto pelo Padre D. Rafael Bluteau, reformado, e accrescentado por Antonio de Moraes Silva natural do Rio de Janeiro. Lisboa: Officina de Simão Thaddeo Ferreira, 1789. v. 1.

CORRÊA, R. L. **Estudos sobre a rede urbana**. Rio de Janeiro: Bertrand Brasil, 2006.

DERNTL, M. F.; CARVALHO, J. L. Tão longe, tão perto: uma abordagem comparada de processos de reorganização territorial nas capitanias gerais de São Paulo e Pernambuco, 1750-1777. In: **Anais do XI SHCU**. Vitória: UFES, 2010. p. 1-17.

FLEXOR, M. H. Vilas do Brasil no século XVIII: plano escrito ou plano desenhado? *In*: FRIDMAN, F. (Org.). Espaço urbano latino-americano: ensaios sobre história e política territorial. Rio de Janeiro: Garamond, 2017. p. 37-62.

FRIDMAN, F. Urbanizações brasileiras no século XIX. *In*: ALMICO, R. C. S.; PEREIRA, W. L. (Org.). **História econômica do Brasil Império**. Niterói: Eduff; São Paulo: Hucitec, 2022. p. 216-260.

_____; FERREIRA, C. H. C. (Ed.). **Urbanizações Brasileiras 1800-1850**. Rio de Janeiro: Letra Capital. 2023.

GIL, T. L; BARLETA, L. B. Atlas Histórico da América Lusa. Porto Alegre: Ladeira Livros, 2016.

IBGE – INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Enciclopédia dos Municípios Brasileiros**. Rio de Janeiro: IBGE, 1958. v. XVIII.

______. **Cidades@**. c2017. Available at: https://cidades.ibge.gov.br/>. Consulted in: 14 jun. 2022.

- JULGADO. *In*: **DICIONÁRIO** da Lingua Portugueza composto pelo Padre D. Rafael Bluteau, reformado, e accrescentado por Antonio de Moraes Silva natural do Rio de Janeiro. Lisboa: Officina de Simão Thaddeo Ferreira, 1789. v. 1.
- LHS LABORATÓRIO DE HISTÓRIA SOCIAL. Universidade de Brasília. **Atlas Digital da América Lusa**. [2011?]. Available at: https://lhs.unb.br/atlas/. Consulted in 14 jun. 2022.
- MARX, M. Cidade no Brasil terra de quem? São Paulo: Nobel, EDUSP, 1991.
- MELLO, J. M. F. Ensaio sobre a Estatística Civil e Política da Província de Pernambuco. Recife: Conselho Estadual de Cultural, 1979[1852].
- NEVES, A. L. Estudo morfológico de cidades do Agreste Pernambucano séculos XVIII e XIX. Dissertação (Mestrado em Desenvolvimento Urbano) Centro de Artes e Comunicação, Universidade Federal de Pernambuco, Recife, 2003.
- REIS FILHO, N. G. Contribuição ao Estudo da Evolução urbana do Brasil (1500/1720). São Paulo: Livraria Pioneira; EDUSP, 1968.
- SAINT-ADOLPHE, J. C-R. M. **Dicionário Histórico, Geográfico e Descritivo do Império do Brasil**. Belo Horizonte: Fundação João Pinheiro; Brasília: Instituto de Pesquisa Econômica Aplicada, 2014[1845].
- VENÂNCIO, R. P. A construção de um dicionário. *In*: SAINT-ADOLPHE, J. C-R. M. **Dicionário Histórico, Geográfico e Descritivo do Império do Brasil**. Belo Horizonte: Fundação João Pinheiro; Brasília: Instituto de Pesquisa Econômica Aplicada, 2014. p. 17-26.
- VILLIERS DE L'ILE-ADAM, J. Carta Topográfica e Administrativa das Províncias do Pernambuco, Alagoas e Sergipe. Rio de Janeiro: Firmin Didot Irmaos, Belin le Prieur e Morizot, 1848. Available at: http://objdigital.bn.br/objdigital2/acervo_digital/div_cartografia/cart67925/cart67925.htm. Consulted in: 31 maio 2022.

Social Technology and Conventional Technology for the community preservation of hydric resources in the planning of Mesquita Quilombo Territory - GO against environmental racism¹

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Introduction

This research integrates social technology with conventional technology for the purpose of analyzing the community preservation of water resources in the planning of Quilombo Mesquita Territory – GO against environmental racism. According to the Palmares Foundation, quilombola communities contribute to environmental

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preservation, even in the metropolitan region of cities and surrounding areas, that is, encompassing the rural areas that make up the green belt of the periurban landscape mosaic. In summary, this paper deals with the concept of environmental injustice to the detriment of sustainable development in the remaining quilombola community of Quilombo Mesquita, located in the municipality of Cidade Oeste, Goiás. The aim is to map the use and occupation of land and, consequently, the management of environmental resource of areas where quilombola occupation still persists as opposed to non-quilombola occupations within the same territory delimited by INCRA in 2011.

The Quilombo Mesquita community had its Relatório Técnico de Identificação e Delimitação (RTID) [Technical Identification and Delimitation Report] published in the Official Gazette in 2011. Its territory is defined as an area of approximately 4,292 hectares, however this publication also points out that more than 80% of this territory is occupied by non-quilombolas, including urban subdivisions and intensive agricultural areas. According to the RTID (INCRA, 2011), the preservation and maintenance of the biome is a *sine qua non* condition for the community life in Mesquita, where, based on the quantities of native vegetation exploitation and land use, on average, 50% of the territory that each family occupies corresponds to the native vegetation of the Cerrado and another significant part is used as family farming.

malidade, redes solidárias, tecnologia social e lugares saudáveis e sensíveis à água" [The Habitat production in the territory of the FD and surroundings, urban and rural ecosystems and socio-technical advice: typologies and spatial patterns, informality, solidarity networks, social technology and healthy and water-sensitive places]

The report highlights the preservation of hydric resources involving the use of water from springs, mines, water courses in the quilombola pattern of occupation (present in the territory and important for the preservation of the local biome) and reinforces the necessity of a close relationship and commitment with the territory for sustainable development, thus, implying the social and economic organization and maintenance of the community. On the other hand, the study highlights the risk brought by projects and activities developed in this area to hydric resources considering their preservation, namely the arable land and the domestic impact of subdivisions which are considered anthropogenic changes with possible impact.

According to INCRA (2011), at the beginning of the mid-20th century the territory was more than 10 times larger than that currently occupied. With the process of building the city of Brasília from the 1950s onwards and, consequently, the growth of satellite cities, the community's territory suffered from these changes. In recent years, real estate speculation in the country's capital has seen a new style of contemporary living in horizontal condominiums or isolated neighborhoods such as "Alphaville Brasília Residencial". The zoning of the Western City Master Plan considers the region as Urban Macrozone III with regions that allow multi-family residences and apartment buildings and could completely mischaracterize the Afro-rural territory, in addition to making it impossible for the quilombola population to maintain its high rates of Imposto Predial e Territorial Urbano (IPTU) [Urban Property and Territorial Tax] payments.

The great challenge faced by the Quilombo Mesquita community is to guarantee land demarcation and titling, to maintain its original territory and identity, as well as to recover the occupied areas. However, it is necessary to go beyond defending the territory, valuing the "production of the common" and the development of social technology so that the neoliberal economic model does not advance. Understanding the 'common' as a political principle and "instituting praxis". The production of the common in Afro-descendant quilombola spaces reflects territorial collectivity and identity with goods and resources shared between individuals, a place where space is managed and administered in a collective manner and these connections with the territory consolidate relationships.

Conservation and preservation of natural resources are aligned with the safeguarding policies of Quilombo Mesquita, where environmental resources and their maintenance are vital and strategic for the subsistence and development of the community. However, the conservation of these resources goes against the practices existing in the non-quilombola occupation area within the territory in which urban subdivisions and large areas of intensive agriculture (that impact the fragmentation of the territory and cause degradation of the biome) are observed.

Therefore, the process of mapping hydric resources and environmental preservation indices in the territory of Quilombo Mesquita are in line with the Sustainable Development Goals of the UN Agenda 2030, in addition to OD11, with SDGs 2 and 6.

The analysis of the occupation processes corroborates the aim of safeguarding cultural heritage as it rationalizes the sustainable development with environmental preservation through positive economic, social and environmental relationships with the ecosystem in the community; where the spatial organization of family nuclei in the Cerrado landscape, family farming as a resilient agricultural practice and the dynamics of land use and occupation protect the ecosystem related to water and cares for the existing environmental preservation area within the territory.

The main objective of the article is to demonstrate the mapping and analysis of community environmental preservation and hydric resources within the territory of Quilombo Mesquita, the importance of water and environmental resources for the subsistence of quilombolas, as well as the dichotomy of environmental impact processes in the occupation non-quilombolas within this territory. The authors have decided to use technology to map the territory at two levels: (i) by means of remote sensing with the production of thematic maps prepared with the aid of Geographic Information Systems (GIS) via satellite images in the QGIS software and UAV and (ii) social cartography technology based on participatory diagnosis

The socio-technical advisory work carried out was requested by the Coordinator of the Black Issue of the DAC/UnB Diversity Directorate, Manoel Barbosa Neres from UnB, resident in Quilombo Mesquita, through Process SEI 23106.120294/2018-40. Assistance was requested to meet the requirements of the Ministétio Público Federal [Federal Public Ministry] regarding the need to issue environmental reports related to the impacts of quilombola cemeteries in the territory of Quilombo Mesquita. The request for issuance of reports that justify the use of land in traditional rituals, without there being any evidence of any misuse by Quilombola, appears to be another way of invalidating Mesquita's cultural

means, making its traditions invisible and can be characterized as a direct attack on the population and a contributing factor to land fragmentation, which characterizes a strong tendency towards Environmental Racism.

The aim of this study is to demonstrate research and extension actions, which included quilombola investigators from the Periférico research group's emerging work, recalling the "extension in reverse", defended by Boaventura de Souza Santos, of mapping community environmental preservation and hydric resources together with the community, the way of life, of Bem Viver Quilombola, integrating the use and occupation of land and, consequently, management of environmental resources in areas where quilombola occupation still persists as opposed to non-quilombola occupations within the same delimited territory by INCRA in 2011.

Quilombola Communities and the relationship with the environment

According to CONAQ – Coordenação Nacional de Articulação das Comunidades Negras Rurais Quilombolas [National Coordination for the Articulation of Black Rural Quilombola Communities], the "word quilombo originates from the African language *quimbunco*, which means: society formed by young warriors who belonged to ethnic groups uprooted from their communities". According to article 68 of the Ato das Disposições Constitucionais Transitórias da Constituição Federal de 1988 [Transitional Constitutional Provisions Act of the Federal Constitution of 1988] "To the remaining quilombo communities that are occupying their lands, definitive ownership is recognized, and the State must issue them respective titles"

But only after Decree No. 4,887/2003 signed by President Luiz Inácio Lula da Silva, were these populations effectively granted the right to self-attribution as the only criterion for identifying quilombola communities, based on the Convenção 169 da Organização Internacional do Trabalho (OIT) [Convention 169 of the International Labor Organization], which provides for the right to self-determination of indigenous and tribal peoples.

According to CONAQ, so far there was no consensus on the precise number of quilombola communities in the country untill 2022, this scenario changed with the 2022 Demographic Census of the Instituto Brasileiro de Geografia e Estatistica (IBGE) [Brazilian Institute of Geography and Statistics]. This is the first time in the history of research, in 150 years, that this data was produced. The balance of the collection was released and brought new official data on the quilombola population in Brazil 1,327,802 quilombolas were recorded in Brazil, according to the IBGE.

In the Northeast region 905,415 quilombolas were registered; in the North 166,069; in the Southeast 182,305; in the Center-West 44,957 and in the South of the country 29,055 quilombolas. Until 2022, the states that had the largest number of people who declared themselves as quilombolas were the states of Bahia (397,059), Maranhão (269,074), Pará (135,033) and Minas Gerais (135,310).

According to the Brasil Quilombola Program – established through Decree No. 6,261 – published in the Guia de Políticas Públicas para Comunidades Quilombolas [Public Policy Guide for Quilombola Communities] (2013), the quilombola population in 2013 was around 1.17 million people, 214 thousand families. Of this total, 92.1% declared themselves black or mixed race, 74.73% of

families were in extreme poverty. 82.2% of the population develops agriculture, extractivism or artisanal fishing activities and less than 10% of quilombola communities have titles to their lands. Based on these demographic and socioeconomic data, we can generally characterize these communities as Afro-rural (a concept seen in IPEA, 2012) as well as a socially vulnerable group according to the definition that is based on economic aspects.

The official data comes from the Secretaria Especial de Políticas de Promoção da Igualdade Racial (Seppir) [Special Secretariat for Policies to Promote Racial Equality] as well as from Instituto Nacional de Colonização e Reforma Agrária (Incra) [National Institute of Colonization Agrarian Reform], the body responsible for the administrative process of identification, recognition, delimitation, demarcation and titling of lands occupied by the Remainers of Quilombo Communities which currently correspond to 2847 certified communities in Brazil, 1533 processes open at INCRA and 154 quilombola lands titled throughout Brazil, 80% of them regularized by state governments.

According to Bullard (2004), populations in situations of social and economic vulnerability are at greater exposure to environmental risks, thus having their maintenance and development threatened by marginalization processes. The definition of Environmental Justice establishes that the differentiation of class, race, ethnicity or different social characteristics should not override the law that ensures the development and implementation of environmental policies, laws and regulations (HERCULANO, 2002). The concept of Environmental Racism used here was established in the USA in the 1980s during the struggle for civil rights, where case studies demonstrated the impact of socio-racial discrimination on environmental policies.

The remaining quilombola peoples, most of whom are established in rural areas, are defined as traditional Brazilian communities in accordance with Decree No. 6,040 of February 7, 2007, which establishes the National Policy for the Sustainable Development of Traditional Peoples and Communities. According to the definition, such communities are defined as having "their own forms of social organization, where they occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted by tradition" (BRASIL, 2007).

Thinking about the concept of sustainable development established by Silva (2006), the conservation and preservation of natural resources align with the policies of safeguarding Quilombo Mesquita, where environmental resources and their preservation are vital and strategic for the subsistence and development of the community. However, the process of conservation of these resources goes against the existing non-quilombo occupation within the territory by urban subdivisions and large areas of intensive agriculture that impact its fragmentation and degradation of the biome.

Quilombola communities, due to their ethnic identity, customs, culture and relationship with occupied territories, are self-determined traditional populations, thus, the dictates of ILO² Convention No. 169 must be applied to them. Therefore, the concept of "Good Living", specific to traditional communities in the

^{2.} NT: the acronym ILO -International Labor Law; corresponds to the Brazilian OIT – Organização Internacional do Trabalho

Global South, guaranteed in the Federal Constitutions of Ecuador and Bolivia defends the guarantee of the traditional peoples' way of life and equates ancestral knowledge, science and technologies with European ones. According to Marx (2019), ideological currents tend to define "buen vivir" relating it to ideals of "harmony with nature, claiming the principles and values of marginalized peoples, democracy, and the role of the State as responsible for guaranteeing the social justice and basic needs (health, food, water, habitat, etc.)

Therefore, the constitution of quilombola communities, their history of resistance and struggles for rights are part of the process of preserving their way of life, their traditions and their local knowledge. Their close relationship and collective dependence on their habitat corroborate the necessary balance between individuals, society and environment. This sustainability perceived in several aspects, aligned with the concept of Good Living, points to alternative sustainable actions towards progress achieved by these traditional communities, and this way of life will be analyzed in this study so that we can apprehend the concept of Good Living within the Quilombo Mesquita community.

Theoretical aspects

Good Living for traditional communities and environmental preservation

According to Anjos (2013), this relationship established between quilombola peoples and their traditions configures an African worldview that breaks with hegemonic hypothesis, seeking development alternatives that align with the ideas of Good Living, a concept conceived as a philosophy of life, in line with Acosta (2016). Quilombola communities in terms of identity are based on their own cultural identity – according to an idea established in their definitions, and including constitutionally aspects such as: their close relationship with the land defines their relationship with the world; the land represents a place of identity and maintenance of collective life; the production of the common.

In the view of Alcantara and Sampaio (2017), Good Living is a cultural identity that emerges from a deep relationship with the place where one lives, and from which ways of life and expressions emerge, such as art, dance, music, clothing, etc. In this sense, identity has a direct relationship with historical heritage, living in the present time, but based on the memory of an ancestor, projecting a perspective of the future.

Therefore, the relationship of quilombo people with their ancestry and their traditions seeks to preserve their ways of life and knowledge and the transition of these values and practices from generation to generation break with the current development model. In a relationship with the territory that encompasses all aspects of their experiences, we can draw a parallel between this experience and relationship with the world with the concepts of Good Living.

The concept of "Good Living", specific to traditional communities in the Global South, is assured in the Federal Constitutions of Ecuador and Bolivia and defends the guarantee of the way of life of traditional peoples and equates ancestral knowledge, science and technologies with European ones. The concept of Good Living is part of the Ecuadorian Constitution and



Figure 1. Quilombola Occupation Pattern. Photo: Valmor Paoz Filho, 2022.

aims at the well-being of the entire population and recognizes the right that the entire population must live in a healthy and ecologically correct environment. Therefore:

Art. 14 - The population's right to live in a healthy, ecologically correct and balanced environment is recognized. It guarantees sustainability and good living, sumak kawsay. The preservation of the environment, the conservation of ecosystems, biodiversity and the integrity of the country's genetic heritage, the prevention of environmental damage and the recovery of degraded natural spaces. (Ecuador, n.d.)

In this sense, the elaboration of the concept of Good Living started in Ecuador and Bolivia for the purpose of rebuilding institutional structures, aiming at the inclusion and diversity of all people. It distances itself from the capitalist model as it has a direct relationship with the community, the construction of a socially correct and fair society for everyone. Societies that play a role of resistance and collective construction. (SEGATO, 2012).

According to Quijano (2013), the concept of Good Living opposes coloniality, goes against the global structure of hegemonic power that is sustained by modes of exploitation and domination, capital accumulation and expropriation. Starting from a decolonial perspective, the Good Living approach contradicts an individualistic vision, seeks a community sense in the way of life, values the preservation and conservation of the habitat. Additionally, the Good Living approach aims at strategies and alternatives that break with the concept of life established in coloniality and with the exploitation that marginalizes and subordinates a large portion of the population.

According to Alcantara and Sampaio (2017), the current development model uses a utilitarian and instrumental view of nature, based on 'accumulation and use' as a material asset. The balance between individual, habitat and way of living defines the possible parameters within this alternative way of living which seeks Good Living. By establishing a close relationship with the land, people will aim at the preservation of the environment due to the sustainable and development character it carries.

It is possible to find characteristics of Good Living in the territory of Quilombo Mesquita, such as social processes, culture, production, food and housing. Some aspects of this community were characterized and evaluated, namely: food, environment, culture, education and housing. In general, the community's scientific and cultural knowledge will be analyzed and their values and interests in knowing about the Good Living characteristics demonstrated.

Strategies such as the Solidarity Economy, Food Sovereignty, Alternative Community Tourism are some of the examples that are in line with the principles of Good Living as



Figure 2. Quilombola Occupation Pattern versus Agricultural Monoculture in the Background. Photo: Valmor Pazos Filho, 2022

alternative movements to development. In quilombola communities, especially rural communities, we can see many of these alternatives that are actually part of the ancestry-based way of life that these communities look forward to.

Gudynes and Acosta (2011) point out that society is in constant transformation, be it political, economic or environmental and, therefore, it is possible to advance in new tools that will help the democratic construction of society. In traditional communities, the processes are not different, there is a mix of 'the traditional' and 'the technological' making people create their own way of living and coexisting.

According to the constitution of Ecuador "Good living will require that people, communities, peoples and nationalities effectively enjoy their rights, and exert responsibilities within the framework of interculturality, respect for their diversities, and harmonious coexistence with nature". And adopting this same logic within the scope of the Quilombola Mesquita community (See table 1) even though they live in a harmonious environment, it is still necessary to advance in access to public policies towards Good Living, they need greater precision with regard to political rights, collective, environmental and freedom of expression in the act of being a quilombola remnant community.

Board 1. Good Living Parameter. Source: Elements for the search for good living (sumak kawsay) for everyone and always – Conselho Indigenista Missionário [Indigenous Missionary Council]. Systematized by Danusa Lisboa.

Parameters and Principes of Good Living	Description	
Freedom	Every society has the right to act for itself, self-independence and autonomy, that is, implying the establishment of a broad scope of civil, political and social rights. The growth of freedom is conceived as an achievement of citizenship	
Good Health	Health is recognized as the greatest resource for social, economic and personal development, as well as one of the most important dimensions of quality of life.	
Sustainability	It is a set of strategic and practical measures that are ecologically correct, economically viable, socially fair and culturally diverse.	
Equity	It is considered social justice, with impartial treatment of different social groups and takes into account the understanding of the social, cultural, economic, political and spiritual needs of the entire society.	
Security	Security can be divided into: economic, food, health, environmental, personal, community and political security. Each type of security represents something different for each one of us, as each person may have a different perception and therefore assigns an appropriate value to what suits them best.	

The Latin American Thought of Science, Technology and Society

Pensamento Latino-americano em Ciência Tecnologia e Sociedade (CTS or PLACTS) [Latin American Thought on Science, Technology and Society] criticizes the conception of technology as an applied and neutral science and promotes popular participation with other knowledges. It is based on a certain transdisciplinary conceptualization that allowed epistemological and extra-scientific convergences internal and external to the major areas of science, such as technoscience and human sciences (Neder and Moraes, 2017, p.71). The high interdependence between technology and the definition of the conditions of socioeconomic life and current political organization is considered and, if the previous definitions in the technological project do not foresee the forms of social inclusion of people, groups and social classes, technology generates conditions of exclusion (NEDER and MORAES, 2017 p.99).

Observing the ineffectiveness of social and political solutions established to combat inequality and discrimination, sociologist Boaventura de Sousa Santos (2020) advocates a policy capable of escaping the determinations of technosciences as defined by scientific and technological agendas (originating from central countries in the Northern Hemisphere – basically the United States, England, France and Germany), which simultaneously comprise the definition of labor requirements, development of projects, technical codes and expertise to be hired by business networks and consolidated technological chains in central countries (BAGATOLLI and BRANDÃO, 2021).

This model tends to benefit only the best situated professional segments in the income and wealth distribution structure, which have more opportunities for technological, managerial training and formal employment. Such a structure benefits only marginally or in a subordinate way the broader social segments of Brazilian society, which make up 2/3 of the workforce and emcompass precisely those people who most need this policy.

In the view of authors who work with CTS Studies and PLACTS, social technology emerged in the years 2004/2016 in order to expand the mobilization of social movements, unions, public companies and the media in general (NEDER, 2016). Considering the high interdependence between technology and conditions of socioeconomic life and political organization today, if the previous definitions in the technological project do not foresee the forms of (social) inclusion of people, groups and social classes, technology is bound to generate conditions of exclusion (NEDER; MORAES, 2017).

Unlike conventional technology – developed for or by companies in the capitalist logic of previously satisfying identified demands with a view to profit – social technology is carried out by people, groups, cooperatives, associations and community collectives not covered by conventional technology or the situations that involve or enable its conception (DAGNINO, 2014).

Regarding the issues of neutrality of science and technological determinism, Dagnino (2019) went deeper in understanding the concepts of Social Technology and Solidarity Economy and developed the concept of Solidary Technoscience to designate the action of a collective made up of producers

who organize themselves to carry out a process of work whose socioeconomic context engenders solutions aimed at collective ownership of the means of production. These forms of resistance ensue from a social agreement (which legitimizes associations), which influences the productive environment, whether aiming at control (self-managed) or under cooperation (of a voluntary, participatory type). This process causes a modification in the product generated, whose material gain can be appropriated according to the decision of the collective of a solidarity enterprise (DAGNINO, 2019).

The logic of the CTS is aligned with the practices of interactionism originally proposed by Freirian Pedagogy, which are also part of the Latin American approach to sociotechnical adequacy - AST³, as if the subjects of scientific knowledge could share their technical codes with organized social subjects, generating the concept of "pedagogical and sociotechnical interactionism". According to Neder (2013), the concept of sociotechnical adequacy is based on hermeneutics understood as the process according to which knowledge only alters reality when people and social groups incorporate it, and thus seek to alter reality to improve the living conditions that prevent them from carrying out the necessary transformations.

The Periférico Group⁴ has developed pedagogical innovations through pedagogical dynamics with active and social inclusion methodologies within the scope of CTS – Science,

^{3.} NT: the acronym AST stands for the Portuguese expression Adequação Sociotécnica, translated here as sociotechnical adequacy.

^{4.} https://www.perifericounb.com/

Technology and Society, participating in the development of social technologies with communities within the scope of urban planning and architecture projects, but always looking for an interdisciplinary and transdisciplinary approach in the areas of sustainable development, health promotion, solidarity economy and human rights. This work constitutes a continuation of the Extension project entitled "In Solidarity with Quilombo Mesquita" of the research group PEAC Periférico (Notice Programa de Extensão em Educação, Trabalho e Integração Social – 2018-2019 [Extension Program in Education, Work and Social Integration – 2018-2019], in which heritage education work was carried out with the production of graphic material and booklets created in partnership with community members and UnB quilombola students.

The Periférico Research and Extension Group seeks to act with "socio-technical assistance for resistance" in popular territories, against social and environmental injustice in these areas corroborating the fight for the right to territory through land regularization, involving communities, coordinating or managing existing associations and collectives, in the process of preparing plans and projects for architecture and urbanism, Afro-rural planning for quilombola territories, social housing, community and cultural facilities, public spaces and urban parks, cultural circuits, abandoned squares, deteriorated roads and alleys.

Methodological Aspects: social technology and conventional geoprocessing technology

The object of study of this Research and Extension project (Notice PIBITI 2021/2022; PIBEX 2021 and 2022 from UnB) is the Quilombo Mesquita Territory with an estimated population of approximately 3,000 people. Quilombo Mesquita obtained its certification as a remaining territory in 2006, through the Certificate issued by the Fundação Cultural Palmares, from the Ministry of Culture, however, to date, despite the publication in the Official Gazette of the Union of the RTID in 2011, the The titling process has not yet been completed. In 2018, the INCRA Board of Directors reduced the territory by 80%, where the remaining 785 quilombola families occupy less than 20% of the initially delimited territory, going from 4.2 thousand hectares to 761 hectares. However, the resolution that would allow the reduction of the territory was revoked after notification by the Public Ministry.

In the research and extension work carried out in 2021 and 2022 for the PIBEX Notice, community environmental preservation and hydric resources within the territory of Quilombo Mesquita were analyzed through the community's affective memory with social cartography linked to the Scientific Initiation Project, Technological and Innovation – PIBITI Notice 2021/2022 as a way of demonstrating the importance of water and environmental resources for the subsistence of quilombolas and the relationship between occupation and environmental preservation as well as the dichotomy of environmental impact processes in non-quilombola occupation within this territory

According to Lima and Querino (2011), the agricultural cultures of the quilombola occupation of Quilombo Mesquita involve simple cultivation without management, as opposed to the territories occupied by non-quilombolas, especially owners of large areas, with (probably) a large use of chemical inputs and / or sophisticated implements. The introduction of massive use of mechanical technology and synthetic agricultural inputs combined with the urbanization process present in the territory via Jardim Edite, Bem-Te-Vi and Nova Canaã subdivisions contributed to a significant change in the natural landscape

According to Anjos (2003), the consolidation and development of many quilombola communities takes place through family agricultural production and is guided by the relationship between these communities and the territory. They were formed based on a worldview and occupational specificity of belonging to the land and according to practices aligned with the conservation of natural resources to maintain their traditions. However, the advance of neoliberal urbanism and intensive agricultural exploitation threaten access to land and sustainable development and maintenance in the Quilombo Mesquita territory and as a result of this, studies are needed to deal with this issue and the impacts of modernization for the implementation of territorial and environmental policies.

The mapping of occupational processes and the analysis of environmental and water preservation within the territory analyzed in this work constitutes an important tool for monitoring land use and management and for generating diagnoses and occupation patterns. The results and conclusions obtained from these analyzes can be very helpful to manage and implement territorial policies, contributing to the development of smart and sustainable cities.

According to Anjos (2003), Brazilian quilombos represent, along with their existence, the characteristic of resistance in compliance with ethnic-racial issues, aligned with the African civilizational continuum and the sustainable development of communities. Therefore, to cover beyond mapping using remote sensing to environmental aspects and land use and occupation, the social actors and agents of this process will be analyzed according to their perception of the territory (PICKET et al 2013).

Remote sensing involves the use of images of the Earth's surface to carry out studies. It refers to obtaining information without direct contact between the researcher or the equipment and the object of study. Initially, this technique was employed through aerial photographs taken from balloons, as early as the 19th century, and is currently used, preferably, by satellites and airplanes.

To this end, this work will consist of analyzing and mapping the territory considering two distinct types of occupation: quilombola and non-quilombola. Two mapping methods will be used which, according to the configuration and characteristics of the territory, are considered complementary and will support a comprehensive diagnosis of the issue in focus:

• Mapping with the aid of remote sensing for the production of thematic maps related to the geomorphology of hydric resources; soil use and cover; and vegetation preservation index, prepared with the aid of Geographic Information Systems (GIS). To analyze the potential for diffuse pollution, morphometric analysis and characterization were considered in three categories of soil permeability: low, medium and high. • Ethno-environmental mapping and quilombola occupation patterns mapping, relating these aspects to the environmental dimension through social cartography for production using the social cartography technique integrated with Diagnóstico Rural Participativo (DRP) [Participatory Rural Diagnosis].

For the analyzes and mappings to be carried out in this work, the territory delimited by the RTID will be accepted (INCRA, 2011). The territorial perimeter will be generated based on the descriptive memorial attached to the RTID document, which contains the geographic coordinates of the points that make up the established polygon.

Conventional Technology: Mapping through Remote Sensing

According to Lima et.al. (2018), the vegetation indices used in monitoring and quantifying the conditions and spatial distribution of vegetation, aim to condense spectral information, discriminating what 'is' or 'is not' vegetation and evaluating crop growth conditions, disease occurrences, drought and frost pests, as well as various meteorological events. In this work, we will use the Normalized Difference Vegetation Index (NDVI), which according to Bezerra et.al. (2011), is an indicator of the quantity and condition of green vegetation, making up an important parameter for the analysis of environmental impacts. The scale of values obtained by NDVI ranges from -1 to +1, where a value closer to 1 indicates denser vegetation.

In order to produce the analyzed maps, images from the Landsat 5 TM satellite were used, referring to orbit 221 and Point 71, provided through the Earth Observing System (EOS) platform and processed in the software QGIS, version 3.4, referenced in SIRGAS⁵ 2000 / UTM⁶ zone 23S (EPSG⁷: 31983). For the temporal comparison of NDVI, images dated 07/16/1985, 07/23/1999 and 07/08/2011 were used, chosen according to the criteria of best visualization of the area, with the lowest cloud cover in the same month, simultaneously in different years.

NDVI is the equation 1 proposed by Rouse et al. (1973). It consists of the ratio between the difference between the near-infrared and red bands, which correspond, respectively, to bands 4 and 3 of Landsat 5 TM. The NDVI maps were cut using the polygonal shapefile of the quilombola territory delimited by INCRA, adding a 1km buffer to the area.

Land use and cover maps and the Normalized Difference Vegetation Index (NDVI) were created for the years 1985, 1999 and 2011 to provide a temporal study of vegetation change and morphometric explorations as an arrangement of analysis that characterize geometric parameters, classifying the potential for diffuse pollution (low, medium and high potential) in order to generate comparisons between quilombola and non-quilombola occupation types. The following resources were used: QGis Geographic Information System software (version 3.14.0), DJI UAV model

^{5.} NT: Geocentric Reference System for the Americas.

^{6.} NT: Universal Transverse Mercator

^{7.} NT: Geodetic Parameter Dataset

MAVIC PRO 2. An aerial survey was also carried out with a Drone together with the community to record discrepancies between the types of occupations in the territory.

The following maps were generated: Soil Use and Coverage; Temporal analysis of Vegetation Index Mapping (NDVI); Map of the Ribeirão Mesquita River Microbasin; Visual elevation map, Slope map; Aspect map; Shaded relief map; Map of water risks in the microbasin

With the purpose of determining the potential for diffuse pollution of the territory, processing was carried out to determine the level of waterproofing of the territory. For this end, we used the processing of OLI L8 satellite images (Raster), acquired on 08/1/2021 by the Instituto Nacional de Estudos e Pesquisas Educacionais (INEP) platform [National Institute of Educational Studies and Research], and, using processing resources available through the Semi-Automatic Classification Plugin (SCP) tool, the pixel-by-pixel classification of the image according to the three types of selected categories and collected image samples. In this way, it was possible to categorize each pixel into three different soil permeabilization categories: low, medium and high with the purpose of generating Raster results about the impacts of different types of territory occupation. All processing was georeferenced in the coordinate system referenced in SIRGAS 2000 / UTM zone 23S (EPSG: 31983).

Board 2. Degrees of soil sealing and diffuse pollution.

Degree of Soil Sealing	Vegetable cover Categories and Land uses	Diffuse pollution potential	
Low	Tree cover, native vegetation, non-native vegetation	Low	
Medium	Undergrowth, streets and avenues	Medium	
High	Exposed soil, Occupied lots, Paved lots, commerce	High	

Social Technology: Mapping through Social Cartography

In this project, the method of social and affective cartography was used. The method counts on the participation of the community in the process of producing georeferenced maps to contemplate the representations of individuals and allow a better understanding of the multiple realities that exist within a community. The methodological articulation of Affective Mapping, took place relying on the participatory process that requires data from the whole group and people, individually, about impressions, feelings, stories, etc. The maps are expected to be causal, with the objective of identifying influence and causality relationships, while discussing the environmental dimension, seeking to identify environmental impacts.

A structured interview was intended to be used with the aim to identify and cartographically categorize the elements that enhance environmental impact according to the perception of the interviewees. With the restrictions imposed by the pandemic, a questionnaire was also applied.

The questionnaire was developed based on the parameters and principles of Good Living such as: freedom, good health, sustainability, equity and security. With the purpose of a more indepth and detailed investigation on the quilombo's affections and connections with the territory, the quilombola graduate student Danusa Lisboa (with a degree in Agronomy from the University of Brasília), holder of a postgraduate scholarship in the Reabilita course by Grupo Periférico and Walisson Braga, quilombola graduate student, became facilitators of the research and of the interviews, given their proximity to the quilombo reality.

To understand the territory of Quilombo Mesquita, in addition to characterizing the place and surveying its constitution trajectory, among the techniques used in this research are semi-structured interviews, with the aim of understanding the meaning given by quilombolas to the practices of self-consumption, commercialization, cultural festivities and religious manifestations. Along with the interview technique, the participant observation technique was also developed.

The participatory research methodology in this study fits with that of quilombola researchers who live in the Quilombo Mesquita territory as it involves direct participation and community involvement (the collective way of life experienced in the community by their families for generations). Due to the pandemic context, the semi-structured interviews were carried out online in order to preserve and protect everyone involved in the process and to mitigate risks and exposure to Covid-19. A Google Forms questionnaire was prepared and applied to 40 interviewees – residents and quilombolas of Mesquita – who answered about the way of life and traditions experienced.

The following tools were used: Guia prático para Diagnóstico Rural Participativo (DRP) [Practical guide for Participatory Rural Diagnosis]: semi-structured interview, structured walkthrough; Geographic Information System software QGis (version 3.14.0), UAV brand DJI model MAVIC PRO 2. The product obtained were: Matrix of Potentialities and environmental problems in the area; Social Map; Quilombola Occupation Pattern Map.

Board 3 represents a synthesis of the Research and Extension Project Structure demonstrating the integration of conventional technology with social technology.

Board 3. Work Structure: integration of conventional technology with social technology

Work Structure: PIBEX and PIBIC Plans						
Assessment techniques Conventional Technology Social Technology	Plan 1	Plan 2	Plan 3	Plan 4		
Microbasins Vegetation Index and Land Cover Community Preservation of Water Resources Affective Mapping	Technology for sustainable development in the territory: analysis of micro-basins	Environmental Injustice: temporal analysis of the NDVi Vegetation Index and Mapping of Soil Use and Cover	Afro-Rural Communities and Good Living: Analysis of Community Preservation of Water Resources and Environmental Conservation	Good Living and Participatory Environmental Diagnosis: Affective Mapping Techniques		

Planning the Territory of Quilombo Mesquita according to the Master Plan

The origins of Quilombo Mesquita date back to the 19th century, when the territory was donated (donation of land) to three female free slaves by Mr. José Jerônimo de Mesquita, a Portuguese farmer after the decline of the gold period. From these three women descended the quilombo's main families and from them the village was formed to the south of what is now considered the Federal District. Since its beginning, the community has evolved around family farming and quince cultivation, that is, a close relationship with the land that is part of the process of constituting and building the community knowledge. However, what threatens the community, and its way of life is the fact that, to this day, people do not have definitive title to the land

Considering the quilombola territories titling processes leads us to one of the biggest problems faced by these populations: the right to land. After going through many struggles and popular pressure, quilombola communities gained, from the 1988 Federal Constitution, the right to obtain official registration of collective ownership of the territory where they develop their knowledge, culture, sustainable, environmental and economic activities. Considered traditional communities, quilombos are examples of territories that transmit black and popular culture, and are considered, due to their history, places of resistance.

The expansion of neoliberal urbanism in the vicinity of Quilombo Mesquita exerts pressure from real estate speculation in the territory that advances into the boundaries of the Quilombo,

as is the case of the Jardim Edite subdivision (within the territory). On the edges of the territory, there are also subdivisions such as Dom Bosco, and large urban condominium developments nearby such as Damha and Alphaville. This urban expansion and real estate speculation corroborate the fragmentation of the quilombola territory and there are no territorial policies to avoid this territorial non-fragmentation.



Figure 3. Jardim Edite Subdivision within the Territory. Photo: Valmor Pazos Filho.

These Afro-rural occupational specificities must be aligned with territorial policies properly designed for the context of the territories of traditional peoples such as the quilombola population of Mesquita. Parameters and patterns of quilombola occupation are particular issues of these territories and, as observed in this work, they are occupation processes that diverge from those existing in non-quilombola occupation. We see the preservation of native vegetation as a pattern of quilombola occupation, according

to calculations based on data from the RTID (2011), within the occupation of each family nucleus, around 48% of the native vegetation is preserved.



Figure 4. Quilombola Occupation Pattern. Photo: Valmor Pazos Filho, 2022.

In this context of occupational specificities and Afro-rural patterns such as family farming and environmental sustainability guidelines, the discrepancy between the areas of quilombola occupation and non-quilombola occupation within the Mesquita territory is noticeable. The expansion of the city into the territory provokes fragmentation and threatens the safeguard of the quilombola way of life. For this reason, territorial policies, such as the Master Plan, need to assure protection to the right to land by traditional peoples, however, what we see when observing the master plan of the Western City, where Quilombo Mesquita is located, is a clear divergence of policies regarding the quilombola rights.

Also, in the Western City Master Plan published in 2016, most of the quilombola territory delimited in the RTID is classified as ZAR 1 – Zona de Adensamento Restrito [Restricted Density Zone], providing for primary occupation for residential use, with residential condominiums with single-family and multi-family dwellings, and secondary occupation for commercial use and services that are related to residential use. Thus, only the lands that are currently in the possession of quilombolas were characterized as ZUE – Zona Urbana Especial [Special Urban Zone]. This classification may cause a direct impact on the environmental resources necessary for the subsistence of the quilombola population, which, once again, suffers from environmental injustice, with the greatest negative impacts resulting from urbanization and agricultural exploitation in its territory falling on this community.



Figure 5. Non-quilombola occupation area within the territory. Photo: Valmor Paoz Filho, 2022

Results and Discussions

Conventional Technology

For the purpose of analyzing and mapping, the territory of Quilombo Mesquita was considered as a land delimited by the Technical Identification and Delimitation Report (INCRA, 2011). To identify the lands of family centers in the quilombola occupation area, the Survey of Quilombola Properties – Land Use (Spreadsheets No. 1A to 17A) was used, an integral part of the RTID (INCRA, 2011). To investigate environmental degradation and its agents within the Quilombo territory, maps of soil use and coverage and the Normalized Difference Vegetation Index (NDVI) were created for the years 1985, 1999 and 2011 with the purpose of obtaining a temporal analysis of the change in vegetation. To produce land use and land cover maps, images were obtained from the MapBiomas Collection 5.0 database.

The interpretations took into account the comparison between land uses and the quality of vegetation obtained by NDVI in areas of quilombola occupation and non-quilombola invasion within the polygonal, identifying occupation patterns and areas of deforestation for agricultural production and natural plant formations. As main results, the minimum and maximum NDVI values in the years of the chosen time interval were: 1985 (-0.0666667; 0.662338), 1999 (-0.285714; 0.642105), 2011 (-0.47619; 0.754717). It was possible to observe that, although since 1985, healthy vegetation indices have increased, negative values have increased even more significantly, revealing that with the growth in invasions into the quilombola territory, there has also been environmental damage.

By analyzing the vegetation index (NDVI) and the mapping of land use and coverage in the Mesquita quilombo territory, it is possible to relate this information to the growth of the Western City, deforestation for agricultural production, the expansion of real estate developments, the representation of the threat of such factors in the quilombo's "rural well-being" lifestyle as well as perceiving the risks to the community's subsistence resources.

The research was based on an analysis of the soil use and cover maps as well as on the Normalized Difference Vegetation Index (NDVI) - 1985, 1999 and 2011, making a comparison of soil use with the quality obtained by NDVI by quilombola communities and of non-quilombola invasion, identifying occupation patterns, areas of deforestation for agricultural production and natural plant formations. It was found that the increase in invaders contributed to the region's environmental damage and that the healthiest vegetation covers are located within the quilombola territory and in the immediate surroundings, as shown in Figure 6.

The comparison of the NDVI vegetation index map of 1985 (Figure 3.a) with that of 1999 (Figure 3.b), allows us to verify the advance of deforestation within the territory, mostly in areas of non-quilombola occupation, with the appearance of larger and more yellowish areas on the second map. When observing the land use and occupation maps from the same years (Figure 4.a and 4.b), it's possible to detect deforestation activity in two large areas, one in the upper part and the other in the central left corner of the polygonal, classified in 1985 as a forest and savanna formation, but, which, in 1999 turned into pasture area.

The analysis of the maps has allowed us to confirm the results and observe that the healthiest vegetation covers are, for the most part, in the areas of quilombola occupation and their immediate surroundings. While in areas where it was classified as invasion, both due to real estate speculation and monocultural systems and aquaculture, it was possible to notice a clear asymmetry in the situation of vegetation cover and its preservation. In the area where the Quilombo lives, we can see an ideal of Good Living, conservation and responsible use of resources.

In this way, based on the configurational variables explored, a critical and comparative analysis was carried out regarding the environmental impact resulting from the occupation of quilombolas as opposed to the illegal occupation of real estate and agricultural developments.

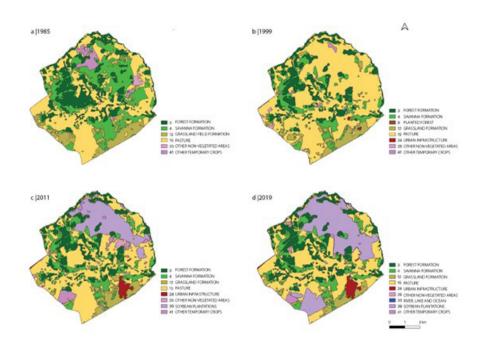


Figure 68. Land Use and Occupation Maps in time intervals. Produced by Nina Gallina, 2021

^{8.} TN: Map legends - 3. Forest Formation; 4. Savanic Formation; 12. Grassland

By categorizing the soil according to the degree of impermeability, it was possible to obtain a result directly related to the different potential for the production of diffuse pollution existing in the studied area. By using the shapefiles of the quilombola territory delimited by INCRA and the occupation areas, it was possible to obtain a comparison of the results between quilombola and non-quilombola occupation areas.

The methodology used to analyze environmental impacts in watersheds is based in the theoretical framework (and adapted concepts) proposed by Christofoletti (1969), which define the process of morphometric analysis as an arrangement that characterize geometric parameters. The delimitation of the Microbasins consisted of: extraction and rasterization of contour lines, filling of cells, elimination of depressions, accumulated flow, generation of the drainage network and delimitation of the Microbasin through a point. For its classification, the diffuse pollution potential was used, making it possible to classify the potential into low, medium and high in order to generate comparisons between types of occupation.

In order to apply the designed methodology, the QGIS 2.18.11 software was used for processing. Satellite images made available at no charge by the QuickMapServices extension and the Semi-automatic Classification Tool processing tool were used, aligned by the EPSG: 31983 coordinate system.

The delimitation of the micro-basins within the Mesquita territory resulted in the delimitation of the Ribeirão Mesquita Microbasin, with 24299790m2, Ribeirão Santana, with 15941632m2 and Ribeirão Saia Velha, with 2673132m2 of total areas.

Formation; 15.Pasture; 25.Other non-vegetable áreas; 41.Other temporary crops; 39.Soybean Plantations; 24.Urban infrastructure; 33.River, Lake and Ocean

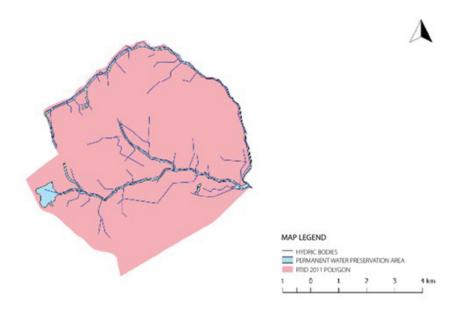


Figure 79. Hydric Bodies and Permanent Preservation Area. Produced by Teresa Ferreira, 2021

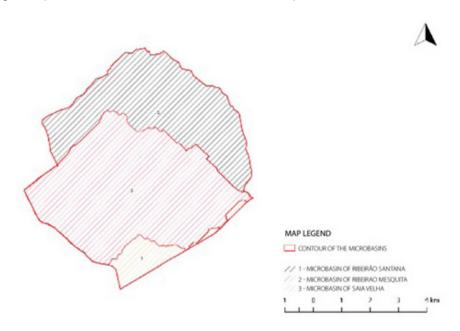


Figure 8. Delimitation of Microbasins. Produced by Teresa Ferreira, 2021

^{9.} TN: Legends in sequence - Hydric bodies; Hydric permanent preservation area; RTID 2011 Polygon.

After delimiting the basins, the percentage of areas according to the categorization by degree of impermeability was calculated. In the total area delimited as quilombola, there was a total of 35.19% of surfaces with low impermeability, 38.09% of surfaces with average and 26.72% with high impermeability. Based on the configurational variables explored, a discrepancy was identified regarding the areas occupied by Quilombo in relation to areas of invasion. Analyzing only the percentage of areas where Quilombo occupations exist, we obtained 42% of surfaces with low impermeability, 35% with medium and only 23% with high, demonstrating a better use of land by the quilombola people in reference to the existing invasions in the territory.

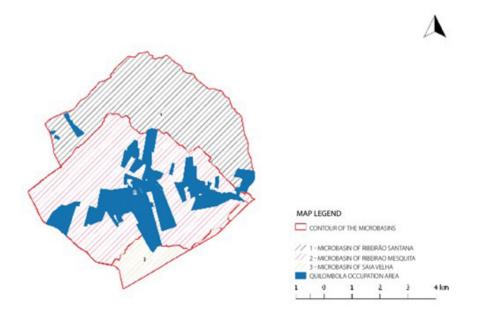


Figure 9. Microbasins in relation to guilombola occupation. Produced by Teresa Ferreira, 2021

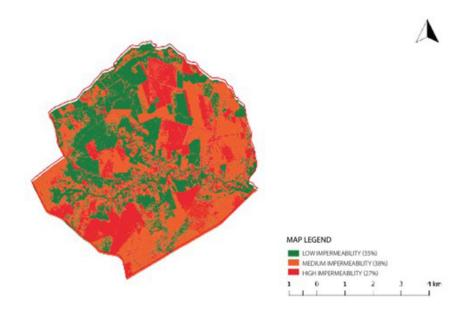
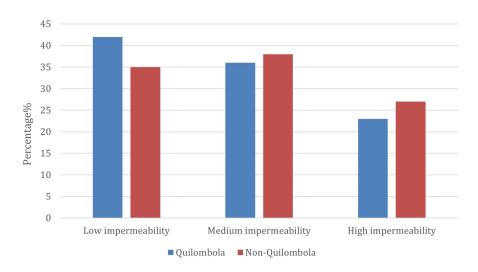


Figure 10. Degree of Permeability. Produced by Teresa Ferreira, 2021

By using soil categorization according to the degree of impermeability, it was possible to obtain a diagnosis in relation to the different levels of potential production of diffuse pollution existing within the studied area. With the use of clippings within this categorization, it was also possible to produce a comparison between these different types of occupation and their respective environmental impacts, and in this way, the comparison between Quilombola and Non-Quilombola occupation was carried out (Board 2).



Graph 1. Comparison (in percentage) of areas according to the degree of soil impermeability in the sectors that make up the micro-basins

Social Technology: affective mapping and results of the questionnaire applied by quilombola researchers

UnB undergraduate student Walisson Braga from Quilombo Mesquita, who is studying visual arts, selected the participant observation as the investigation technique (consisting of frequent and prolonged contact with actors in the social context) with the aim of recording cultural moments and community traditions for a more in-depth and detailed perception of the quilombo's affection relationship with the territory. Danusa Lisboa, quilombola, Agronomist with a degree from University of Brasília got a scholarship on the Reabilita course at Post Graduation Course in Architecture and Urbanism [PG-FAU/UnB], has researched on Good Living in Quilombola Communities to generate application parameters in the questionnaire during the pandemic. The two members of the community became facilitators along the research and interviews, due to their proximity to Quilombo reality.

The self-diagnosis questionnaire was elaborated based on the parameters and principles of Good Living such as: freedom, good health, sustainability, equity and security. The Google Forms Questionnaire remained open for 2 months collecting responses from 40 people, 45% residing in Furquia; 37.5% in Rabeira; and 17.5 in Atoleiro.

Board 4. Questionnaire Results.

Questionnaire Results	
1- How many interviewees, how old are the interviewees?	40 residents were interviewed, with a minimum age of 19 and a maximum of 72 years of age.
2- How many consider themselves quilombolas?	92.5% consider themselves quilombolas; 5% do not consider themselves quilombolas; 2.5% are married to quilombolas.
3- What is the gender of the interviewees?	60% female and 40% male.
4- In which region do the interviewees reside?	45% in Furquia; 37.5% in Rabeira; 17.5 in Atoleiro.
5- How many family members live in the same household?	40% up to 4 members; 32.5 up to 3 members; 10% up to 2 members; 7.5% up to 3 members; 7.5% up to 2 members; 2.5% up to 1 family member.
6- Do family members share the same land? How many houses are there on the same land?	52.5% - 5 or more homes; 22.5% up to 2 homes; 20% just one house; 5% up to 3 homes.
7- What is the description of the interviewees' house?	Houses used for weekend rest; houses with traditional models; houses with more modern designs, including masonry and blindex. Satisfaction with living in their own homes.
8- Importance of land and quilombola territory.	97.5% consider it very important and part of the interviewees' way of life. 2.5% consider it unimportant. It matters more to those who use the land for commercial purposes.
9- Does the family cultivate the land?	85% 'yes' and 15% 'no'
10- Before the interviewee's generation, did people have a tradition of planting or producing any product?	80% of the interviewed people still maintain the planting/ production tradition; 20% used to maintain production and nowadays they no longer do.

(cont.) Board 4. Questionnaire Results.

Questionnaire Results	
11- Do the interviewees bring about any product from what they plant?	72.5% answered 'yes' and 27.5% responded 'no'.
12-Where are the derivative products commercialized?	47.5% sell them to people nearby who come to buy them in the producers' homes; 37.5% produce for own consumption only; 15% sell in shops and institutions 7.5% sell at fairs; 1% does not produce; 1% sell at home; 1% sell to another municipality.
13-Does the interviewee think that family farming and the production of goods from the land are a quilombola tradition?	62.5% said 'yes', it is a quilombola tradition and it still exists; 37.5% said 'yes', it is a tradition, but it is being lost.
14- Is there native forest on your land?	75% answered 'yes'; 22.5% said 'no' and 1% said it has never existed.
15- Are there any streams or water channels on your land? Do you and your family use this water?	47.5% said 'yes', "it exists and we use water from canals and streams"; 35% said 'yes', "it exists but we DO NOT use water from canals and streams"; 17.5% said there are no streams of water.
16- How do you consider your family's relationship with the land/environment?	Everyone affirmed there is a good relationship with nature, a respectful one and that they give great importance to the environment.
17- Do the interviewees think they preserve the surrounding environment?	97.5% answered 'yes', we care about it; 2.5% answered it was "not' a concern.
18- Does the interviewee think that the quilombolas of Quilombo Mesquita are concerned with environmental preservation (vegetation and water)?	50% answered 'the majority of quilombolas are concerned'; 30% answered 'few quilombolas care'; 17.5% answered 'yes', all quilombolas care; 2.5% answered 'there are people who still do not have this awareness. I think there should be training to better inform them'.
19- Does the interviewee think that residents of the territory who are NOT quilombolas care about environmental preservation? (vegetation and water)	82.5% said "a few care about it"; 10% said they don't think anyone cares; 5% said the majority of non-quilombola worries; 2.5% said 'yes', "everyone cares".
20- Does the interviewee think that the territory of Quilombo Mesquita is threatened?	70% answered 'yes', due to the invasion of quilombola lands; 67.5% said 'yes', due to the destruction of the environment and luxury condominiums; 62.5% said 'yes', due to the agribusiness; 40% said 'yes', by territorial legislation; and 5% said 'I don't believe it is threatened'.

(cont.) Board 4. Questionnaire Results.

Questionnaire Results	
21- Does the interviewee think that the rivers/streams and water channels of Mesquita are threatened?	85% answered 'yes', due to the lack of awareness among residents; 52.5% answered 'yes', due to the large increase in population; and 30% answered 'yes', 'due to excessive use'.
22- Does the interviewee think that the native vegetation in Quilombo Mesquita is threatened?	94.9% answered 'yes'; and 5.1% answered 'no'
23- How does the interviewee classify their contact with the neighborhood where they live?	37.5% grade 10; 15% grade 9; 20% grade 8; 10% grade 7; 10% grade 6; 5% grade 5; and 2.5% grade 4.
24- In which regions does the interviewee spend most of their time? (It is possible to select more than one alternative)	57.5% answered 'in Furquia'; 37.5% answered 'in Rabeira'; 17.5% answered 'in Atoleiro'; and 5% answered 'in Jumper.
25- In the regions listed, in which do you feel least safe?	36.2% answered "in Cascalheira"; 23.5% answered "in Furquia"; 23.5% answered "in Jumper"; 17.6% "in Rabeira"; 5.9% "in Atoleiro"; 2.9% "in Other nearby neighborhoods"; 2.9% Does not walk much (away from home); 2.9% Feel safe in all places; 2.9% None.
26- How would you classify your participation in traditional cultural activities in the Quilombo?	35% grade 5; 30% grade 4; 12.5% grade 3; 15% grade 2; 7.5% grade 2.
27- Which cultural activity do you like most? (Mark a maximum of 2)	76.9% answered Quince Festival; 69.2% Revelries; 51.3% Traditional masses; 38.5% Horseback Riding; 35.9% Dances (catira/fox); 28.2% N'golo Party.
28- What does the interviewee consider the lack of cultural activity in Quilombo?	Sports and leisure that involve the participation of young people and children. There must be respect for the community and the traditions that take place. Appreciation of evangelical events. There is also a lack of incentive from social policies.

The community values the preservation of the environment, lives in family groups (52.5% of families have 5 or more houses) and their traditions and way of life are aligned with sustainability principles (75% still maintain native forest, 97, 5% preserve it, and 47.5% have water from canals and streams on their property). 80% still maintain the planting/production tradition, 85% think that streams and water channels are threatened and 94.9% think that native vegetation is threatened. The community is familiar and connected with the celebrations: Festa do Marmelo; Foliage; Traditional masses; Horseback riding; Dances (catira/fox); N'golo party.

In order to collect data from the community, as a hole, and from individuals (about impressions, feelings, stories, etc) the characterization of the 83 family nuclei present in the Quilombola Properties Survey – Land Use (Spreadsheets No. 1A to 17A) was used. It corresponds to an integral part of the RTID (INCRA, 2011). According to self-diagnosis and reports, the area occupied by the quilombolas was divided into 5 regions (named by themselves): Saltador, Furquia, Rabeira, Cascalheira and Atoleiro.

In this study, the technique of social cartography was integrated with the self-diagnosis of Participatory Rural Diagnosis – a self-determination tool used to evaluate the status of natural resources and environmental aspects of a community (problems and opportunities). This survey along with the self-designation of the regions will be useful to generate future addresses in the territory.

With the privileged perspective of Quilombola participant observers (and researchers), and in accordance with the investigation carried out by means of the application of a questionnaire, it was possible to observe the connection between the guilombola

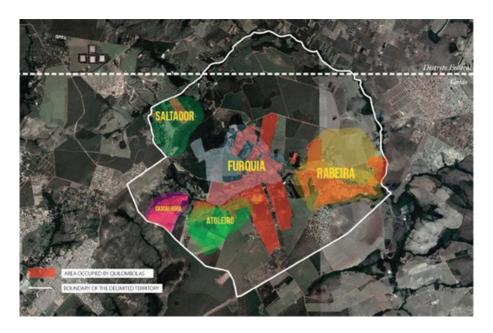


Figure 11. Regions mapped by the community and turned into images via questionnaires. Produced by Mariane Paulino and Walisson Braga, 2021.

community of Mesquita and the principles of Good Living, especially in terms of their proximity to the land and their subsistence from it. The community values the preservation of the environment, its traditions and way of life which are aligned with principles of sustainability and collective life (based on resistance and struggle in search of defending their lands and maintaining their own way of life) which is consistent with the principles of Good Living.

Preserving the parameters of Bem Viver, we sought to celebrate the roots of this quilombola reminiscence, their way of life, their history and their traditions by producing a 2022 Calendar "Quilombola Nature and Culture". In this calendar, each month of this year brings one topic related to Good Living in the community, also covering Environmental Racism and the community struggle to preserve its resources and identity.

Conclusions

When considering quilombola communities in Brazil, it is necessary to analyze that even though they live in a harmonious environment, it is still necessary to advance in terms of access to public policies in the direction of Good Living as they require greater precision with regard to political; collective; environmental and social rights; as well as freedom of expression for effectively being a quilombola remnant community.

The mapping and analyzes carried out by this work make clear the divergence of quilombola and non-quilombola occupation patterns within Quilombo Mesquita. Regarding quilombola reminiscences, Good Living, in line with, safeguarding the way of life, contributes to environmental preservation and conservation of hydric resources in the region. This is different from what happened in the non-quilombola occupation area where the pattern of urban expansion aggravates environmental degradation stimulated by agricultural exploitation and real estate speculation.

The project received the Darcy Ribeiro award from UnB in 2022 in the Social Technology and Innovation category, which was received by members of the community at the awards ceremony and, later, presented to the entire community at the Encontro de Ciência e Saberes no Quilombo Mesquita [Science and Knowledge Meeting at Quilombo Mesquita] that took place in December 17, 2022.

References

ANJOS, R. S. A. dos. O Espaço Geográfico dos Remanescentes de Antigos Quilombos no Brasil. **Revista Brasileira de Extensão Universitária**. Rio de Janeiro, v. 1, n. 1, p. 52-57, jul./ dez. 2003.

BRASIL. **Decreto nº 6.040**, de 7 de fevereiro de 2007. Dispõe sobre a Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais. Brasília: 2007

_____. Ministério do Desenvolvimento Social e Combate à Fome. **Guia de políticas sociais quilombolas**. Brasília: Ministério do Desenvolvimento Social e Combate à Fome, 2013.

BULLARD, R. Enfrentando o racismo ambiental no século XXI. **Justiça ambiental e cidadania**. Rio de Janeiro: Relume Dumará, p. 41-68, 2004.

HERCULANO, S. Riscos e desigualdade social: a temática da Justiça Ambiental e sua construção no Brasil. **Encontro da ANPPAS**, v. 1, p. 1-15, 2002.

Instituto Brasileiro De Geografia E Estatística. **Brasil**: 500 anos de povoamento. Rio de Janeiro, 2000.

Instituto de Pesquisa Econômica Aplicada (Ipea). **Quilombos das Américas**: articulação de comunidades afrorrurais: documento síntese. Brasilia, 2012.

LIMA, J. C. P.; QUERINO, R. N. Relatório Ambiental da Área dos Moradores Não Quilombolas do Território Pleiteado pela População do Quilombo Mesquita. INCRA, 2011

MARX, J. Buen Vivir, Habitat E A Questão Ambiental. **Anais XVIII ENANPUR**. NAtal, 2019.

- NEDER, R. T.; MORAES, R. de A. Para onde vai a universidade diante da política de ciência & tecnologia no Brasil. Uberlândia: Navegando Publicações, 2017.
- PICKETT S.T.A., CADENASSO M.L., MCGRATH Brian. Ecology of City as a Bridge to Ur-ban Design. *In:* **Resilience in Ecology and Urban Design**. LinkingTheory and Practice for Sustainable Cities. Springer Science. New York, 2013.
- REIS, J. J. Presença Negra: conflitos e encontros. *In*: INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Brasil**: 500 anos de povoamento Rio de Janeiro, 2000. p. 94.
- SILVA, C. L. da (org). **Desenvolvimento Sustentável**: um modelo analítico integrado e adaptativo. 1 ed. Petrópolis: Vozes, 2006.

Expressiveness of the invisibles

Residing, working and living in the Center of Rio de Janeiro¹

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Introduction

In view of the announced package of transformations and in response to the lack of popular participation in the actions implemented by OUC Porto Maravilha, an articulation took place between the academy, the social movements (active in the Center and organized civil society), in an attempt to influence, claim and democratize the proposed interventions – in addition to the fundamental role of reporting violations of rights committed by the State in the accelerated course of urban transformations. As a result of this process, the Popular Committee for the World Cup and

^{1.} This research is part of the project "Informalidades e llegalismos e seus impactos no associativismo e na produção dos territórios populares" [Informalities and Illegalisms and their impacts on associations and the production of popular territories] supported by the Ford Foundation.

Olympics² was formed, highlighting the non-compliance with the rights provided for the poorest and bringing to light the oppression of public authorities (by imposing the project of elitization of the center with the consequent expulsion of the popular classes who historically occupy the region as a place of residence, work, leisure, culture and memory).

The Popular Committee produced relevant denunciation reports, the so-called Dossiers, which included the participation of the *Observatório das Metrópoles* (IPPUR/UFRJ) [Observatory of the Metropolises], the *Centro de Direitos Econômicos e Sociais* (CDES) [Center for Economic and Social Rights], the *Central de Movimentos Populares* (CMP) [Central of Popular Movements], the *Movimento Unido dos Camelôs* (MUCA) [Street Vendors Movement], and other organizations defending the right to the city. Considering such sum of efforts, the denunciations indicated the relevance of a more comprehensive survey of working and housing conditions in the central region.

The announcement of the city of Rio de Janeiro as the host city for global mega-events traces a trajectory of transformations in which a new conception of planning – the so-called strategic planning - is consolidated in order to provide a solution to the challenges posed by the Games. During this

^{2.} The mission of the Rio de Janeiro World Cup and Olympics Popular Committee was to mobilize a wide network of social organizations, popular movements, unions, bodies defending rights and controlling the public budget, universities, with the leading role of directly and indirectly affected communities, to monitor public and private interventions and articulate integrated actions against the adverse impacts of mega sporting events in the city. The group produced Dossiers that highlighted human rights violations in Rio de Janeiro, achieving wide visibility and participating in the production of national dossiers.

period, in which a new city project gained strength, the then mayor Eduardo Paes (2009-2016) invested in modernizing the port area as a priority intervention. Meanwhile, the City Hall promised to "revitalize" the region and announced a package of changes and investments that sought to transform the 'center', launching the Operação Urbana Consorciada Porto Maravilha – OUC [Porto Maravilha Consortium Urban Operation], managed by the Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro – CDURP [Urban Development Company of the Port Region of Rio de Janeiro]. The Urban Operation involved works and services throughout the port region, a movement considered the largest public-private partnership in the country, won by the Porto Novo Consórcio (integrated by the companies Odebrecht Infraestrutura, OAS and Carioca Christiani Nielsen Engenharia).

In this way, the INCT Observatório das Metrópoles, through the Research Group Direito à Cidade [Right to the City] begins the extension project "Morar, Trabalhar e Viver no Centro: mobilizações e ações de promoção do direito à cidade na área central do Rio de Janeiro" [Living, Working and Living in the Center: mobilizations and actions to promote the right to the city in the central area of Rio de Janeiro] with the objective of mapping and giving visibility to housing and work issues in the center; denouncing situations of violations of social rights and promoting actions to demand the right to the city, focusing on the issue of urban occupations, tenement buildings, street vendors and, later, the homeless population. The project is carried out jointly by the Right to the City research laboratory (IPPUR/UFRJ) – with an extension interface and linked to the Núcleo Nacional do

Observatório das Metrópoles³ [National Center for the Observatory of Metropolises] - and the *Núcleo Nacional do Observatório das Metrópoles* (CMP) [Central of Popular Movements].

In 2015, research into housing and work began with active social movements in the central region, the CMP and MUCA respectively, with the aim of producing a confrontation with the urban planning policy guided by the public authorities. This paper is the result of the data gathering produced by researchers who are part of the laboratory and also of the 'Morar, Trabalhar e Viver no Centro' project, thus, contributing, among other topics, to the analyzes of street work, the homeless population, occupations and tenements from the central region of Rio de Janeiro. Based on the Project's surveys and research, which identify the living conditions of the urban poor, it is clear to observe the intertwining between the three themes that will be presented in this paper: housing, street work and the homeless population.

The three themes present, as a unifying nexus, not only the identification of the urban poor and the need to occupy the city center, but also the confirmation of vulnerability in living, housing and work conditions. According to the results obtained through research

^{3.} The "Observatório das Metrópoles" research network brings together institutions and researchers from the university, governmental and non-governmental fields, in several Brazilian cities. The teams have been working on metropolises and urban agglomerations identifying convergent and divergent trends generated by the economic, social, institutional and technological transformations that the country has undergone in the last 20 years. The research activities of Observatório das Metrópoles have benefited from support from national funding agencies, particularly the CNPq, through the PRONEX program, the Millennium Institute program (2006-2008) and the INCT Program (2009-2014). The Residing, Working and Living in the Center project, and the research it developed, were financed with support from the Ford Foundation.

already carried out and in progress, in addition to vulnerability, two other aspects are common elements identified in their realities: (i) invisibility, translated into both the absence of official data and/or the consequent insufficient public policies aimed at this reality; (ii) the violence and repression of the State - whether against residents of occupations, the homeless population or street vendors – who still, for decades, resist and dispute their permanence in the Center and the desire for a city more inclusive.

That said, this paper intends to present the research Residing, Working and Living in the Center with the two aspects mentioned above as axes of analysis. The study covers the themes of housing, street work and the homeless population and its results, although preliminary, allow the identification of characteristics among the analyzed groups, showing that the urban interventions planned and executed in the central region, marked by beautification processes and attempts at elitization, occur in opposition to the recognition of the Center as a strategic location for testing 'the right to the city' for the popular classes.

Methodology

The research promoted by the Group – *Direito à Cidade do Observatório das Metrópoles - Núcleo Rio de Janeiro* is carried out with and based on the work of different social groups mentioned above: CMP, MUCA, residents of spontaneous occupations, street vendors and the homeless population. Therefore, different methodologies were necessary to develop the research, considering the specificities of each research activity.

We start from the methodological conception of Howard Becker (1997) who understands that methodological solutions must take into account the peculiarities of each group, each territory. In other words, "we have to adapt the general principles to the specific situation at hand." (BECKER, 1997, p. 12). Therefore, the reader will be able to see that each dimension of this work presents different resources and methodological steps, seeking to cover the issues of each social group.

Another methodological conception that permeates all dimensions of this work is participant observation, mainly according to Magnani (2002), looking closely and from within the residents and workers of the Center of Rio de Janeiro, in opposition to what he calls like looking from afar and from the outside⁴.

The simple strategy of accompanying one of these "individuals" on their usual routes would reveal a travel map punctuated by significant contacts, in contexts as varied as work, leisure, religious practices, associations, etc. It is at this level that the perspective from close up and from within comes in, capable of apprehending the behavioral patterns, not of atomized individuals, but of the multiple, varied and heterogeneous sets of social actors whose daily lives take place in the city landscape and depend on its equipment. (MAGNANI, 2002, p.17)

It is also important to highlight that cartography, a method used in the three research activities covered here – occupations, homeless population and street vendors – is based on the idea of building a map as a procedural research method according to Deleuze and Guattari, and presented in the first volume of A Thousand Plateaus. The authors argue that "the map is open, connectable in all its dimensions, dismantled, reversible, susceptible to constant modification." (Deleuze; Guattari, 1996, p.21).

^{4.} Defined by the author as the look of the hegemonic power on the city's production.

With these premises in mind, we present the methodological solutions for each dimension of this work. The research involving occupations, in the 'Residing in the Center' dimension, is being developed in five stages: (i) mapping the existing occupations in the central area; (ii) survey of the legal status of mapped occupations; (iii) carrying out interviews and a series of conversations with representatives of spontaneous occupations; (iv) preparation of cartography; and (v) feedback meeting with the occupations representatives.

The mapping was carried out using four databases: the Prata Preta survey (mapping tenements in the central region of Rio Janeiro, accomplished by this same group between 2015 and 2019); data from the Defensoria Pública do Estado do Rio de Janeiro [Public Defensory of Rio de Janeiro state], specifically from the *Núcleo de* Terras e Habitação (NUTH)⁵ [Land and Housing Center]; data from the Campanha Despejo Zero [Zero Eviction Campaign]; and, finally, data on the occupations organized and/or monitored by the CMP, which were visited by the researchers and obtained from the leaders of each of the occupations. As a result of the contact with the CMP, spontaneous occupations were also mapped, that is, those that were not organized by social movements and are self-managed. The survey about the legal status of the occupations occurred after the mapping and during the beginning of the visits, since residents generally know who the registered owner of the occupied building is and this information can be confirmed in the case files, most of which are accompanied by the Public Defender's Office of Rio de Janeiro, through the Land and Housing Center (NUTH).

^{5.} Data collected through the *Cartografias Jurídicas* (Legal Cartography) research project, carried out by LABÁ - Direito, Espaço & Política (FND-UFRJ) and Observatório das Metrópoles (IPPUR-U-FRJ) in partnership with the Land and Housing Center of the Public Defender's Office of the State of Rio de Janeiro (NUTH - DPERJ). The data refer to a historical series investigation, carried out by the partners since 2018, integrating a national-scale initiative promoted by the National Urban Reform Forum (FNRU) for mapping and analyzing conflicts over urban land in the country.

After the mapping, a meeting organized by the CMP was scheduled, between the group of researchers who make up the research presented here and the residents of the systematized spontaneous occupations. Stemming from this meeting, visits to the occupations were planned, aligning dates and times with residents and leaders. In total, 58 occupations were identified in the central region and 25 were visited. During these visitations, we had conversations and performed semi-structured interviews with residents. The visits are still ongoing, but data capable of supporting the proposed cartography have already been generated. This cartography will consist of an interactive map of spontaneous occupations in the center of Rio de Janeiro, bringing together some basic information about the situation of each of them.

When carrying out the first visits, we found out an urgent situation and extreme precariousness experienced by the residents. For this reason, the Right to the City Research Laboratory, from a perspective of militant action in the territory, chose to raise resources⁶ to bring about emergency actions in eight of the occupations, which were scheduled to take place in January 2023. This measure became one stage of the research and is anchored in Becker's intervention perspective:

Observational studies also make it possible to go beyond the problem as originally conceived by those group members who aimed to help and discover other problems that, from a different point of view than theirs, require or justify intervention. (BECKER, 1997, p.131).

^{6.} This is being done through a virtual crowdfunding and spontaneous donations.

The last stage, a feedback meeting – which consists of presenting and validating the information collected by the survey with residents of the occupations, as well as marking the beginning of the works – was also scheduled to take place in January 2023.

Regarding the 'Working in the Center' dimension, the study on street vendors in the Center of Rio de Janeiro is being carried out with MUCA and has three stages. The first, which is being finalized, consists of carrying out a general counting of street vendors in specific regions of the central area, with the aim of observing the magnitude of informal work and the number of people carrying out the street vendor activity. The streets and times for carrying out the fieldwork were indicated by MUCA, and the activity is performed by four researchers, two of whom are members of MUCA and the other two are researchers from the Right to the City Research Center. Having the support of social movement researchers, who work as street vendors in the central region, impacts the density of analyzes and seeks to address the insulation between the academia and the organic production of knowledge by social movements.

The second stage will be the analysis and the crossing of data obtained through counting and the subsequent elaboration of informal work typologies. From this, semi-structured interviews will be carried out with a representative of each typology elaborated, with the aim of identifying working conditions, the circulation of wealth and the interconnections between the informal and the formal work. The third and final stage involves generating a cartography of informal work in the Center of Rio de Janeiro.

Finally, in the Living in the Center dimension, research into the homeless population occurs in four stages: (i) semi-structured interviews with homeless people; (ii) mapping of groups that work 'with' and 'for' the homeless population, which we call mediators, with semi-structured interviews; (iii) survey of news from the newspaper O Globo (printed) from 2009 to June 2022; (iv) production of cartography of the homeless population in Rio de Janeiro.

The first three stages were implemented simultaneously, in the first and second semester of 2022. The field research and the survey of newspaper reports were carried out by two researchers and a social worker. Finally, based on the analysis of this data, the production of a cartography is underway.

The next sections of this paper will deal with the three dimensions - residing, working and living in the Center of Rio de Janeiro - from the aspects of invisibility and State violence, presenting the general issues that cross the themes and the social groups that compose them. .

The expressiveness of invisibles

Despite the proliferation of discourses and narratives about the abandonment of the central region of Rio de Janeiro and the supposed need for its revitalization (WERNECK, 2016), the number of families that have the central area as their home is quite high. Generally made up of people with low purchasing power, the population residing in the central area of the city sees in the region the possibility of having access to basic urban infrastructure, transport, health and education, in addition to the formal and informal job markets that pulsate in the region.

The apparent abandonment of many public and private buildings hides dozens of occupations and tenements, which can house 5 to 300 families, of absolutely heterogeneous nature. The research estimate is that there are more than 100 occupations and tenements in the central region of Rio de Janeiro, distributed territorially as shown in Figure 1:

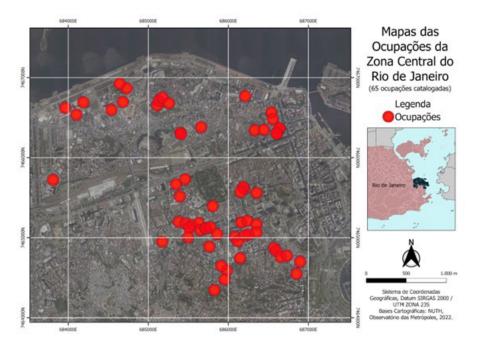


Figure 1. Map of Occupations in the Central Zone of Rio de Janeiro. Source: elaborated by the authors.

Initially, regarding the typology of housing in the central area, in order to situate the reader, it is necessary to differentiate between occupations and tenements in the accomplished research.

Given the non-objective definition of what a 'tenement' is, we do not consider only the housing typologies and characteristics that are commonly identified in specialized literature. This analysis adds to the dimension of rental exploitation, and in this way, we

define tenements as 'collective housing' with rooms, bathrooms and/or kitchens shared by residents, where the social relationship between residents and owners – or administrators (as) as) – is based on the payment of rent.

Differently, occupations can be defined by the unauthorized use of a building for housing, with or without the construction of infrastructure apparatus and separation of rooms. A place where there is no relationship of exploitation characterized by the payment of rent. Occupations can also be classified according to (i) their organization, depending on whether they are articulated by a group or social movement; (ii) degree of housing precariousness, based on various indicators such as separation of rooms, basic sanitation, access to drinking water, access to the electricity grid, among others; (iii) access control, whether carried out by the residents themselves or by third parties and (iv) presence of armed groups.

Despite the threats, the population residing in occupation areas and tenements in the central region of Rio de Janeiro exist and resist in the face of policies and interests that aim to convert the place into a valued neighborhood of the city, through structures, businesses and services that aim to meet the needs of middle classes to the detriment of workers, most of whom are street vendors, who have a real means of survival in the occupation of the central area.

Street vendor's work has been regulated since 1992 in the city of Rio de Janeiro (Law 1,876/1992). However, despite legal recognition, the city's street vendors experience cycles of repression, arbitrariness and violation of human rights by the State which, in the absence of policies that guarantee their rights, intensify according to the directives of each government. The economic crisis worsened

by the coronavirus pandemic, together with the elimination of social policies by the Bolsonaro government, indicate the current growth in street commerce, as well as the substantial increase in the homeless population and in the urban poor. Many, unable to continue paying rent, seek shelter in occupation areas in the central region, whether or not organized by housing movements, forming networks of sociability and support.

A short walk through the city streets is enough to notice the increase in squatters (illegal occupants), as well as the growth of homeless population and street vendors. And, not surprisingly, a confluence of the dimensions proposed in this work is identified in the actors who form and compete for their permanence in the center. The visits, interviews and meetings carried out in 25 occupations in the central region indicate that the significant majority of residents of these occupations carry out street work close to where they live. Likewise, interviews with the region's homeless population indicate that a significant part of those interviewed present the trade of products and services in places of concentration and large flows in the city center as their main survival activity.

Likewise, the significant increase in the number of people living on the streets can be observed by any attentive citizen walking on the streets of several cities in Brazil. Titles of publications such as "Crescimento dos moradores de rua mostra vulnerabilidade cada vez mais exposta" [Growth of homeless people shows increasingly exposed vulnerability] (about Londrina, Bonde News/February 12, 2018); "Projeto aponta crescimento da população de rua" [Project points to growth in the homeless population] (about Niterói, A Tribuna/June 6, 2017); "Pandemia causa aumento na população de rua no Rio de Janeiro, aponta

prefeitura" [Pandemic causes increase in the homeless population in Rio de Janeiro, according to city hall] (CNN Brasil/July 5, 2021); "População em situação de rua no Brasil cresce 16% de dezembro a maio, diz pesquisa" [Homeless population in Brazil grows 16% from December to May, says research] (CNN Brasil/June 10, 2022) demonstrate that this growth goes beyond borders, that is, it is not just restricted to large capitals.

Furthermore, works such as "Mendigos e vadios na Bahia no século XIX" [Beggars and trumps in Bahia in the 19th century] by Walter Fraga Filho (1994) and "Olhares sobre a pobreza e a urbanização no Brasil na transição do século XIX para o XX" [Views on poverty and urbanization in Brazil in the transition from the 19th to the 20th century] by Fabiano Rückert (2019) explain that the phenomenon of urban poverty in Brazil — encompassing the homeless population, squatters and street vendors — is not a recent phenomenon either. It has been always present in our history since the 19th century and shows extreme relationship with the period of slavery and post-abolition

Even with such expressiveness, Brazil still does not produce research or official counts at a national level about the homeless population. The *Instituto Brasileiro de Geografia e Estatística* – IBGE [Brazilian Institute of Geography and Statistics] says it is unfeasible to carry out the count due to the lack of a single methodology and due to the specificities and heterogeneities of this population. Even so, some cities have implemented censuses, such as São Paulo⁷ and, more recently, Rio de Janeiro⁸. The Rio de Janeiro census, released in January 2021, reveals that 7,272 people are currently homeless. Of these, 2,317 people are concentrated in the central area.

Even though there is legislation – at federal and state levels – which establish policies aimed at the homeless population, these are not entirely applied, given that many tools have not yet been regularized9. Added to this, is the inefficiency of public policies aimed at groups in situations of social vulnerability, the absence of updated official data (or the production of data that are questionable, regarding their methodology¹0), and the lack of protection for this population. From the point of view of public policy, there is great invisibility in the knowledge and recognition of these groups. We must consider, however, that the homeless population, squatters dwellers, informal workers and other groups in situations of social vulnerability, become visible in repression and criminalization policies, which aim to force their displacement to less accessible spaces of the city, destined to the poorest.

^{7.} The censuses of the homeless population in São Paulo are available at: https://www.prefeitura.sp.gov.br/cidade/secretarias/assistencia_social/observatorio_socioassistencial/pesquisas/index.php?p=18626

^{8.} Available at: https://www.data.rio/apps/PCRJ::censo-de-popula%C3%A7%-C3%A3o-em-situa%C3%A7%C3%A3o-de-rua-2020-1/explore

^{9.} As an example, the Popular Forum for Homeless Adults is currently fighting to regularize and implement the Intersectoral Committee for Monitoring the Policy for the homeless population in the State, provided for in State Law No. 9302/2021, which establishes the state policy on the homeless population.

^{10.} Groups that actively work with the homeless population on a regular basis question their non-participation in the development of the methodology and in the application of the counting process of homeless people for the census. Furthermore, homeless people question the numbers, stating that there are more people living on the streets than reported in the census.

State violence: the repressive presence of public authorities to the detriment of the absence and/or insufficiency of inclusive public policies

Rio de Janeiro presents intense and systematic cycles of rights violations for the three groups analyzed here: street vendors, homeless people and squatters. During the period of urban transformations for mega-events, the discourses of the obsolescence of the center and the need for modernization (elitization), added to the lack of transparency and dialogue in decisions, made them a central issue of public security for eyes of the authorities.

Faced with this issue, the Popular Committee for the World Cup and the Olympics launched the Dossier of Violations of the Right to Work and the Right to the City of Street Vendors in Rio de Janeiro (2015)¹⁰, denouncing the non-compliance with the rights granted to female street vendors, as well as the Dossier Mega-events and Human Rights Violations in Rio de Janeiro (2012)¹¹, which involves topics such as housing, work, among others. Subsequently, the Residing, Working and Living in the Center Project unfolds this activity into an academic research carried out jointly with MUCA (2017- 2019), identifying a Panorama of the Working Conditions of Men and Women in the Center of Rio de Janeiro, with a focus

^{11.} Available at: https://www.plataformadh.org.br/wp-content/uplo-ads/2019/08/dossie_camelos_rj_2014.pdf

^{12.} Available at: https://comitepopulario.files.wordpress.com/2012/04/dossi-c3aa-megaeventos-e-violac3a7c3b5es-dos-direitos-humanos-no-rio-de-janeiro.pdf

on gender. The investigation focused on the areas indicated by MUCA as having the greatest concentration and diversity of street commerce in the region.

The accomplishment of the first phase of the street vendor research was preceded by the Eduardo Paes' government (2009-2016), which emphasized the discourse of the 'city's planning' by creating the Secretaria de Ordem Pública (SEOP) [Secretariat of Public Order], supported by a doctrine of "zero tolerance" with great receptivity on the part of Rio de Janeiro society and the Brazilian media, see Figure 2.



Figure 2. "Threatened revitalization". The space elitization and the denunciation of the non-invited (Source: O Globo, June 18, 2017).¹²

^{13.} Newspaper headlines: Threatened Revitalization; Street vendors and homeless people multiply; Groups take over spaces in a region that stretches from Boulevard Olímpico to Marechal Âncora square

During this period, the establishment of a system for street commerce registration in the city of Rio de Janeiro (2009)¹³ stands out, strongly questioned by street vendors movements who pointed to a lack of transparency. Subsequent to registration, there was an intense period of State repression in the supervision and ordering of the street, carried out by *Choque de Ordem* [Shock of Order] aiming to "put an end to urban disorder". The *Choque de Ordem* acted towards the removal of the homeless population from the sidewalks and streets of the city and, most of the time, in a brutal manner, promoting a series of compulsory hospitalizations. Newspaper articles from 2009 constantly associated the homeless population with street vendors, see Figure 3, as these groups were treated equally by SEOP: with extreme violence.

The results of the *Panorama das Condições de Trabalho de Homens e Mulheres no Centro do Rio de Janeiro* [Panorama of Working Conditions for Men and Women in the Center of Rio de Janeiro] indicate that since 2009, with *Choque de Ordem*, the City Hall under the command of Eduardo Paes, criminalizes and tries to chase street vendors and the homeless population out of the central regions and of the South Zone of the city as illustrated in the reports: "Protesters protest against Rio City Hall's shock of order" (O Globo/March 13, 2009) and "Shock of Order removes 46 homeless people from the Center and South Zone" (O Globo/November 1, 2011).

After the end of the Eduardo Paes' government, during the next government of Marcello Crivella (2017-2020), a decrease in the City Hall's repression of street vendors was observed, even

^{14.} The electronic address to view the registration can be accessed at: http://wwwo.rio.rj.gov.br/pcrj/destaques/ordem_publica_ambulantes.htm



Figure 3. Report on the homeless population and street vendors. Source: O Globo, January 4, 2009.14

15. Newspaper headline: Homeless people targeted by the City Hall; Municipal Secretary says he will not allow the homeless population to camp and sleep in public areas. though developing policies to protect their rights or to promote better working conditions, in the streets, were still absent. As a consequence of the recent return of Mayor Eduardo Paes to the municipal government (2021), a new wave of repression, violence, seizure of goods and arbitrary acts by the Municipal Guard has been observed, targeting the three groups analyzed in this paper. Eduardo Paes' return to City Hall and the Reviver Centro Project¹⁵ resume the recurrent violence against these social groups, removing them from places for speculation purposes in the Center of Rio de Janeiro. In the case of the homeless population, violence does not only occur by state agents (Comlurb, Municipal Guard, Military Police, for example), but also by other civil society agents, such as security guards in private locations.

In everyday social relations, racial data appears vigorously as a regulator of spatial configuration. Therefore, it is essential to highlight that the majority of residents of occupations areas and homeless people who work as street vendors in the city center of Rio de Janeiro are black people. Given the historical and recurring allegations of violation of rights by State agents, which include physical violence, moral abuse and misappropriation of goods (even when the street vendor has an invoice), the debates and systematic attempts to arm the Municipal Guard authorities indicate who will be the main target if this measure, which is presented as a bill, happens to be approved.

In the case of squatters (residents of occupation areas), the state's actions are also violent and have increased in recent years, even during the pandemic period and the "Stay at Home"

^{16.} Formore information about the Reviver Centroproject, see: lang.com/revivercentro

campaign. The multiple forms of violence are perpetrated by state agents with the consent of the judiciary¹⁶ – as in cases of removal of residents from occupied properties during the pandemic. The report "Justice fulfills repossession in invaded property in the center of Rio" (Folha/2020)¹⁷ tells the case of Thais, who was a street vendor and due to the pandemic lost her source of income, having been forced to live in the occupation in focus. After being evicted, she and 28 families who occupied the property became, at least temporarily, homeless. Among many similar cases, the research by the Right to the City Group leads us to observe the intertwinings experienced by the groups analyzed. However, it is not just about common analytical characteristics, such as the treatment given by the State to these groups. One can also observe life trajectories, paths that are interwoven, people who sometimes live in occupations and work as street vendors, others who are homeless and work as street vendors, and also street vendors who have experienced some of these situations, but today they are no longer there. Cases that denote the faces of urban poverty in the Center of Rio de Janeiro.

^{17.} Cases of evictions and threats of evictions in the city are best presented in the Panorama of Land Conflicts - 2019-2020 report, which can be accessed at: https://forumreformaurbana.org.br/wp-content/uploads/2021/12/PanoramaConflitos_2019-2020.pdf

^{18.} Availableat:https://www1.folha.uol.com.br/cotidiano/2020/09/justica-cumpre-reintegracao-de-posse-em-imovel-invadido-no-centro-do-rio.shtml

Conclusion

The research experiences presented in this study portray an effort by the authors to analyze, in a multidimensional way, the processes underway in the central region of the city of Rio de Janeiro. Based on the research work of the Right to the City Research Group, it is worth highlighting how the dimensions of residing, working and living in the city center interrelate, permeating the dimensions of invisibility and State violence. The recognition that these groups are intrinsically connected makes impossible any attempt of isolated analysis, otherwise it would promote an adaptation of reality to the methodological-scientific "closed boxes". It becomes urgent to reflect on a new way of doing research on these territories, which values trajectories and curves, and not just the use of pre-selected categories and analytical frameworks.

In our forays into the researched field, it was possible to learn about the homeless people who began to live in occupation areas, as well as the to understand the opposite direction – the eviction and removal measures. It was possible to notice that a large part of the residents of occupations work as street vendors, either permanently or sporadically, in order to guarantee the fulfillment of basic emergency needs. This reality is the same for people living on the streets. Furthermore, it was possible to identify street workers who depend on the occupations for overnight stays or to store their carts and materials.

From the investigation carried out to date, some points stand out about the profile of the homeless population, which is mainly made up of black men aged between 30 and 50. In Rio de

Janeiro, of the 7,272 people, 5,871 are men and, of these, 4,410 are black or mixed race, with an average age of 39.7 years 18. However, it is necessary to consider the heterogeneity of the homeless population, considering that people are on the streets for different reasons, whether due to addictions to substances such as alcohol or drugs, or due to loss of family ties, mental health problems, among others. For this reason, we reinforce that the existing public policies today aimed at this population are not sufficient to deal with the issue. When developing public policies for the homeless population, as well as in their implementation, the integration between the themes of housing, work, social assistance, health, security, among other areas, must be a priority.

In the street population census in Rio de Janeiro, when people were asked about ways to make a living, 26% said they were street vendors or informal workers. In the panorama of occupations in the center, it is clear that the 58 houses systematized by the research, shelter around 2,205 people¹⁹. Many of them, when asked about their housing trajectories, report having experienced previous evictions, in other properties also in the city center. It is also noteworthy the predominance of black women, single mothers, identified as leaders of these spaces, which may or may not have the presence of parallel power groups such as drug trafficking or militias.

^{19.} According to observations by groups that work with the homeless population, after the pandemic, the profile of the population would have changed, considering more women and children living on the streets than in the pre-pandemic period. This information has not yet been confirmed due to a lack of official data.

^{20.} We have information on 57 occupations, and for one we have not been able to obtain the number of families so far, indicating that this number is even higher.

In our research, we interviewed Jusélia, a 36-year-old black woman who lives on the streets of the city of Rio de Janeiro. She was once a "griddle cook", working with a food cart, until the moment she had a health problem caused by the heat of the griddle and had to stop working. Furthermore, Jusélia reports having already owned a property in a neighborhood far from the city center of Rio de Janeiro, but it was invaded by the militia. Jusélia spent a lot of time away from home because her work in the city center required many hours of commuting. She went to live in an occupation area in the center of Rio, but did not adapt due to the presence of drug trafficking, and preferred to live on the streets, where she felt safer.

The groups portrayed here have urgent social demands, which do not relate to the issue of public security policy and cannot be resolved by further arming security agents, in a city that tends to be increasingly militarized and besieged by armed territorial control groups. Inclusive social policies are needed. Policies that consider their professional and housing trajectories, which also permeate the other dimensions of life (leisure, emotional relationships, environment, memories, ease of access to public facilities, among others) and point to the need to remain in the Center, recognizing the vitality and importance of the central region as a privileged place for the reproduction of the popular classes, which historically remain there.

The intersections between the themes highlighted in this paper evidence the need for multisectoral policies that focus: (i) on housing, with the creation of housing policies of social interest in the central region, serving residents of occupations and tenements who live there; (ii) on work, with the creation of a registration system of

street vendors carried out in dialogue with the category for possible organization of the street, which guarantees protection and the right to work for street vendors, preventing them from the perpetuation of cycles of oppression (by using the need to organize public space²⁰ as a discourse); (iii) on considering the homeless population as a priority group in public policies for work, housing, social assistance and health in an integrated manner. That said, the purpose is that public authorities fulfill the role of dignity and citizenship for the urban poor, focusing on the most vulnerable groups who claim the right to occupy the center as a place of residence, work and life, in opposition to the planning logic and the creation of exclusionary urban recovery programs.

^{21.} In 2018, a new registration proposal, again without dialogue with the category, was made under the Marcelo Crivella administration. The proposal was part of the Legal Street Vendor Program which intended, once again based on the discourse of the planning of the city's neighborhoods, to regulate street trading points, as established by municipal decree 44.838/2018 published in August of the same year. For more information about the fragility of the resolution, access: https://www.observatoriodasmetropoles.net.br/camelos-do-centro-do-rio-podem-viver-novo-choque-de-ordem/

Referências

- BECKER, H. S. Metodologia da pesquisa em ciências sociais. São Paulo: Hucitec, 1997.
- CENSO de População em Situação de Rua no Rio de Janeiro 2020. Disponível em < https://psr2020-pcrj.hub.arcgis.com/pages/resultados>
- DELEUZE, G.; GUATTARI, F. **Mil platôs**: do capitalismo à esquizofrenia. Rio de Janeiro: Editora 34, 1996. v. 1.
- FRAGA FILHO, W. **Mendigos e vadios na Bahia no século XIX**. Dissertação (Mestrado em História). Faculdade de Filosofia e Ciências Humanas. Universidade Federal da Bahia, 1994.
- MAGNANI, J. G. C. De perto e de dentro: notas para uma etnografia urbana. **Revista Brasileira de Ciências Sociais**, São Paulo, v. 17, n.49, p. 11-29, 2002.
- PESQUISA censitária da população em situação de rua, caracterização socioeconômica da população em situação de rua e relatório temático de identificação das necessidades desta população na cidade de São Paulo. Disponível em https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/Produtos/Produto%209_SMADS_SP.pdf
- RIBEIRO, B. Cortiços de Hoje na Cidade do Amanhã: Invisibilidade e despossessão. Dissertação-Mestrado. Universidade Federal do Rio de Janeiro, Instituto de Pesquisa e Planejamento Urbano e Regional, 2017. 146f.
- RÜCKERT, F. Q. Olhares sobre a pobreza e a urbanização no Brasil na transição do século XIX para o XX: uma prospecção bibliográfica. *In*: CARDOZO, José Carlos da Silva. [et al.] (Orgs.). **Histórias da Pobreza no Brasil**. Rio Grande: FURG, 2019.

SANTOS JUNIOR, O. A. dos; WERNECK, Mariana; RIBEIRO, Bruna Cardoso; MOREIRA, Maira de Souza; LACERDA, Larissa. Os Cortiços na área Central do Rio de Janeiro: inviabilidade, heterogeneidade e invisibilidade. 2019. (Relatório de pesquisa).

SANTOS JUNIOR, O. A. dos; WERNECK, Mariana; RIBEIRO, Bruna Cardoso; VIAL, Yago de Ávila; LACERDA, Larissa; LOURDES, Maria de. **Camelôs**: Panorama das condições de trabalho de homens e mulheres no Centro do Rio de Janeiro. 2019. (Relatório de pesquisa).

WERNECK, M. da G. e S. **Porto Maravilha**: agentes, coalizões de poder e neoliberalização no Rio de Janeiro. Rio de Janeiro: IPPUR, 2016.

Essays and formation of act-action

Between blindness and the lucidity of Luz

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Light in matter and wave

We are experiencing a moment of critical challenges: a global crisis of capitalism that stretches social, environmental, and economic collapses across all dimensions of life; a crisis that produces injustices and inequalities and, for that reason, provokes us to question, imagine, and propose new resistance practices to be able to exist. Living, for many people, is a state shaped by constant violence between expropriations and urban expulsions: the State reveals, on a daily basis, one of its cruelest aspects by advancing unrestrainedly on human dignity rights, such as the eviction of thousands of people from their homes – in the city of São Paulo alone, between March 2020 and December 2021, period of COVID-19 pandemic peak, at least 2,719 families were removed, and 197,368 families were threatened with removal (UNGARETTI et al, 2022). It is under this tension, experienced in tangled, coupled, and linked instances, that forms of control and their power devices

gain potency when aligned with the production of space and the expansion of markets in capital processes that increasingly take place as forms of circulation touching various scales of operation, from small to large, renewing the situation of conflict as a field of sociourban agency and social practices in the production of urban territorialities, spread across all spaces.

Campos Elíseos region, in the central area of São Paulo, has been the target of continuous and increasingly violent actions carried out by the State. In 2017, a major removal and demolition action was taken by the then government, resulting in complete destruction of two entire city blocks in a systemic and illegal way (LABCIDADE, 2017). Since then, the region, which, since the 1990s, has been declared by municipal and state governments as the object of successive intervention policies (thus becoming one of the most radical cases of urban renewal processes in contemporary Brazilian cities), has been a target of open violence in daily repressions, through a necropolitics that promotes actions like the one we witnessed in May 2022, in which the movement of a large police action in Princesa Isabel square spread the concentration of people living on the streets and in abusive use of drugs throughout the city center (MARINO et al, 2022).

It is undisputable that the urban violence in the region overtakes dispossession movements inherent to the processes of spatial and social restructuring, currently presenting itself in a structurally central political category, as it indicates "systems of unfulfilled expectations within social life" (SAFATLE, 2020, p. 160), since a city is not only the stage for life events – as a neutral base that receives production, circulation and its modes of appropriation – but something that is recognized in the manner how these spaces

are produced, where the space is produced by the territory of market production, itself (and its expansion), its forms of control and power, the fields of socio-urban agencies, social practices, resistance actions and conflicts inscribed in forms of production and management. Such violence, therefore, is the cause and the consequence of the space production itself, as it is configured as a powerful tool (for institutional actions) that has the license to coordinate the violation of rights in a considerable part of the population (MBEMBE, 2018). This violence, here, is conceived as a vector to make the existence of memories, stories, architectures, relationships, people, place and life invisible.

It is, therefore, important to recognize the power and the conception and prerogatives of power (and the constitution of a landscape of devastation directly linked to it) bearing in mind that the concentration of anything can only exist in a certain environment and this environment is the place of representation of a few. Such place exposes the logic structured by private property and its role in the urban dynamics of capital which, consequently, subjugates ways of life, linked to the State's policy of domination and control (in essence, an instance of power, capable of creating and suspending rules that allow directing, redirecting and shaping an ideal bourgeois way of life, via the establishment and regulation of order and law). Life is directly reduced and condemned to elimination as the power of capital expands in the process of exploitation and spoliation of life.

This powerful structure of domination by means of control mechanisms - which increase inequalities, segregations and expulsions from a possible life – ends up constituting "conceptually underground conditions that we need to bring

to the surface, as Sassen comments, They are potentially new spaces for creation" (2016, p. 263). Spaces that reveal that power negotiations can also produce life, mobilize affections and build social ties in the constitution of political subjects, derived from the permanent, continuous and, therefore, incomplete construction of their formation. These spaces are made up of transversalities that cross multiple urban territorialities in their routine and conflicting forms. In other words, the spatial practice of resistance can be constituted from an experience, if it results in consciousness of life against capitalist reproduction.

This formulation of constant movement and incompleteness (as it is always under construction), contributes to redefine strategies and dynamics involved in the transformation of behaviors and values, as well as their representations and world views (turned into practical actions and focused on the desired formation of the political subject). The definition of these strategies and movements rely on the construction of the landscape of life (socially produced) and directly linked to collective 'doing and knowing'. Such continuous formations not only reveal new social productive forces, but also organize them, both as a production renovation and production process variations, through innovative ways of imagining and studying them. In other words, how the germ of a possible prosperous future can emerge from a disastrous scenery – future of active life and transformation through action of the "human capacity to establish new things in the world" (ARENDT, 2013, p. 8-9) within the imposed reality –, not as a 'problem solver' formulation, but as 'proposed formulas', able to expose a fact and organizing possible reactive acts stemming from it – a tool for popular organization. The conviction on the effectiveness of this organization (capable of building continuous movements of reaction) thought outside the capitalist property logic, is structured by other forms of mediation and control and power, as it places its actions – which are not expected to resolve something that should remain unresolved, for the necessary survival and intensity of the conflict of/in life itself – in confrontation with the recognition of poles of tension in urban experience.

For every violent action against life, there is also room for one corresponding reaction that fights for life. The urban and economic model in which we live today does not occur without social and political battles. It is from the spatial tyranny established by urban violence that insurgency movements also emerge – which constitute resistance, struggles and activism for the experience of resisting the current dominance of accumulation – in reaction to spatial agencies and putting the reconfiguration of space in debate (ROLNIK, 2018). If we face violence in our daily lives (as in cases of eviction), we respond with other (perhaps new) articulations, in reactions that emerge from the struggle (even if the victimized social groups have not been recognized or organized as a class capable of being represented). This is where, in contrast to the violent eviction data mentioned above, the articulation between social movements, entities, research laboratories, political parties and parliamentarians that have led to campaigns such as #DespejoZero [ZeroEviction], both at local and national levels, in order to suspend evictions and removals of vulnerable families and homeless people.

Resistance organizations are historic in these fights: we have as an example the "Observatório de Remoções" [Removal Observatory] currently formed by the laboratories LabCidade (FAUUSP), Praxis (UFMG), Laboratório de Estudos da Habitação – LEHAB (UFC), Lugar Comum (UFBA), Grupo de Pesquisa Labá

- Direito, Espaço & Política, from FND (UFRJ), - Laboratório de Justiça Territorial LabJuta (UFABC), Laboratório de Estudos e Projetos Urbanos e Regionais – LEPUR (UFABC) and Observatório de Conflitos Fundiários do Instituto das Cidades (UNIFESP), which this year completed 10 years of mapping threat actions and resistance against evictions in the metropolitan region of São Paulo and the Forum Mundaréu da Luz, constituted in 2017 by several groups and institutions, which operates in the Campos Elíseos region, with the aim of addressing the precariousness and social vulnerabilities of the territory, through the development of a proposal that "would guarantee the permanence of all and the perspective of support, with housing, health, work and income programs for people who face the drama of violence, due to the use of crack (drug) and, essentially, implemented by the State, which uses its repressive apparatus to violate the most fragile people" (FABIANO JUNIOR; RUBANO, 2022, s/p.).

The organization of the Forum dialogues directly with the formulation of territorialized collectives, affirmed since this 21st century, – where many make up the group –, presenting themselves in a self-organized, multidisciplinary, territorialized way in the urban space and participating in political processes in collaboration with crossed actions also found in the same place, in strategies originating from their own organizations (BASSANI, 2019).

This paper, based on approximation and practical experience with the second group mentioned – Fórum Mundaréu da Luz – via "Grupo de Trabalho" (GT) [Research Group] "Observatório", at Mackenzie Architecture Model Office – Mosaico, has the objective of contributing to the collaborative process of teaching-learning and interaction between its multiple agents –

students, teachers, organized movements and civil society, in order to act, aiming at academic training, in a complex, conflicting, perverse and unequal reality.

It is notable, given the financial production of the space (which tries to expand its borders to capture more profit), the discussion about the role and place of the urban Architect. This professional is part of a larger scenery. The urban Architect may be part of a space of resistance - when they recognize Architecture and Urbanism as an intrinsic and inseparable part of the city – regarding it as a privileged instrument of discussion and capable of being used to construct a feasible hypothesis to give objective /objectual form to the world and for everyone. Urban Architects can also occupy a space for repair, as these professionals present themselves as 'tools' for building a landscape for life, in addition to structures for business production, based on the proposition and perception of spaces planned and constructed, as territories of speech and listening, capable of providing vocations for collective challenges. Thus, the objects of production and construction of space create new guidelines for organizing collective challenges, with the purpose of formulating and expanding scenarios of political events in new forms of organizing society.

However, we recognize the gaps existing during our academic path regarding content and dissemination – in the theoretical-practical exercises we are exposed to – that barely address the reality of built spaces and the lives they shelter. We claim for consolidation of a training practice capable of catalyzing immanent horizons and highlighting the University as an important hub of knowledge, open to new popular and erudite knowledge, by means of participation and construction with other agents (HOOKS, 2017).

It is important to point out that a significant number of new academic perspectives (as a result of the entry of young people who used to have little or no access to universities through public policies), have replaced the "research object" redirecting it to themselves, as producers of (their own) knowledge, based on their trajectories, adding theoretical meaning to their own lives, connected to ongoing urban processes (of life and the world).

Such multiple frameworks composed of layers of (trans) gender, race and social class bring with themselves greater probability of recognizing the use of the body as a necessity for accessing urban infrastructures and structures. Mainly, considering the ways by which people refer to them in their daily lives. It is proposed, therefore, as a challenge to be considered, that student qualification be intertwined with the constitution of the reflective subject, capable of exercising freedom of thought and action (CHAUI, 2014), through praxis that guides the experience in processes of education of the technical-scientific political being.

The building of knowledge means recognition and possibility of reflection about the world and about oneself, an opportunity of marking and (re)telling stories that are likely to face contradictions for being in permanent change, raising issues (BENJAMIN, 1987) to enable other seams, ties (at times, barely acceptable or recognizable), speculation of blind spots, tangles and necessary paths that result (or aim to result) not as a replacement by a new paradigm, but as the construction of others. This point of view is defended by many authors, including Mignolo (2003), who advocates other possibilities of debate and dispute in the construction of thinking, rethinking and recounting the past and present. He proposes urgent reconstruction 'of', 'about' and 'within' the urban.

Focusing on democratic expansion, in order to motivate actions in everyday life, we seek possibilities of living spaces to be constituted, planned, idealized and conquered. That is, we aim at other possibilities in opposition to the world that is being constructed and destroyed unevenly. The model of 'reflection on action', 'reflection in action" and 'reflection on reflection in action' by Donald Schön (2000) provides the basis for considerations between teachers and students (about manings and openness to the 'new' that presents itself, each year, in a more mandatory way), basing these experiments on resolution number 7, published on December 18, 2018 by the National Education Council/Ministry of Education, which establishes guidelines for the curricularization of extension programs in Brazilian higher education.

The challenges imposed for the development of the extension project described here (specific objective) and academic training (general objective) are many, as follows:

- (i) to put as a perspective, the construction of a political student, aware of the spatial dimension and the heterogeneous ways of organizing life, not reduced only to their personal experience based on a connection with organized civil society in a two-fold approach: offering contributions for Architecture and Urbanism and expanding the context of committed and critical training of students;
- (ii) to seek critical and propositional reflection on the elaboration of research content and project procedures through the articulation of partnerships involving academy, community, research institutes, and public power, as a space for thought and support for the development of the project linked to the idea of concrete reality and notion of pertaining to the world;

- (iii) formulate other project methodologies, review forms of participation, experiment with horizontal work management and propose through theory and project procedures new space possibilities, considering diverse demands that are received by the model office and that provoke new peculiar ways of positioning and confronting;
- (iv) to recognize the importance of creating a network with other training centers, with the purpose of breaking down the space barriers which segregate the activities of groups in a particular way, thus proposing a systemic project among active fields, connected in practices and desires, whose path (re)construction is able to transform the city and form the subject in spaces/possibilities of political experiences;
- (v) to catalog their work, through a theoretical-critical report applied by the proposed project, and analyze the strategic actions up to the present moment of this experience, with the purpose of highlighting the transit between expanded logics, local circumstances and specificities.

We will present here, as a case study, the work developed since 2017, in Campos Elíseos, to address these issues.

Luz from inside

Luz has always been a territory and field of dispute and new coalitions, which are formed and transformed according to its relationship with global and local processes. Luz has been between the popular occupation of the central area, inserted in a context of financial devaluation of material spaces, and possibility of huge turn in real estate appreciation, based on the monopolization of private property, in constant cycles of destruction and reconstruction.

What stands out in this scenario is the population that lives there – multiple, large, plural and conflicting –, made up of homeless people, drug addicted people, local shop owners many of them residents of homes structured in very different ways (autonomous units, collective spaces or shared rooms). There are many people from remote areas living in PPP (Public Private Partnership) housing projects that have acquired their central units through decades of financing and debt. Residents of the area are migrants and immigrants, forming a kind of peripheral population downtown.

Through the processes of violence and violation sequentially established in the area, the extreme face of capitalist reproduction is easily recognized, which illuminates, with lucidity, the uselessness of the worker as an individual – first placed as an object of market reserve, later on, as an abject body, capable of being eliminated (RUI, 2014). It can be described as a territory of extreme violence, illuminated by the current emerging fascism in Brazilian society.

What this study aims to share is the lack of minimal democratic experience, in varied instances, resulting in the "naturalization of a sub-citizenship" (TANAKA et al, 2019, p. 6), understood as subjectivation of politics and as forms through which it is manifested. This situation is challenging since it conditions the fate of most cities to interventions coming from a government centralized perspective, taken as a desired democratizing (trans)

formation. So, we fall into the contradiction of legal instruments and institutional policies that, for the most part, either devour and destroy or intensify the problems they are supposed to solve/eliminate, even with the desire to establish democracy and combat social inequality.

Therefore, in the context of the actions in this territory, there is the need to put questions back in place, about the way in which cities are produced and reproduced, about how we position ourselves in the face of the construction of another meaning and about how we contribute to the understanding of Architecture, Urban Planning and Urbanism and, by desire, how we reinvent the openness of future horizons, structured by desires, hopes, movements and, therefore, by transformations, mutations and social relations, in search for actions to build a political collective being (also a scientific technician).

It is important to understand that the world can not be simplified and divided only into two antagonistic, hermetic and autonomous parts – the reproduction of capital and the reproduction of life – and that, even within these two areas, it is necessary to identify inseparable parts of one in the other. Considering these two parts, we have, on the one hand, the act-action of the planning experience that is based on the tensions (and their implications) of the "income landscape" (ROLNIK, 2018), with private property as a structure and, on the other hand, the daily practices of struggles and non-steady social organization, which go beyond the elaboration of the plan(s), and which are carried out through organized movements and institutions, the "landscape of life" (IDEM, IBIDEM).

These 'moments-in-parts' are, more than two fractions at the same time, coexistences of manifestations linked to different phases of the same system, with their specificities and correlations. One produces the kinds of operations that govern the existence and the other opens space to the experience that still does not exist, but which are continually negotiating and in constant transformation, as in a cycle, replacing new forms in response to the (re)formulation of the other. But not ambivalent. This ambivalence of asymmetric political-financial power results in violations of rights and death policies, engendered by the presence of the State as a life-regulating power and presents itself as a structural element in today's neoliberal capitalism (MBEMBE, 2018). The tension between them also implies the dialectic of alienation and rebellion, abstract thinking and the concreteness of practical actions.

In this perspective, it is supposed that the abstract-concrete limitations of the production of space and urbanization can be, if not overcome, at least tensioned in the hope of gaining possible extensions for the construction of a new agreement, with the social struggle as its object and focus (based on the experience of conflict mediated as an instance of dialogue and of possibilities for the constitution of a transformed reality – a place of manifestation, even if in an ephemeral way due to its contact with the unpredictable).

"How to work with advances under the rule of urgency?". This is the guiding question for two fields of action: one is the development of the extension project and the other one is the inherent practice to the idea of student training, both linked to the contribution to the definition of the construction and production of space, as a socially necessary and transformative activity of desired immanent emancipation, idealized by environment-space-society interactions, in the light of Freire's thought (FREIRE, 2002).

When working with a vulnerable community – precarious housing, informal work and drug addiction, on a public health scale –, in a place with such unpredictable logics of time and interventions in space, in a world that replaces individuals with rights following an idea of service users/clients, the process gains prominence, since the idea of a final product does not exist.

The logic is different: the stages and development of collaborative work that meets the territorial demands of such a heterogeneous population, do not have as their perspective, a fixed and immutable proposal, but rather the instrumentalization of the community, in the daily dispute for permanence in the territory and the right to decent and essential housing.

In this way, building the desired awareness of the population regarding their rights as citizens and monitoring the legal situation of the area to clarify the measures that can be taken in relation to housing are an important aspect that has been carried out in the entire process of the project.

Routine actions, such as the removal of residents, in addition to the speed in which people who live there move to other places, subvert the idea of a classic project schedule. The steps are guided by priority demands, in an attempt to stop the inhumane processes that take place all the time in the territory. Thus, this project proposes the alliance of the idea of 'urgency methodology' – effective and real actions presented as immediate responses to problems experienced by the individuals in the territory – as an understanding of teaching associated with permanent research, whose commitment is to deal with the field of study and project capable of seeing, promoting and working on the idea of life behind the abstract metrics of thought.

Until 2021, the project proposal was an alternative to State Housing "PPP", for Blocks 37 and 38 in Campos Eliseos. The organizational structure was presented in discussions and regular collective meetings in public spaces/existing groups active in the area, such as the "Teatro Pessoal do Faroeste" and "Largo Sagrado Coração de Jesus", in addition to the Polis Institute, where field surveys, Forum organization meetings and workshops with residents were promoted to discuss solutions for the territory.

The collective work carried out went through processes of territorial immersion, divided into qualitative surveys that involved 4 axes: (i) residents of the neighborhood, evaluating income, family composition, length of stay and rent; (ii) shop owners, (iii) the 'flow', in which a survey was conducted regarding social assistance and health services; and (iv) the buildings. Then, proposals were presented in order to improve housing production, on the scale of the neighborhood, blocks, and surrounding area; service modalities, aspects related to social rental, social hotel, home ownership, therapeutic housing, local commerce, shared shops, immediate and emergency housing, shared living spaces, and the enhancement of actions by cultural collectives; as well as project typologies, with housing alternatives for families threatened with removal. Finally, economic and financial viability strategies for the project were presented.

During the period of the project, among the actions carried out, the following stand out: (i) presentation of alternatives, based on dialogue with residents and shop owners, which would guarantee a better quality of life for the neighborhood's population; urban and social project, in a press conference held at the Teatro Pessoal do Faroeste, with the presence of politicians, representatives of the

Public Ministry and the Public Defender's Office; carrying out a procession-performance; citizen public hearing; projections of the project and poems on the walls of a historic building in the area and exhibition of panels with diagrams of territorial readings produced throughout the project process carried out on April 3, 2018; (ii) emergency assistance to families removed from block 36, after April 16, 2018, before the Management Council took office; (iii) implementation of a "Rights Counter" in 2019 and (iv) creation of a Prevention Booklet – COVID19 pandemic. The work proposed expanded action with guidelines developed for the entire territory.

The project's central focus consisted in three blocks between Cleveland Avenue, Rio Branco, Glete and Helvética streets, with sections of Dino Bueno and Barão de Paranapiacaba Avenues. However, on March 14 of the same year, the court ordered the removal of 200 families who lived on the blocks. Despite being considered, by the Master Plan, as a Special Zone of Social Interest, which should be destined to improve housing conditions, the eviction aimed at the construction of the Pérola Byington Hospital PPP.

During all the subsequent years, at the beginning of each period, the Forum group invited partners to plan guidelines for the development of the work. On February 17, 2022, an action was held at the Mungunzá Container Theater (where the meeting took place) which, since 2016, has been an important socio-cultural space in the territory, in addition to being a strong agent of support for the most vulnerable population.

Currently, the theater's actions are aimed at occupying a disused neighboring building that, during the 1950s, operated as an old hotel. The work is collaboratively carried out with a network of



Figure 1. Drawing by Urban Sketchers on kraft paper spread out on the sidewalk, 10/21/2017; Meeting with residents held at Largo Coração de Jesus, 03/01/2018; Reading of the pension surveys, 2017; Post-its panel, 10/21/2017. Source: designed by the authors.

collectives and artists who promote actions and support possibilities, aiming at desired emancipation by means of art and education – Tem Sentimento, Birico Arte, Paulestinos, the artist Badarós, Pagode na Lata, Ilú Obá De Min, Bar da Nice among others – they demand a space in which they could concentrate their activities. Such occupation would be for art collectives uses (headquarters of collectives acting in the region) and housing (for vulnerable people linked to the collectives) of these groups and partner agents.

The actions of these collectives are anchored in the experience of spoliation of urban violence, but also in the construction of another landscape. The mutual construction between identity and recognition (HONNETH, 2003) and experience and suffering

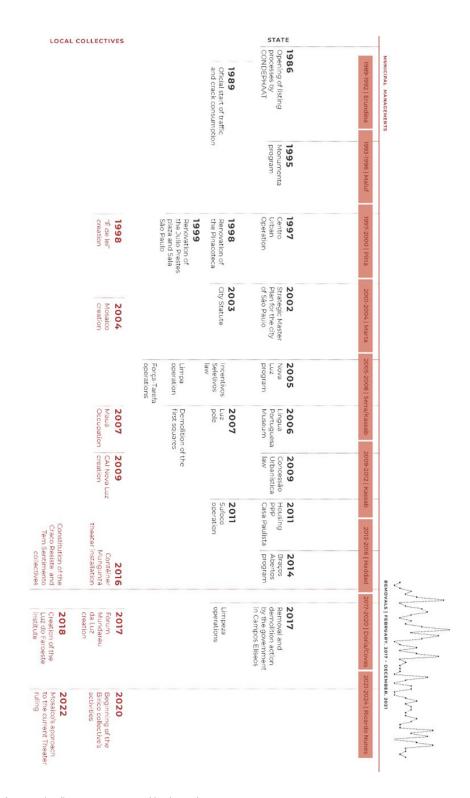


Figure 2. Timeline. Source: prepared by the authors.

(DUNKER, 2015) helps to redefine strategies and movements involved in the transformation of behaviors and values, and their representations and world views mobilized, in practical actions, even which are often dreamlike.

Recognizing the actions of these collectives means incorporating the real experiences of the territory in the attempt to reinsert them into the debates on spatial, temporal processes and the construction of multiple world views. Such recognition involves their territorial positioning, in effective collaboration of the territory in the territory. This relationship based on recognition and incorporation implies something capable of placing the participation of groups as an active, conscious feeling, 'indispensable' to the construction and implementation of something. Project, for us, is a fact-act in the world for someone else and, if in the end, in the concreteness of the actions, the design/desire can disappear, what remains are the things for other people who, being them, in the process, also fact-act, in the coming and going of existence, what remains for us, as a search, is the construction of other collective meanings.

In the following week, on February 22nd, a new meeting was scheduled. With the presence of public officials, art collectives, theater companies, educational institutions, and researchers from the Forum, via Zoom. This meeting discussed the initiative of the intervention project for the space next to the theater and the possibility of artistic occupation as a strong space of reverberation for a resistance action in the region. The importance of recognizing limits and territorial possibilities was emphasized, with the aim of establishing organizing guidelines that embraced the territory, acknowledging its fluidity, and addressing housing, cultural, and harm reduction issues. Then, in the Forum, three major areas of

action were identified: (i) bureaucratic procedures; (ii) financial resources; and (iii) the possibility of a project for the occupation of the building. Focusing on the third target that we, from the GT Observatório, began our experimentation in the project's field of action.

This new agenda guided the Forum's work towards a different direction, changing the project's development plan – previously, the power of the macro scale was recognized, by theme and territorial implementation of the project (the first phase of the project had the following items developed: (i) potentialities of housing production on the neighborhood/surrounding scale and block scale; (ii) service modalities – living and working axis, loving and caring axis, being on the street and living together axis; (iii) project typologies and (iv) preliminary economic and financial viability strategies). Now, as a strategy, we try to start from a focal point – Theater of Container Mungunzá –, without forgetting the importance of the subjects found there, strengthening the meeting place, as a hard field of action, aiming at its socio-spatial expansion.

This change is parallel to the announcement of new violent action in the area. If on the one hand the real estate market advances fast, removing people from their homes to implement PPP housing projects, on the other hand we see intense police action in the displacement and spread of the people flow, previously concentrated in Princesa Isabel square, so that both reveal strong violation of human rights.

On June 21st, a new meeting in the theater space was held. Some hypotheses (for action) were raised, in which the following stand out: (i) the audiovisual recording of repression due to violent actions by the military police and the municipal civil guard against drug addicted people and people living on the streets; (ii) the occupation of the streets in collaborative actions, many of them of cultural nature and organization, mobilizing the presence of more activists and residents in public hearings, so that there is real listening about the territory, circumventing unfair maneuvers of an unethical policy in course; (iii) development of a public policy agenda for new candidacies that support actions in the region; and (iv) the cartography of the main territorial partners, that is, main streets, corners and support spots in the territory that could support audiovisual recordings, among which Bar da Nice and Teatro Pessoal do Faroeste stood out.

It is important to highlight that experimental artistic-socio-spatial actions by cultural collectives, many of them located in the central region of São Paulo city, constitute a network of (re) formulations of another order, not arising from cultural commercialization, but from the need of collaborative production. This positioning on the field of artistic creation seeks other political paths and social practices to (hopefully) dissolve the idea of authorial positioning – which emerges in moral consciousness regarding issues related to the concept of right and wrong –, towards emancipation, capable of considering relevant factors, within a common thought, to decide what should be the best path of action, seeking the best alternatives for all of us. And it is from them that we place ourselves, as a strategy, a field of confrontation and a proposition.

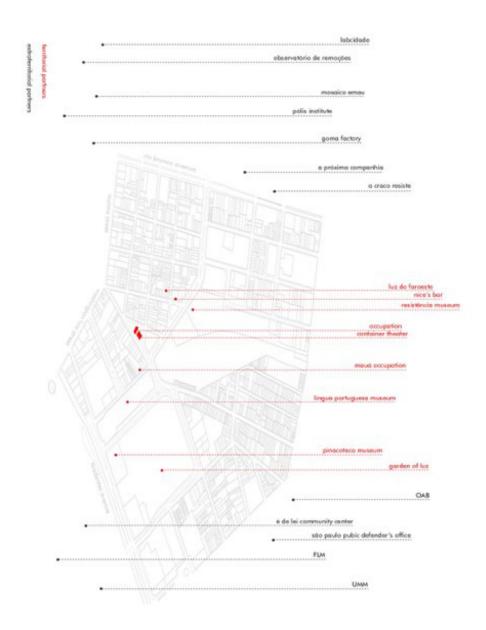


Figure 3. Partners in the work in progress. Source: prepared by the authors and GT Observatório team.

The recognition of binary patterns - right/wrong, public/private, good/bad, inclusion/exclusion, center/periphery, inside/outside, action/reaction, construction/destruction, appropriation/expropriation - fails to account for the reality that not only has a thousand faces, but continually constructs so many other margins - social and territorial, legal and political ones. If the articulated field of capital changes forms that redefine them at an increasingly fast speed, to the point where the reaction is unable to articulate itself because, from the start, it is co-opted into a new redefinition, here the key is another time, marked by the perception of a perennial crisis in constant increase, lived in a spiral of a continuous present, where the only changes to this movement are the presence of some daily actions, in a politics of care and listening, of breathing and articulation.

This is because, if at first reading, even if the territory hosts an experience of the order of evident misdemeanor, placed by the body that radicalizes its 'being on the street'; the police, placed as Lepecki says, as a "social actor in the choreopolitics of the current urban" (2012, p. 51), dictates and determines the circulation space, bringing to itself the monopoly of space.

This path puts us on constant alert, as it presents itself as a movement of passage between the current situation and the future (presented as a non-future), understanding the participation, conscious or not, of all stages of this activity, placing everyone – bodies, insurgencies and institutionalized actions – as parts of this crossing into a paralyzing status of permanent conflict. Against this monopoly, caring shows up. A minimal action, but it takes away the reproduction and permanence of predetermined modes of individual and collective circulation, opening possible slivers of light-lucidity in the midst of so much blindness.

The daily creation and reconstruction of bonds of solidarity has a structural role in maintaining these actions on small scales, even when they operate in a network, based on narratives and concepts that form, integrate, dynamize and multiply this network, creating a project capable of thinking from a perspective of the right to the city, based on cooperation agreements and decommodification of life (as a conductor of sensibilities), where the spatial fight – and the logic that seeks to reconstruct some meaning for the fight itself – can emerge as a class fight based on other sort of bonds. It is as if, after recognizing a window of change, we could think about what we can do with this small opening.

Intellectuals like Faranak Miraftab (2016) provoke us to rethink planning practices in search of a more humane urbanism. It is in this context that one must recognize what these practices are, in addition to those sanctioned by the State and corporate powers, in order to think about new perspectives for the future. While public authorities seek to maintain the *status quo* based on gentrification and spatial injustices, insurgent movements propose a break with current practices. It is important to highlight that the tactics performed by these movements are always anchored in a place, in a way that it symbolically gives new meaning to the imaginative use of public space, reinforcing the power that the presence of bodies in the streets can perform against dispossession and oppression.

In this scope, it is worth recovering the dimension of affection as a creator of bonds that allow us to politicize our practice (HOOKS, 2017) to ask: how can we mediate a critical action capable of transforming realities and shaking paradigms in the gaps of a violent and oppressive system? How to evoke this so-called 'alternative future' proposed by Miraftab, who calls for social and spatial justice? How to act and reflect on the world in order to change it, in the collective construction of subjects of struggle and conflict?

Recognizing all agents and the actions coming from their articulations, therefore, as acting partners for spatial formulations in the field of Architecture and Urbanism, puts the idea of building the landscape of social production, directly linked to collective action, into another dimension via the exploration of project methodologies in building dialogue between tensions that build and constitute urban space. This movement leads us to formulate a re-territorialization of political praxis (NEGRI; GATTARI, 2017), not as a return to universalization, but to the recognition of the conditions of bodies, when linked to community struggles for freedom, dialogue and common desires, as instruments that make up the territory.

Based on reflection about the production of space and the production of time, associating urbanization and everyday life, not just the production of things in space (although the world of merchandise tries to appropriate and objectify everything, including reactions against it), the challenge that arises (with the glimpse of the production of space and social relations in unity) is how to overcome the contradiction between private market production, forms of control and socio-urban agencies of social practices and conflict situations that are present in all spaces.

Reporting, thinking critically and building other paths on the methodologies of daily action, through the concerns found – recognized and/or interpreted – in the territory, gives us the possibility of trying to decode how this extension project contributes, regarding strategies and political actions, in prospecting new pacts for the future, from its margins (and specific fields of action), which could support isolated practices.

It is in the order of possible-impossible that resistance is carried out, with the prospect of social change. From the city (private property), from income, also emerges the opposition's breaths of life and the possibility of seeking other forms – of production, use, decision and projection –, which incorporate conflicts and frictions of an unequal society, divided into classes and unrecognized, many times, in it, without erasing these tensions, but identifying transversalities in them and their possible reverberations present in the multiple urban territorialities, as an instrument of purposeful political action in urban social struggles for the ways of being, producing, living, inhabiting and reproducing the city.

The project methodology experiment, and its actions and implementation – where quotidian facts prevail, feeding academic theory with the pressure of urgency and solidarities that, despite everything, resist – is the guiding axis of the work and also of the activities carried out by the Forum. As such, there is a need to conceive other forms of space production, social relations and spatial relations in counter-forms that oppose the commodification of space and life as a technical, ethical and aesthetic strategic function, coming from multiple groups driven for different actions. These actions are not subordinated to the trait, but to common desires through the observation of life as a daily activity, in the desire to think of the city as a call that encourages reflection and action in search of a fair world for all.

The GT Observatório, at this moment, is formed by professor Antonio Fabiano Junior and Anna Tereza Moro Lanzuolo, Gabriela de Miranda Papi, Isabela do Val Salge, Joel Lucas Quena Paco, Julia Alves Konstantinovas and Rafael de Barros Trigo,

students who are in different periods of the course, between the 5th and 10th semester. The work structure is articulated through 3 moments of collective meetings:

- 1. Meetings with Mosaico members students and teachers –, who discuss methodological processes constantly, as a result of the rapid changes that occur in the area on a daily basis. The meetings take place in the EMAU space, in the Mackenzie Faculty of Architecture and Urbanism building;
- 2. Meetings with the partners that make up the study working group on the possibility of a project for occupying the building, with two purposes: discussion of action strategies and dissemination of the project and presentation of the development of the work done by each member. The meetings take place in different locations, generally rotating between the headquarters of the groups and entities that participate in the work.
- **3.** Meetings with the community for collective construction and debates. The meetings take place in the project area.

Collective work meetings are scheduled, in alternating modes: sometimes together with other collectives in the Campos Elíseos territory, at Teatro do Container, sometimes in the development of each partner group. Meetings take place weekly, lasting approximately 2 hours. From these meetings, between April and June 2022, important readings were raised about the hypothesis of action, such as (i) the limits and possibilities of the territory; (ii) the bureaucratic development in relation to public authorities and the situation of the building; (iii) the articulation between housing, art, education and income generation; and (iv) the range of possibilities to project perspectives and transformations.



Figure 4. Meeting for work discussion and preparation, held on May 11, 2022. Source: Aluizio Marino.

Concomitantly with the project actions, on May 15th an event was mobilized in which hundreds of people gathered in protest against the violence of police actions against the vulnerable population of the region known as "Cracolândia" [crackland]. The act of denunciation was organized by the Craco Resiste movement, which denounces and resists the violent action of the police and the 'terror campaign' established by the city of São Paulo since 2016 (LACERDA, 2022).

Next, conversations began by reviving this act, around the need to mobilize a new communication strategy to face current challenges in the region. As a proposal, the occupation project was structured into programmed and continuous actions, in meetings and collective activities called "eventos-mutirão" [collective events]. For this, three moments of time were listed – short, medium and long term.

In the short term, we have the immediate actions necessary to make the occupation safe for everyone. This resulted in immediate cleaning of the space, installation of guardrails on the stairs leading to the building's floors, regularization of the floor, implementation of electrical, water and sewage infrastructures and removal of plaster from the facade. In the medium term, the beginning of the appropriation of collective groups, in cultural and housing activities. Such occupations will gain collective dynamics and, to this end, a working group responsible for their ongoing management and organization was created.

The development and implementation of workshop spaces, collective conversations and/or public classes is also planned, in partnership with nearby institutions. In the long term, we will have the opening of the ground floor and the creation of laboratories/workshops as support spaces – such as carpentry, metalwork, printing and collective sewing studios – for the activities promoted in the territory. The building's roof is expected to become an urban terrace, to promote a space for collective and plural appropriation. It is recognized that throughout the entire process, new arrangements will be designed for the occupation of the building and its spaces. In order to achieve this goal, the working group will always be present, planning multiple collective actions.

Detailing the activities, in line with the logic of occupation of housing movements, five essential guidelines were listed to guarantee safety when entering the building: (i) production of guardrails for the stairs, in order to guarantee minimum safety for access to upper floors (this activity took place in three stages: first, guardrails were installed on the first two floors, which were already used as storage and support for the collectives present in the space; then, guardrails were

completed along the entire staircase. Finally, a metal piece, made by a local metalworker, a partner of the theater, was painted in a collective action. Action completed); (ii) closing the window openings that surround the staircase, using metalwork and metal mesh, maintaining visual permeability, ventilation and safety (action in progress – design and budget ready, production of parts started); (iii) maintenance and covering of stair floors and regularization of floors in heavily damaged areas of the first floor; (iv) installation of an electrical circuit; and (v) installation of a hydraulic project (the last three are scheduled to be the next actions carried out).

In parallel, transversal actions were raised and are already beginning to be carried out during the continuous periods of discussion, in order to enhance the occupancy of the building and even raise financial resources, such as (i) continuous cleaning of the environments, (ii) visual occupancy through collages and posters, demonstrating the intention and beginning of the use of spaces by artistic collectives (activity conducted by the Birico Arte collective, throughout the building. This action began on the first two floors, spaces already occupied in the building); (iii) virtual crowdfunding to raise funds and continue installing the guardrail until the top floor (action completed).

Groups of actions were divided: cleaning efforts, repairs to the building, organization of fundraising, awareness campaigns, graphic and audiovisual material denouncing violence in the area and events to strengthen commerce and local events. In the case of the Forum, the purpose of the meetings is to develop the architectural project for occupying the building. The actions – including possibilities of independent actions and those of a collective nature – aim to join forces, create relationships of cooperation, recognition and support between those involved.

The next steps are the installation of external metal piping and conduits for placing light points and sockets in the environments that will receive collective actions throughout the space, removing the plaster from the facade, installing water and sewage spots, taking advantage of existing hydraulic spots in the building and implementation of the headquarters of collective groups that, gradually and collectively, will configure the space in mutant movements, according to the need for intention of the actions that will emerge from such meetings. On very cold days, the first floor is open so that people in extremely vulnerable situations and directly related to the working groups can sleep with a minimum of protection. The collectives are already beginning to appropriate the spaces, storing materials and appropriating the first floor.

New actions are beginning to be outlined: (i) the organization of "collective events", which will take place in the Theater space, bringing people together to raise funds; (ii) development of workshops, collective conversations and/or public classes, in partnership with institutions such as Sesc Bom Retiro and neighboring partner institutions; (iii) study and mapping of discarded materials in the neighborhood as a possibility for reuse in a design action. This last activity is organized as follows: (i) preparation of maps to recognize discarded materials within a radius of 1 km from the proposed occupation; definition of the volumes of materials found; contacting sources and beginning to establish supply relationships; (ii) cataloging and researching possible uses of the materials made available; (iii) development of experiments on the use of these materials at the college site and (iv) elaboration of a booklet with test specifications, quantities and procedures for producing the construction components, all tested by university laboratories.

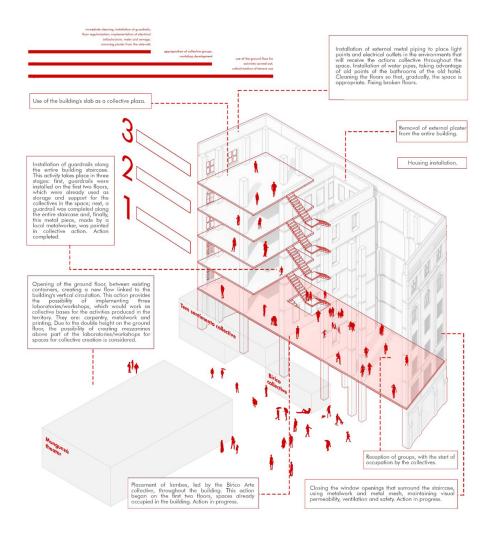


Figure 5. Graphical elaboration of the proposed actions for the occupation. Source: elaborated by the authors and GT team.

For all these work phases, regular meetings are held between the agents involved, with the aim of building the landscape of social production, linked directly to collective action, through the exploration of project methodologies to discuss tensions that constitute the urban space. The proposed actions aim to join forces, create cooperation, recognition and support between everyone involved in the project.

A possible light in the darkness

This project has been developed in search for the desired immanent emancipation, in the glimpse of the fight for disalienation, structured on four bases: (i) understanding urban violence as a political category; (ii) the need to think about other bases for the production of social emancipation through the creation of networks and social ties; (iii) due to the prerogatives of power and the empty place of authority as a strategy for distributing power inscribed in life conflict and dispute and (iv) due to the glimpse of the project's scope as an articulation and basis for the formation of the political subject.

It is important to establish the bases of social emancipation we are using: those understood as a series of actions through which individuals begin to transform their lives and become capable of doing things that they thought they could not do. Emancipation is the key and core of this exercise, as its process has political struggles as its horizon, capable of producing singularities from the gap as a place of desire for rupture. Such a rupture opens up the structures that hold power and also knowledge. Emancipation is, therefore, the decomposition of the voice that establishes the rules of the world and the establishment of a new grammar of power in social life, for those who participate and for those who form it. In other words, it is a movement of dissolving and creating one's own relationships, in a transition between dismantling and construction.

This research emerges as a trace of light and hope in the face of a world in collapse. Identifying the existence of actions such as the one developed by the Forum, as well as its ways of operating through a micropolitics of affection and solidarity, generates inputs

to be able to enhance new actions through support networks, which aim to build an alternative capable of proposing pressure and tension in the face of a problematic public policy and harsh on the most marginalized people, therefore, the most fragile population. It is from an experience of violence and radical perversity that one can think of the challenge – as a call and link to the training of students – of desiring and proposing possible radical reactions, inscribed in the conflicts, dilemmas and tensions in the city and real life.

Such actions experienced and speculated in the territory energetically announce new ways of resisting and discussing the production of space and the right to live in the city, demonstrating the importance of spatial projection as an instrument of transformation. When articulated in a creative and purposeful way, in which the partnership between the most diverse social subjects is actively presented in debates and propositions, the practices become even more consistent, revealing to us a present moment in which solidarity, affection and cooperation are still resilient.

Among the dynamics that interfere in the way space is organized, an intention prevails, one that can be clarified in the light of 'reflection about the project', observing some points such as the direction to produce spaces at the service of hegemonic projects of globalization, aimed at the functioning of economic policy in the prevalence of the forces of capital. As a practical result, we have Architecture and Urbanism acting as cruel instruments of expectation of value through the project, instrumentalizing materiality and dimensions and knowledge of construction, while distancing themselves from the urgent and necessary social demands to work, due to the etymology of the word project itself. (ETIM lat. projectus, action of launching forward, of extending), as a tool for financial logic.

In this aspect, the proposed project (being elaborated) reroutes us as it opens up space to the experience of 'the non-existent', but which is continually transitioning and in constant transformation that, as in a cycle, replaces new forms as a response to the (re)formulation of the other (the opposite side). If a large portion of the population does not have their assured representation, as a right in civil society, the actions promoted continuously by the project presented are opposed to an established norm of participation, built on other values. It is in this scenario that emancipation, as something that is beyond the current, presupposes the collective.

When we think about the possibility of an alternative future, Ailton Krenak (2020) reminds us that we will have to be reconfigured to be able to circulate and inhabit this world, so that if we can face this, what we are experiencing today will not just be a crisis within so many crises, but a possible movement of promising hope.

The search to recognize other alternatives for the logics of the project intends to replace architectural work as possible experiences that pierce the bubble of current hegemonic logics, trying to systematize them so that they are capable of reproposing themselves as a constructed space and as a field of thought for an effective, necessary and urgent intentionality, not only as moments of exception. Project, technical and humanistic actions are seen as instruments of necessary commitment for the formulation of environments for life. Through critical and propositional reflection on the complexity of urban territories, and through the foundation of issues perceived empirically and supported theoretically, a methodology is experimented that considers intertwining with everyday clashes, based on the idea of "space as a sphere of possibility of existence of multiplicity" (MASSEY, 2008, p. 31).

The possibility of an urban social movement based on practices that represent a struggle for existence, corroborates the need to regard the project and its field of action, as an instrument of resistance, pointing out the need to plan a city that cares for and cultivates life. This perspective motivates the conception of other forms of elaborating the actions of the project as one of the possible instruments underlying the production of space, social and spatial relations, through the constitution/education of the subject – political spaces of collectivities.

The academic education of new generations of urban architects who experiment inclusive practices in the scope of projects – covering expanded actions beyond the assertive trait, stretching over other and common desires through the observation of life as a daily activity – seems fundamental to us and an absolute necessity (in the face of evident inequalities and the almost impossibility of access for the most vulnerable populations to urban and architectural project). The University has the power to offer access to a new way of thinking and, above all, of organizing subjects into multiple collectives, who get together to think about essentially recurring problems, understanding their role and education opportunity as a place of conceptions about the world – a world anchored in other forms of collective social networks, capable of leading us to possible reformulations and new formative conceptions.

In times of global vertigo, we are convinced that in order to move towards our desires and emancipation inspired by resistance, conflict, education and art as form of social and political construction, it is essential that we act collectively, strengthening networks and insurgent territorial partners. Drummond, in his poem "Mãos dadas" [holding hands] (feelings of the world), perhaps gives us a clue: "The present is so large, let's not move away. Let's not move too far away, let's move holding hands." May moments of hope, during collective actions, be our present energy, as a permanent invitation to resistance. And let's draw ourselves a future, for all of us, urgently and quickly, and now.

References

- ARENDT, H. **A condição humana**. Rio de Janeiro: Forense Universitária, 2013.
- BASSANI, J. Das intervenções artísticas à ação política urbana. Tese de Livre-Docência. São Paulo: FAU USP, 2019.
- BENJAMIN, W. **Magia e técnica, arte e política**: Ensaios sobre literatura e história da cultura. Obras escolhidas. São Paulo: Editora Brasiliense, v.1, 1987.
- CHAUÍ, M. **Conformismo e resistência**. São Paulo: Editora Autentica, 2014.
- DUNKER, C. Mal-estar, sofrimento e sintoma: uma psicopatologia do Brasil entre muros. São Paulo: Boitempo, 2015.
- FABIANO JUNIOR, A.; RUBANO, L. M. Cidade, espaço público e contravenção: moradia e cena aberta do crack na Luz. 2022. Available in: https://www.brasildefato.com.br/2022/06/04/artigo-cidade-espaco-publico-e-contravencao-moradia-e-cena-aberta-do-crack-na-luz. Access in: 5 out. 2022.
- FREIRE, P. **Pedagogia da Autonomia**: Saberes Necessários à Prática Educativa. São Paulo: Paz e Terra, 2002.
- HONNETH, A. Luta por reconhecimento: a gramática moral dos conflitos sociais. São Paulo: Editora 34, 2003.
- HOOKS, b. **Ensinando a transgredir**: A educação como prática da liberdade. 2ª edição. São Paulo: Martins Fontes, 2017.
- KRENAK, A. **A vida não é útil**. São Paulo: Companhia das Letras, 2020.
- LABCIDADE. **Mapeamento colaborativo RMSP**. 2022. Available in: http://www.labcidade.fau.usp.br/mapa-denuncias/. Access in: 31 mar. 2022.

- LABCIDADE. Violações, violências e remoções nos Campos Elíseos. 2017. Available in: http://www.labcidade.fau. usp.br/violacoes-violencias-e-remocoes-nos-campos-eliseos/. Access in 29 out 2022.
- LACERDA, N. Ato em São Paulo pede o fim da violência policial na Cracolândia. Available in: https://www.brasildefato.com.br/2022/05/15/ato-em-sao-paulo-pede-o-fim-da-violencia-na-cracolandia. Access in: 18 jul. 2022.
- LEPECKI, A. Coreopolitica e Coreopolicia. **ILHA**. Santa Catarina: Programa de Pós-Graduação em Antropologia Social Vol. 13, N. 1, pp. 41-60, jan./jun. (2011) 2012.
- MARINO, A.; AMPARO, A.; MACHADO, A.; MELLO, D.; MAGRI, G.; MEOLA, L.; ROLNIK, R. A Cracolândia não diminuiu, só se espalhou. 2022. Available in: http://www.labcidade.fau.usp.br/acoes-violentas-do-poder-publico-multiplicam-cracolandias-pelo-centro-de-sao-paulo/. Access in: 15 ago. 2022.
- MASSEY, D. **Pelo espaço**: uma nova política da espacialidade. Rio de Janeiro: Bertrand Brasil, 2008.
 - MBEMBE, A. Necropolítica. São Paulo: N1 edições. 2018.
- MIGNOLO, W. **Historias locales/disenos globales**: colonialidad, conocimientos subalternos y pensamiento fronterizo. Madrid: Akal. 2003.
- MIRAFTAB, F. Insurgência, planejamento e a perspectiva de um urbanismo humano. **Revista Brasileira de Estudos Urbanos e Regionais**, Recife, v. 18, n. 3, p. 363-377, jul. 2016.
- NEGRI, A.; GUATTARI, F. **As verdades nômades**: por novos espaços de liberdade. São Paulo: Autonomia Literária e Editora Política, 2017.
- ROLNIK, R. Paisagens para a renda, paisagens para a vida. **Revista Indisciplinar**. Belo Horizonte: Escola de Arquitetura e Urbanismo. Vol.5, N.1, pp. 20-43. 2018.

- RUI, T. **Nas tramas do crack**: etnografia da abjeção. São Paulo: Terceiro Nome, 2014.
- SAFATLE, V. Maneiras de transformar mundos: Lacan, política e emancipação. Belo Horizonte: Autêntica, 2020.
- SASSEN, S. **Expulsões**. Rio de Janeiro/São Paulo: Paz e Terra, 2016.
- SCHÖN, D. A. **Educando o profissional reflexivo**: um novo design para o ensino e a aprendizagem. Trad. Roberto Cataldo Costa. Porto Alegre: Artes Médicas Sul, 2000.
- TANAKA, G.; OLIVEIRA, F. L de; COLI, L.R. Planejamento Autônomo e Ação Política na Produção da Cidade: Movimentos, mobilizações e direito à cidade no Brasil contemporâneo. **Anais** do XVIII ENANPUR. Natal, 2019.
- UNGARETTI, D.; PECORA, G.; SÁ, J.; SANTOS, R. A., GONSALVES, T. A.; MARINO, A. Balanço das remoções em dois anos de pandemia na Região Metropolitana de São Paulo. 2022. Available in: http://www.labcidade.fau.usp.br/balanco-das-remocoes-em-dois-anos-de-pandemia-na-regiao-metropolitana-de-sao-paulo/. Access in: 01 nov 2022.

Humanized Landscape

Reference models for (post)pandemic city management¹

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Introduction

The pandemic context provided by coronavirus disease 2019 (COVID-19) revealed numerous adversities for the management of cities and the lives of citizens. If, on the one hand, urban behavior changed radically with the restrictions imposed to prevent further viral spread, on the other, the habits and customs of individuals were transformed to comply with new social and health protocols.

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As the city facilitates the transmission of epidemic episodes and the onset of health crises (HARDT et al., 2020), shortly after the declaration of the pandemic in early 2020 (WHO, 2020), different strategies were adopted by different nations with the purpose of reducing the spread of the virus. Among them, the partial shutdown of socioeconomic functions, the use of high technology for tracking and isolating people, and the application of rapid tests to identify contamination, complemented by the mandatory use of masks (DURRHEIM; BAKER, 2020) stand out. These and other deliberations, as well as the implications of COVID-19 on the health of the population, caused numerous impacts on urban planning and management, leading forcefully to the adoption of measures to tackle this problem, maximized by the lack of understanding about plans and reference models aimed at pandemic control in urban landscapes.

In addition, measures are based on the assumption that actions to humanize public environments contribute to the psychological satisfaction and physical comfort of citizens, highly affected by the conditions aimed at protecting them against coronavirus contagion. These practices can be made possible if they conform the characteristics of the spatial components, which offer well-being to users, or by proposals developed by governments and civil society actors, aimed at sustainable and social issues (OLIVEIRA; BORGES, 2018; SOETHE; LEITE, 2015). However, likewise in the urban plans, there are limited guidelines for implementing humanized landscapes in cities.

Faced with these problems, the following investigative question arises: how the examples of strategies addressed in reference models (e.g. plans, projects, actions and similar initiatives) are addressed at the humanized management of the city in contexts of health crises? With the purpose of formulating responses, the main objective of the present work is to classify strategy examples (models), at national and international levels, applied to urban landscape management during pandemic periods.

The objective of this study is linked to the hypothesis that the aforementioned models are normally aimed at adapting in order to remedy adverse situations arising from epidemiological factors and their from measures taken to restrict movement and social isolation. Based on these considerations, this article begins with the theoretical foundations, bringing the conceptualization of humanized landscapes, especially in contexts of health crises, in addition to the theoretical proposition of categorizing reference examples regarding urban planning practice.

Sequentially, the methodological procedures adopted for the selection and classification of initiatives relevant to the research are described. Subsequently, the proposed results are discussed, focusing on specific cases selected, ensuing from bibliometric analysis and systematic literature review, these cases are ordered based on the delimited theoretical-classificatory structure. Finally, general considerations are made about the work, with a view to systematizing humanization actions in urbanized scenarios and future directions for investigative application.

Theoretical foundations

Due to the dynamics of the COVID-19 pandemic and the issues raised, two main theoretical frameworks were specified to establish the state of the art. The first one is focused on the central themes "humanized landscape" and "the post-pandemic city", as it deals with the spatial contexts of the research. The second is directed to the concept of "reference models" and their specific features, aimed at the (re)humanization of contemporary cities.

Humanized landscape and the post-pandemic city

Despite its different approaches, the concept of landscape is normally associated with distinct relationships between natural and anthropic elements, as well as with individuals' perceptions of physical spaces. This definition allows interactions between concrete reality and the social and cultural dimensions experienced by human beings, regarding dualities between universe and individual, nature and culture, object and subject (ALEHASHEMI et al., 2017; KESHTKARAN, 2019).

According to Custódio (2014[2000]), to understand this concept it is necessary to recognize the configurations of the societies that formed its history and understand the contributions of people in the processes of changing environments over time. In this way, the concept of landscape is something broad and with multiple layers, including subjective, objective, individual and collective issues.

In the urban framework, the landscape design is usually

related to urbanism and architecture, reinforced in multifaceted conceptual interpretations of the city and its settings (KESHTKARAN, 2019). According to this view, the city is a physical object, in which the different perspectives of experts are external to its visual and functional aspects. Scherer (2002) understands it, however, as the dialogue between the site designed by man and the natural elements, that is, the associations between the set of built forms and their incorporation into the original environment.

From an artistic and functional perspective, Cullen (2015[1961]) considers the urban landscape as the result of the art of making the cluster of buildings, streets and places (that make up the city environment) visibly pleasant. From a contemporary viewpoint, it includes dynamic and flexible relationships between the anthropic environment and the natural environment to create unlimited and indefinite space-time continuity, thus covering a set of areas and purposes, as well as different cultural forms (DE WIT, 2016; KALAIARASAN, 2016; KESHTKARAN, 2019).

It is, then, understood, that the ability to interpret a landscape is complex and not universal, since its observation can be connected to sensations and impressions about the place. In this sense, the humanization of cities contributes positively to the evaluation of their scenarios, as this condition adopts the citizen as the protagonist of the urbanized space via public policies that guarantee their well-being (OLIVEIRA; BORGES, 2018).

For Ferreira and Artmann (2018), the humanitarian capacity prioritizes the quality of commitment and care for the person, as well as for their satisfaction. In the context of cities and, consequently, their landscapes, Oliveira and Borges (2018) associate it with urban

planning, when aimed at valuing the human dimension and citizens' sense of belonging.

For the same authors, this condition is ensured in the principles of participatory plans, looking forward to the creation of fair and democratic spaces to guarantee broad access to public facilities and social, educational, political, economic and cultural actions. To this end, according to Meisner et al. (2019), the practical application of these postulates can occur in different ways within cities, from physical interventions in the landscape to abstract and subjective guidelines.

One of the possibilities for actions to humanize urbanized space focuses on solutions that are reflected in the scale and mobility of users, as well as in dynamics that favor the vitality, sustainability and safety of public areas (GEHL, 2014[2009]); JACOBS, 2011[1961]). Additionally, some strategies applied to landscapes are supported by premises of accessibility, vitality, legibility, sociality and visual satisfaction (MOURATIDIS; POORTINGA, 2020; NIA, 2021; PÉREZ-DELHOYO et al., 2016; TAVASSOLIAN; NAZARI, 2015; VIHANNINJOKI, 2021).

On the other hand, during the COVID-19 pandemic period, considerable movement restrictions were imposed, which, according to Ximenes et al. (2020), significantly transformed social dynamics, especially in the metropolises worldwide. These authors, despite models of (post)pandemic cities, reinforce the idea of urban vitality through the appropriation of public space and the rescue of the human dimension, placing priority on the health and well-being of users in the search for relationships of affection and strengthening of community ties.

According to information from the Organization for Economic Co-Operation and Development (OECD, 2020), three fundamental characteristics can be identified for reformulating the city environment with a view to mitigating health crises. The first refers to the configuration of inclusive locations, according to which community practices for vulnerable people must be a priority for government and institutional systems, by making housing and adequate mobility conditions available to prevent contamination risks, for example. The second concerns the formation of green cities, supported by environmentally correct conducts, especially those aimed at the consumption and production of goods that favor the local economy. Finally, the third is focused on the creation of smart cities, related to the use of technologies and innovations, through digital tools, to improve urbanized spaces.

In view of the above, and within the scope of this research, the ideal model of a (post)pandemic city can be identified as one that brings together the precepts of sustainable, lively, accessible, legible, inclusive, green and intelligent cities, among many others. However, it is still necessary to understand applicable examples to the adaptation of the urban landscape to satisfactory human conditions.

Reference models applied to the humanization of cities

Faced with the sudden changes in life in society and, as a result of its dynamics, whether temporary or permanent, the search for solutions to cope with these changes becomes essential. In this way, reference models, the object of this study, are those defined as techniques, methods and strategies for city praxis, which aim to improve the current and future excellence of the urban environment.

In other words, they are practical applications in the urbanized environment which improve the quality of life of citizens.

Despite being comprehensive, mainly because it involves measures on the physical and perceived space of cities, the search for management reference models can be subdivided into specific classifications, with guidance standards in the categories: physical-territorial, socioeconomic, political-institutional, judicial-legal and technical-technological. For better understanding, the essential characteristics of each of them are explained below.

Physical-territorial models include those that aim to organize the space of cities, with a view to achieving a balance between social, economic and environmental growth. In other words, they deal with the public and private spatial configuration, addressing knowledge of planning, design or management for urban interventions (DUARTE, 2013[2007]).

Regarding the Brazilian framework, the territorial arrangement is consubstantiated, in the first instance, by the institution of the 1988 Constitution (BRASIL, 1988) and, subsequently, by the statutes of the City and the Metropolis (BRASIL, 2001; 2015). Among others, these legal provisions not only define the *master plan* as a planning and ordering tool, as well as instruments for integrated urban development, but also determine the adoption of standards for production and consumption in compatibility with the limits of sustainable development. They, therefore, include measures of changes in the urban landscape or specific projects at various urban scales.

Socioeconomic models are those aimed at the growth

of the production system, with mitigation of its impacts on various social factors. The approach, in terms of conceptual definition, is broad and varied, but, although they can be interpreted as a set of measures that do not value profit as the maximum purpose and as measures which are supported by cooperativism, in this research they are aimed at valuing society's relationships and its consequences in the economy (DAVIS; DOLFSMA, 2008).

With a similar interpretation, Santos (2005), within the sociological perspective, exposes the need to understand the configuration, evolution and consequences of economic divisions and their associations with the inequalities that have long permeated the Brazilian context, so that public policies can prioritize social well-being. However, in the context of health crises, community and even state resources constitute efforts to alleviate differences between classes, intending to reduce the imbalance of human development in the same society (ANTUNES, 2008). In this way, exemplifying solutions are: the distribution of food to vulnerable people, the shelter of homeless individuals, adequate access to health and transportation resources, and the support of the financial system.

Political-institutional models are understood as the 'complex of actions' that seek to establish institutions, naturally linked to a representative character, such as the State's role in city management. In this sense, they are government initiatives to implement strategies via participatory and institutionalized spaces in order to increase citizens' quality of life (LOPES; NASCIMENTO, 2016). The nature of these arrangements aims at strengthening normative functions of debate, decision and control of public guidelines, based on an articulating and deliberative process with the potential to propose and/or change the format and content of state deliberations (ALMEIDA; CUNHA, 2011).

Severo (2018) highlights that the trust and legitimacy of institutions are essential for the effectiveness of political agendas, as, in addition to promoting values such as socio-political inclusion and public contestation in decision-making processes, they contribute to bringing citizens closer together in decision-making and foster the consolidation of the democratic regime. In the context of (post)pandemic cities, examples are represented by actions, strategic plans, resolutions and administrative standards created with the participation of institutions and social groups that guide the dynamics of public and private spaces for the purpose of managing risks of contamination and viral spread, as well as a rapid diagnosis of the disease.

Judicial-legal models, in a similar context, are understood as those that generate a legislative framework of permissions and restrictions on state and social action (public or private) within urban space. In the urban planning discipline, normative instruments are intended to regulate spatial transformations, as well as to analyze their effectiveness and interference in the quality of life of citizens and in the constructed and natural environments (COSTA, 2016).

Minahim and Costa (2021) remember that, during the pandemic period, to respond to the epidemiological severity and to establish actions that go beyond individual control, numerous joint efforts between different spheres of State power were created to reduce the risks of contamination of the society. According to the authors, the results of such practices include guidelines for collective coexistence, isolation, quarantine and compulsory examinations and COVID-19 tests, in addition to the mandatory use of personal protective masks and other prophylactic measures.

However, other laws and decrees were implemented, in a severe manner, such as the lockdown, or in a mild manner, the ban or establishment of limits on the occupation of public and private spaces. In general, these were initiatives to prevent the crowding of people and the spread of the virus (MINAHIM; COSTA, 2021).

Finally, **technical-technological models** use specific techniques or artifacts – digital or analogic – linked to innovative design factors to act on urbanized space. Considered a field with a multidisciplinary approach, the terms "technology" and "innovation" have long been adopted in various areas of knowledge, including in the field of health, as a strategic and development center for society (LORENZETTI et al., 2012).

Technique and technology are intrinsic instruments to humanity, as they comprise, respectively, rules and solutions for solving everyday problems. On the other hand, innovations refer to the increase in improvements of products, processes and organizations, not restricted to industrial productivity, but also covering intellectual production and the structure of services provided by public and private institutions (LORENZETTI et al., 2012).

During the COVID-19 pandemic period, technologies, especially digital ones, were widely used in strategies for diagnosing the disease and tracking people (CELUPPI et al., 2021). Some examples of technological solutions to combat the pandemic are artificial intelligence resources to infer the exposure status of individuals to the virus in urban spaces and telemedicine services for diagnosis and treatment, including psychological care, in addition to the improvement of monitoring processes to locate active cases.

These categories of reference models guide the structuring of research methods and techniques, detailed below and essentially, aimed at bibliometric analysis and systematic review to identify the application of the classes determined for the study.

Methodological procedures

Exploratory and qualitative in nature, the procedural context of this research is based on secondary data and mixed methods for the elaboration of a classification framework focused on reference models for the treatment of (post)pandemic cities and the construction of humanized landscapes. In this sense, bibliometric techniques of the sources collected and systematic review of their contents were used based on other searches in scientific journal repositories.

The bases of the Scientific Electronic Library Online (SciELO, 2022) and the Web of Science (WoS – CLARIVATE, 2022) were used in order to generate scopes related to scientific works at national, Latin American, and international levels. Thus, articles dealing with case studies (formal or informal) developed by institutions in initiatives with some intervention in cities during and after the COVID-19 pandemic period were analyzed.

The systematization of the search process was defined by a comprehensive string, formed only with the words "pandemic", "urban" and "landscape", to collect a large number of results for carrying out initial investigation of the theoretical standard proposed for classification. The texts found were analyzed according to three variables: *geographic context* – comprising the place where

the work was carried out –; *reference models* – comprising plans, projects, actions and similar initiatives of an institutional nature –; and *landscape approach* – involving direct or indirect landscape treatment solutions.

Table 1, below, sets out the inclusion and exclusion criteria for articles, while Figure 1 presents the complete search protocol and Table 2 summarizes the variables for reading procedures for the texts found.

Table 1. Inclusion and exclusion criteria for bibliometric search. Source: prepared by the authors based on the methodological procedures adopted.

INCLUSION CRITERIA			
FORMAL	studies on the specific performance of a governance institution		
INFORMAL	research on actions carried out by communities or people, with little or no interference from public authorities		
EXCLUSION CRITERIA			
THEMATIC	articles on subjects not relevant to the themes of this investigation (urban planning, landscaping and related to the COVID-19 pandemic)		
THEORETICAL	texts of an exclusively theoretical nature		
MODULAR	works without specific performance analysis, or "pure empirical" research		
CHRONOLOGICAL	documents not included in the time period of the COVID-19 pandemic (2020-2022)		
URBANISTIC	investigations without insertion in urbanized space		
RESTRICTIV	manuscripts not allowing the possibility of full reading access		



Figure 1. Diagram of the research protocol. Source: prepared by the authors based on the methodological procedures adopted and the theoretical foundations presented – see Section 2. Note: searches were carried out on November 21, 2022 for both bases and use of 'Web of Science' Core Collection.

Table 2. Analysis of variables applied to the article reading protocol. Source: prepared by the authors based on the methodological procedures adopted, and the theoretical foundations presented – see Section 2.

VARIABLES	DATA	DESCRIPTORS
Geographic context	Quantitative	Location of application of the initiative: • national; • international; • country and continent covered by the study.
Reference models	Qualiquantitative	Classification of reference models applied to the city context of initiatives to address pandemic issues: • physical-territorial, including effective landscape approaches; • socioeconomic; • political-institutional; • judicial-legal; • technical-technological.

Based on these procedures, analytical measurements were made, using basic statistics and narrative review techniques. Within this scope, content analysis of the texts was also carried out according to the classifications of the reference models.

Analytical results

After applying time, typological and selective filters by categories (WoS) and by thematic areas (SciELO), there is a quantitative discrepancy between the databases, with the

predominance of Web of Science (589 articles – 98.33%) on SciELO (10 – 1.67%). 566 (94.49%) of the 599 works found (100.00%) were excluded, totaling 33 relevant ones (5.51%) (Table 3).

Table 3. Quantity of articles excluded according to the inclusion and exclusion criteria adopted. Source: prepared by the authors based on the methodological procedures adopted – see Section 3.

EXCLUSION CRITERIA	Nº	INCLUSION CRITERIA	Nº
THEMATIC	54	FORMAL	15
THEORETICAL	100	INFORMAL	18
MODULAR	404	-	-
CHRONOLOGICAL	6	-	-
URBANISTIC	1	-	-
RESTRICTIVE	1	-	-
TOTAL	566	TOTAL	33

Among some issues related to the excluded articles, it is worth mentioning that the vast majority are relevant to the general theme of the research, but a portion of 54 (9.54%) was removed because the studies did not have a reference model as an object of investigation and 100 (17.67%) for having an exclusively theoretical approach. Within this universe, two themes stand out: urban green spaces and related areas, mainly focused on analyses of the uses of public areas and associated to mental health aspects; and chronourbanism, especially focused on debates about the time dimension of city use (e.g.: 15-minute city). Many of the articles removed are still related to peculiar characteristics of education during the pandemic and others deal with the urban and landscape, but do not encompass the pandemic event.

Six articles were removed for chronological reasons, that is, because they did not coincide with the COVID-19 period, and one for covering exclusively rural areas. Only one was eliminated from the set due to its full reading inaccessibility by Comunidade Acadêmica Federada da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAFe-CAPES) [Federated Academic Community of the Coordination for the Improvement of Higher Education Personnel].

Among the 33 articles included, 15 (45.45%) were added using formal criteria, due to the institutional nature associated with the activities. The other 18 (54.55%) were considered informal, due to actions linked to local communities and relatively dissociated from public authorities.

In a preliminary approach to the 33 final texts, the vast majority concern foreign cases (28 – 84.85%) (Figure 2), while only five (15.15%) concern Brazilian cases. This result is justified by the proportionality of scientific production in Brazil compared to other countries, and also by the majority of the texts in this bibliometrics originating from the Web of Science, with an international scope, in association with a few cases from SciELO, more restricted to Latin America.

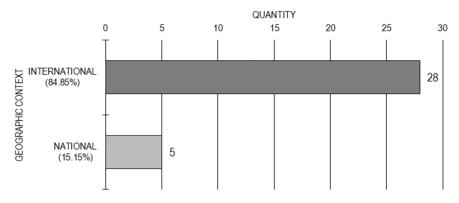


Figure 2. Graph of the number of cases in the final articles by national and international context. Source: prepared by the authors based on the methodological procedures adopted – see Section 3.

The geographic analysis directed to the distribution by continents and countries (Figure 3 and Table 4) shows that Brazilian studies are among the first in terms of number of cases (5 - 8.9%) of the total of 56 found) alongside that of Singapore, being only lower than that of Italy (6 - 10.7%). Thus, it can be said that Brazil stands out in the context of the research theme, identified as a place with potential for scientific production for the reference models under study. The European continent has the highest occurrence (26 - 46.2%), followed by the Asian continent (15 - 26.8%), while the others vary between two and six (3.6%) to (3.6%).



Figure 3. Choropleth map of the number of cases in the final articles by country. Source: prepared by the authors based on the methodological procedures adopted – see Section 3.

Considering the possibility of each work belonging to more than one category (according to the theoretical-classificatory definitions) proposed for the reference models, we came to a total of 60 records (Figure 4), with the categories physical-territorial (18 - 30.00%) and the political-institutional (16 - 26.67%) among the most present. Next, are socioeconomic and technical-technological categories (both with 11 - 18.33%), being the judicious-legal

category (4 - 6.67%) the least representative among the studies analyzed. The keywords (and similar ones) repeated at least once in the articles by classification are illustrated in Figure 5, in which the predominance is detected of bibliometric search terms (and their synonyms) (urban or city; pandemic or COVID – see Section 3), considered, therefore, peculiar to the present investigation, except in the case of the term landscape.

Table 4. Number of cases in the final articles by countries and continents. Source: prepared by the authors based on the methodological procedures adopted – see Section 3.

	Germany	2
	Austria	1
	Belgium	1
	Denmark	1
	Spain	3
	France	1
	Finland	1
EUROPE	Greece	1
	Italy	6
	Iceland	1
	Lithuania	1
	Portugal	3
	Sweden	3
	Türkiye	1
	TOTAL	26
	Australia	2
OCEANIA	New Zealand	1
	TOTAL	3

ASIA	China	2
	Singapore	5
	South Korea	1
	Formosa (Taiwan)	1
	Hong Kong	2
	India	2
	Japan	1
	Vietnam	1
	TOTAL	15
NORTH America	Canada	1
	United States	3
	TOTAL	4
SOUTH America	Brazil	5
	Colombia	1
	TOTAL	6
	South Africa	1
AFRICA	Ethiopia	1
	TOTAL	2

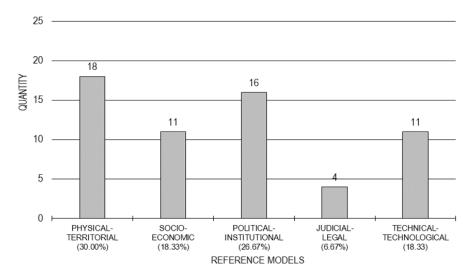


Figure 4. Graph of the number of final articles by theoretical-classificatory categories of reference models. Source: prepared by the authors based on the methodological procedures adopted – see Section 3.

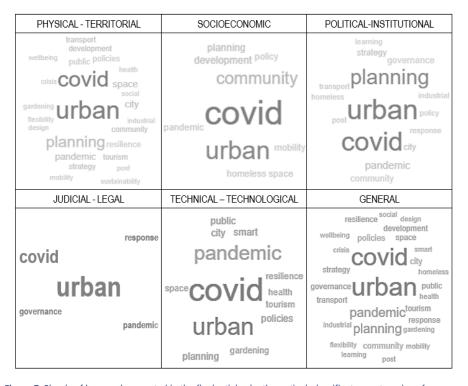


Figure 5. Clouds of keywords repeated in the final articles by theoretical-classificatory categories of reference models. Source: prepared by the authors based on the methodological procedures adopted – see Section 3 – from Google Docs.

The articles pertinent to **physical-territorial models**, therefore related to direct action on the concrete environment of cities, are representative of a wide range of approaches. This diversity can be observed by means of its own keywords, among which – in addition to those considered peculiar – it is worth mentioning (above 5.00% of repetitions in the category) for planning (eight citations – 8.08%) and for space (six – 6.06%).

Some examples of these models are related to the conception of specific urban plans, including alternative modes for urbanization (COTELLA; BROVARONE, 2020 – study in Italy), the search for health resilience (SARAVIA-MADRIGAL, 2021 – Valadollid, Spain), the observation of social places designed for the community's well-being, based on an analytical structure on environmental influences on citizens' lives (RADOMSKAYA; BHATI, 2022 – Singapore), the implementation of temporary cycle paths as alternatives to the interruption of regular transport services (HARRIS; MCCUE, 2022 – Sydney, Australia) and the co-creation of European public spaces by teenagers (COSTA; BATISTA; MENEZES, 2021 – Ghent, Belgium; Lisbon, Portugal; Milano, Italy; Vilnius, Lithuania). In this context, Silvestre (2022) indicates the loosening of urban standards for workers during the health crisis in Rio de Janeiro.

Including the works cited above, the focuses on landscape are diverse, from aspects aimed at the characteristics of territorialization, such as: strategies for increasing spatial vitality (HUCKO, 2022 – study in Berlin and Hamburg, Germany), expanding the feeling of belonging to the place (ALVES; MARQUES; BRETAS, 2022 – Ouro Preto), enabling participatory urban design (LÓPEZ ESCOLANO; RODRÍGUEZ BELTRÁN, 2022 – Zaragoza, Spain) and adapting uses to create quality public spaces (SEPE, 2021 –

Cagliari, Genova, Lecce, Narni, Palermo, Rome, San Benedetto del Tronto, Siena and Trieste, Italy). The diversity of aspects also cover sustainability attributes, such as the implementation of gardens, community gardens and other green areas (JOSHI; WENDE, 2022 – Edmonton, Canada), practice of home gardening (SIA et al., 2022 – Singapore) and landscape design model for sustainable development of mountainous regions (DEZIO, 2021 – Vermont, United States).

Samuelsson (2021), within this scope, proves the relationships between frequenting places with natural characteristics and improving the feeling of well-being during the pandemic event in Stockholm, Göteborg and Uppsala, Sweden. Another work that well portrays the focus on pandemic aspects is that of Mengistu et al. (2022), in which an overview of government action is outlined based on the Ethiopian case of planning industrial parks in sustainable urban centers.

These approaches also include characteristics of both *functionality* – such as improving mobility resilience (KYRIAKIDIS, 2023 – study in Athína, Greece), including civil society measures in the face of government solutions (DAS; ZHANG, 2021 – Singapore) –, and visitation, by the remodeling of future tourist scenarios by physical changes in the redesign of urbanized spaces, attractions and activities – with consequences on emotional conditions, by the renewal of values and attitudes to inspire visitors, adapting their experiences to their desires (PASQUINELLI, 2022 – Firenze, Milano, Rome and Venezia, Italy).

Apparently more linked to pandemic impacts when compared to other typologies, articles related to **socioeconomic models** comprise several new propositions, generally associated with the **political-institutional** category. In addition to those considered peculiar, among its keywords are found (above 5.00% of repetitions in the category): *community* (five citations – 13.51%), *planning* (three – 8.11%) and *development* (three – 8.11%), besides to *homeless*, *mobility*, *policies* and *space*, with two each (5.40% individually).

In these circumstances, some texts referring to these models are focused on urbanism itself, including the pedagogical perspective of the Global South, specifically on self-built and economically disadvantaged neighborhoods, along with to initiatives ("invitations") from local kitchens in the fight against hunger (ORTIZ; MILLAN, 2022 – study in Medellín, Colombia). Two articles deal with public actions to assist homeless people. In the first, Colburn et al. (2022) analyze the investment in hotels as emergency shelters for these individuals in King County, WA, United States, and mainly the benefits of this alternative for the health sector compared to traditional shelters. In the second, Silva, Reis Neto and Cunha Júnior (2020) evaluate both the public policies of Brazilian cities in relation to this population and access to housing in social housing programs.

Still from the perspective of social vulnerability, Basile (2022 – study in Rio de Janeiro and São Paulo) evaluates speeches by community organizations in favelas in the face of State necropolitics, while Friendly (2020) analyzes the Complexo da Maré episode, in the capital carioca, allowing reflection on the essentiality of the actions of voluntary communicators, as insurgent planners, in circumstances of state absence in meeting the needs of the population.

On the other hand, Odendaal (2021) focuses on an initiative by communities in South Africa aimed at compensating for the economic difficulties faced during COVID-19. Elander, Granberg and Montin (2022), in turn, focus on socio-environmental vulnerability through the interpretation of securitization and planning conditions applied in Sweden to mitigate the complexity of the joint existence of climate change, population migration and pandemic effects.

Socioeconomic issues are also related to individual, relational and social well-being during the pandemic. Radomskaya and Bhati (2021) argue that regarding Singapore, urban spaces should be structured by coercion (better visibility of community practices), co-presence (sense of connection with the place) and placement (spatial design capable of influencing people's movement and interaction). Other points concern the resilience of mobility (KYRIAKIDIS, 2023 – study in Athína, Greece) and the requalification of places to enhance the visitor experience (PASQUINELLI, 2022 – Firenze, Milano, Rome and Venezia, Italy).

Cotella and Brovarone (2020), following another investigation strand, study connections between urban and rural areas in terms of potential "retraction" for inland regions of Italy. The authors debate the naivety regarding the hope of returning to the rural environment is highlighted in view of quality of life in urbanized areas. Therefore, the issue receives criticism concerning the real effectiveness of this return, by means of analysis on its disadvantages, such as low accessibility and dependence on motor vehicles, or even the difficulty to access services. The most realistic approach, for the authors, is to strengthen the interaction between the city and the countryside in a single system.

Studies with adherence to **political-institutional models** are related to the nature of the activities themselves, as they either have a strong formal character, generally interpreting the efficiency of public administration during the pandemic period, or an informal configuration, when the State is incapable of acting on specific issues. The preponderance of keywords in the articles (above 5.00% of repetitions), with the exception of those considered peculiar, are: *planning* (nine citations – 13.43%), *governance* (five – 7.46%) and *community* (four – 5.97%).

The article by Anttiroiko (2021 – study in 17 countries in Asia, Europe and Oceania) provides two reviews of formal and institutionalized actions. The first is aimed at the main points of the government's strategic responses to the health crisis, involving knowledge, clinical and medical management in combating the disease; hygiene and disinfection; prevention of community transmission; use of authoritarian methods to suppress contagion and maintain essential services. The second, in turn, compares governmental conduct between Eastern and Western nations. While Eastern cases show proactive practices and invasive diligence, Western cases, in general, are more reactive and commonly late.

Still on formal studies, governance processes are reiterated during the COVID-19 pandemic regarding climate change and population migration (ELANDER; GRANBERG; MONTIN, 2022 – study in Sweden) and government initiatives for social resilience in remote areas (COTELLA; BROVARONE, 2020 – Italy). Likewise, there is the development of public policies aimed at the rapid installation of bases for active mobility in the face of the temporary suspension of transport services (HARRIS; MCCUE, 2022 – Sydney, Australia), the participation of society in urban design (LÓPEZ

ESCOLANO; RODRÍGUEZ BELTRÁN, 2022 – Zaragoza, Spain), the qualification of public spaces (SEPE, 2021 – Cagliari, Genova, Lecce, Narni, Palermo, Roma, San Benedetto del Tronto, Siena and Trieste, Italy) and the zoning of urban expansion-industrial associated with political-institutional and sanitary-epidemiological measures (MENGISTU et al., 2022 – Ethiopia).

Institutional actions in the health domain for viral containment are also mentioned by Saravia-Madrigal (2021 – study in Valadollid, Spain). In another way, administrative practices of social isolation are cited by Mali, Yerramsetti and Manoharan (2021 – Delhi, India), related to the ability of e-planning to support initiatives to transform local communities.

In informal scenarios, Friendly (2020) reinforces the adoption of spontaneous and supportive measures by the community of Complexo da Maré (Rio de Janeiro), with an educational character for individual prevention (wearing a mask and washing hands, for example), passing from the transmission of information through graffiti on walls (communicating the number of deaths and infections in the city and the country in comparison to the cases in the favela itself), to the collection of food and other donations to support the most affected residents.

Other works on informal diligence relate the actions of communities both in combating pandemic difficulties, as in the South African case of care infrastructure (ODENDAAL, 2021), and in helping needy populations in the cities of Rio de Janeiro and São Paulo (BASILE, 2022) and homeless people (COLBURN et al., 2022 – King County, WA, United States; SILVA; REIS NETO; CUNHA JÚNIOR, 2020 – Brazilian cities). In their articles, Joshi and Wende

(2022) present solutions for adapting the operation of community gardens in Edmonton, Canada, aiming at physical distancing, and Ortiz and Millan (2022) highlight the participation of women in self-built settlements rooted in solidarity networks in Medellin, Colombia.

For **judicial-legal models**, it is clear that, to a large extent, they serve to establish normative structures or legislative modifications, in solid association with the other classifications. Except for those considered peculiar, the most frequent keywords in the articles (more than 5.00% of repetitions) correspond to: *governance* and *response*, with two citations each (14.28% individually).

In summary, these models represent the formalization of epidemiological measures. As examples, there are cases already reported both by Anttiroiko (2021 – study in 17 countries in Asia, Europe and Oceania), which deals with legislative alternatives for governance during health crises, and by Silvestre (2022), who, based on of interpretation about the city of Rio de Janeiro, generates the hypothesis of legal and administrative flexibility of restrictions for the construction of "puxadinhos" (annexes to a residence) with a view to generating minimum housing conditions for survival during pandemic events.

^{2.} The term "puxadinho" is commonly used in Brazilian Portuguese to describe an informal or improvised extension or addition to a building or house. These extensions are usually constructed without formal planning or official approval and are often made to accommodate growing families or to create additional space for various purposes, such as storage, extra rooms, or small businesses. The term can carry a connotation of being makeshift, unregulated, or built with limited resources and craftsmanship.

Another issue highlighted from a legal and legislative perspective is the right to housing, represented by the case of Lisbon, Portugal (MENDES, 2021), with the involvement of different social movements in the discussion of government decision-making on the topic. In another direction, Wakefield, Molinari and Grove (2022) comment on legislation to intensify the implementation of cryptocurrencies during the pandemic in Miami, United States.

The **technical-technological models** are also diverse in their occurrences. Apart from those considered peculiar, the main keywords mentioned in the articles (more than 5.00% of repetitions in the category) are *planning*, *policies*, *public* and *smart*, with three citations each (6.38% individually).

An issue that emerges in three articles is the application of digital surveillance techniques associated with the epidemiological control of disease cases and the movement of people (HUCKO, 2022 – study in Berlin and Hamburg, Germany; MISHRA et al., 2022 – India). There is even a comparison between policies implemented by China and Hong Kong for government and news coverage (TAN; CHIU-SHEE; DUARTE, 2022).

The case of Singapore reported by Das and Zhang (2021) involves the use of applications for monitoring movement and contact between individuals through Bluetooth signals linked to the check-in and check-out system in establishments. Criticisms to these applications include the need to integrate them with policies and other initiatives. In turn, the work of Conticelli et al. (2020) brings the challenge of digitizing information applied to urban planning in the educational sphere focused on the constructed environment at the scale of the building in the general plan of the municipality of Castelfranco Emilia, Italy.

In other directions, recurrent texts come up on technicaltechnological solutions for the financialization and implementation of cryptocurrencies during the pandemic period for transactions at the municipal level (WAKEFIELD; MOLINARI; GROVE, 2022 - study in Miami, United States); for the recreation, through new technologies, of urban experiences and stimulation of new forms of sociability in a hybrid urban space for conviviality (ALVES; MARQUES; BRETAS, 2022 - Ouro Preto); and for the innovative participation of teenagers in the co-production of European public spaces (COSTA; BATISTA; MENEZES, 2021 – Ghent, Belgium; Lisbon, Portugal; Milano, Italy; Vilnius, Lithuania). Articles related to the regeneration of the sense of community in digital media in the context of gardens, community gardens and other green areas can also be cited again (JOSHI; WENDE, 2022 – Edmonton, Canada); to the tourist communication of city brands on social networks in the pre- and post-pandemic period (PASQUINELLI, 2022 – Firenza, Milano, Roma and Venezia, Italy) and to innovations linked to the benefits of gardening on wellbeing and mental resilience (SIA et al., 2022 - Singapore).

In short, many of these models serve both during periods of health crisis and to improve the quality of life of citizens in normal situations. Except for those considered peculiar, the only keyword that reaches, in general terms, more than 5.00% of repetitions is *planning* (planning – 23 citations – 8.27%). Thus, the importance of not only **physical-territorial** planning, but also **socioeconomic**, **political-institutional**, **judicial-legal** and **technical-technological** planning of cities is diagnosed, which leads to the final reflections of this work.

Conclusion

Based on the theoretical-classificatory panorama of understanding national and international reference models for urban and landscape management of (post)pandemic cities, with the resulting achievement of the research objective, the scientific articles identified provide different directions for the actions of public authorities, or even for the community itself, in situations of health crises. They serve, therefore, as a basis to be not simply applied, but essentially improved, given the insufficiency of answers to investigative questions about strategies derived from plans, projects, actions and similar initiatives) aimed at the humanization of the city in (post) pandemic contexts.

This incipience is related to the confirmation of the hypothesis that the examples studied are, in general, intended for adaptation to mitigate epidemiological impacts and their restrictive measures of circulation and social contact, that is, with the absence of strong contours to prevent the problem. It is reinforced that the mainstay of practically all texts on various issues during the pandemic contains actions to control the disease as a condition of the relational theme between urbanity and health.

In relative terms, work on the Brazilian reality is qualitatively and quantitatively relevant, being reinforced and complemented by foreign cases. However, the relevance of detailing information can still be inferred from the expansion of journal bases and, consequently, scientific articles, aiming at greater precision of systematized models.

Initially, the landscape is indirectly appreciated as an object of scientific analysis, at least in terms of reference models. Within the scope of the repositories consulted, there are no initiatives with an effective focus on landscape agency, being restricted to actions with factual consequences in urbanized scenarios.

Despite its importance in pandemic situations, urban and landscape humanization apparently still does not constitute a determining strategy for the application of solutions to problems arising from restrictive measures of circulation and social contact, with a lack of investigations into the social perception of the urbanized environment . This assertion, however, refers solely and exclusively to reference models, as some of the articles excluded in the bibliometric process (especially those of a theoretical nature and those not pertinent to plans, projects, actions and similar initiatives), present a humanized approach to space city dweller, given the significance of the psychosocial factor in these circumstances.

In turn, the methodological procedures adopted allow inferences for future work, such as the expansion of the number of articles to be analyzed and the use of complementary variables to interpret the proposed theoretical-classificatory categories, which would allow comparison between different initiatives. It is worth mentioning that, previously, the exploratory nature of the research pointed to the impossibility of definitive and indisputable conclusions, but the primary intention of the study includes the survey of points of debate and subsidies for subsequent investigations, without the intention of exhausting the subject.

The developments in the approach to reference models are also considered appropriate, as the selections of articles falling within the areas of urban studies and urban and regional planning in the selected repositories eliminate other works of possible interest in other related fields of science. This is probably the reason why the most cited keywords, apart from those considered peculiar, are normally linked to these scientific sectors.

Finally, we conclude that the assessment of formal and informal applications aimed at the reality of cities is appropriate, with findings on these operations in periods consistent with and subsequent to the COVID-19 pandemic. These results, embodied in physical-territorial, socioeconomic, political-institutional, judicial-legal and technical-technological models, generate relevant subsidies for the formation of humanized landscapes in (post) pandemic city management processes.

References

ALEHASHEMI, A.; MANSOURI, S.; BARATI, N. Urban infrastructures and the necessity of changing their definition and planning landscape infrastructure; a new concept for urban infrastructures in 21st century. **Bagh-E Nazar** [online], v.13, n.43, p.5-18, 2017. http://www.bagh-sj.com/jufile?ar_sfile=1025204&lang=en

ALMEIDA, D. C. R. de, CUNHA, E. S. M. A análise da deliberação democrática: princípios, conceitos e variáveis. *In*: PIRES, R. R. C. **Efetividade das instituições participativas no Brasil**: estratégias de avaliação. Brasília, DF: Instituto de Pesquisa Econômica Aplicada – IPEA, 2011, p.109-123. ISBN 978-8578111090

ANTTIROIKO, A. Successful government responses to the pandemic: contextualizing national and urban responses to the COVID-19 outbreak in East and West. **International Journal of E-Planning Research**, v.10, n.2, p.1-17, 2021. http://doi.org/10.4018/IJEPR.20210401.0a1

ALVES, K. S.; MARQUES, W. R. A.; BRETAS, E. M. Turismo local e o conviver em Ouro Preto em tempos de pandemia: lugar de encontro e de desencontro dos moradores. **RDC – Revista de Direito da Cidade**, v.14, n.1, p.392-410, 2022. https://doi.org/10.12957/rdc.2022.54968

ANTUNES, J. L. F. Condições socioeconômicas em saúde: discussão de dois paradigmas. **Revista de Saúde Pública**, v.42, n.3, p.562-567, 2008. https://doi.org/10.1590/S0034-89102008005000017

BASILE, P. Vulnerability, neglect, and collectivity in Brazilian favelas: Surviving the threats of the COVID-19 pandemic and the state's necropolitics. **Urban Studies**, s.n.(preprint), p.1-17, 2022. https://doi.org/10.1177/0042098022110334

BRASIL. Constituição da República Federativa do Brasil, de o5 de outubro de 1988. **Diário Oficial [da] República Federativa do Brasil**, Poder Executivo, Brasília, DF, o5 Oct. 1988.

BRASIL. Lei Federal Nº 10.257, de 10 de julho de 2001. Regulamenta os Artigos 182 e 183 da Constituição Federal, estabelece diretrizes gerais da política urbana e dá outras providências. Estatuto da Cidade. **Diário Oficial [da] República Federativa do Brasil**, Poder Executivo, Brasília, DF, 11 Jul. 2001.

BRASIL. Lei Federal Nº 13.089, de 12 de janeiro de 2015. Institui o Estatuto da Metrópole, altera a Lei Nº 10.257, de 10 de julho de 2001, e dá outras providências. **Diário Oficial [da] República Federativa do Brasil**, Poder Executivo, Brasília, DF, 13 Jan. 2015.

- CELUPPI, I. C.; LIMA, G. dos S.; ROSSI, E.; WAZLAWICK, R. S.; DALMARCO, E. M. Uma análise sobre o desenvolvimento de tecnologias digitais em saúde para o enfrentamento da COVID-19 no Brasil e no mundo. **Cadernos de Saúde Pública**, v.37, n.3, p.1-12, 2021. https://doi.org/10.1590/0102-311X00243220
- CLARIVATE. **Web of Science**. Available at: https://clarivate.com/webofsciencegroup/solutions/web-of-science/. Retrieved in: 14 nov. 2022.
- COLBURN, G.; FYALL, R.; MCHUGH, C.; MORARAS, P.; EWING, V.; THOMPSON, S.; DEAN, T.; ARGODALE, S. Hotels as noncongregate emergency shelters: An analysis of investments in hotels as emergency shelter in King County, Washington, during the COVID-19 pandemic. **Housing Policy Debate**, v.32, n.6, p.853-875, 2022. https://doi.org/10.1080/10511482.2022.2075027
- COSTA, C. S.; BATISTA, J. S.; MENEZES, M. What happens when teenagers reason about public open spaces? Lessons learnt from co-creation in Lisbon. **Cidades, Comunidades e Territórios,** v.43, p.139-155, 2021. https://doi.org/10.15847/cct.22456
- COSTA, I. F. Os instrumentos legais de urbanização presentes no ordenamento jurídico brasileiro: As leis n. 6.766/79 e 10.257/01 e sua capacidade para dirimir os problemas relacionados ao uso da propriedade privada. **Revista de Direito** [online], v.7, n.2, p.137-188, 2016. https://periodicos.ufv.br/revistadir/article/view/1629
- COTELLA, G.; BROVARONE, E. V. Questioning urbanisation models in the face of COVID-19: The crisis as a window of opportunity for inner areas. **TeMA Journal of Land Use, Mobility and Environment**, n.spec.(Covid-19 vs City-20), p.105-118, 2020. https://doi.org/10.6092/1970-9870/6913
- CONTICELLI, E.; MARZANI, G.; ROSAS, P. S.; SANTANGELO, A.; TONDELLI, S. A field-based learning experience in the time of COVID-19. **TRIA Territorio della Ricerca su Insediamenti e Ambiente**, v.25, n.2, p.113-126, 2020. https://doi.org/10.6092/2281-4574/7597

- CULLEN, G. **Paisagem urbana**. 2.ed. Translation: Isabel Correia and Carlos de Macedo. repr. Lisboa, PT: Edições 70, 2015. (Original title: The concise townscape. Abingdon, EN, UK: Architectural; Routledge, 1961). ISBN 978-9724414010
- CUSTÓDIO, M. M. Introdução ao direito de paisagem: contribuição ao seu reconhecimento como ciência no Brasil. 2.ed. Rio de Janeiro, RJ: Lumem Juris, 2014[2000]. ISBN 978-8584400973
- DAS, D.; ZHANG, J. J. Pandemic in a smart city: Singapore's COVID-19 management through technology & society. **Urban Geography**, v.42, n.3, p.408-416, 2021. http://dx.doi.org/10.108 0/02723638.2020.1807168
- DAVIS, J. B.; DOLFSMA, W. Social economics: An introduction and a view of the field. *In*: DAVIS, J. B.; DOLFSMA, W. **The Elgar companion to social economics**. Cheltenham, EN, UK: Edward Elgar. 2008, p.1-7. ISBN 978-1848442771
- DE WIT, S. Let's walk urban landscapes: New parthways in design research. **Journal of Landscape Architecture**, v.11, n.1, p.96-97, 2016. https://doi.org/10.1080/18626033.2016.1144695
- DEZIO, C. Agritourism and slow lines: Hybrid practices for a landscape design model to support agriculture in mountain regions. Vermont as read from an Italian perspective. **Ciudades**, v.s/n., n.24, p.79-98, 2021. https://doi.org/10.24197/ciudades.24.2021.79-98
- DUARTE, F. **Planejamento urbano**. 3.ed. Curitiba, PR: InterSaberes [Instituto Brasileiro de Pós-Graduação e Extensão IBPEX], 2013[2007]. ISBN 978-8599583418
- DURRHEIM, D. N.; BAKER, Michael G. COVID-19 a very visible pandemic. **The Lancet** [online], v.396, n.10248, p.e17, 2020. https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31675-5.pdf

- ELANDER, I.; GRANBERG, M.; MONTIN, S. Governance and planning in a 'perfect storm': Securitising climate change, migration, and COVID-19 in Sweden. **Progress in Planning**, v.164, n.100634, p.1-30, 2022. https://doi.org/10.1016/j. progress.2021.100634
- FERREIRA, L. R.; ARTMANN, E. Discursos sobre humanização: profissionais e usuários em uma instituição complexa de saúde. **Ciência & Saúde Coletiva**, v.23, n.5, p.1437-1450, 2018. http://doi.org/10.1590/1413-81232018235.14162016
- FRIENDLY, A. Insurgent planning in pandemic times: The case of Rio de Janeiro. **International Journal of Urban and Regional Research**, v 46, n.1, p.115-125, 2020. https://doi.org/10.1111/1468-2427.13000
- GEHL, J. Cidades para pessoas. 2.ed. Translation: Anita Di Marco. São Paulo, SP: Perspectiva, 2014. (Original title: Cities for people. Washington, DC, US: Island, 2009). ISBN 978-8527309806
- HARDT, L. P. A.; HARDT, C.; HARDT, M. Cidades e pandemias: uma história sem fim? **Revista Políticas Públicas & Cidades**, v.1, n.1-2(esp.), p.1-6, 2020.
- HARRIS, M.; MCCUE, P. Pop-up cycleways. **Journal of the American Planning Association**, s.n.(preprint), p.1-11, 2022. https://doi.org/10.1080/01944363.2022.2061578
- HUCKO, M. Fickle spheres: The constant re/construction of the private and other new habits. **Urban Studies**, n.spec.(Urban Public Health Emergencies and the COVID-19 Pandemic), p.1-12, 2022. https://doi.org/10.1177/00420980221095734
- JACOBS, J. Morte e vida de grandes cidades. 3.ed. Translation: Carlos Silveira Mendes Rosa. São Paulo, SP: WWF Martins Fontes, 2011. (Original title: The death and life of great American cities. New York, NY, US: Vintage, 1961) ISBN 978-8578274214

JOSHI, N.; WENDE, W. Physically apart but socially connected: Lessons in social resilience from community gardening during the COVID-19 pandemic. Landscape and Urban Planning, v.223, n.104418, p.1-9, 2022. https://doi.org/10.1016/j.landurbplan.2022.104418

KALAIARASAN, A. A study on passive sustainable techniques (PST) in urban landscape. **Indian Journal of Science and Technology**, v.9, n.6, p.1-7, 2016. http://doi.org/10.17485/ijst/2016/v9i6/87664

KESHTKARAN, R. Urban landscape: A review of key concepts and main purposes. **International Journal of Development and Sustainability Science and Technology** [online], v.8, n.2, p.141-168, 2019. https://isdsnet.com/ijds-v8n2-06.pdf

KYRIAKIDIS, C.; CHATZIIOANNOU, I.; ILIADIS, F.; NIKITAS, A.; BAKOGIANNIS, E. Evaluating the public acceptance of sustainable mobility interventions responding to COVID-19: The case of the Great Walk of Athens and the importance of citizen engagement. **Cities**, v.132, n.103966, p.1-15, 2023. http://dx.doi.org/10.1016/j.cities.2022.103966

LOPES, M. G.; NASCIMENTO, A. S. A participação política institucional em perspectiva histórica. **Perspectivas – Revista de Ciências Sociais** [online], v.47, p.107-137, 2016. https://periodicos.fclar.unesp.br/perspectivas/article/view/10811/6999

LÓPEZ ESCOLANO, C.; RODRÍGUEZ BELTRÁN, M. del M. Un caso de análisis para la planificación urbana en el contexto del COVID-19: El acuerdo por el futuro de Zaragoza (España). **Revista de Urbanismo**, n.46, p.3-21, 2022. http://dx.doi.org/10.5354/0717-5051.2022.61187

LORENZETTI, J.; TRINDADE, L. de L.; PIRES, D. E. de; RAMOS, F. R. S. Tecnologia, inovação tecnológica e saúde: uma reflexão necessária. **Texto & Contexto – Enfermagem**, v.21, n.2, p.432-339, 2012. https://doi.org/10.1590/S0104-07072012000200023

- MALI, N. V.; YERRAMETTI, S.; MANOHARAN, A. P. Communicative governance to mitigate the COVID-19 pandemic: Delhi, India. **International Journal of E-Planning Research**, v.10, n.2, p.116-123, 2021. https://doi.org/10.4018/IJEPR.20210401.0a10
- MEISNER, T. N.; KOVALEV, N. A.; LYASHENKO, N. V.; LEPIKHOVA, V. A. The ecologization and humanization concept of a modern city in the transition of society from industrialism to humanism. **EurAsian Journal of BioScience** [online], v.13, n.2, p.1659-1665, 2019. https://web.archive.org/web/20200320024807/http://www.ejobios.org/download/the-ecologization-and-humanization-concept-of-a-modern-city-in-the-transition-of-society-from-7320.pdf
- MENDES, L. Lutas urbanas pelo direito à habitação em Lisboa em tempos de pandemia. **Cadernos Metrópole**, v.23, n.50, p.203-232, 2021. https://doi.org/10.1590/2236-9996.2021-5008
- MENGISTU, D. T.; GEBREMARIAM, E.; WANG, X.; ZHAO, S. Pandemic-resilient urban centers: A new way of thinking for industrial-oriented urbanization in Ethiopia. **Urban Science**, v.6, n.2, p.1-20, 2022. https://doi.org/10.3390/urbansci6020026
- MINAHIM, M. A.; COSTA, L. G. S. Instrumentos de ação do Poder Público empregados para o enfrentamento da COVID-19: a necessária articulação de comportamentos. **Cadernos Ibero-Americanos de Direito Sanitário**, v.10, n.2, p.123-138, 2021. https://doi.org/10.17566/ciads.v10i2.768
- MISHRA, A. K.; MANDADI, M.; MISRA, A. K.; KESHARWANI, A. Emergency responses of Indian smart cities during the COVID-19 pandemic. **Journal of Urban Affairs**, s.n.(preprint), p.1-12, 2022. https://doi.org/10.1080/07352166.2022.2057320
- MOURATIDIS, K.; POORTINGA, W. Built environment, urban vitality, and social cohesion: Do vibrant neighborhoods foster strong communities? **Landscape and Urban Planning**, v.204, n.103951, p.1-9, 2020. https://doi.org/10.1016/j.landurbplan.2020.103951

NIA, H. A. The role of urban aesthetics on enhancing vitality of urban spaces. **Khulna University Studies**, v.18, n.2, p.59-77, 2021. https://doi.org/10.53808/KUS.2021.18.02.2112-E

ODENDAAL, N. Constructing an 'infrastructure of care' – understanding the institutional remnants and socio-technical practices that constitute South Africa's COVID-19 response. **Urban Geography**, v.42, n.3, p.391-398, 2021. https://doi.org/10.1080/02723638.2020.1807166

OECD – Organization for Economic Co-Operation and Development. **Tackling coronavirus (COVID-19)**: Contributing to a global effort – cities policy responses. Paris, FR: institutional edition, 2020. https://read.oecd-ilibrary.org/view/?ref=126_126769-yen45847kf&title=Coronavirus-COVID-19-Cities-Policy-Responses

OLIVEIRA, L. Y. Q. de; BORGES, Pedro Pereira. O direito à cidade e o desenvolvimento local como base para a humanização do espaço urbano. **Interações**, v.19, n.4, p.739-755, 2018. https://doi.org/10.20435/inter.v19i4.1630

ORTIZ, C.; MILLAN, G. Critical urban pedagogy: Convites as sites of Southern urbanism, solidarity construction and urban learning. International Journal of Urban and Regional Research, v.46, n.5, p.822-844, 2022. https://doi.org/10.1111/1468-2427.13119

PASQUINELLI, C.; TRUNFIO, M.; BELLINI, N.; ROSSI, S. Reimagining urban destinations: Adaptive and transformative city brand attributes and values in the pandemic crisis. **Cities**, v.124, n.103621, p.1-10, 2022. http://dx.doi.org/10.1016/j. cities.2022.103621

PÉREZ-DELHOYO, R.; GARCÍA-MAYOR, C.; MORA, H.; GILARD-IGLESIAS, V.; ANDÚJAR-MONTOYA, M. Improving urban accessibility: A methodology for urban dynamics analysis in smart, sustainable, and inclusive cities. International Journal of Sustainable **Development and Planning**, v.12, n.3, p.357-367, 2016. http://doi.org/10.2495/SDP-V12-N3-357-367

RADOMSKAYA, V.; BHATI, A. S. Hawker centres: A social space approach to promoting community wellbeing. **Urban Planning**, v.7, n.4, p.167-178, 2022. https://doi.org/10.17645/up.v7i4.5658

SAMUELSSON, K.; BARTHEL, S.; GIUSTI, M.; HARTIG, T. Visiting nearby natural settings supported wellbeing during Sweden's "soft-touch" pandemic restrictions. **Landscape and Urban Planning**, v.214, n.104176, p.1-12, 2021. http://dx.doi.org/10.1016/j.lurbplan.2021.104176

SANTOS, J. A. F. Uma classificação socioeconômica para o Brasil. **Revista Brasileira de Ciências Sociais**, v.20, n.58, p.27-45, 2005. https://doi.org/10.1590/S0102-69092005000200002

SARAVIA-MADRIGAL, M. El Plan General de Ordenación Urbana de Valladolid 2020, en el lado soleado de la calle. **Ciudad y Territorio**, v.53, n.207, p.229-256, 2021. https://doi.org/10.37230/CyTET.2021.207.14.1

SCHERER, R. Paisagem urbanística, urbanização pósmoderna e turismo. *In*: YAZIGI, E. (Org.) **Turismo e paisagem**. São Paulo, SP: Contexto, 2002, p.83-106. ISBN 978-8572441872

SciELO – Scientific Electronic Library Online. **Sobre o SciELO Data**. Available at: https://scielo.org/pt/sobre-o-scielo/scielo-data-pt/sobre-scielo-data-pt/. Retrieved in: 14 nov. 2022.

SEPE, M. COVID-19 pandemic and public spaces: Improving quality and flexibility for healthier places. **Urban Design International**, v.26, n.2, p.159-173, 2021. http://dx.doi.org/10.1057/s41289-021-00153-x

SEVERO, M. Regimes políticos e confiança institucional: reflexos do Brasil contemporâneo. **Ponto-e-Vírgula,** n.23, p.133-154, 2018. https://doi.org/10.23925/1982-4807.2018i23p133-154

- SIA, A.; TAN, P. Y.; WONG, J. C. M.; ARAIB, S.; ANG, W. F.; ER, K. B. H. The impact of gardening on mental resilience in times of stress: A case study during the COVID-19 pandemic in Singapore. **Urban Forestry & Urban Greening**, v.68, n.e127448, p.1-11, 2022. http://dx.doi.org/10.1016/j.ufug.2021.127448
- SILVA, L. J. A. de; REIS NETO, A. F.; CUNHA JÚNIOR, I. F.. Risk society and urban hygienism in the COVID-19 scenario: urban invisibility and access to the house of social interest (HIS), in the national policy of the street population (PNPR). **Revista de Direito da Cidade**, v.12, n.4, p.2440-2464, 2020. https://doi.org/10.12957/rdc.2020.54933
- SILVESTRE, G. F. Flexibilização das leis urbanísticas de edificação durante a pandemia da doença do coronavírus-2019: A legalização dos puxadinhos e a relação com a pandemia. **Revista de Direito da Cidade**, v.14, n.1, p.608-642, 2022. https://doi.org/10.12957/rdc.2022.54078
- SOETHE, A.; LEITE, L. S. Arquitetura e a saúde do usuário. In: Simpósio Brasileiro de Qualidade do Projeto no Ambiente Construído, 4., Viçosa, MG, 2015. **Anais eletrônicos** [...]. Viçosa, MG: Universidade Federal de Viçosa UFV, 2015, p.1-13. https://www.locus.ufv.br/bitstream/123456789/6039/3/50.pdf
- TAN, S. B.; CHIU-SHEE, C.; DUARTE, F. From SARS to COVID-19: Digital infrastructures of surveillance and segregation in exceptional times. **Cities**, v.120, n.103486, p.1-13, 2022. https://doi.org/10.1016/j.cities.2021.103486
- TAVASSOLIAN, G.; NAZARI, M. Studying legibility perception and pedestrian place in urban identification. International **Journal of Science, Technology and Society,** v.3, n.2-1, p.112-115, 2015. http://doi.org/10.11648/j.ijsts.s.2015030201.32
- VIHANNINJOKI, V. Urban places as aesthetic phenomena: framework for a place-based ontology of urban lifeworld. **Topoi**, v.40, p.461-470, 2021. http://doi.org/10.1007/s11245-018-9601-1

XIMENES, D. S. S.; SILVA, G. M. N. da; MAGLIO, I. C.; CHIQUETTO, J. B.; AMATO-LOURENÇO, L. F.; VASCONCELLOS, M. da P.; JACOBI, P. R.; COUTINHO, S. M. V.; CÉSAR, V. A. B. S. S. A importância dos espaços públicos e áreas verdes póspandemia na cidade de São Paulo (SP). **Revista LABVERDE**, v.10, n.1, p.1-21, 2020. https://doi.org/10.11606/issn.2179-2275. labverde.2020.172291

WAKEFIELD, S.; MOLINARI, S.; GROVE, K. Crypto-urban statecraft: Post-pandemic urban governance experiments in Miami. **Urban Geography**, s.n.(preprint), p.1-9, 2022. https://doi.org/10.1080/02723638.2022.2125664

WHO – World Health Organization. **WHO Director-General's opening remarks at the media briefing on COVID-19**. 11 Mar. 2020. Available at: https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020. Retrieved in: 13 dez. 2022.

An inventory of urban experiences of collectively-owned and self-managed housing in Latin America today¹

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Why discuss housing ownership, map and understand experiences of collective ownership?

Some works around the world have discussed and demonstrated how housing projects built under collective property and self-management regimes can be important tools for the decommodification of housing, by producing housing based on its use value, relatively outside the circuits of the real estate market, and maintaining accessibility and security of tenure for low-income and vulnerable people (THADEN; ROSENBERG, 2010; MIRONOVA, 2018; SANJINÉS; DUYNE BARENSTEIN, 2018; RODRÍGUEZ, 2020; DUYNE BARENSTEIN et al., 2021; BAIOCCHI; CARLSON, 2022).

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Discussing forms of land and housing ownership and the production and management processes associated with them is essential to understand and tackle contemporary housing issues. Considering they are not just quantitative, they cannot be read only based on indicators such as the housing deficit, and faced by the mass production of new units and the spread of home ownership, as they are generally addressed in the debate of and within public policies. We are experiencing a broad, multidimensional and deeprooted housing crisis.

Some of the many researchers who have sought to understand the depth of this crisis are Rodríguez (2020), who presents the concept of residential alienation, in dialogue with Madden and Marcuse (2016), as a condition of structural and systemic nature:

[...] the notion of "sentirse en el hogar" (feeling at home) is opposed to that of residential alienation. [...] Residential alienation is what occurs when a capitalist class captures the housing production process and exploits it for its own purposes. [...] Alienation means estrangement, objectification, otherness. If something is alienable, it is interchangeable, it is bought and sold: its origin is directly linked to the laws of property. (p. 649. Our translation)

Rolnik (2015), is the author who shows how the model of individual titled private property in housing has been imposed by the State and Capital, around the world, as the only legitimate and desirable form of access to housing and land, through policies economic, urban and housing.

One of the points of rapprochement between these formulations is the centrality of private property in understanding the housing crisis. Far from stating that the discussion of property is the only or the most important constitutive aspect of the crisis, we understand that it is one of the main dimensions in the reproduction of the processes of alienation, dispossession, commodification and colonization of land and housing.

However, the hegemony of individual property does not occur only as a legal-economic model, but as a proprietary rationality, structuring the forms of organization and occupation of the territory, involving material and symbolic aspects. Proprietary reasoning guides our knowledge, actions and experiences in the city. It is mainly based on an individualistic model of social life (WOLKMER; FERRAZZO, 2020; TONUCCI FILHO, 2021), on the structuring of urban space based on the physical and legal unity of the individual lot (ROLNIK, 1997) and of the fundamental duality between public — identified as state — and private (DARDOT; LAVAL, 2015) and, consequently, in the undoing of relations with the territory based on logics of the common, collective or community.

The proprietary reasoning permeates, as a structuring dimension, the main urban, land and housing policies implemented in contemporary times around the world: the privatization of public and cooperative social housing stocks, mainly in the countries of the Global North (TRAPP, 2018; MARIĆ, 2018; SØRVOLL; BENGTSSON, 2018); the vulnerability of communal property forms, especially in the Global South (RIGHTS AND RESOURCES INITIATIVE, 2015; SCHACHERREITER; GONÇALVES, 2016; ARANGO, 2017; SANTOS, 2018); housing production policies aimed at homeownership, via market and demand subsidies with

individual financing and/or through public-private partnerships (FERREIRA, 2012; SUGRANYES; MORALES; ARAVENA, 2014; ROLNIK et al., 2015; SANTO AMORE; SHIMBO; RUFINO, 2015; CARVALHO, 2016; SANTORO; LIMA; MENDONÇA, 2018; ALMEIDA et al., 2020) and land regularization policies in popular territories with a focus on mass titling (COCKBURN, 2011; ROLNIK, 2015; RIBEIRO, 2018).

These policies do not meet the diversity of housing needs. In reverse, many of them actively contribute to the reproduction of historical processes of dispossession and territorial alienation. It maintains and expands situations of precariousness and housing needs overlapping other layers of socioeconomic vulnerability (SANTO AMORE et al., 2016; FERREIRA, 2019; RODRÍGUEZ, 2020). They reproduce a crisis of security of tenure, with populations subjected to a condition of permanent transience, threatened by evictions, forced removals and expulsion due to property appreciation (ROLNIK, 2015). They compromise income and put families in debt by financing their own home, a debt that, contracted individually and linked to global financial circuits, has been a powerful mechanism for extracting income, associated with labor exploitation (TRAPP, 2018; GAGO, 2020). And they progressively residualize the values of the house and the territory as goods of use, which welcome and express cultural, social and political needs and repertoires, opening space for a material and symbolic conception of the house as a commodity, investment, heritage (MADDEN: MARCUSE, 2016; TRAPP, 2018; CANNETIERI; MACHADO, 2019; RODRÍGUEZ, 2020; TONUCCI FILHO, 2021).

Although proprietary reasoning permeates up to date politics, it is, in fact, part of a historical process. Especially in the Global South, and in Latin America – our locus of investigation – it has been produced and reproduced over the last five centuries of colonization, construction of modernity and its crisis (ARRUTI, 1997; ESTIMA, 2007; ARÉBALO; BAZOBERRY; LANDAETA, 2014; FAGOTH, 2014; UGALDE, 2014; ARANGO, 2017; SANTOS, 2018; BHANDAR, 2018).

In this sense, it criminalizes and marginalizes existing and possible relationships with territories that are not guided by the languages of state urban planning or contractual market relations. But as Swyngedouw (2012), Escobar (2019), Rolnik (2019) and Zibechi (2021) point out, projects and territories that develop other conceptions of property, production and management of territory insist on existing. Among them, we understand that there are housing territories produced and inhabited under regimes of selfmanagement and collective property — many not recognized by the State, sustaining themselves in the loopholes of legality and through its practices. They seek to be places of resistance to the commodification and alienation of housing, and may be capable of prefiguring alternative present and future times. They would therefore be important spaces for learning, reflection and construction of repertoires for struggles and projects in the fields of social housing and urban politics. What and where are these experiences in Latin American cities?

Based on this question, we began to produce an inventory of urban housing territories in Latin America, deliberately produced and inhabited under collective ownership and self-management. The inventory is part of a master's degree research, which started

from the observation of gaps regarding academic works that analyze these experiences on a Latin American scale. The existing works that deepen the discussion on collective property in housing are case studies of specific territories (ALGOED; TORRALES; DEL VALLE, 2018; BASTOS, 2013; PINEDA, 2013; HUGUENIN, 2013; HIRAO, 2015; PINEDA, 2016; CASAS; TORNER, 2017; RECALDE, 2018) or specific groups of experiences (BARAVELLI, 2007; NAHOUM, 2008; VILA, 2011; GONZÁLEZ, 2013; NAHOUM, 2013; ARNOLD; LEMARIÉ, 2014; LAZARINI, 2014; BUDUSSIAN; GONZÁLEZ, 2015; GHILARDI, 2017; PEDRO et al., 2020). And those that look at some of these experiences on a Latin American scale are collections, which deal with the experiences in a very synthetic way, because their intention is not to discuss them in detail, but to present them succinctly and disseminate them (CENTRO COOPERATIVISTA SUECO, 2011; WE EFFECT, 2014).

Another gap is the frequent absence of discussion of property in studies on self-management in housing. Self-management has been the subject of many works, but in many cases, especially in Brazil, it is approached with a certain distance from collective property and restricted to housing construction processes (BONDUKI, 1992; MOREIRA, 2009; SUÁREZ PAREYÓN, 2010; LAGO, 2012; LORENCES, 2021), whether due to the choices of research approach or the conditions and options of the territories and organizations studied, which relegate it to a secondary level or don't even address the issue of property. Our research attempts to highlight the interdependence and complementarity between the two concepts and practices, and we believe that through collective ownership we can contribute to a renewed analysis of self-management in housing.

Inventory method and results

Our methodological reference was the proposal for three phases of successive approaches to the INRC – Inventário Nacional de Referências Culturais [National Inventory of Cultural References]: preliminary survey, identification and documentation (IPHAN, 2000; 2021). As it is a broad method, which goes beyond the scale of this project, we developed our own methodology, with these same three steps, but adjusted to the theme and scope of the research — individual, with an international scope and non-face-to-face data collection strategies.

In this article, we present a summary of the results of the first two phases, carried out between 2021 and 2022, and the main questions arising from the initial characterization of the experiences. It is an underway investigation, recently converted into a direct doctorate, and therefore, there remains a long way to go in depth on these issues.

The complete inventory consists of a list of the largest number of experiences that could be identified based on the research methods adopted; by a map, which locates them; by a database with information and references collected about each one; and by characterization profiles of the groups involved in these experiences.

In the preliminary survey, using academic sources, collections and dissemination materials (such as publications, websites and social networks) from communities and organizations, we identified groups of experiences. We mapped seven groups,

which are called federations, movements, centers, committees, in addition to seven "isolated experiences", which are not part of a regional articulating group, in twelve countries (Figure 1).

During the identification stage, we deepen the characterization of experiences, adding more references, such as press and legal materials. We carried out two interviews with researchers (ZAPATA, 2022; PINEDA, 2022), which remain a fundamental procedure for the continuity of the research. At this point, we identified each of the experiences within the seven groups, totaling a universe of 477 experiences, also including the "isolated" ones. We seek to recognize as many experiences as possible with the adopted methodology. It is possible that there are unmapped experiences where data sources are very restricted (in Central America, Paraguay and Venezuela) or where documentation is abundant but the concentration of experiences is very high (in Uruguay).

Main collective ownership models identified

Almost all of the experiences identified, 475, adopt an ownership model recognized as "user's cooperative". Even though there are differences in denomination among the groups — which indicate important specificities of context, regulation and cultural and political meanings — user's cooperatives are self-managed organizations, structured to contract collective financing and build housing by and for their members. Cooperatives remain even after the end of construction, as definitive owners of the land and buildings. Its members are quota holders, who access housing as users: they are owners and managers of all housing units together,



Figure 1. Groups of collective property and self-management housing experiences in Latin America, 2022. Source: elaborated by the author.

and users of a unit. In principle, housing in this model is produced as use value, because it is built and managed by its own consumers, and, when a member moves, the unit is not sold at market price: the member who wishes to move receives only the value of the capital share he has in the cooperative, which does not incorporate the appreciation of the land.

The other two experiences follow the community land trust model — known as *fideicomiso de tierras* (in Spanish), and called *termo territorial coletivo* in Brazil (ANTÃO; RIBEIRO, 2019). It also has important local specificities, but it is, in short, a model applicable to the construction of new houses, conversion of constructed buildings or land regularization, in which land ownership and management is collective and ownership of buildings or units is individual. In practice, the separation into two parallel property regimes, as in cooperatives, subjects the formation of the transmission price of the units and the criteria for inclusion of new members to the collectives, which generally prioritize poor, racialized or female-headed families.

Groups of experiences and "isolated experiences" identified

Uruguay: Mutual Aid Cooperatives (FUCVAM)

The cooperatives of the Federación Uruguaya de Cooperativas de Vivienda por Ayuda Mútua (FUCVAM) are the oldest group of experiences identified by the survey. Its history begins with three pilot projects in the interior of the country, in 1965, built by the CCU (Centro Cooperativista Uruguayo) in partnership with groups of workers (GONZÁLEZ, 2013; GHILARDI, 2017). It

constitutes the product of a cooperative tradition that had already been underway since a few decades ago, inspired by Swedish housing cooperatives. The pilot projects were financed with resources from the IDB (Inter-American Development Bank) and the German Catholic organization Misereor, complemented with resources from the Uruguayan government. At the same time, several other cooperative groups focused on housing began to emerge, mainly in Montevideo. In the midst of this process, the *Ley Nacional de Vivienda* [National Housing Law], of 1968, recognized and regulated cooperative, self-managed housing production, through mutual aid and collective ownership in the country.

Since then, FUCVAM has been structured – a second-tier organization — a space for intercooperative political education and articulation. Ghilardi (2017) differentiates cooperatives from social movements, and also clarifies the difference between them and the second-tier organization:

A cooperative unit in Uruguay is not created to claim access to housing for a neighborhood or region of the city. A cooperative emerges as a productive organization, which will serve to bring out housing for its members. The demanding character, however, is carried out by second-degree organizations. It is the federation of cooperatives that will carry out the demands of the affiliated units. (p. 169. Our translation)

Cooperatives flourished supported by the *Ley de Vivienda* and public resources resulting from it, whichremain to this day, although having varied a lot over time, and allow this to be the largest scale experience on the continent: our survey located 351 inhabited cooperatives, in 22 cities.



Figure 2. Some of the FUCVAM cooperatives: Complejo Jose Pedro Varela - Zona 6, Covireus al Sur, Covicivi, Covamca 2, Covigrup 35, Covicivi IV. Sources: Morel, 2015; Google Street View; Intendencia de Montevideo, Google Street View, FUCVAM; Facebook.

There are cooperatives of complexes of one or two-floored houses; renovated vertical buildings; and sets of buildings of different sizes, with up to seven floors. They are formed from unions, but also from neighborhood relations among workers (who are not always unionized) or from a combination of both. Managed through a general assembly and thematic committees, responsible for executing and monitoring decisions on their topics (GHILARDI, 2017).

Throughout history, there have been three forms of access to land. State land banks, important for the large housing projects of the 1970s, but which never acquired scale (MENDIVE, 2013; GHILARDI, 2017). In a short period of time, FUCVAM created its own land portfolio, and by purchasing land on the market, the most used method.

Land and construction financing is done with a public fund, created by the 1968 Law, fed by a tax on salaries and state subsidies (BARAVELLI, 2007; GHILARDI, 2017). Mutual aid work at the construction site is the counterpart that residents offer to state financing, as they are families without the ability to save. Collective ownership also means that financing is collective, negotiated and granted in the name of cooperatives, therefore families together.

Uruguay: Prior Savings Cooperatives (FECOVI)

The *Ley de Vivienda* of 1968 also regulated prior savings cooperatives (*ahorro previo*). What differentiates them from mutual aid cooperatives is that the compensation contributed by users is given in cash, with the families' prior savings (instead of work on the construction site). In 1969, the first prior savings cooperatives were created in Uruguay, which formed the *Federación Nacional de Cooperativas de Vivienda* (FENACOVI). In 1976, FENACOVI was extinguished by the dictatorship regime, but the cooperatives continued to exist, and in 1984, they refounded the federation, with the name FECOVI, *Federación de Cooperativas de Vivienda* (FECOVI, [s.d.]). FECOVI fulfills a role similar to FUCVAM for mutual aid cooperatives for prior savings cooperatives.

All FECOVI cooperatives are self-managed and adopt collective ownership with a user system. The majority are in Montevideo, but there are also experiences in Paysandú, Florida and San José de Mayo. We identified 85 inhabited cooperatives, totaling 3626 units.



Figure 3. Some of FECOVI's cooperatives: Complejo Bulevar, Covisur 1 and Ucovi. Sources: Anais Jorcin, Google Street View, Castillo and Vallés, 2015.

Most prior savings cooperatives are four- to thirteenstory buildings or groups of buildings. This is directly related to the production process, with little or no labor input from members, which facilitates construction at height. There are complexes of houses, but they are a minority.

Being a mutual aid or prior savings cooperative implies differences in the composition of the groups (families that are able to have prior savings have higher incomes), in location (prior savings cooperatives are generally built on smaller plots and in more valued areas), and in the self-management practices (mutual aid cooperatives tend to be more mobilized in collective activities) (GHILARDI, 2017).

Just like mutual aid cooperatives, financing is collective. Land is purchased on the market with financing resources, but there are cooperatives that needed to supplement their resources to be able to pay for the land, and others in which cooperative members purchased the land with their own resources before the financing was granted, reducing the value of the counterpart. (BUDUSSIAN; GONZÁLEZ, 2015). Ghilardi (2017) points out that the amounts

financed have reduced over time, which means that there are increasingly no pure systems: prior savings cooperatives now have to contribute hours of work on site, and mutual aid cooperatives have to contribute some savings.

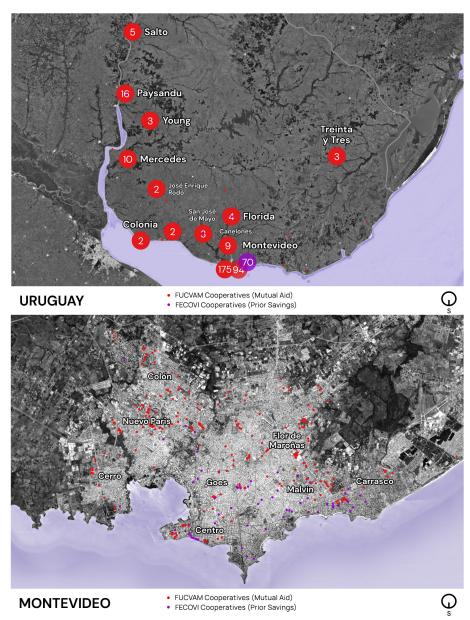


Figure 4. Some of FECOVI's cooperatives: Complejo Bulevar, Covisur 1 and Ucovi. Sources: Anais Jorcin, Google Street View, Castillo and Vallés, 2015.

Paraguai: Mutual Aid Cooperatives (CCVAMP)



Figure 5. Two of the CCVAMP cooperatives: Kuarahy Rese and Reina de la Cordillera. Sources: Dambrauskas and González, 2018; Arnold and Lemarié, 2014.

FUCVAM has been politically involved with popular organizations and housing movements in other Latin American countries since the beginning of the 1990s, but, at the end of the decade, it began an agreement with SCC (Swedish Cooperative Center), currently named 'We Effect', to cooperate in development of housing cooperatives — with self-management, collective ownership and mutual aid — on the continent, in countries with high levels of poverty, in partnership with local organizations.

In 2000, Paraguay was the first selected country, followed by Bolivia and Central American countries. Cooperation involved exchanges of knowledge, technical and political support in the struggle for financing and local regulation, in the formation of the first cooperative groups, and in the construction of a second-tier organization, CCVAMP (*Central de Cooperativas de Vivienda por Ayuda Mutua del Paraguay*) (DAMBRAUSKAS; GONZÁLEZ, 2008). The local partner institution was the *Comité de Iglesias para Ayudas de Emergencia*, a Catholic non-profit institution.

A national law, approved in 2003, allowed financing and regulated the organization of cooperatives. During the same period, five groups were formed, which between 2003 and 2010, built the Barrio Cooperativo Kuarahy Rese (Aveiro Itá). Since then, other cooperatives have been formed and built their sets (DAMBRAUSKAS; GONZÁLEZ, 2008; VILA, 2011; ARNOLD; LEMARIÉ, 2014; HIC-AL/GRUPO DE TRABAJO DE PSH, 2017; RECALDE, 2018; WE EFFECT PARAGUAY, 2020). We do not have the exact number of cooperatives currently inhabited, because information about the Paraguayan experience is scarce and often conflicting (VILA, 2011; CCVAMP, 2019). Our inventory mapped four cooperatives, which together total 396 units. They are in Asunción or nearby municipalities, in peri-urban regions. Three are complexes of single-story houses and one is a two-story houses complex.

The cooperative model regulated by Paraguayan law incorporates collective ownership with a user's system, unlike most other Latin American countries. Despite this, in practice, there are challenges in implementing the system represented by threats from the market and the State, and internal conflicts.

The greatest achievement was and continues to be the formation of the cooperative neighborhood in the municipality of Itá. It is collective property, which is not easy to achieve in Paraguay, due to pressure from the State itself and the individualistic mentality. [...] Another important learning has been to have achieved the coexistence of families in a collective territory, which helps them find a new approach to the community. (WE EFFECT PARAGUAY, 2020, p. 34. Our translation)

Within the scope of work of FUCVAM and SCC in order to support the formation of cooperative movements in other Latin American countries, the "pilot experience" strategy is central. This was the way found to demonstrate the viability of self-managed housing production in countries with high levels of poverty and housing needs, without a policy aimed at this type of production, and distrust with the pillars of the model, in addition to awakening political action that supports new experiences.

The pilot experience was the first stage of Kuarahy Rese, financed with IDB resources. The following stages of this experience and all other Paraguayan ones were financed by a specific public fund. However, Vila (2011) and HIC-AL/Grupo de Trabajo de PSH (2017) point out that the resources for this fund comes from the country's annual budget, which is why it is a very fragile system that can be easily demobilized by governments – preventing the experience to gain scale – and required an annual struggle by CCVAMP so that the budget includes the fund and the resources be implemented.

Bolivia: Mutual Aid Cooperatives (CACVAM)

Following the same process in which Paraguayan cooperatives were formed, Bolivian experiences were built. There, the exchange of foreign organizations occurs mainly with the Fundación de Promoción para el Cambio Socio-Habitacional (PROCASHA). Cooperation was formalized in 2001, and in 2002, the first groups were formed. In 2004, the second-tier organization was created: CACVAM (Comité Articulador de Cooperatives de Vivienda por Ayuda Mutua) (MEDINA; BUTRÓN, [s/d]).



Figure 6. CACVAM cooperatives: COVISEP and COVIVIR. Sources: Cohabitat; Macovam.

At the beginning of the 2010s, the first two groups, and the only ones inhabited until now, managed to complete the works on their complexes. They are in the department of Cochabamba, where the other groups are also being formed. All together they are 42 units. The majority of cooperative members are workers in the informal sector, with indigenous and peasant roots (MEDINA; BUTRÓN, [s/d]; DOMÍNGUEZ, 2017).

The system of users of Uruguayan origin is a pillar of CACVAM's cooperativism (MEDINA; BUTRÓN, [s/d]; HABITAT EN MOUVEMENT, 2015), but in addition to external influence, there is a "traditional community sense of land's collective ownership" (ARÉBALO; BAZOBERRY; LANDAETA, 2014, p. 105, our translation): Uruguayan support did not implement a new model, but contributed to the recreation of persistent practices, even if systematically weakened by colonial processes (DAMBRAUSKAS; GONZÁLEZ, 2008; ARÉBALO; BAZOBERRY; LANDAETA, 2014; DOMÍNGUEZ, 2017).

Arébalo, Bazoberry and Landaeta (2014, p.104, our translation) point out that the Bolivian Constitution of 2009 recognizes that "every person has the right to individual or collective property".

However, the State has not incorporated collective ownership and financing as a policy or practice and "cooperative social property" continues to be a battle flag. Medina and Butrón ([s.d]), report that this situation makes it difficult to form cooperatives, to access land, financing and construction, and that the State tries to condition the granting of credit to the adoption of individual property, which was not accepted by the groups.

The cooperatives built received financing from We Effect, Habitat for Humanity and Pró-Habitat in order to purchase cheap land in peripheral areas, design and construction. The lack of resources and the long road to construction have led many families to giving up and also to the dissolution of groups already formed. We Effect usually supports projects like this for up to seven years, but because the pilot experiences were not enough to build minimum policies, it continues to support CACVAM to keep it alive (MEDINA; BUTRÓN, [s/d]; HABITAT EN MOUVEMENT, 2015; DOMÍNGUEZ, 2017).

Central America: COCEAVIS

The Central American experience is also part of the process of spreading mutual aid cooperativism promoted by FUCVAM and SCC. The process involved technical support and knowledge exchange to formulate strategies appropriate to the contexts (DAMBRAUSKAS; GONZÁLEZ, 2008). Second-level organizations were built in Guatemala, Honduras, El Salvador, Nicaragua and Costa Rica, and a regional organization that articulates the national ones: COCEAVIS (Coordinadoria Centroamericana Autogestionaria de la Vivienda Solidaria), founded in 2010 (QUIÑONEZ; ROJAS, [s.d]).

Data from COCEAVIS and HIC-AL (2015) showed that there were 2962 families in cooperatives in the five countries, 22% of which had already built their houses, in all except Costa Rica. Central American cooperative members are low-income families: workers, in most cases self-employed or informal, many possess indigenous origin, former residents of favelas and tenements, and mainly, female heads of families.



Figure 7. Central American mutual aid user's cooperatives, 2022. The numbers indicate the number of experiences concentrated in a region. Source: elaborated by the author.

Guatemala: Mutual Aid Cooperatives (MEGCOVAM)

The Guatemalan organization is the *Mesa Guatemalteca* de Cooperativas de Vivienda por Ayuda Mutua (MEGCOVAM). In the country, we have identified two cooperatives built and inhabited: one in the capital and one in San Pedro Sacatepéquez. They are small groups of houses that together total 23 units.



Figure 8. Guatemalan cooperatives: COVIESO and Fe y Esperanza. Sources: Bredenoord, 2016; Facebook.

Guatemala does not have a public financing program for mutual aid cooperativism (GONZÁLEZ, 2016). The two mapped experiences accessed funding from foreign institutions for building purposes – We Effect and Habitat for Humanity (BREDENOORD, 2016; GONZÁLEZ, 2016). The land was purchased on the market. In one, with the cooperative members' prior savings, and in another, it was necessary to obtain credit offered by the technical consultancy Idesac, We Effect and the Belgian organization Juan Pablo (BREDENOORD, 2016).

Honduras: Mutual Aid Cooperatives (MEECOOVISUR)



Figure 9. Two of the Honduran cooperatives: COVIMARL and COVICHOLUMAR. Sources: Facebook; Bredenoord, 2016.

The Honduran second-tier organization is the *Mesa Coordinadora de Cooperativas de Vivienda del Sur de Honduras* (MECOOVISURH). In the country, we mapped four inhabited cooperatives, all sets of houses in peri-urban areas, in the cities of San Lorenzo, Nacaome, Marcovia and Choluteca. There are 438 units. Honduras has a state financing program that serves mutual aid housing cooperatives. All mapped experiences were covered by the program, some with credit and subsidies. Despite this, the land was acquired with prior savings, formed through collective activities, and We Effect offered additional credit to two cooperatives (BREDENOORD, 2016; QUIÑONEZ; ROJAS, [s.d]).

El Salvador: Mutual Aid Cooperatives (FESCOVAM)

In El Salvador, the second-tier organization is the Federación Salvadoreña de Asociaciones Cooperativas de Vivienda por Ayuda Mutua (FESCOVAM). We identified four experiences in the country. Three are in the Historic Center of San Salvador and raised theirbuildings in the same region where their members had previously lived, in slums or tenements (ARQUITECTURA PANAMERICANA, [n.d.]). The other, 13 de Enero, is a group of houses in El Majahual. Its land was acquired on the market, with financing offered by FUNDASAL (Fundación Salvadoreña de Desarrollo y Vivienda Mínima), a private non-profit institution.

To be able to build houses, cooperatives had to combine financing from foreign institutions. ACOVICSHH, in its two projects, combined resources from *Agencia Española de Cooperación Internacional al Desarrollo*, We Effect, Misereor and Cordaid. ACOVIVAMSE received funding from the German



Figure 10. Three of the Salvadoran cooperatives: ACOVICHSS Renascer, ACOVIVAMSE and 13 de Enero. Sources: Arg. Panamericana; Bredenoord, 2016; Fundasal and CCS.

government's development bank (KfW). 13 de Enero received a donation from We Effect to build a communal hall, and obtained financing from the *Agencia Sueca de Desarrollo Integral*, FUNDASAL and We Effect for the construction of houses and urbanization (BREDENOORD, 2016).

Nicaragua: Mutual Aid Cooperatives (CENCOVICOD)



Figure 11. Two of the Nicaraguan cooperatives: Juntando Manos and Los Volcanes. Source: Bredenoord, 2016.

In Nicaragua, the second-tier organization is the *Central Nicaraguense de Cooperativas de Vivienda por Ayuda Mutua* "Comunidades Dignas" [Dignified Communities] (CENCOVICOD). We mapped three inhabited experiences, which total 70 units. They

are all groups of houses in the municipality of León, whose city hall has developed a strategy to sell municipal land at affordable prices to twelve cooperatives in an urban expansion zone (BREDENOORD, 2016; GONZÁLEZ, 2016; QUIÑONEZ; ROJAS, [s.d]; CASAS; TORNER, 2017).

However, only the three mapped ones have managed to complete their houses so far. 'Juntando Manos' – a pilot experience – was financed with resources from We Effect. 'Los Volcanes', according to Bredenoord (2016), was financed with credit from the city of León, but according to Casas and Torner (2017) by way of a credit cooperative. 'Manos Amigas' was financed with resources from the Spanish Juan XIII foundation (BREDENOORD, 2016; GONZÁLEZ, 2016). All our references agree that financing for construction is the biggest problem in the country: cooperatives in León even accessed land through the municipal strategy, but there is a lack of credit and subsidies to build and, therefore, there are few cooperatives that are currently inhabited, compared to the number of cooperatives formed as well as with land plots.





Figure 12. Palo Alto Cooperative. Source: film The Battle of Palo Alto – Livia Radwanski and Virginia Negro, 2017.

Cooperativa Palo Alto is located in the western region of Mexico City, next to Mexico-Toluca Highway, a vector of real estate development. In the 1940s, there used to be a sand mine in the region, whose workers were migrants, who lived in shacks paying rent to the mine owner. In the 1970s, the mine closed its activities and the workers, threatened with eviction, came together to fight for the right to continue living there, with the support of priests and nuns linked to iberation theology, social techniques and architects, including a Uruguayan (RAMÍREZ; CORREA, 2012; ORTIZ FLORES, 2016).

After a long process, which involved the construction of more temporary housing and conflicts with neighbors in the region, they managed to get the government to mediate the purchase of land by the community at an affordable price (ORTIZ FLORES, 2016). Buendia (2019) reports that the cooperative was able to access the first forms of credit with low interest rates and in gradual stages. Today, Palo Alto has 147 two-floored houses and a three-story building with 32 apartments (HABITAT PARTICIPATIVO ASOCIACIÓN CIVIL, 2015).

Housing cooperativism is incorporated into Mexican policies, which recognize and finance it, but little by little and devoid of one of its pillars. Mexico does not legally allow collective ownership: housing cooperatives are treated by legislation as transitional mechanisms, which exist only for construction purposes. At the end of the works, they must be extinguished and the property individualized. Palo Alto, however, supports the user's system relying on two factors: the practice itself, with collective organization and its own statute; and a long conflict that threatens the existence of the cooperative, but paradoxically, allows the

continuity of collective ownership. A small proportion of residents request the individualization of the property in court, interested in selling their homes, which are valued and pressured by the real estate activity in the surrounding area. This legal dispute, which has lasted three decades, prevented the cooperative from completing the last stage of construction. Therefore, as there are still houses to build, the existence of the cooperative and collective property is legally justifiable (BUENDIA, 2019).

Mexico: Guendaliza'a Cooperative

Guendaliza'a is located in the neighborhood of Cuchilla Pantitlán, Mexico City. It is a set of five blocks with 48 units. The formation of the cooperative began in 2011, but it results from the accumulation of struggles promoted by *Movimiento Urbano Popular* (MUP), which has brought together Mexican organizations since the 1980s. In 2010, the MUP obtained the government's commitment to promote together with the movement, and with HIC-AL, a social habitat production program called Programa Comunitario de Producción y Gestión Social del Hábitat. Guendaliza'a is a pilot experience developed within this program. The construction began in 2014 (CORREA, 2014) and was completed between 2016 and 2017. The residents are working families, with family ties, who have previously lived in cohabitation situations or where their income was highly compromised by rent.

It is located on a territory where there was previously an unoccupied warehouse, purchased on the market. The land and construction were financed in part by INVI (Instituto de Vivienda de la Ciudad de México [Mexico City's Housing Institute), and in



Figure 13. Guendaliza'a Cooperative. Source: Google Street View.

part by residents, through prior savings, weekly contributions and organization of collective activities to raise funds (URBAMONDE, 2017; HIC-AL/GRUPO DE TRABAJO DE PSH, 2017).

Until 2017, when the references about Guendaliza'a were written, the cooperative maintained a collective ownership model, in a user's system exercised in practice, because Mexican legislation does not provide for the existence of collective ownership after construction.

Mexico: Acapatzingo Cooperative

Acapatzingo is a community made up of two-floored houses and buildings, in La Polvorilla, Mexico City, where 596 families live (ETSAM - UPM, 2004; PIZAÑA; LOZANO, 2021). It is one of the communities that forms the *Organización Popular Francisco Villa de Izquierda Independiente* (OPFVII), whose

formation dates back to the popular movements that were constituted in the struggle for housing, self-construction of slums and land occupations. However, OPFVII went through ruptures with other sectors of the Mexican popular movement, such as the MUP, from the end of the 1980s, disagreeing with the notion of revolution as a future action, the approximations of these sectors with institutional politics and the "prácticas clientelares que progresivamente fueron invadiendo al movimiento" (PINEDA, 2013, p. 54), while radicalizing the development of autonomous experiences in the territories (PINEDA, 2013; ZIBECHI, 2021).

The neighborhood was built with mutual aid and self-management, on land occupied in 1994 and acquired in 1998 with financing from INVI, supplemented by families (ETSAM - UPM, 2004). The construction of the houses began in 2000 (ZIBECHI, 2021), with the community organized in the form of a housing cooperative, whose intention was not just to build houses, but to put forward a project of community life, social self-regulation and popular power (PINEDA, 2013).



Figure 14. Cooperative Acapatzingo. Source: Cesar Pineda.

Decisions are made in an assembly, which brings together the entire community. But discussions are held more closely and frequently in brigades, groups of ten to fifteen neighboring families, who are also responsible for maintenance tasks in collective spaces. The brigades elect representatives for thematic committees, responsible for community services, such as gardens, health centers, libraries, radio, and educational and cultural activities. These spaces constitute a system of task and position rotation, and bottom-up decision making. In them, a set of community rules was formulated, and in the case of non-compliance, after support and mediation for resolution, a maximum sanction of expulsion can be applied as a last resort. Therefore, the family right to use the units is submitted to the community (PINEDA, 2022).

Pineda (2022) states that cohesion around territorial self-management occurs both because of affective and political values, but also because it is a model that gives concrete results in people's lives. Even though there are challenges in daily practice, Acapatzingo is, in his point of view, an "oasis" on the outskirts of the city: the buildings, spaces and collective infrastructures are well maintained and the streets are calm and safe (PINEDA, 2013).

Argentina: Self-Managed Cooperatives (MOI and Los Pibes)

Historically, the struggle around housing self-management in Argentina has had as its protagonist the MOI – Movimiento de Ocupantes e Inquilinos [Movement of Occupiers and Tenants] in partnership with professionals and academic members. After the approval of Law 341/2000, which gave rise to the Programa de Autogestión de la Vivienda (PAV) [Self-managed Housing Program]

only in the City of Buenos Aires, very different groups, but all structured in the form of cooperatives, signed up to participate. Some of these cooperatives were structured within the MOI (PEDRO et al., 2020; ZAPATA, 2022).

The law does not mention collective property, a topic that is only mentioned in Law 1251/2003, which created the Instituto de Vivienda — institution responsible for the PAV—, when it mentions the possibility of titling cooperatives into collective property. In practice, however, cooperatives are considered by the State as temporary tools, as in Mexico.



Figure 15. Some of the MOI and Los Pibes cooperatives: La Fabrica, COVILPI, Yatay and Necochea 1316. Sources: Facebook: FM Riachuelo: Lazarini. 2014: Pedro et al., 2020.

Thus, the program imposed an individual ownership model on cooperatives, which for many of them was not a problem. However, the most of MOI cooperatives, and also the Los Pibes movement, seek to practice and fight for the incorporation of collective property into the program. They are living in housing complexes that have not yet been regularized, and are temporarily owned by the cooperative.

Housing cooperatives in Buenos Aires seem to be in dispute, between sectors that practice self-management and collective ownership as pillars; and a tendency towards neoliberal instrumentalization of self-management, legitimized by cooperatives that are contrary to collective property and have a restricted view of the concept: they access financing to build, adopt hierarchical organizational processes, construction through contracted companies and individualize property (ZAPATA, 2022), offering to the government quantitative and insurgency-free results.

Considering only groups that practice collective ownership, our inventory identified six cooperatives, totaling 112 units. Los Pibes cooperatives accessed the PAV to renovate their small buildings. COVILPI, also from Los Pibes, is a new five-story building, and the MOI buildings (La Fábrica and Yatay) are retrofits of industrial buildings combined with new structures.

Since 2003, the MOI established a civil construction labor cooperative, excluding construction companies from the project and work. From this proposal, a production model called *Unidad Social de Producción Autogestionaria* [Social Self-Managed Production Unit] emerged, and was adopted in its cooperatives, combining mutual aid, work cooperatives and technical assistance (LAZARINI, 2014; RODRÍGUEZ, 2020).

The plots of land were purchased on the market, as the financing includes resources for the acquisition, construction and the multidisciplinary technical team. However, since 2006 the purchase of land and financing for new projects have been interrupted (PEDRO et al., 2020).

Brazil: Shangri-lá Cooperative



Figure 16. Shangri-lá Cooperative. Source: Bento Rubião Foundation, taken from Bastos, 2013.

Shangri-lá is a community of 29 houses in Colônia Juliana Moreira neighborhood, Jacarepaguá, Rio de Janeiro. Shangri-lá used to be a 'favela', built in 1971, on areas remaining from a formal subdivision. Most of the residents lived in single-room wooden shacks, paying rent to a "faveleiro" [slum dweller]. In the 1990s, the community began to receive activities from the Catholic Church, mainly through Padre Josino Base Ecclesial Community. In this process of collective organization, they negotiated the

purchase of land, formed a cooperative, supported by the Bento Rubião Foundation, and financed by the German Catholic institution Misereor, built the group of houses in mutual aid, inaugurated in 1999, without support from the State.

The collective property model was established in a statute, as there is no Brazilian legislation that recognizes user housing cooperatives — self-management production experiences that access State programs and resources are obliged to accept the individualized ownership and financing regime (BASTOS, 2013; GUERREIRO, 2015; MIRANDA, 2019; BORDENAVE, 2022). In Shangri-lá, each resident has a share of the social capital, which is made up of houses, a system similar to the Uruguayan one. Bastos (2013) reports that, until that moment, there was no sale or rental of the units, only one transfer of the quota in 2009, a transaction made outside the market with the intermediation of the cooperative.

To sustain its existence, Shangri-lá adopted the legal model of "Housing and Mixed Cooperative" and follows the general law for Brazilian cooperatives, which was not designed for user's housing cooperatives, but which allows it not to pay taxes for productive activities it does not perform. The cooperative's legal person is kept inactive, which exempts this cooperative model from other compulsory contributions, but allows it to maintain control of its share capital, thus preserving collective property. However, this same arrangement prevents the transfer of the land to the cooperative, currently under the name of two people from the Base Ecclesial Community (BASTOS, 2013). In other words, it is a model legally maintained within legal loopholes, with weaknesses, inconsistencies and improvisations, supported by the agreement of its members. Huguenin (2013) understands that the maintenance of collective property in this unique

Brazilian experience has to do with its historical process of formation, with the strong desire for social control over the territory and with the bonds created between the community and the whole, whose "value is immeasurable in economic terms and therefore cannot be inserted into the market (p. 123)."

Venezuela: Campamentos de Pioneros / Nuevas Comunidades Socialistas

The formation of the Campamentos de Pioneros refers to the *Movimiento de Pobladoras y Pobladores de Venezuela* and the *Comitês de Terras Urbanas* [Urban Land Committees], participatory organizations for planning and regularizing settlements, created in the early 2000s, whose history of struggles dates back to the end of the 20th century. The Campamentos de Pioneros are a platform of the Movimiento de Pobladoras, and their experiences of building groups in self-management and mutual aid, called *Nuevas Comunidades Socialistas* [New Socialist Communities], began in 2011, when the Venezuelan government approved financing for fifteen groups, which occupied urban land, accounting for the name *'Campamentos de Pioneros'*.



Figure 17. Some of the New Socialist Communities: Kaika-shi, Jóvenes en Evolución, Mujeres Vencedoras. Sources: Arg. Panamericana; CTAA; Arg. Panamericana.

The movement consists of a manifestation of peripheral struggles in recent decades and was the basis for the election of governments of *Partido Socialista Unido de Venezuela* [United Socialist Party of Venezuela]. Within these governments, the movement creates spaces to promote self-managed projects. Members do not understand themselves as part of a movement for housing, but rather for the construction of a broader revolutionary and socialist project and they believe that

[...] the organized community has the necessary capabilities to solve all its social problems (housing, health, education, food, production, etc.), thus guaranteeing the transformation of the traditional State into the Comunal State, but requires the transfer of resources and technical support. (GARCÍA, [s.d]. Our translation)

They demand collective communal property (MOVIMIENTO DE POBLADORAS Y POBLADORES, 2015) which, according to Hirao (2015), until 2012 was not fully regulated in Venezuela. The model is similar to a user's cooperative: ownership of the land, of the building and of the units is held by a "civil association" (HIC-AL/GRUPO DE TRABAJO DE PSH, 2017) and its members are users. Collective ownership is also seen as inseparable from collective credit (HIRAO, 2015).

Our inventory identified ten experiences, nine in Caracas Metropolitan Area and one in Carora, totaling at least a thousand units. However, there is little information about the experiences, especially about their construction and occupation stages. In recent years, state transfers, the main form of financing, have decreased significantly or completely ceased, which explains why many projects are unfinished. The groups try to complete the works

through small contributions from members, but impoverishment and the devaluation of work and currency depreciation prevent large contributions. Thus, the works go on at a slow pace and completed in stages. Some were inhabited and others were inaugurated before they were ready (HIRAO, 2015; PINEDA, 2016; TATUY TVC, 2020; BRASIL DE FATO, 2021). Therefore, our list of experiences for Venezuela considers projects that are certainly in advanced stages of construction, but the complexity of the situation and the scarcity of information do not allow us to assert that they are all fully completed with the methodology adopted.

Most Nuevas Comunidades Socialistas are five to ninestory building complexes. Access to land occurred through the transfer of public land to associations or through the expropriation and transfer of underused land (TORRES; PINEDA; REY, 2017). Land occupations were an important strategy in this process.

Porto Rico: Caño Martín Peña Community Land Trust



Figure 18. Communities of Caño Martín Peña. Source: Proyecto ENLACE.

Caño Martin Peña is a canal in the central region of San Juan, between the historic center and the city's real estate-financial center. The communities of Caño Martin Peña have existed since the mid-20th century, when people occupied the region and, with their own efforts, backfilled the terrain and built their houses. Fideicomiso began to emerge in the early 2000s, when the organized community managed to influence a canal dredging project, proposed by the State. The community understood that this projectdid not meet the needs of residents and would cause evictions and gentrification, so they have succeeded in transforming it in a popular planning initiative, and opt for collective ownership, in the form of a community land trust, as a tool for security of tenure.

During the disputes surrounding the Caño dredging project, the community formed a collective organization, called G-8, which represents the eight communities surrounding the canal and brings together organizations from across the region. *The Fideicomiso de la Tierra* [Community Land Trust] — the organization that collectively owns and manages the land — is a specific group, made up of families that adhere to the collective property regime, therefore smaller than the G-8 but linked to it.

The Caño Martin Peña experience is inspired by the community land trust property model and adapts it to its reality: as it is a pre-existing popular territory, the CLT is a mechanism for collective land regularization and not just related to housing production or management. In fact, 222 members are part of the trust, totaling 78 hectares of collective land (FIDEICOMISO DE LA TIERRA, [s.d]).

Our references argue that the property model is part of a social process of planning, reflection and action on the broader territory, which involves practices of organization and collective design, the construction of spaces and mechanisms for debates and community decision-making, the processes of building new houses (for relocations, where necessary), infrastructures and public spaces collectively, in addition to establishing a suitable, legitimate meaning for the territory as a collective asset (ALGOED; TORRALES; DEL VALLE, 2018; ALGOED; TORRALES, 2019; LITSEK, 2019; RIBEIRO et al., 2020).

Bolivia: Maria Auxiliadora Community



Figure 19. Maria Auxiliadora Community. Source: Cohabitat.

Comunidad Maria Auxiliadora emerged in 1999, from a group of women who worked to combat issues of gender violence, and who had been discussing the right to housing since 1996. This group, headed by Rose Mary Irusta Pérez, purchased land and began to develop the project of a popular territory with collective

ownership and self-management, designed by and for women heads of families in Cochabamba (HÁBITAT PARA LA MUJER COMUNIDAD MARÍA AUXILIADORA, 2014; PERIFERIA, 2014; PÉREZ; VELIZ, 2015). Since then, the community has grown in the number of resident families, building houses, collective spaces and infrastructure in mutual aid, with the support of NGOs that provide technical assistance. The most recent data indicates that in 2017 there were 500 families living in the territory (HIC-AL/GRUPO DE TRABAJO DE PSH, 2017).

The ownership model is similar to a community land trust, however this term is not mentioned in any document or source authored by the community. They use comunidad or comunidad solidária [community or solidarity community], which they believe represents the diversity of their social relationships (PÉREZ; VELIZ, 2015). It is a regime based in practice, on collectively constructed agreements, and on fragile legal mechanisms, as there is no regulation regarding collective property in Bolivia. The land is managed by the community organization, but it was registered in the name of Rose Mary. Residents sign a contract of use that gives the right, under this woman's name, to build and live on a part of the land, and determines the rules that apply to this right. The house cannot be sold on the market or rented. If a family wants to move, the house is sold to the collective association, for a price that does not incorporate the appreciation of the land, and then ispassed on to a new family (SOMOS SUR, 2012; HÁBITAT PARA LA MUJER COMUNIDAD MARÍA AUXILIADORA, 2014). They fight for the constitution of a legal entity of the community, which would be the collective owner of the land, and for a law that regulates collective property in the country (HÁBITAT PARA LA MUJER COMUNIDAD MARÍA AUXILIADORA, 2014).

In 2011, a small group of residents, interested in selling the houses, used the community's legal fragility to claim individual ownership and accuse Rose Mary of fraud. She was imprisoned for four months. The community continues to exist under the same situation, and is disputing in court the legitimacy of collective property and the legal riddle with the deserting group (PERIFERIA, 2014). A text produced by the leaders refers that this conflict has a gender motivation, since the dissidents are generally men (SOMOS SUR, 2012).

The land, located on the outskirts of Cochabamba, was purchased on the market, using the savings of the former residents, and a loan, paid off in small installments. Construction financing was effected with a mix of prior savings and loans from NGOs, such as Pró-Habitat and Habitat for Humanity (WORLD HABITAT, 2008).

Initial Inventory Questions

From the inventory work, we see that in territories of collective property, self-management, and, in most cases, mutual aid, a very significant diversity of community socio-territorial practices is exercised, and our hypothesis is that these practices overflow the production of housing, constituting broader practices of collective management of the territory. Collective property is exercised as a living practice, a dynamic process, and not only as a legal, static form.

Community relief funds for families with difficulties in paying installments are maintained by FUCVAM cooperatives and several other mapped ones. These supporting strategies,

associated with crowdfunding, are essential for security of tenure. Due to the low volume, difficulty of access or instability of resources made available by the State or philanthropic financing agents, the Uruguayan FECOVI cooperatives (GHILARDI, 2017) and the Mexican Palo Alto cooperative (BUENDIA, 2019) tried out forms of financing through cooperatives of credit. To pay the technicians who contributed to community projects, the women from Maria Auxiliadora used the *pasanaku*, an ancestral practice of collective savings (PERIFERIA, 2014).

Other practices of solidarity economy are also being developed from the organization initially formed by housing. Central American cooperatives have built community garden projects for consumption and sale (QUIÑONEZ; ROJAS, [s.d]; COCEAVIS, 2017), as well as Acapatzingo (PINEDA, 2013; PIZAÑA; LOZANO, 2021), in the same cooperatives in Central America (BREDENOORD, 2016), in Maria Auxiliadora (WORLD HABITAT, 2008) and in some of the New Socialist Communities (KAIKASHI, [s.d]) cooperative productive organizations were created, in a context of increasing precariousness of work and unemployment. The study produced by Arnold and Quintas (2020) showed how, during the Covid-19 pandemic, productive initiatives, collective purchasing and sharing of food and resources, organized within communities, have been important for food security, sustenance and care for the health of families.

Some of the Salvadoran cooperatives organized construction groups in mutual aid and collective management of urban and environmental infrastructures, which served both their own groups and the surrounding neighborhoods (UNIÓN INTERAMERICANA DE MUNICIPALISTAS, 2018; LEI DA

AUTOGESTÃO JÁ, [s/d]; BREDENOORD, 2016). In several experiences we can observe practices of construction and management of social facilities open to the neighborhood, mainly salónes comunales [community halls] – spaces where assemblies, parties and community activities take place – traditional in Uruguayan cooperatives (GONZÁLEZ, 2013; GHILARDI, 2017) and present in Mexican, Argentine, Central American, Paraguayan, Venezuelan and Bolivian cooperatives as well. Likewise, schools and daycare centers, observed in Argentine, Paraguayan and Mexican cooperatives, were also present in Acapatzingo and Maria Auxiliadora.

There are also popular clinics, in the Mexican experiences: PaloAlto (LACOPERACHA, 2018), Acapatzingo (PIZAÑA; LOZANO, 2021) and Guendaliza'a, which also has a popular restaurant (HICAL/GRUPO DE TRABAJO DE PSH, [s.d.]) Courts, squares and other open spaces built and maintained by communities, were present in various studied experiences. The large Uruguayan complexes of the 1970s and 1980s built networks of urban facilities open to the community, such as schools, daycare centers, libraries and clinics, in some cases with cooperatives also being responsible for the services provided (GONZÁLEZ, 2013; CASTRO et al., 2013). Currently, the new Uruguayan cooperatives, with the reduction in financed resources, find it difficult to build social equipments, and most of them are able to build at most one *salón comunal* (GHILARDI, 2017).

In addition to equipments, some experiences develop practices of solidarity and socialize the care for children and the elderly, such as in Argentine cooperatives (ZAPATA, 2022), Acapatzingo (PIZAÑA; LOZANO, 2021) and Maria Auxiliadora

— in the latter, they also include community practices to protect women and children against domestic violence, with the formation of commissions for mediation of these conflicts (PERIFERIA, 2014; PÉREZ; VELIZ, 2015). In Acapatzingo, the police, seen as a threat, is not allowed to enter. The community, trying to prevent the entry of both the police and the factions, had to fortify itself, but more than that, it maintains its own structure for conflict mediation and damage repair — which until now, has produced a safer environment than that existing in surroundings areas (PINEDA, 2013; 2022; ZIBECHI, 2021; PIZAÑA; LOZANO, 2021).

Communities and movements have also built spaces for political and cooperative education, such as the COCEAVIS Regional Cooperative School (MARIELLE, 2020) and the guardías of MOI in Argentina, which are spaces for welcoming and training (LAZARINI, 2014; RODRÍGUEZ, 2020). In many of them, the struggles go beyond the housing issues. Communities participate in international networks. The Venezuelan Pioneros understand very clearly the insertion of their struggles in a broader political process, of building a Communal State in Venezuela (HIRAO, 2015; MOVIMIENTO DE POBLADORAS Y POBLADORES, 2015; GARCÍA, [s.d]). Comunidad Maria Auxiliadora originated from the organization of women against gender-based violence, who discovered in the course of their struggle the importance of housing and territory. FUCVAM established itself as an autonomous and relevant force in the Uruguayan and international political scene, positioning itself and directly influencing different conflicts and disputes in this period, both during the dictatorship and in the current advance of neoliberalism (BARAVELLI, 2007). Acapatzingo takes part in a struggle for territorial, anti-capitalist and anti-state self-management,

in dialogue with the Zapatistas of Chiapas (PINEDA, 2013; ZIBECHI, 2021). HIC-AL (Habitat International Coalition – Latin America) and SELVIHP (Latin-American Popular Housing and Habitat Bureau), are networks composed of cooperativists, professionals and researchers, movements, secondary organizations and partner entities, which articulate, promote and disseminate most of the experiences we discuss here, in addition to actively influencing the public debate in defense of the rights to land, housing and the city (RODRÍGUEZ, 2021).

Evidently, it is important to mention the self-managed practices of housing construction. They include a diversity of knowledge and methodologies for collective project development and result in designs that are sensitive to the lifestyles, contexts and aspirations of residents, articulated with the political proposals of their organizations, and with better use of resources than State and private projects since they are produced without profit and under the control of users (albeit at different levels), who are also producers.

We highlight the project methodology of the Venezuelan Pioneros that addresses three scales of society (family, communal and urban) in a design process that starts from the definition of the implementation and the program, seen as the heart of the community, to unity (HIRAO, 2015); for the valorization of the design of MOI complexes – a product of the ideas of the current arquitectura-ciudad (LAZARINI, 2014; PEDRO et al., 2020); the flexible Palo Alto project – that generated a lively neighborhood, with houses of different colors, uses and expansions, well cared for and appropriated by residents (ORTIZ FLORES, 2016); and for the design and appropriation of Shangri-lá's balconies and patio, which challenges a "precise definition of the limits between the house and the collective space" (HUGUENIN, 2013).

They also include forms of mutual aid work on the construction site, a topic that, on the one hand, provokes an important debate regarding overwork, on the other, it also raises questions about the construction of relationships of solidarity and de-alienation of work (OLIVEIRA, 2006; BARAVELLI, 2007; GHILARDI, 2017). The different, complex and confusing ways in which these construction sites evolve, in the diversity of Latin American experiences, keep this debate alive and central, and contribute to deepening it: through which practices and in which contexts is self-management just a cheap way, or possible, to build, and by means of which practices and in what contexts can territories of free work be constituted? (ARANTES, 2002 apud BARAVELLI, 2007).

All these practices seek to respond to and confront various dimensions of vulnerability to which families and communities are subjected: housing needs that are linked to impoverishment, indebtedness and precarious work (GAGO, 2018; CEPAL, 2021), in a context of State and Capital reconstruction under neoliberalism (HARVEY, 2005) and the complexification of forms of socio-territorial dispossession. These are experiences that, therefore, exist amidst many difficulties and contradictions.

Among them, the lack of financing, which requires communities to face long battles and combinations of different resources — philanthropic, state, international financial organizations and scarce family savings — to develop. There are very few mechanisms for accessing land that go beyond purchasing on the market. Furthermore, the impoverishment and precarious working conditions of families affect the formation and maintenance of groups and their education, construction and management

activities. These dynamics have spatial implications, with impacts on the quality, scale and location of projects, with scarce resources to design, build and acquire land.

Still, most experiences are part of a blurred legal territory, since, in all countries except Uruguay and Paraguay, the State does not authorize, regulate or restrict collective property and pushes for individualization. Therefore, their reality is a collective property regime in fact, in practice and in dispute, informalized. This situation forces communities to develop legal improvisations to maintain a fragile existence and in constant threat: legally threatened from the State, and internally threatened, since the precariousness of non-recognition and pressures for individualization amplify the difficulties of maintaining community cohesion around collective ownership and self-management.

Final considerations

The effort of inventorying and understanding the socioterritorial contexts and practices of communities can contribute to inform and deepen the Latin American discussions already referred and to shed light on new issues concerning property, territorial selfmanagement, housing and city production processes, stemming from its conflicts, contradictions, limitations and potentialities.

Therefore, it is important to continue with a comparative approach at the diversity of experiences in different latitudes of the continent, and at the ways in which they are affected and respond to the constituent processes of the housing crisis as it currently

exists. How are the socio-territorial practices of communities and housing territories under collective ownership and self-management crossed by the dynamics of vulnerability, income extraction and dispossession? To what extent are they determined by them, and, even so, can they be constituted as tools of resistance, confrontation and potential overcoming and prefiguration of alternatives, through direct action?

References

ALGOED, L.; TORRALES, M. E. H. Essa terra é nossa! Vulnerabilização e resistência em favelas: lições do TTC do Caño Martín Peña, partes 1 a 5 (tradução por VIEGAS, Lia Matos). RioOnWatch, 2019. Available at: https://rioonwatch.org.br/?tag=serie-terra-e-nossa. Access in: 10 fev. 2022.

ALGOED, L.; TORRALES, M. E. H.; DEL VALLE, L. R. El Fideicomiso de la Tierra del Caño Martín Peña Instrumento Notable de Regularización de Suelo en Asentamientos Informales. **Documento de Trabajo WP18LA1SP**. Lincoln Institute of Land Policy. 2018.

ALMEIDA, I M. et al. PPPs habitacionais em São Paulo: política habitacional que ameaça, remove e não atende os removidos. *In*: **Cartografias da produção, transitoriedade e despossessão dos territórios populares.** Observatório de Remoções: relatório bianual 2019-2020 / organização Fernanda Accioly Moreira, Raquel Rolnik, Paula Freire Santoro. São Paulo, 2020.

ANTÃO, R. C. do N.; RIBEIRO, T. F. Termo Territorial Coletivo: instrumento de costura entre o planejamento urbano e o direito em prol do incremento da segurança da posse. **Anais XVIII ENANPUR**. Natal, 2019.

- ARANGO, J. H. La tenencia de tierras colectivas en Colombia. CIFOR infobrief, n. 203, 2017.
- ARÉBALO, M.; BAZOBERRY, G.; LANDAETA, G. Bolívia. El suelo y la vivienda entre la propiedad estatal, comunitaria, social cooperativa y privada. *In*: La vivienda, entre el derecho y la mercancía. Las formas de propiedad en América Latina. Montevideo: Ediciones Trilce, 2014.
- ARNOLD, P.; LEMARIÉ, C. Una semana al ritmo de las cooperativas de vivienda por ayuda mutua de Paraguay. Habitát en Movimiento. HIC-AL. 2014.
- ARNOLD, P.; QUINTAS, N. **Estudio global**: vivienda socialmente producida y gestionada en contexto de Covid-19. Urbamonde, CoHabitat Network, We Effect. 2020.
- ARQUITECTURA PANAMERICANA. Rescate de la funcion habitacional del CHSS, contribuyendo a una ciudad equitativa. Arquitectura Panamericana, [s.d.]. Available at: https://www.arquitecturapanamericana.com/rescate-de-la-funcion-habitacional-del-chsscontribuyendo-a-una-ciudad-equitativ/. Access in: 25 fev. 2022.
- ARRUTI, J. M. A emergência dos "remanescentes": notas para o diálogo entre indígenas e Quilombolas. **Mana**, n. 3/2, p. 7-38, 1997.
- BAIOCCHI, G.; CARLSON, H. J. Social Housing 2.0 Viable Non-Market Tools for Today's Housing Crisis. Pathfinders for Peaceful, Just and Inclusive Societies, Social Housing 2.0. New York: Center on International Cooperation. 2022.
- BARAVELLI, J. E. Cooperativismo uruguaio na habitação social de São Paulo: das cooperativas FUCVAM à Associação de Moradia Unidos de Vila Nova Cachoeirinha. Dissertação (Mestrado em Habitat) Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo. São Paulo, 2007.

BASTOS, T. S. Autogestão habitacional e a desmercantilização da moradia: análise dos avanços e retrocessos na região metropolitana do Rio de Janeiro. Dissertação (mestrado) - Universidade Federal Fluminense, Programa de Pós-Graduação em Arquitetura e Urbanismo. Rio de Janeiro, 2013.

BHANDAR, B. Colonial lives of property: law, land, and racial regimes of ownership. Durham: Duke University Press, 2018.

BONDUKI, N. **Habitação e autogestão**: construindo territórios de utopia. Rio de Janeiro: FASE, 1992.

BORDENAVE, G. Autogestão na habitação e propriedade coletiva da terra: a experiência de uma cooperativa habitacional em Jacarepaguá-RJ. **O Social em Questão**, n. 53, p. 233-254, 2022.

BRASIL DE FATO. "Sem organização popular não se resolve a moradia": conheça o movimento sem teto da Venezuela. Brasil de Fato, 2021. Available at: https://www.brasildefato.com.br/2021/08/07/sem-organizacao-popular-nao-se-resolve-a-moradia-conheca-o-movimento-sem-teto-da-venezuela. Access in: 05 fev. 2022.

BREDENOORD, J. Avances del movimiento cooperativo de vivienda por ayuda mutua en Guatemala, Honduras, Nicaragua y El Salvador. Anexo - Cartera de cooperativas y comunidades. Evaluación del "Programa Regional Vivienda y Hábitat América Latina 2014-2017" de We Effect y sus socios. We Effect. 2016.

BUDUSSIAN, P.; GONZÁLEZ, M. Cooperativas de vivienda de ahorro previo: aproximación a las lógicas de integración y gestión para su inserción urbana - Estudio de Casos. **Tesina del Curso Producción de Vivienda con Asesoramiento del Centro Cooperativista Uruguayo.** Facultad de Arquitectura, UdelaR. Montevideo, 2015.

BUENDIA, A. R. Palo Alto y las cooperativas de vivienda en México. Centro Urbano, 2019. Available at: https://centrourbano.com/opinion/palo-alto-y-las-cooperativas-de-vivienda-en-mexico/. Access in: 09 fev. 2020.

CANNETIERI, T.; MACHADO, B. R. Dominação da formamercadoria nos territórios populares? Uma análise a partir da ocupação urbana Dandara. **Revista Indisciplinar**, v. 5, n. 1, 2019.

CARVALHO, H. R. de S. Habitação social no Brasil e no México: notas sobre transformações nas políticas e na produção de mercado da moradia. Dissertação (Mestrado em Habitat) - Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo. São Paulo, 2016.

CASAS, M. P.; TORNER, F. M. Prevención de asentamientos informales a través políticas de expansión urbana de lotificación con servicios para familias de bajos ingresos: El caso de León Sureste, Nicaragua. **Working Paper WP17MP1SP**. Lincoln Institute of Land Policy, 2017.

CASTILLO, A. del; VALLÉS, R. (org.). Cooperativas de vivienda en Uruguay. Medio Siglo de Experiencias. Montevideo: Facultad de Arquitectura Universidad de la República, 2015.

CASTRO, D. et al. Apuntes del pasado para la vida digna. **Revista Contrapunto**, n. 3, 2013.

CAZÈRES, J. L. La base jurídica. *In*: NAHOUM, B. (comp.) **Una historia con quince mil protagonistas**. Las Cooperativas de vivienda por ayuda mutua uruguayas. Montevideo: Espacios Públicos y Edifica- ciones, Intendencia Municipal de Montevideo; Junta de Andalucía, Consejería de Obras Públicas y Transporte, Dirección General de Ar- quitectura y Vivienda; Agencia Española de Cooperación, 2008, p. 34-43.

CCVAMP. Central de Cooperativas de Vivienda por Ayuda Mutua del Paraguay - Página Fora do Ar, acessada através da **plataforma Internet Archive** - Arquivo mais recente: o1 de Janeiro de 2019, 2019. Available at: https://web.archive.org/web/20190101073640/http://www.ccvamp.coop.py/. Access in: 04 mar. 2022.

CENTRO COOPERATIVISTA SUECO. **El camino posible**. Producción Social del Hábitat en América Latina. Montevideo: Ediciones Trilce, 2011.

CEPAL. **Panorama social de América Latina, 2020.** Comisión Económica para América Latina y el Caribe. Santiago. 2021.

COCEAVIS. **Cosechando colectividad cooperativa**. Las cooperativas de vivienda y sus huertos organopónicos en Centroamérica. San Salvador: We Effect, 2017.

COCKBURN, J. C. Titulación de la propiedad y mercado de tierras. **EURE**, v. 37, n. 111, p. 44-77, 2011.

COLECTIVO HABITAT POPULAR. Introducción a los tipos de propiedad y seguridad de tenencia. YouTube, 2021. Available at: https://www.youtube.com/watch?v=DH65LczyslY. Access in: 13 out. 2021.

CORREA, P. Guendalizaá, la tenencia social de la tierra en la ciudad. La Coperacha, 2014. Available at: https://lacoperacha.org.mx/cooperativa-vivienda-Guendalizaa-tenencia-social-tierra-a-la-ciudad/. Access in: 08 mar. 2022.

DAMBRAUSKAS, A.; GONZÁLEZ, G. La irradiación latinoamericana de la experiencia. *In*: NAHOUM, B. (comp.) **Una historia con quince mil protagonistas**. Las Cooperativas de vivienda por ayuda mutua uruguayas. Montevideo: Espacios Públicos y Edificaciones, Intendencia Municipal de Montevideo; Junta de Andalucía, Consejería de Obras Públicas y Transporte, Dirección General de Arquitectura y Vivienda; Agencia Española de Cooperación, 2008, p. 166-179.

DARDOT, P.; LAVAL, C. Propriedade, apropriação social e instituição do comum. **Tempo Social**, v. 27, n. 1, p. 261-273, 2015.

DOMÍNGUEZ, M. S. FUCVAM: cooperativismo de vivienda, de los barrios en Montevideo a una alternativa contrahegemónica en otros Sures. **Interface: a journal for and about social movements**, v. 9, n. 1, p. 448-476, 2017.

DUYNE BARENSTEIN, J. et al. Struggles for the decommodification of housing: the politics of housing cooperatives in Uruguay and Switzerland. **Housing Studies**, v. 37, n. 6, p. 966-974, 2021.

ESCOBAR, A. "El territorio es la vida y la vida no se viende: se ama y se defiende": El territorio como lenguaje y como tejido~mundo. Apresentação oral no evento Thinking Territory in Latin America - LASA 2019, Nuestra America: Justice and Inclusion. Boston, 2019, 2019. Available at: https://www.youtube.com/watch?v=_gNhpRC1ARA. Access in: 15 ago. 2020.

ESTIMA, F. O quilombo ainda é um espaço de resistência. **Revista Teoria e Debate**, n. 70, p. 38-43, 2007.

ETSAM - UPM. **Minas Polvorilla**: Arquitectura y Diseño Urbano, con Recuperación Cultural y del Paisaje (Iztapalpa, México). Ciudades para un Futuro más Sostenible - Hábitat - Escuela Técnica Superior de Arquitectura de Madrid — Universidad Politécnica de Madrid, 2004. Available at: http://habitat.aq.upm.es/dubai/04/bp2665.html. Access in: 08 mar. 2022.

FAGOTH, L. E. T. Honduras. Propiedad colectiva del suelo y la vivienda. Pasado, presente y futuro. *In*: La vivienda, entre el derecho y la mercancía las formas de propiedad en América Latina. Montevideo: Ediciones Trilce, 2014.

FECOVI. **Quiénes Somos** - Fecovi. FECOVI, [s.d.]. Available at: https://fecovi.coop/web/quienes-somos/. Access in: 20 jun. 2021.

- FERREIRA, A. R. Os limites do reconhecimento do ocupante como sujeito da política fundiária: uma reflexão sobre corpos que não importam. *In*: CHIARELLO, F.; REGINA, L.; PIRES, G. M. (coord.) **Novos paradigmas da regularização fundiária urbana**: estudos sobre a Lei nº 13.465/2017. São Paulo: Edições Almedina, 2019.
- FERREIRA, J. S. W. (coord.). **Produzir casas ou construir cidades?** Desafios para um novo Brasil urbano. Parâmetros de qualidade para a implementação de projetos habitacionais e urbanos. São Paulo: LABHAB; FUPAM, 2012.
- FIDEICOMISO DE LA TIERRA. Fideicomiso de la Tierra del Caño Martín Peña, [s.d]. Available at: http://fideicomisomartinpena.org/. Access in: 17 fev. 2021.
- GAGO, V. A razão neoliberal: economias barrocas e pragmática popular. São Paulo: Editora Elefante, 2018.
- GAGO, V. A potência feminista ou o desejo de transformar tudo. São Paulo: Editora Elefante, 2020.
- GARCÍA, A. Campamento de Pioneros. Producción Social del Hábitat (HIC-AL), [s.d]. Available at: https://produccionsocialhabitat.wordpress.com/galeria-de-casos/pioneros-kaika-shi/#:~:text=Resumen%3A%2oLos%2oCampamentos%2ode%2oPioneros,colectiva%2oy%2oel%2otrabajo%2osolidario. Access in: 10 fev. 2022.
- GHILARDI, F. H. Cooperativismo de moradia em Montevidéu e autogestão habitacional no Rio de Janeiro: as basessociais, políticas e econômicas da produção social do hábitat na América Latina. Tese (doutorado) Universidade Federal do Rio de Janeiro, Instituto de Pesquisa e Planejamento Urbano e Regional, Programa de Pós-Graduação em Planejamento Urbano e Regional. Rio de Janeiro, 2017.
- GONZÁLEZ, G. **Una historia de FUCVAM**. Montevideo: Ediciones Trilce, 2013.

GONZÁLEZ, G. Un ejemplo de cooperación Sur-Sur. A trece años de la expansión del "Modelo FUCVAM" en Centroamérica. **Vivienda Popular**, n. 28, 2016.

GUERREIRO, I. USINA 25 anos - Comuna Urbana D. Hélder Câmara. **ArchDaily**, 2015. Available at: https://www.archdaily.com.br/br/767961/usina-25-anos-comuna-urbana-d-helder-camara. Access in: 15 abr. 2021.

HABITAT EN MOUVEMENT. Les Coopératives de logement autogérées à Cochabamba; une proposition de la société civile qui attend une réponse de l'État pour prospérer. **Habitat En Mouvement - Tumblr,** 2015. Available at: https://habitatenmouvement.tumblr.com/post/107449537600/les-cooperatives-de-logement-autogerees-a. Access in: 13 out. 2021.

HÁBITAT PARA LA MUJER COMUNIDAD MARÍA AUXILIADORA. Esta es nuestra historia y estos nuestros sueños! Nuestro perfil y lecciones de nuestras mejores prácticas. Cochabamba, 2014.

HABITAT PARTICIPATIVO ASOCIACIÓN CIVIL. **Propuesta de diseño participativo para vivienda nueva**. Cooperativa Palo Alto. Línea de Investigación ADCP FA-UNAM/Especialidad de Vivienda UNAM. Ciudad de Mexico, 2015.

HARVEY, D. Do administrativismo ao empreendedorismo: a transformação da governança urbana no capitalismo tardio. *In*: **A produção capitalista do espaço**. São Paulo: Annablume, 2005.

HIC-AL/GRUPO DE TRABAJO DE PSH. Cooperativa Guendaliza'a. Producción Social del Hábitat (HIC-AL), [s.d.]. Available at: https://produccionsocialhabitat.wordpress.com/galeria-de-casos/guendaliza/. Access in: 08 mar. 2022.

- HIC-AL/GRUPO DE TRABAJO DE PSH. Experiencias transformadoras de Producción Social del Hábitat en América Latina, 2016. Available at: https://www.researchgate.net/publication/330117904_Experiencias_transformadoras_de_Produccion_Social_del_Habitat_en_America_Latina. Access in: 09 fev. 2022.
- HIC-AL/GRUPO DE TRABAJO DE PSH. **Utopías en construcción**: experiencias latinoamericanas de producción social del hábitat. Mexico, 2017.
- HIRAO, F. H. **As questões habitacional e urbana na Venezuela contemporânea**. Dissertação (mestrado) Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo. São Paulo, 2015.
- HUGUENIN, J. P. O. O território do homem comum: constituição e apropriação cotidiana do espaço em cooperativas habitacionais. Rio de Janeiro: Letra Capital, 2013.
- IPHAN. Inventário Nacional de Referências Culturais: manual de aplicação. Apresentação de Célia Maria Corsino. Introdução de Antônio Augusto Arantes Neto. Instituto do Patrimônio Histórico e Artístico Nacional. Brasília, 2000.
- IPHAN. **Anexo 5** Informações Sobre o INRC. Portal IPHAN, 2021. Available at: http://portal.iphan.gov.br/uploads/ckfinder/arquivos/Anexo%205(4).pdf. Access in: 09 abr. 2021.
- KAIKA-SHI. Campamento de Pioneros Kaika Shi La Vega, [s.d]. Available at: https://campamentokaikashi.wixsite.com/kaikashi/kaika-shi. Access in: 14 out. 2021.
- LA COPERACHA. **Cooperativa de Vivienda Palo Alto**. La Coperacha, 2018. Available at: https://lacoperacha.org.mx/palo-alto-cooperativa/. Access in: 09 fev. 2022.
- LAGO, L. **Autogestão habitacional no Brasil**: utopias e contradições. Rio de Janeiro: Letra Capital, 2012.

- LAZARINI, K. Luta por moradia e autogestão em Buenos Aires: da crise à construção popular do hábitat. Dissertação (mestrado) Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo. São Paulo, 2014.
- LEI DA AUTOGESTÃO JÁ. El Salvador. **Lei da Autogestão Já**, [s/d]. Available at: https://leidaautogestaoja.org.br/estudos-de-caso/el-salvador/. Access in: 18 fev. 2022.
- LITSEK, F. C. A. A experiência dos termos territoriais coletivos na promoção de moradia acessível e resistência à mercantilização da terra. **e-metropolis**, n. 39, ano 10, 2019.
- LORENCES, A. G. El Programa de Autogestión para la Vivienda y el acceso participativo a la vivienda en la Ciudad Autónoma de Buenos Aires (2000–2018). Tesis de Maestría. FLACSO Sede Académica Argentina. Buenos Aires, 2021.
- MADDEN, D.; MARCUSE, P. In defense of Housing. New York: Verso, 2016.
- MARIĆ, M. Property is a verb: on social ownership in Yugoslavia. **The Property Issue: Ground Control and the Commons**, p. 70-77, 2018.
- MARIELLE, J. D. Las cooperativas de vivienda por ayuda mutua en América Latina. *In*: GALINDO, F. J. de la T.; VELÁZQUEZ, B. R. R. (coord.) **Ciudad en Disputa**: política urbana, movilización ciudadana y nuevas desigualdades urbanas. Ciudad de México: Universidad Autónoma Metropolitana, p. 173-190, 2020.
- MEDINA, J. L.; BUTRÓN, H. A. CACVAM: **Cooperativismo de altura.** Producción Social del Hábitat (HIC-AL), [s/d]. Available at: https://produccionsocialhabitat.wordpress.com/galeria-decasos/cacvam/. Access in: 14 fev. 2022.
- MENDIVE, C. Cartera de Inmuebles de Vivienda de Interés Social (CIVIS): alternativas para la provisión de suelo en Uruguay. Documento de Trabajo del Lincoln Institute of Land Policy. [S.I.]. 2013.

MIRANDA, A. C. M. de. Autogestão habitacional no Rio de Janeiro: o acúmulo de experiências e a influência do Programa Minha Casa Minha Vida Entidades. Dissertação (mestrado) - Universidade Federal do Rio de Janeiro, Instituto de Pesquisa e Planejamento Urbano e Regional, Programa de Pós-Graduação em Planejamento Urbano e Regional. Rio de Janeiro, 2019.

MIRONOVA, O. The value of the land: how community land trusts maintain housing affordability. **The Property Issue**. Ground Control and the Commons, p. 64-69, 2018.

MOREIRA, F. A. **O lugar da autogestão no Governo Lula**. Dissertação (Mestrado em Habitat) - Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo. São Paulo, 2009.

MOVIMIENTO DE POBLADORAS Y POBLADORES. Informe Popular del Movimiento de Pobladores y Pobladoras de Venezuela al Comité de Derechos Económicos, Sociales y Culturales de las Naciones Unidas sobre la cuestión del Derecho a la Vivienda y la Ciudad en el país. Examen del Estado de la República Bolivariana de Venezuela sobre el cumplimiento del Pacto de Derechos Económicos, Sociales y Culturales. Venezuela, 2015.

NAHOUM, B. (comp.). Una historia con quince mil protagonistas. Las Cooperativas de vivienda por ayuda mutua uruguayas. Montevideo: Espacios Públicos y Edificaciones, Intendencia Municipal de Montevideo; Junta de Andalucía, Consejería de Obras Públicas y Transporte, Dirección General de Arquitectura y Vivienda; Agencia Española de Cooperación, 2008.

NAHOUM, B. Algunas Claves. **Reflexiones sobre aspectos esenciales de la vivienda cooperativa por ayuda mutua**. Montevideo: Ediciones Trilce, 2013.

OLIVEIRA, F. de. O vício da virtude: autoconstrução e acumulação capitalista no Brasil. **Novos Estudos CEBRAP**, n. 74, p. 67-85, 2006.

- ORTIZ FLORES, E. Hacia un hábitat para el buen vivir. Andanzas compartidas de un caracol peregrino. México D.F: Rosa Luxemburg Stiftung, 2016.
- PEDRO, B. H. et al. Construcción autogestionaria de hábitat por cooperativas: derecho a la ciudad y a la centralidad en la Ciudad de Buenos Aires, Ley N°341/00. Buenos Aires: Universidad de Buenos Aires. Secretaría de Ciencia y Técnica, 2020.
- PÉREZ, R. M. I.; VELIZ, M. E. Comunidad María Auxiliadora (Bolivia): Construyendo desde la autogestión un hábitat para la mujer. **Entrevista a ROIG**, Diego Marín. Aralnfo, Cochabamba, 24 Outubro 2015. Available at: https://arainfo.org/comunidad-maria-auxiliadora-bolivia-construyendo-desde-la-autogestion-un-habitat-para-la-mujer/. Access in: 14 fev. 2022.
- PERIFERIA. **Buscar un lugar... y construir una comunidad** Comunidad María Auxiliadora, Cochabamba Capacitación Ciudadana. Bruxelles: Periferia, 2014.
- PINEDA, C. E. Entrevista com César Enrique Pineda. 08 abr. 2022.
- PINEDA, C. E. **Acapatzingo**. Construyendo comunidad urbana. Revista Contrapunto, v. 3, p. 49-62, 2013.
- PINEDA, V. Etnografia de una Comunidad Socialista en construccion. Estado, movimientos sociales y gentrificacion, 2016.
- PIZAÑA, C.; LOZANO, E. **Acapatzingo**: el otro mundo en medio de la Ciudad de México. Desinformemonos, 2021. Available at: https://desinformemonos.org/acapatzingo-el-otro-mundo-en-medio-de-la-ciudad/. Access in: 08 mar. 2022.
- QUIÑONEZ, N.; ROJAS, A. **COCEAVIS**: articulando luchas y proyectos de vida colectivos. Producción Social del Hábitat (HIC-AL), [s.d]. Available at: https://produccionsocialhabitat.wordpress. com/galeria-de-casos/coceavis/. Access in: 21 fev. 2022.

RAMÍREZ, J.; CORREA, P. **Palo Alto**: 40 años de una lucha que sigue. La Coperacha, 2012. Available at: https://lacoperacha.org.mx/palo-alto-reportaje/. Access in: 09 fev. 2022.

RECALDE, S. Construyendo una comunidad sostenible: Barrio Cooperativo Kuarahy resĕ. **Resumen de Ponencia** - 8º Conferencia Latinoamericana y Caribeña de Ciencias Sociales. Buenos Aires, 2018.

RIBEIRO, T. et al. Termos Territoriais Coletivos em Assentamentos Informais: adaptando as características do fideicomisso de la tierra Caño Martín Peña de Porto Rico para abordar a insegurança fundiária nas favelas do Rio de Janeiro, Brasil. *In*: DAVIS, J. E.; ALGOED, L.; TORRALES, M. E. H. (eds.) **On Common Ground**: International Perspectives on the Community Land Trust. Madison: Terra Nostra Press, 2020. (tradução por D'ABOIM, Tomás; LITSEK, Felipe; GODINHO, Maria Fernanda; GUILHON, Cynthia).

RIBEIRO, T. F. A propriedade privada no capitalismo sob dominância financeira no Brasil: uma análise a partir do Novo Marco Normativo Nacional de Regularização Fundiária. *In*: **Propriedades em Transformação**: Abordagens Multidisciplinares sobre a Propriedade no Brasil. São Paulo: Blucher, 2018.

RIGHTS AND RESOURCES INITIATIVE. Who owns the world's land? A global baseline of formally recognized indigenous and community land rights. Rights and Resources Initiative, 2015. Available at: https://rightsandresources.org/publication/whoownstheland/. Access in: 03 fev. 2022.

RODRÍGUEZ, M. C. (coord.). Hábitat, autogestión y horizonte socialista. Construyendo con y sin ladrillos. Ciudad Autónoma de Buenos Aires: El Colectivo, 2021.

RODRÍGUEZ, M. C. **Desafiando la Alienación Residencial en Buenos Aires**. ACME: An International Journal for Critical Geographies, v. 19, n. 3, p. 647-664, 2020.

- ROLNIK, R. et al. O Programa Minha Casa Minha Vida nas regiões metropolitanas de São Paulo e Campinas: aspectos socioespaciais e segregação. **Cadernos Metrópole**, v. 17, n. 33, p. 127-154, 2015.
- ROLNIK, R. A cidade e a lei: legislação, política urbana e territórios na cidade de São Paulo. São Paulo: Studio Nobel/Fapesp, 1997.
- ROLNIK, R. **Guerra dos Lugares**: a colonização da terra e da moradia na era das finanças. São Paulo: Boitempo Editorial, 2015.
- SANJINÉS, D.; DUYNE BARENSTEIN, J.. Role of Cooperatives in the Provision of Affordable Housing: an introductory overview. Espazium, 2018. Available at: https://www.espazium.ch/de/node/9415. Access in: 10 jun. 2022.
- SANTO AMORE, C.; SHIMBO, L. Z.; RUFINO, M. B. C. **Minha casa... E a cidade?** Avaliação do programa minha casa minha vida em seis estados brasileiros. [S.l.]. 2015.
- SANTO AMORE, C. et al. Levantamento das situações de moradia precária na Operação Urbana Consorciada Bairros do Tamanduateí. **Relatório Final de Pesquisa**. Peabiru TCA e LabCidade FAUUSP. São Paulo, 2016.
- SANTORO, P. F.; LIMA, P.; MENDONÇA, P. Parcerias Público-Privadas e habitação social: vínculos perversos. *In*: ROLNIK, R. et al. (org.) **Cidade Estado Capital**: reestruturação urbana e resistências em Belo Horizonte, Fortaleza e São Paulo. São Paulo: FAUUSP, 2018.
- SANTOS, A. B. dos. Somos da Terra. **Piseagrama**, n. 12, p. 44-51, 2018.
- SCHACHERREITER, J.; GONÇALVES, G. L. A luta zapatista pelo direito à terra: antecedentes, estratégias e dimensões transnacionais. **Direito e Práxis**, v. 07, n. 13, p. 575-635, 2016.

SOMOS SUR. **SOLIDARIDAD**: La Comunidad Maria Auxiliadora reclama JUSTICIA. Somos Sur, 2012. Available at: https://www.somossur.net/bolivia/politica/testimonios-demovimientos-sociales/1061-solidaridad-con-comunidad-maria-auxiliadora.html. Access in: 14 fev. 2022.

SØRVOLL, J.; BENGTSSON, B. The Pyrrhic victory of civil society housing? Co-operative housing in Sweden and Norway. International Journal of Housing Policy, v. 18, n. 1, p. 124-142, 2018.

SUÁREZ PAREYÓN, A. Las mejores prácticas de la sociedad en la autogestión y la producción habitacional: lecciones aportadas por el análisis de algunos casos en México y América Latina. Primer Encuentro Académico del Fondo de Desarrollo Científico y Tecnológico para el Fomento de la Producción y Financiamiento de Vivienda y el Crecimiento del Sector Habitacional. Ciudad de Mexico, 2010.

SUGRANYES, A.; MORALES, R.; ARAVENA, S. Chile. Buscando alternativas colectivas en un escenario neoliberal. *In*: La vivienda, entre el derecho y la mercancía. Las formas de propiedad en América Latina. Montevideo: Ediciones Trilce, 2014.

SWYNGEDOUW, E. A cidade pós-política. Tradução de Brian Hazlehurst. **E-Metropolis**, n. 8, ano 3, p. 52-62, 2012.

TATUY TVC. ¿Qué pasa en el Campamento de Pioneros Nueva Esperanza en Lara? Tatuy TVC, 2020. Available at: https://tatuytv.org/campamento-de-pioneros-nueva-esperanza/. Access in em: 05 fev. 2022.

THADEN, E.; ROSENBERG, G. Outperforming the Market. Land Lines. Lincoln Institute of Land Policy, 2010. Available at: https://www.lincolninst.edu/ publications/articles/outperforming-market. Access in: 28 abr. 2021.

TONUCCI FILHO, J. B. M. Entre o privado, o público e o comum: repensando os direitos. **Revista Direito e Práxis**, Ahead of Print, Rio de Janeiro, 2021.

TORRES, A.; PINEDA, V.; REY, E. Las disputas urbanas en la Caracas del siglo XXI: retos y potencialidades en la producción social del suelo. **Territorios**, Bogotá, n. 36, p. 47-68, 2017.

TRAPP, H. Capital Home. The Property Issue. **Ground Control and the Commons**, p. 32-39, 2018.

UGALDE, A. R. Panamá. Autonomía y defensa del territorio en Guna Yala. *In*: **La vivienda, entre el derecho y la mercancía**. Las formas de propiedad en América Latina. Montevideo: Ediciones Trilce, 2014.

UNIÓN INTERAMERICANA DE MUNICIPALISTAS. La cooperativa de vivienda 13 de Enero: desarrollo sustentable con equidad y empoderamiento para las mujeres. Datos Generales de la Experiencia. Unión Interamericana de Municipalistas, 2018. Available at: http://comunidades.uimunicipalistas.org/genero/wp-content/uploads/sites/5/2018/07/LA-LIBERTAD-La-cooperativa-de-vivienda.pdf. Access in: 24 fev. 2022.

URBAMONDE. **Cooperativa Guendaliza'a** (Vídeo). urbaMonde - Youtube, 2017. Available at: https://www.youtube.com/watch?v=jRKvKBeZqQA. Access in: 08 mar. 2022.

VILA, C. La vivienda social en el Paraguay. *In*: **El camino posible**. Producción Social del Hábitat en América Latina. Montevideo: Ediciones Trilce, 2011.

WE EFFECT. La vivienda, entre el derecho y la mercancía. Las formas de propiedad en América Latina. Montevideo: Ediciones Trilce, 2014.

WE EFFECT PARAGUAY. **We Effect en Paraguay 1996-2019**. Historias de cooperación mutua para aportar a un mundo justo y sostenible, libre de pobreza, con igualdad de género. Paraguay: We Effect Paraguay, 2020.

WOLKMER, A. C.; FERRAZZO, D. Uma abordagem descolonial sobre democracia e cultura jurídica na modernidade. **Revista Brasileira de Estudos Políticos**, n. 120, p. 55-105, 2020.

WORLD HABITAT. 'Hábitat para la Mujer' — Comunidad María Auxiliadora. World Habitat, 2008. Available at: https://world-habitat.org/es/premios-mundiales-del-habitat/ganadores-y-finalistas/habitat-para-la-mujer-comunidad-maria-auxiliadora/. Access in: 14 fev. 2022.

ZAPATA, M. C. Entrevista com Maria Cecilia Zapata. 31 Janeiro 2022.

ZIBECHI, R. La comunidad autónoma urbana: el mundo nuevo en el corazón del viejo. *In*: HOPKINS, A.; RAMÍREZ, C. E. P. **Pensar las autonomías**. Experiencias de autogestión, poder popular y autonomía. México: Bajo Tierra A.C., 2021.

Black skin, white fear

about interdictions and the metropolitan non-being¹

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Introduction

This paper is an attempt to think about the prohibitions (SILVA, 2013; AZEVEDO, 2021) on the black body as an elementary part of the space-time composition that fills the sense of the metropolis in the current period. From long-term milestones, this process has proved valid in another kind of metropolis, temporally consistent with the political-administrative characteristics of the colonial spectrum (BRAUDEL, 2014; RIBEIRO, 2017). Demarcating the relevance of space seems a challenging endeavor in the planning phase. In the introduction of the famous "Black Skin, White Masks", by Frantz Fanon (2020), – a fundamental bibliography for the construction of this study – the Martinican philosopher and psychiatrist makes clear that his work leans towards temporality. It seems difficult to make a direct criticism on the author in this sense, especially given the lack of depth of some debates during the period in which the book was written, but we claim the imaginative nature of Fanon's reading

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of spatial reasoning. Therefore, our main objective is the search for Fanon's perspective about the importance of circumstances involving the urban reality forged by whiteness, which prohibits black existence in the production of space. Therefore, more than just temporality, Fanon's indispensability also refers to spatiality, an elaboration that reproduces itself mutually and conditions space to time, but also the opposite.

The first part of the text circumvents the notion of "forbidden" space", a category proposed by the feminist geographer Joseli Silva (2013) with regard to gender studies. The intention is to associate this notion with the conformation of the metropolis in an abstraction movement that recognizes some bodies and subjects that are evidently more interceptable, having their discourses in space retained not by heteronormativity, as discussed by Silva (2013), but by whiteness, implying the naturalization of both subject submission and capture (of long-lasting effects). During the construction, the spatial and temporal world of whiteness will be the marker of the immediate relationship between the "spatial and temporal world" and the "black body", since the white problem turns into a black problem, with regard to space (when it is produced from a logic supported by a white desire). The forbidden space enunciated by Silva (2013) in dialogue with Foucault (2014[1996]), with regard to black life, is guided by a series of junctions originating from a white reality. The effects of this circumstance are symptomatic in the patrimonialization of the city (GUIMARÃES, 2015) or in public security policies (OLIVEIRA, 2014, 2019, 2020; PATERNIANI, 2016; VALENTE, 2017), and are reflected in the way black men and women produce metropolitan spaces in its physical, mental and social sense, according to Lefebvre (2013).

The Lefebvrian bibliography, in fact, supports good part of the discussions presented here (which demand some valuable considerations in relation to the intentions that proclaim the perspective) precisely so as not to be interpreted as an unusual postulate of its appearance, considering that, although permeated by racial division, it is evidently focused on the production of space. Regarding not only space, but mainly the complexity of its production, Lefebvre (2016) is emphatic in highlighting *contradiction* as a founding ingredient for understanding urban reality. Following his rationality, *quotidian* and *urban* are, at the same time, products and producers, since methodologically "they occupy a social space generated by themselves and vice versa" (p. 21). This encounter – it is worth remembering – transmutes the space into a socially produced entity that is decisive for the essential content of social relations, therefore, product-producer.

For Lefebvre (2016), the urban-quotidian-space continuum is characterized as a global reality "and does not designate a minor aspect of social reality" (p. 33). Resulting from this configuration, emerges the necessary amplitude for the right to the city. Such an appeal "means the right of city-citizens and the groups they constitute to appear on all networks and circuits of communication, information, exchanges (LEFEBVRE, 2016, p. 33). This reality depends, in one way or another, on the notion of centrality, not in absolute terms, but in the sense of prominence of a certain part of the space where the encounter of subjects and objects is manifested.

From the perspective of the French philosopher, "excluding groups, classes, individuals from the urban area also implies excluding them from civilization, and even from society (LEFEBVRE, 2016, p. 34). In racial terms, these instruments of exclusion, within

the framework of the urban reality of a country crossed by the slavery philosophy, black life is replicated not only by the denial of the production of civilization and society – in a sense foreseen by Lefebvre (2016) –, but it is framed within a place of inhumanity, as indicated by Fanon (2020). In another passage – also important for our reflections based on the author's view, Lefebvre states that

This right of the citizen (if one wants to say it like that: of "man") announces the inevitable crisis of the centers established on separation and that establish it: centers of decision-making, wealth, power, information, knowledge, which launch into peripheral spaces all those that do not participate in political privileges (2016, p. 34).

According to Lefebvre (2016), the right to the city "means, therefore, the constitution or reconstitution of a spatio-temporal unity, (the establishment of a sense) of reunion instead of fragmentation" (p. 34). For the French philosopher, in line with Aristotelian postulates, the urban, tensioned by the idealized encounter (which gives meaning to the polis) needs to be considered in vew of the imagetic content of the subject - in this case, individual and collective. Therefore, considering the right to the city demands the elaboration of spatial reasoning linked to the realization of being and non-being. This reasoning, which involves knowledge about the realization of oneself (of human life), or its impediment, "is not defined as 'science of space' (ecology, geopolitics, equistics, planning, etc.), but knowledge of production - the production of space" (LEFEBVRE, 2016, p. 35). Therefore, more than "right to the city", we are talking about the "production of space", dealing with the theoretical organization of work which demands the necessary depth to be reproduced in the metropolitan senses that involve black life.

The challenge of associating Henri Lefebvre's Marxism and the racial issue theories is thorny, but not impossible. In that sense, two initial considerations are extremely valid: the first concerns the removal of possible anachronisms (since the spread of the adopted perspective, in Europe, seems recent); the second refers to an attempt to avoid merely theoretical reflections, abstractions disconnected from everyday life and distant from a concrete reality, an argumentation contrary to the methodological perspective designed for this article. Again, it is crucial to emphasize that more important than promoting something new is promoting something appropriate (GUIMARÃES, 2020).

In this endeavor, I adopt the radicality of Lefebvre's method regarding the relevance of space in a totalizing perspective – a logical and contradictory system that understands space as a fundamental entity from a practical and strategic approach. Based on these milestones, it is essential to question what the role of space is in perceiving the racial issue, and mainly, in apprehending how a certain racialized theoretical alignment reconditions the features involving space and its production.

For Lefebvre (2016), one should not "start from a "viewpoint of class"; it is necessary to get to it" (p. 39), having said that, comparatively, it does not seem possible to prioritize the link between space and "blackness", although it is necessary to get to it. This occurs because (as inspired by Lefebvre and Fanon, 2020), whiteness and its opposing branches constitute the same logical, contradictory and violently supportive system. "Here, there is a dilemma: if we are imprisoned in a certain system, our words and our conceptions are part of it" (LEFEBVRE, 2016, p. 36).

The words and concepts that compose this totality may intercede in space, "an intermediary [role] in all senses of this term, that is, a means and an instrument, an environment and a mediation" (LEFEBVRE, 2016, p. 44). This data, therefore, works as an object in the hands of an agent in its individuality or collectiveness (exemplified by Lefebvre in the figure of the dominant power that can be that of technocrats, bourgeoisie or State itself), since its reproduction launches the representations as a reality of the entire global society, or, as for work, consolidated as a prospectus for the metropolis in its entirety. The leading role of these representations is explicitly permeated by whiteness – reproduced in the most different possibilities regarding the metropolis – a notably contradictory and conflictive reality amidst the discourses that give rise to its production.

This text is subdivided into three main parts: the *first* is concerned with the characterization of the discourse by means of the spatial inscriptions of black men and women, often interdicted amid the reproduction of urban life by whiteness. Silva's (2013) interpretation about discourse in Foucault (2014) qualifies it as an elementary trait; the *second* focuses on the conjecture of whiteness as a definitive demarcator of race and racism within space – an organizational chart projected over a long period of time and which restrains the existence of the racial separation admitting one being can be considered human and the other cannot. This segment of the article brings together Fanon's analysis of the zone of non-being based on the influence of W.E.B. Du Bois, in addition to reconciling the importance of Brazilian bibliographical production on the whiteness issue and its psychic branches. The *third* and final section relates white fear – the indispensable fuel of whiteness – to the long-

term milestones that outline this reality until the current days. In this segment, the appreciation of the 19th century relevance seems necessary, whether because of the accentuation of instruments of control of black bodies in urban space amidst abolitionist ideas, or, and mainly, due to the strength of libertarian ideals arising from the Haitian Revolution.

On discourse

Silva's proposal, characterized by the peculiarities of the discursive matter, makes direct reference to James Duncan (1990) and his understanding of space as a text. Even though the author's ideas are supposedly more inclined to the content of the landscape category, the feminist geographer values Duncan's intellectual effort in order to associate geographic imagination with discourse analysis. In addition, Silva is also inspired by Foucault's (2014) propositions in "The Order of Discourse", a text which highlights space as an important analytical object with regard to power of those who can or cannot speak.

Discourse from Foucault's perspective goes beyond the idea of language, constituting a web of actions that have meanings and articulate other elements beyond language. Discourses constitute the objects they deal with simultaneously. Thus, space is simultaneously formed by discourse and part of it, constituting a continuous movement of spatial reality permeated by power relations. Power produces certain social knowledge that takes place in everyday spatial practices and, therefore, discourses are irreducible to language alone (SILVA, 2013, p. 156).

Foucault (2014) presents some exclusion procedures in discursive reproduction, which, obviously, are also based on the spatial dimension. For the French philosopher, there are fundamental interdictions at the intersection between discourses: the taboo of the object, the ritual of the circumstance and the privileged right of the enunciating subject. These elements perform a relational bulge that, according to the philosopher, are reproduced in sexuality and politics, and allow certain theoretical deviations to highlight how much the racial issue, at least in terms of the work, was extraneous to the perspective.

Still with regard to gender, Silva (2013) offers the main imagery ingredient for this text – "a dense and complex grid that prevents or makes it difficult for dissonant groups (with hegemonic sexuality) to produce their own spatial discourses" (p. 158). It is worth highlighting that our intention is not to establish a comparative link between the production stemming from the prohibited space within the framework of heteronormativity and whiteness, much less to oppose or hierarchize such different objections with regard to urban quotidian life. Our focus is, precisely, to glimpse at Silva's (2013) outstanding category, carrying out subjects and bodies that also have their spatial discourses demarcated or riddled by different systems of discursive denial. The following quote brings important consideration about the potential of the opening proposed by the author:

Thus, the prohibited space is conceived as the effect of the spatial discursive order in which regulatory practices are carried out by those who consider themselves within the order and have the power to exercise it, as well as to establish the ways in which certain subjects must be excluded. The prohibited space is formed by the power relations

that are omnipresent and, thus, its constitution is seen as something natural, being incorporated by everyone who is part of the discourse. It reveals itself with all its strength when the order is challenged, and the attempts to transgress the order reveal the spatial limits that must not be exceeded for the order to be maintained (SILVA, 2013, p. 158-159).

In line with Foucault (2014) and his main discursive exclusion procedures, Silva (2013) brings together the three essential archetypes of interdiction, after all "it is well known that one does not have the right to say everything, that one cannot say anything in any circumstance, in short, that no one can talk about anything" (FOUCAULT, 2014, p. 9). The Brazilian geographer, therefore, enumerates this set based on what cannot be said, lists the discourses that can only be exposed and communicated in specific situations; and in addition, she highlights that certain discourses cannot be delivered by any subject, since they depend on certain positions of power – specificities related to the previously mentioned taboo of the object, the ritual of the circumstance and the privileged right of the enunciating subject. For Foucault (2014), "there, we have the 'game' of three interdictions that intersect, reinforce or compensate each other, forming a complex grid that never stops changing" (p. 9).

Maurício Ferreira and Clarice Traversini (2013), also interested in Foucault's discursive analysis, articulate the procedures carried out both inside and outside the discourse. Silva (2013) reminds that according to the authors, the interdiction is consolidated outside, intrinsically linked to desire and power (intentionally, as said, semantically forged in sexuality and politics), the "separation", often characterized by rejection, and the "will to truth". Silva (2013) does not advance in the direction of these

other principles of exclusion enunciated by Foucault (2014), which, as well as in Ferreira and Traversini's analysis, we also attribute relevance due to the possibilities of theoretical directions based on racial reasoning.

From this perspective, as a representation of separation, the French philosopher highlights the gap between reason and madness. As underlined by Ferreira and Traversini (2013), "it is through the word that the madman is identified" (p. 212). According to Foucault (2014), the figure of the madman was characterized by the exemplification of a subject whose speech is full of impediments to its circulation. The fact is that "the word was only given to him symbolically, in the theater where he performed, unarmed and reconciled, since he played the role of masked truth" (FOUCAULT, 2014, p. 11).

What has been previously ignored or taken as an exceptional representation of a non-common reason and separated from those considered reasonable, the madman's speech is (now) heard by doctors, pedagogues, psychologists, who nevertheless operate the separation: on the one hand, the patient to whom the opportunity to express himself is given; on the other, the subject who occupies the position of authority in the discourse, who allows the madman to speak and interprets and analyzes his speech, based on what is considered truth (FERREIRA and TRAVERSINI, 2013, p. 212).

The third exclusion procedure is consolidated by the antagonism between true and false, a performance that is modified according to the historical period and the spatial circumstances of its realization (FERREIRA and TRAVERSINI, 2013), which underlies the exemplification used by Foucault (2014) with genetic traces that date back from the Greek poets and residual propositions in

the formation of modern science. In this case, the discourse is oriented intersectionally to other exclusivist procedures, such as the forbidden word and again the imaginative separation of madness, although with the support of an institutional prospectus prepared via coercion. In the words of the French philosopher:

Ultimately, I believe that this desire for truth, supported by institutional support and distribution, tends to exert on other discourses – I am always talking about our society – a kind of pressure and a sort of coercive power. I think about the way in which Western literature had to seek support, for centuries, in the natural, in the credible, in sincerity, in science too – in short, in true discourse. I also think about the way in which economic practices, codified as precepts or recipes, eventually as morals, have sought, since the 16th century, to ground themselves, rationalize themselves and justify themselves based on a theory of wealth and production; I also think about the way in which a group as prescriptive as the penal system sought its support or justification, first, it is true, in a theory of law, then, from the 19th century onwards, in sociological, psychological, medical and psychiatric knowledge: as if the word of the law itself could no longer be authorized, in our society, except through a discourse of truth (FOUCAULT, 2014, p. 18).

The interdependence regarding the formats of discursive control expresses the essential meaning of Silva's (2013) discussion, especially when the author highlights the dissonant possibility of other discourses present in the city's experience. As the author focuses on the transvestite experience, she demonstrates that subjects or groups that are beyond the discourse of heteronormativity will suffer immediate impacts from the interdiction mechanisms presented in the Foucauldian approach. In addition, in the composition among other archetypes of discourse control for Foucault (2014), the will to truth (become true), also consolidates an apparatus characteristic of urban daily life in our work, which is whiteness.

Whiteness, then, is configured as the main marker of the spatial interdictions that involve the condition of black people in Brazilian metropolises. For Bento (2000), this relationship is intertwined with the recognition of black people as a problem to be studied and investigated, a characterization that is ratified through the superposition of white necessarily linked to the moral exclusion of the black body, which can be based on milder forms, such as discrimination, or more severe ones, in the form of genocide. According to Bento (2000), the processes of discrimination and genocide are permeated by a circumstantial element – fear. "The fear of what is different, and to some extent, the fear of what is similar to oneself in the depths of the unconscious" (p. 7), in the author's words. This white paranoia meant (supported by a broader perspective in time) processes-projects of whitening in some State policies in Brazil, such as the encouragement of European immigration in the post-abolition period.

The fact is that it is necessary to analyze the processes of whiteness regarding it as an issue to be based on studies focused on space. The notion of whiteness is supported by the clinical literature of Fanon (2020) and Neusa Santos Souza (2021), as well as by authors concerned with whiteness as a circumstantial element to think about the historical plot of Brazil and the spatial consequences of this process. For Oliveira (2020), one of the indispensable bibliographies of this theme in current Brazilian Geography – whiteness – has forged blackness as a spatial problem.

The author's approach implies there are spatial inscriptions of racism performed in whiteness that make black people an interjection in space, characterizing them as an abject body, a being to be interrupted.

Studies on whiteness in Brazil gained breadth and projection with the contributions of Alberto Guerreiro Ramos, and his writings about the "pathology of white Brazilians". From the author's viewpoint, it would be necessary to claim the constitution of whiteness as a problem for the understanding of racism, which was neglected in the literature of the time. On a broader scale, Camila Moreira de Jesus (2012), very suitably, points to the relevance of W.E.B Du Bois and Frantz Fanon for the generalization of studies on the privileges of being white.

Initially, Fanon (2020) mentions the inseparability of black and white, because one invents the other, even though they are positioned in different branches. They are two separate fields, closed to one another. The black in his blackness and the white in his whiteness. The elaboration of the parts of this "latifundium" is consolidated as the content of these fields is filled with common, although opposing, traits. Paranoia, the colonial dependence syndrome and the dialectical reason that opposes superiority "epidermization" of inferiority, cross and place these two paths side by side.

About the veil: white problem

As proposed, *paranoia* and *fear* contributed to the solidification of spatial contexts prohibiting black life. It is in this sense that Fanon delves deeper into improving the understanding of white misery in relation to black people, especially when we criticize the notion of "black problem", a discussion that will be very well elaborated by Guerreiro Ramos, but which appears in W.E.B. Du Bois before any other work. For Fanon, in Europe there is evil

represented by black people. A little further than the words of the Martinican psychiatrist, we would say that the knowledge inherited from the coloniality attaches the poverty of the world to the fact of being black.

The hangman is the black man, Satan is black, we talk about darkness, we are black when we are dirty – whether that applies to physical dirt or moral dirt (...). In Europe, black people represent, whether concretely or symbolically, the bad side of the personality. Until we understand this proposition, we will be condemned to talk in vain about the "black problem" (2020, p. 200).

Fanon's quote gives undeniable contours to the necessary understanding of the whiteness structure, again, in a conception that shifts the semantics of the "problem" to whiteness, especially in the sense that the black problem is, initially, preceded by the white problem. For Joaze Bernardino-Costa (2019), a sociologist with relevant study developed on the analytical convergences between Fanon, Du Bois and Guerreiro Ramos, the concern with the "black problem" on the part of the last two, occurred through a hegemonic national rationality, in the States United for Du Bois, and in Brazil for Guerreiro Ramos, both protected by the "veil" (DU BOIS, 2021) of racism.

Du Bois, in the remarkable *Almas do povo negro* (2021) [Souls of Black People], in the initial chapter of the book, offers a personal account of the racist looks proposed by the question "How does it feel to be a problem?" (p. 21). And then he replies: "being a problem is a strange experience – peculiar even for me, as I have never been anything other than that. It is in the first days of joyful childhood that revelation hits a person, all in a single day,

with all its force." In the author's narrative, the first manifestation of his problematic existence occurred at school, with the refusal of a business card given by him to a classmate. "That was when the almost immediate realization came to me that I was different from the others; or similar, perhaps, in terms of heart and vital force and aspirations, but separated from their world by an enormous veil."

This veil, then, appears as an elementary category for the constitution of the black problem in Du Bois. In the last preface to the Brazilian edition of the aforementioned work, Sílvio Almeida (2021) denotes the anguish of the segregation due to the veil - an immediate distortion of the way that blacks and whites see the world, including their own existence. It does not seem exagerated to say that this color line (DU BOIS, 2021) establishes a double myopia, shared by blacks and whites. In Almeida's words about Du Bois' concept:

Blacks and whites live simultaneously in the same world and in different worlds. Blacks and whites are creations of this permanent process of dividing life by a veil in which each side implies a different way of existing. Race is, therefore, an existential condition that, in addition to physical characteristics, is defined by the process of formation of our souls. Racism is, in effect, a process of formation of split and shattered souls, of both black and white (2021, p. 13).

In the same line as Almeida, some commentators on Du Bois, such as England and Warner (2013), Brown (2016) and Melcher (2019) also place the "veil" to an essential position in the discussion of the author. "The veil represents a ubiquitous fracturing of society along racial lines. It is present in the structure and culture of society and in the development and content of a person's identity" (ENGLAND and WARNER, 2013, p. 964).

As predicted in the social environment, the veil is consolidated as a failure that structures two sets of antagonistic and complementary systems, incessantly interactive. On one side, a system elevated to white power and another non-white system, devoid of power and permeated by black inferiority. Therefore, it is essential to highlight the inseparability and fulfillment that the two systems promote each other. According to England and Warner (2013):

Each side of the veil has its own class structure, institutions and culture. Yet the two sides interact with domination and distortion characterizing the cross-veil dynamics. Each side is only understandable in its relationship to the other (p. 964).

The composition of the color line in Du Bois seems inspiring for the constitution of Fanon's zone of non-being, a conception pointed out in the title of the article itself. The Martinican author's prospectus, necessary for the discussions proposed in our textual organization, also preserves the elaboration of two fields, essential to each other. Fanon mentions "two quite dissolving metaphysics" (2020, p. 22, emphasis added). Both systems, revested with narcissism, have their roots crossed by a bias of humanity. Black people want to be white to become human. The white power launched by Du Bois (2021) regarding the color line separated by the veil is concomitant with the contempt for the condition of existence of black people. Either black becomes white or he will not be human. Therefore, "as painful as this realization may seem to us, we are forced to make it: for black people, there is only one destiny. A white one." (FANON, 2020, p. 24). The psychiatrist uses several clinical examples of the psychic alienation of black men and women, especially in the condition that vitalizes love as a structuring aspect of the salvation of the race. On the other hand, he will say that this

reality is only consolidated through a theoretical narrative that has its support in the trapped ego of Anna Freud. The trapped ego gives meaning to the inferiority required to enter the white world and the Martinican author is emphatic in stipulating this suppression of the ego in relation to black people:

"(...) the black, slave to his inferiority, the white slave to his superiority, both behave according to a neurotic guideline. In this logic, we were led to consider their alienation with reference to psychoanalytic descriptions. In his behavior, the black man approaches an obsessive neurotic type or, better said, he is in full situational neurosis. There is in the man of color an attempt to escape his individuality, to nullify his presence. Whenever a man of color protests, there is alienation. Whenever a man of color rejects, there is alienation." (p. 74)

The criticism against the reality of privilege and the prevalence of the white condition in the social environment gained prominence in Brazil. As seen, first with Guerreiro Ramos, but later inspired by the debates surrounding whiteness in the United States in the 90s, whiteness has been a fundamental branch of study in attributing relevance to the issue of race in a country historically permeated by contradictory meanings of miscegenation and racial democracy. In agreement with Piza (2005), Jesus (2012) states that "whiteness starts to be discussed as a stage of awareness and denial of the privilege experienced by the white individual who recognizes the non-existence of the right to structural advantage in relation to black people" (p.2). This stage of awareness, in most bibliographies about whiteness in Brazil, can be explained by biases aligned with psychoanalytic theory, mainly via works such as those developed by Edith Piza, Neusa Santos Souza and Maria Aparecida Bento, a fact that justifies the influences of Fanon and Du Bois as the literary root of this construction.

Lia Shucman (2014), in an article focused on studies on whiteness in São Paulo, advocates there are few researches concerned with the racial issue (of being white) in Brazil. The author proposes two main hypotheses to justify this issue: the first based on the very personality of the white psychologist, the majority in the country, who do not recognize themselves as being capable of being racialized; and the second based on the increasing difficulty of symbolic and material exposure of the privileges of the white subject in a society marked by racism. Therefore, "studies on whites indicate that the ideal of racial equality, in which Brazilians are socialized, operates to maintain and legitimize racial inequalities" (p. 84). Thus, Shucman visualizes the spectrum of colonialism (regarding its long duration and often mentioned as a methodological particularity adopted for the main implications of the work) as determining postulates of this imagetic construction, shaping these postulates as data that must be understood based on the power relations that constitutes them. In the lines of the Brazilian psychologist:

Whiteness is understood as a position whose occupants were systematically privileged with regard to access to material and symbolic resources, initially generated by colonialism and imperialism, and which remain preserved in contemporary times. Therefore, to understand whiteness, it is important to comprehend how the fundamental, concrete and subjective power structures, in which racial inequalities are anchored, are constructed (2014, p. 84).

The author's hypothesis also refers to a systematic difficulty in defining whiteness due to the complexity related to the crossing of sociological categories such as ethnicity, color, culture and race, which are associated with different historical and spatial contexts. Taking these aspects into consideration is valid, especially

in a study focused on the spatial consequences of this process. Still, it is worth delving deeper into fundamental convergences of theoretical approaches originating from different historical moments and places of enunciation, as proposed by Bernardino-Costa (2018) in the aforementioned work that aligns the theory of Guerreiro Ramos, Fanon and Du Bois. Regardless of the theoretical assertion, it is indisputable that "being white, that is, occupying the symbolic place of whiteness, is not a condition established by genetic issues, but, above all, by positions and social places that subjects occupy" (SHUCMAN, 2014, p. 84).

For Neusa Santos Souza, author of the impressive Tornar-se negro (2021) [Becoming Negro], the interminhgling of 'occupation of social places' and 'production of knowledge' culminates in a certain "unequivocal finding of the precariousness of studies on the emotional lives of black people in Brazil" (p. 45). Also inspired by Fanon's work, in terms of the incessant search for humanity, the psychiatrist and psychoanalyst continues, "Away from their original values, black people took white people as a model of identification, as the only possibility of 'becoming people" (p. 46). Once again, considering the phantom of slavery, it is necessary to recognize that the colonial spirit established a direct association between black people and race (SOUZA 2021), an assumption perceived from Mbembe (2019). This immediate adaptation represents the historical accumulation of a social order institutionally forged by the senzalas. In the colonial situation, black people were subjected to an inferior perception, which was known not to change with the dismantling of the slave regime in Brazil.

The inferiorizing definition of black people persisted even after the disintegration of slave society and its replacement by capitalist society, governed by a competitive social order. Black and white people saw and perceived each other through a distorted perspective resulting from the persistence of traditionalist patterns of social relations. The black man was paradoxically enclosed in the position of freedman: he had the role of the disciplined – docile, submissive and useful – while the white man acted with authoritarianism, sometimes paternalistic, which was characteristic of lordly domination. This place of inferiority was mirrored in the way the black population was inserted into the cities' occupational system (SOUZA, 2021, p. 49).

Souza's statement is decisive, especially because it links the condition of inferiority to the appropriation of the urban. Furthermore, the Brazilian psychiatrist contextualizes this spatial dynamic to the 'soothing' of black people as a necessary postulate for the formation of the city. Non-being in the metropolis is necessarily linked to the characterization of black inferiority which, as stated, is performed through long-lasting events, involving discipline and control of bodies that during slavery times were challenged by the brandishing of the whip, also driven by the white fear. In one of his writings, Fanon (2020) highlights white paranoia based on a tense experience on the train with a French child:

My body was returned to me dismembered, dismantled, broken, all in mourning on that white winter day. The black man is a beast, the black man is mean, the black man is malicious, the black man is ugly; 'look, a black man', it's cold, the black man shivers, the black man shivers because he feels cold, the boy trembles because he's afraid of the black man, the black man shivers with cold, that bone-wrenching cold, the beautiful boy trembles because he thinks the black man shakes with rage, the white boy runs into his mother's arms: 'Mommy, the black man is going to eat me" (p. 129).

The excerpt, also mentioned by Mbembe (2019, p. 79), about what he calls "sustained humanity", allows us to evaluate the extent to which the denial of the black being becomes evident in the production of space. In this case, under what assumptions are the conditions of black life challenged in the midst of the urban crisis, and mainly, under what instruments can this subhuman reality be characterized. Therefore, it is worth considering that in the current period, marked by the outbreak of neoliberal competitiveness and by the prominence of the still relevant empires, physical and psychological indigence of black daily life are still perceived as "a calcified shell and a wound" (MBEMBE, 2019, p. 81).

The wound exposed by Mbembe – Cameroonian historian and philosopher – consolidates what is perhaps the most evident dialogue with Fanon. In the subchapter "O negro de branco e o branco de negro" [The black of the white and the white of the black] (2019, p. 88), some extremely powerful postulates are exposed for approaching whiteness. At first, in direct agreement with Fanon, Mbembe reiterates the invention of the "black object" by white people. Furthermore, Mbembe adds, through a warning to colonial terror, that "whiteness is, in many ways, a fantasy of the European imagination that the West strove to naturalize and universalize" (2019, p. 88). This fantasy, for the author, resides in three indispensable determinants: *dogma*, *desire* and *exploration*, very well explained in the following lines:

The white fantasy was successful because it ultimately became the mark of a Western way of being in the world, of a particular figuration of brutality and cruelty, of a singular form of predation, and of an unparalleled capacity for subjection and exploitation of foreign peoples. This force manifested itself in different ways depending on the time

and context – genocides and exterminations in the New World and Australia, slave trafficking in the Atlantic triangle, colonial conquests in Africa, Asia and South America, apartheid in South Africa and, a little everywhere, spoliation, depredation, expropriation and plunder in the name of capital and profit, and, on top of all that, vernacularization of alienation. It is this structural violence and the way it contributed to a profoundly unequal redistribution of the resources of life and the privileges of citizenship on a planetary scale that give the white fantasy part of its appeal (MBEMBE, 2019, p. 91).

Mbembe's terrifying words demonstrate the correlation between the construction of social positions and the phantasmagoria of the colonial situation that interferes with the materialization of life until the current period. Paranoia, an important archetype of this white fantasy, reflects the horrifying traits included in repulsion, murder and naturalization of difference. It is interesting to note how much this violence inherent to white fear will be useful in affirming their social position, again with long-term contours, from the plantations (MBEMBE, 2019) to the current period, notably connected to the production of space in large Brazilian metropolises.

Haiti, Brazil and the 1800s

While crossing this space-time line, we propose to focus on the 19th century as a powerful demarcator of terror in relation to black people. In addition to being a fundamental period for accelerating the development of most of Brazilian main urban centers, it was also a relevant historical moment in terms of not only the emancipatory ideals in the relationship involving colony/metropolis, but also in terms of the slavery situation in Brazil

(affected by freedom ideals since the Haitian Revolution), which intensified tensions and disputes over the abolitionist possibility and triggered the reproduction of white fear about a possible "black wave" – a logic that emerges with each legislation in favor of the freedom of black men and women and which was consolidated with the abolition of slavery in 1888.

Washington Santos Nascimento (2008) demonstrates the paradoxical situation experienced in Brazil at the dawn of the 1800s with the imaginary built around the revolutionary process that took place in Haiti. Initially, the effects of the slave insurgency were significant, in addition to the rise in the price of sugar, a product largely represented by the Caribbean and by the plantations of the Brazilian Northeast. The uprising terrorized the landowning elites and slave-holders throughout America, having resulted in yet another fundamental paradox – the hope of freedom for subalternized people (captives) and the tightening of laws and instruments of repression and control of the bodies enslaved by their masters.

Nascimento, as a historian, comments the ideas of some authors of the time, clearly frightened by possible Brazilian references to Haitian revolutionary content. Bishop Azeredo Coutinho; the English traveler Thomas Lindley; lawyer Vellozo de Oliveira; the "Patron of Independence" José Bonifácio Andrada e Silva, and, mainly, the Marquis of Queluz, João Severiano Maciel da Costa, were some of the precursors to the generalization of white terror against libertarian ideals. The latter is ratified as the representative icon of the situation that will later be designated as "Haitianism". The Marquis, recognized politically and economically by the Brazilian elite, "emphasized the danger of the increase in slavery coupled with the contagion of foreign ideas" (NASCIMENTO, 2008, p. 132).

He was favorable to replacing the import of slaves with free labor, which implied the propagation of terror as a premeditated act amid the ways of reconstituting the slave model – as also seen in Andrada e Silva and Maciel da Costa, one of the "illustrious Brazilians who took advantage of the events of São Domingos to propagandize the need to reform slavery" (NASCIMENTO, 2008, p. 134).

Marcos Queiroz (2017) – a researcher concerned with the "winds of freedom" propagated in Haiti – sediments his argument on the potential convergences of such an event and its repercussions on the processes related to Brazilian independence and its constitutional appeal. For the author, there are two most accepted theses in the emancipatory debates in relation to Portugal: the first is protagonized by traders, concerned with their economic and political autonomy; and a second that praises the participation of landowners and slave owners (fearless people in maintaining latifundia and monoculture). This historiographic duality emphasized, above all, the quotidian peculiarities of major hegemonic actors and "envisaged the formation of an independent Brazil based on socioeconomic structures and production relations" (QUEIROZ, 2017, p. 101).

Such metanarrative was negligent of the intense role of the poorer, enslaved and ex-enslaved people amidst the process of consolidating the ideas of emancipation in the country, perceiving these people as inert individuals to the important processes that were taking place in Brazilian territory. According to Queiroz (2017), the maintenance of this "paradigm of absence" (NASCIMENTO, 2016) was also fundamental for the weakening of a series of theoretical tensions – the establishment of a notion of nation and the way black

people and black women perceived "their white 'other'" (QUEIROZ, 2017, p. 101). These conceptions impacted not only the republican, federalist and revolutionary ideals in dispute, but also the racial and class division – crucial to this first moment in the country.

The book Rebelões da Senzala by Clóvis Moura (2014) represents a relevant work for the transformation in the historiography of the demarcated period. It is focused on political movements from the end of the 18th century to the beginning of the 19th, encompassing the Inconfidência Mineira, the Revolta dos Búzios and the Pernambuco Revolution. The text "has a profound meaning not only from the point of view of the organization of the insurgents, but, especially, due to the programs, objectives and respective racial cleavages opened by the participation of the black population" (QUEIROZ, 2017, p. 103).

The revolts were perceived as a construction strongly identified and influenced by what had occurred in Haiti, as Queiroz (2017) shows inspired by Francisco Adolfo de Varnhagen. The authors agree that the revolts reflected an interesting mirror of the potential horror experienced by Brazilian elites in the 1800s, frightened by the revolutionary process in the Haitian Caribbean (that began in 1791), as discussed in Nascimento (2008). In the defense made by Queiroz (2017), this imagery construction of the Caribbean impacts on the political characterization of the rebels in Bahia and other parts of Brazil, "required the abandonment of revolutionary or liberal principles in the process of transition and consolidation of the Brazilian State" (p. 105), which indicated the distance of racialized subjects from their recognition as citizens at the beginning of the century.

In the case of Pernambuco, due to the influential participation of slave owners in movements related to independence, the political content of subaltern demands was limited by slightly milder meanings, with emphasis on the inviolability of private property and the argument for the end of slave labor slowly and gradually (QUEIROZ, 2017). The fact is that the ideas of freedom and subaltern protagonism were mediated by the elites as an interesting paradox, since the conservative content that proclaimed the first proposals for independence were crossed by the need for military force, which in many cases depended on poorer subjects and of enslaved people.

Queiroz (2017) presents an extremely relevant document that vehemently demonstrates the fearful attitude of elites around the recognition of black men and women as political subjects. In a passage written by a French agent and forwarded to D. João VI, there is a reference to a party other than the official ones that were divided into liberal and conservative. The other faction of the political game at the time would be the "party of blacks and people of color", which for the French, (for representing the majority of the population), should be understood as the strongest.

It seems noticeable that the fear of white elites also had demographic meanings. It was feared that the large contingent of black men and women would enable the advancement of an uprising with more evident strength. This condition intensified the projections of the 'population whitening' - necessary process for a more characteristic format of nation – revealing an explicitly hierarchical reality in racial terms and objectively more Europeanized than in the centuries lived under Portuguese rule. According to Queiroz (2017), the socio-historical construction of

Brazil and Brazilians would have as a background the white fear in relation to Haiti's demand for freedom and the revolutionary auspices launched from the Atlantic, a problem that gave meaning to the first tensions after the independence and connected to the legal issues concerning the valorization of free being and citizenship of enslaved people, and the maintenance of the servile relationship accompanied by arguments in defense of the conservation of the principles of property from the masters.

Therefore, the context of the first decades of the 1800s, imbued with the senses of political emancipation of the metropolis, was riddled by the continuous demand for freedom in relation to slavery and by the subaltern protagonism often ignored by a historiography focused on the great hegemonic actors. This trait, primarily linked to universal theses about the period, can be easily circumvented by the immediate objection of white elites to an internal enemy that is specifically black and identified with the winds of freedom emanating from the Caribbean, the target of the most concrete limitations to the constitution of participation in the core of the construction of national identity, but above all in the valence arising from white fear of their recognition as a being, which will be present in the policies of control and repression of the black body.

Historians Aline Gonçalves and Álvaro Nascimento (2020) follow a similar articulation to those previously exposed in this study. The two authors are concerned with political, economic and social articulations in the context of the tensions of what could become the post-emancipation of the so-called "servile element" in Brazil, with a focus on free workers in Rio de Janeiro. "What is approached here is the perception of a horizon of expectations of free people in the face of the inauguration of debates around emancipation" (GONÇALVES E NASCIMENTO, 2020, p. 82).

The elimination of slavery seemed to be a concern of imperial policy, albeit with reservations based on the interests of legislators and the economically ruling class itself in the conservation of wealth and their property titles. What could be done with the recently freed people was a question that hovered over much of the political game at the time, always focusing on seigneurial gains as a circumstantial axis of the decision-making nature of the main encounters and assemblies dealing with the issue.

Based on the arguments of Bernardo Avelino Gavião Peixoto, Gonçalves and Nascimento (2020) make explicit the continuity of white fear as a prominent prospect throughout the 19th century, when the parliamentarian member is incisive in establishing the emancipation event as a possibility of spreading the "social war", especially at a time of financial instability that was difficult for agriculture. Gavião Peixoto's opposition to the imperial proposal had a time and place: "He and many parliamentarians knew about the different experiences of other countries on the American continent to put an end to slavery, with Haiti being the most difficult to swallow" (id, 2020, p. 86), demonstrating once again the relevance of political organization for freedom and the effects of this revolutionary movement in Brazil in the 1800s and early 20th centuries.

As proposed in previous lines, terror was consolidated by a demographic logic. Rio de Janeiro in the mid-19th century had around 100,000 enslaved people, which transformed the urban scenario into a fruitful context for tensions involving the social groups that produced the space of the city (at the time Rio de Janeiro was the capital of the monarchy). The "black wave" characterized by Célia Marinho de Azevedo (1987) "flowed like a tsunami over the

politicians of the empire" (GONÇALVES and NASCIMENTO, 2019, p. 89) and over the quotidian life of the Court. Therefore, it was necessary to rethink the organizational protection of the servile relationship, which was proposed by a series of economically and politically relevant subjects, such as Antônio da Silva Netto and Adolfo Bezerra de Menezes, making it clear that the emancipationist project would still have the manorial protection of the slavery regime (GONÇALVES and NASCIMENTO, 2019).

Silva Netto, civil engineer and self-proclaimed slave owner, despite being contradictorily republican and abolitionist, in his work entitled Estudos sobre a emancipação dos escravos no Brasil (1866) [Studies on the emancipation of slaves in Brazil] alerted the other farmers (Figure 11) to be careful about the possibility of abolishing slavery in Brazil. For the author, it was necessary to prepare "humanity" for a future without slavery – alleged opinion of someone who, personally, did not perceive black men and women as suitable for that position. The fact is that Silva Netto understood the possible emancipatory process as an entity that diffused public calamity and a conflictual future between the recently freed people, landlords and owners and other groups with greater social relevance.

Bezerra de Menezes, known as the "doctor of the poor" for his work in spiritualism, presented a range of moral concerns for a future without slavery in Brazil. The deputy from Ceará recognized the strengths of Silva Netto's approach regarding the end of physical punishment in servile relationships, even though he believed in the need to replace this model of moral reprimand (GONÇALVES and NASCIMENTO, 2019). The effects of black freedom, for the author, were more harmful to good customs than to property and agricultural fields, which disagreed with most arguers regarding the signs of

the end of the servility. It seems evident that, whether through arguments surrounding *property* or *morals* and *good customs*, it was in the elite's interest that the emancipatory project be organized by the masters themselves, in an explicit attempt to prevent the recognition of black men and women as protagonists of what could be your embryonic moment of freedom.

A good example of the context of fear could be witnesses during the 19th century when the notion of "dangerous classes" gained coverage in the main political directions for the city precisely in the period in which the debates surrounding abolition were most heated – an issue debated in the work of Sidney Chalhoub (2017). Another example – perhaps one of the first representations (in urban politics) of the "myth of efficient management" in Rio de Janeiro and in Brazil – was a severe wave of demolitions of tenements and kiosks, with a view to the still recent and controversial process of abolition of slavery, that destroyed a series of important spaces for the sociability of poorer people.

The concept of "dangerous classes", primarily adopted by Mary Carpenter in the 1840s, was poorly employed by the then politically ruling groups in Brazil. According to Chalhoub (2017), based on a very problematic reading of Frégier (1840) – an inexplicably respected French police commissioner –, Brazilian parliamentarians realized about the necessity to combat and repress idleness in the country's urban centers. The historian's attention is drawn to the inconsistency of Brazilian politicians in putting an end to the details of lesser theoretical, political and social value of the proposal of the prominent French official, which was the direct association between the "dangerous classes" and the "poor classes".

Thus, the notion that an individual's poverty was sufficient fact to make him a potential evildoer had enormous consequences for the subsequent history of our country. This is, for example, one of the theoretical foundations of the police strategy in large Brazilian cities since at least the first decades of the 20th century. The police act based on the assumption of generalized suspicion, the premise that every citizen is suspected of something until proven otherwise and, of course, some citizens are more suspicious than others (CHALHOUB, 2017, p. 26).

Yet, in a fortunate reference by Chalhoub (2017, p. 27) to the text *Cemitério dos vivos* by the novelist Lima Barreto, it is brought up that "every citizen of color must necessarily be a scoundrel" (p. 152), in reference to the repression of idleness at a time characterized by black corporeality. In context, the understanding that "some citizens are more suspicious than others", as stated in the previous quote, undoubtedly presents a relevant racial nature, especially in the midst of the abolitionist situation. For Chalhoub (2017), "the deputies' main difficulty was to imagine how it would be possible to guarantee the organization of the world of work without resorting to domination policies characteristic of captivity" (p. 27).

There was an understanding that the great possibility of guaranteeing lordly profits even without slavery and repression on the farm would be the 'generalization of suspicion' as an elementary condition of the presence of black men and women in the urban scene, performing a logic of control over their corporeality, even if distant of production spaces, in such a way that prevented and prohibited the existence of idle subjects amid the contingency of work that was established in a overpowring manner in the city (CHALHOUB, 2017).

Another underlying motivation for viewing black people as the preferential subject of generalized suspicion were the purported legacies of behavior arising from the captive life. In the speech of Mac-Dowell, an important deputy of the time, the duty of the State would be "to repress and oppose, a dam to all the vices that the freed man brought from his former condition". According to the parliamentarian, the law that would enact the freedom of enslaved people would have a disastrous effect on civilized society at the time, since captives would not possess "the noble feelings that can only be acquired by a free population", a disposition conditioned not by social facts, but to biological nature.

Therefore, it is clear that the 19th century, with emphasis on the moments closest to abolition, represents a fundamental period for the immediate association between black people and their pernicious determination. This concern denotes the relevance of white fear related to black skin, a structuring reality for the development of technologies essentially linked to the control of the production of space carried out by black men and women, a proposal best presented in the following section of the work, which highlights the security experience of the current period.

Final considerations

By way of conclusion, it is essential for us to recognize the organizational structure of a theoretical postulate that permeates urban theory in the midst of racial matters. The interdiction of spatial discourses, as seen in Silva (2013), the consolidation of whiteness as a marker prospect for the control of black bodies and the relevance of the 1800s for the constitution of a zone of

non-being in Rio de Janeiro configure a consistent spectrum, yet projective, of metropolitan postulates, even though we see such relational content as a potential reorganization of studies that focus on the city. The fact is that denouncing the racist filling of urban technocracy ends up touching the epistemic violence that makes invisible and subordinate the innovative and necessary character of dialoging with authors concerned with the Afro-diasporic perspective to think about a metropolis like Rio de Janeiro, a more pleasant space for transformation of black men and women into marketable circumstances.

It seems essential, therefore, to articulate a consolidated bibliography focused on urban space, as done with the openings arising from the production of space in Lefebvre (in a prasing way), but without shadowing the organization that comes from theoretical and empirical experiences lived by black men and women. In this area, once again, it is important to return to Fanon (2020) and his indispensable perspective that visualizes the liberation of men and women without them necessarily becoming white. To this end, it is important to reconsider under which aspects the racial issue has been debated in studies concerned with the city, but in addition, it is worth recognizing the processing of senses of freedom historically curtailed by white paranoia, as done by enslaved people at different moments during the 19th century and that until now transmute the black person into an entity to be intercepted, not allowing them to recognize themselves or being recognized as a being.

References

AZEVEDO, C. **Onda negra, medo branco**: o negro no imaginário das elites do século XIX. Rio de Janeiro: Paz e Terra, p. 37, 1987.

AZEVEDO, F. Entre ausências e emergências, genocídios e epistemicídios: notas sobre metrópole e "espacialidades enegrecidas". **Geopauta**, [S.l.], v. 4, n. 1, p. 111-128, abr. 2020.

BRAUDEL, F. Escritos sobre a história. 2014. p. 289-289.

CICALO, A; VASSALLO, S. Por onde os africanos chegaram. O Cais do Valongo e a institucionalização da memória do tráfico negreiro na região portuária do Rio de Janeiro. **Horizontes Antropológicos**, n. 43, p. 239-271, 2015.

CHALHOUB, S. Cidade febril: cortiços e epidemias na corte imperial. São Paulo. Companhia das Letras, 2017.

DU BOIS, W. **As almas do povo negro**. São Paulo: Veneta, 2021.

Duncan, J. **The city as text**: the politics of landscape interpretation in the Kandyan Kingdom. Cambridge: Cambridge University Press, 1990.

ENGLAND, L; WARNER, W. WEB Du Bois: reform, will, and the veil. **Social Forces**, v. 91, n. 3, p. 955-973, 2013.

FANON, F. **Pele negra, máscaras brancas**. São Paulo: Ubu Editora, 2020. 320 p.

FERREIRA, M; TRAVERSINI, C. A análise Foucaultiana do discurso como ferramenta metodológica de pesquisa. Educação & Realidade, v. 38, p. 207-226, 2013.

FOUCAULT, M. A ordem do discurso: aula inaugural no Collège de France, pronunciada em 2/12/1970. São Paulo: Loyola, 2014. (Original publicado em 1971).

- GILROY, P. O **Atlântico negro**: modernidade e dupla consciência. Editora 34, 2001.
- GONÇALVES, A; NASCIMENTO, A. Como pensar o elemento servil: o lugar dos libertos nas expectativas das elites após a emancipação. Afro-Ásia, Salvador, n. 60, 2020.
- GUIMARÃES, G. Rio Negro de Janeiro: olhares geográficos de heranças negras e o racismo no processo-projeto patrimonial. 2015. Tese de Doutorado. Universidade Federal da Bahia UFBA, Salvador.
- GROSFOGUEL, R. Racismo/sexismo epistémico, universidades occidentalizadas y los cuatro genocidios/epistemicidios del largo siglo XVI. **Tabula rasa**, n. 19, p. 31-58, 2013.
- HONORATO, C. **Valongo**: o mercado de escravos do Rio de Janeiro, 1758-1831. 2008. 166 f. Dissertação (Mestrado) Curso de História, ICHF, Universidade Federal Fluminense, Niterói, 2008.
- JESUS, C. Branquitude x Branquidade: uma análise conceitual do ser branco. In: III EBE Encontro baiano de estudos em cultura, 2012, Bahia. **Anais**. Salvador: 2012. p. 1-14.
- LEFEBVRE, H. La presencia y la ausencia: contribuición a la teoria de las representaciones. México: Fondo de Cultura Economica, 2006.
- LEFEBVRE, H. La producción del espacio. Madrid: Capitán Swing, 2013.
- LEFEBVRE, H. **Espaço e política**. Trad. Margarida Andrade e Sérgio Martins. Belo Horizonte, Editora UFMG, 2016.
- MALDONADO-TORRES, N. Analítica da colonialidade e da decolonialidade: algumas dimensões básicas. *In*: BERNARDINO-COSTA, J; MALDONADO-TORRES, N; GROSFOGUEL, R (Org.). **Decolonialidade e pensamento afrodiaspórico**. 2. ed. Belo Horizonte: Autêntica, 2019. Cap. 1. p. 27-53.

- MBEMBE, Ac. **Crítica da razão negra**. 3. ed. São Paulo: N-1 Edições, 2019. 320 p.
- OLIVEIRA, D. Inscrição espacial do racismo e do antirracismo: a "Pequena África" como forma espacial de descolonização da área central e portuária do Rio de Janeiro. In: ENANPEGE, 2019, São Paulo. **Anais**. São Paulo: Anpege, 2019. s/p.
- OLIVEIRA, D. Questões acerca do genocídio negro no Brasil. Revista da Associação Brasileira de Pesquisadores/as Negros/as (ABPN), [S.l.], v. 12, n. Ed. Especi, p. 312-335, abr. 2020.
- QUEIROZ, M. Constitucionalismo brasileiro e o Atlântico Negro: a experiência constitucional de 1823 diante da revolução haitiana. 2017. 200 f. Dissertação (Mestrado) Programa de Pós-Graduação em Direito, Universidade de Brasília, Brasília, 2017
- QUIJANO, A. Colonialidade do poder, eurocentrismo e América Latina. *In*: LANDER, E. (org.). **A colonialidade do saber**: eurocentrismo e ciências sociais. Buenos Aires: Colección Sur Sur, CLACSO. set. 2005. p.227-278.
- RIBEIRO, G. Fernand Braudel, geohistória e longa duração: críticas e virtudes de um projeto historiográfico. Annablume, 2017.
- SILVA, J. M. Espaço interdito e a experiência urbana travesti. *In*: SILVA, J. M.; ORNAT, M. J.; CHIMIN JUNIOR, A. B. (Orgs). **Geografias Malditas**: Corpos, Sexualidades e Espaços. Ponta Grossa: Toda Palavra, p. 143-182, 2013.
- SOUZA, N. **Tornar-se negro**: ou as vicissitudes da identidade do negro brasileiro em ascensão social. São Paulo: Zahar, 2021. 176 p.

Casa-terreiro of Quilombo¹ Ribeirão do Mutuca

Between the potential of ancestral knowledge and the limits of housing policy²

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Introductory notes

The formation of the Brazilian territory has deep roots that date back to the period of land invasion by the Portuguese crown in the 16th century. In parallel, slavery was one of the central pillars of the mercantile mode of production, which exploited the lands, and the bodies of the original and enslaved African peoples. The relationship between colonization, captive labor and the subsequent institution of private land ownership (MARTINS, 1986) are fundamental aspects of the occupational process of Brazilian territory.

^{1.} According to CONAQ [Coordenação Nacional de Articulação das Comunidades Negras Rurais Quilombolas], quilombo remnants are defined as ethnic-racial groups that have their own historical trajectory endowed with specific territorial relationships, with a presumption of black ancestry related to resistance to the historical oppression undergone, and their characterization must follow the criteria of self-attribution attested by the communities themselves, as also adopted by the ILO [International Labor Convention] on Indigenous and Tribal Peoples.

^{2.} Text prepared from master's research carried out between 2018 and 2020 in the Graduate Program in Architecture and Urbanism at the Faculty of Architecture

In general terms, it can be said that the colonization process and the transfigurations that redesigned the territory from the 1930s onwards, shaped the characteristics of the contemporary rural environment. In the 1900s, the transformation of this scenery was marked by development guidelines and State actions that supported two means of expansion: one focused on the cities – industrial expansion was imposed; and one focused on the countryside – a productivist model, based on the occupation of extensive swaths of territory, reinforced land concentration (ZUQUIM, 2002).

In this context, and considering the reality of the state of Mato Grosso, which had its territorial formation mainly centered in agribusiness as the main axis of production and occupation of the territory, it is crucial to address the complexity that involves: respect for the ways of life of rural populations, land issues and territorial planning in order to better subsidize the elaboration of suitable public policies that contemplate the ways of life of this population .

For this purpose, our starting point was the Quilombo Mutuca, part of the Quilombola Community of Mata Cavalos, located in the south of the state of Mato Grosso, in the municipality of Nossa Senhora do Livramento (fig.1) located between the cerrado [savanna] and the pantanal [swampland]. This territory records the legacy of resistance in times of slavery. It gives meaning to the struggles of quilombolas for their rights during the redemocratization of the country, and it holds the marks of the violence they experienced. The quilombolas of Mata Cavalo

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have occupied their lands for over 130 years but they were only recognized by the state government in 1998, by Fundação Cultural Palmares in 2000, and had their Identification and Delimitation Report³ issued in 2006. However, they still do not have a definitive land title. In 2013, the Associação da Comunidade Negra Rural Quilombo Ribeirão da Mutuca (ACORQUIRIM) [Quilombo Ribeirão da Mutuca Rural Black Community Association], had access to the Programa Nacional de Habitação Rural [National Rural Housing Program], which subsidized the construction of 150 houses for Mutuca families between 2013 and 2016.

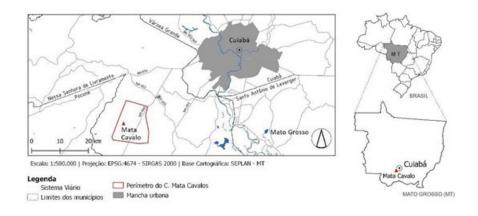


Figure 1. Map of the Mata Cavalo Community Location, in Mato Grosso. Source: elaborated by the author.

Housing policy is included within the State's actions in the territory of Ribeirão da Mutuca, which over the years, has alternated between plunder, violence and minimal citizenship assistance. The 'house', then, acquires centrality and is the path through which the relationships between territory and identity of the community are

^{3.} The Identification and Delimitation Report is a document that is integrates the land regularization process.

deeper and may be understood. The place of residence aggregates articulated dimensions and provides clues to understand the movement of social reproduction of life and the production of space that result in greater or smaller transformations of this territory. The house keeps affective, symbolic memories, records of the ways in which spaces are occupied and the peculiar way of doing things that carries knowledge transmitted through the oral language and common memory of this group. It also reveals the ways of living and the relationship with nature, keeps the bitter memories of spoliation attempts and, at the same time, is an element underlying the construction of future perspectives.

Between 2018 and 2019, field research was carried out in Quilombo do Mutuca, with incursions into the territory and based on field diaries, hearing sessions, participant observation and semi-structured interviews. The research was held with the Ferreira family, due to their prominent representation in the Quilombo community. The family members are currently at the head of the residents' association. The visits were guided by Justina Ferreira, matriarch and historical leader of Mutuca. Observation of daily life, georeferenced data collection, photographic survey, semi-structured interviews with residents, updating the families' genealogical tree and field notes were performed in the locus. In parallel, documentary research was carried out based on the anthropological report and on documentation related to the land recognition and titling process.

The study starts from the notion of space as a social construction, and not just as the physical support for human activities. In this trajectory, we sought to understand how social relations are structured considering the territorial dynamics and, at the same time, how the territory is shaped based on such relationships – the

rural habitat. Over the almost 200 years of its history, Mutuca has been a place of encounter between the quilombola way of living and thinking and the quilobola way of making and perceiving home, on a distant scale. At a certain moment, political decisions coming from an office in Brasília have reached a quilombo in Nossa Senhora do Livramento, corroborating the movement pro territory.

The sequence adopted for this paper starts with a brief restrospective of the historical process of Mutuca territory, placing it within the national scenery; then it approaches the *casa-quintal* [backyard-house] from three moments: (i) 'the house of memory', focusing on the subjectivity contained in the ancestral house and its surroundings, based on the studies of Bachelard (1978) and in the relationships expressed in the ways of doing things; (ii) 'the PNHR4 house', focusing on the process of house provision via housing policy; and (iii) 'the house of mixture', which addresses the post-PNHR period and the adaptations made by families. Finally, the study summarizes considerations about the potential for developing public policies and other interventions in these territories that start from the *casa-terreiro* [farmyard-house], thus, an "up close and from within" research (MAGNANI,2002,p.17).

Footsteps coming from far away

The term "quilombo" gives meaning to more than 400 years of the black population resistance in Brazil, and "quilombola communities" represent, in contemporary times, a social group that fights for the right to the land occupied by their ancestors and the search for their identity affirmation. These communities represent the continuity of a historical

^{4.} PNHR: National Rural Housing Program

process of resistance that began with slavery (GOMES, 2015). Such communities produce stories of material and immaterial culture, in which the process of formation and self-identification of quilombola individuals reveal their close relation to the territory.

Land, in this perspective, in addition to being a condition of physical survival for these groups, turns into a fundamental instrument for affirming the community's identity. Thus, the sense of territoriality represents the relationship maintained by a certain group with its territory. Bandeira (1996) contributes with the notion of "ethnic territory", attributed to quilombos, considered a group with a distinct social base whose constitutional elements are manifested in the formation of the territory. These elements embrace ancestry, kinship relationships and farming practices, consolidated on land of collective use and complying with the principles of solidarity and reciprocity (BANDEIRA et al. 1996, p. 9).

To encourage reflection, it is worth highlighting some historical facts and processes that have determined the formation of the Brazilian territory, as well as the struggles waged by black people and their reverberations. It's important to take into account the point of view of those who constructed the narrative about the *mocambos* and *quilombos* over the years, and until the middle of the 20th century, this narrative came from outside the *quilombos*, contributing to strengthen the importance of the work of black intellectuals such as Flávio Gomes, Lélia Gonzales and Rafael Sanzio. These authors propose to reconstruct the historiography and vision of the ethnic territories of enslaved black people in Brazil and other Latin American countries, with the intention of promoting a paradigm change that changes the way these organizations are looked at.

There are records of the presence of African captives in the Colony as early as the mid-16th century, before the beginning of "official trafficking" in 1549 (FIABIANI, 2005, p. 259). Resistance to captivity began in the same period: there are records of uprisings by enslaved black people in official documents since, at least, 1588 (ibid. p. 259). These facts account for Brazil having become the largest slave territory in the Western Hemisphere for almost three and a half centuries (GOMES, 2019, p.24).

According to Bandeira et al. (1996), quilombo Mata Cavalo was formed in the 17th century, from Sesmarias⁵ Boa Vida and Rondon, which were established together with the discovery of gold in Cuiabá. The enslaved population and the consequent formation of quilombos on the outskirts of Nossa Senhora do Livramento emerge during the regime of hereditary captaincies. The formation of towns and cities in the region was based on violence and expulsion of the original indigenous Bororo people, the exploitation of nature and of the bodies of those enslaved in mining. According to Bandeira et al (1996), in the 18th century the lands of Sesmaria Boa Vida, where Mata Cavalo is located today, were already valued due to the intense occupation caused by the mining activity.

In 1850, Lei de Terras [Land Law] was enacted with the aim of regulating access to land in the country, which was very important in the process of abolishing slavery. In addition to regulating land ownership, the Land Law had other objectives, such as interfering with the new migration policy and transforming land into (the equivalent to) merchandise, which conditioned the usufruct

^{5.} Sesmaria: a plot of land distributed to a beneficiary, in the name of the king of Portugal, with the aim of cultivating virgin lands.

of land to capital (MARTINS, 1973). It's the beginning of the period "in which land is no longer just an instrument for exploiting the labor of others, but also for extracting surplus – converting income into capital" (MARTINS, 1986: 34).

In general terms, the setting of the commodification of private land ownership was a condition for maintaining the status of elites in the transition from captive to free labor. Furthermore, the law also prevented free access to property in the context of immigration while, at the same time, it promoted the whitening of the national population. Land commodification caused prices to raise so that neither the mass of black people newly inserted into Brazilian society nor newly arrived immigrants would have easy access to land. Instead, they should be forced to earn wages to survive.

Gomes (2015) recovers the diversity inherent to resistance processes, spatial organization and land acquisition by the black population in Brazil. These processes include events of escapes with occupation of free and isolated lands, as well as inheritances, donations, receiving land as payment for services provided to the State, occupation of portions of land within large properties and the purchase of land, during and after the slave system. The forms of resistance adopted by the black population to break with the slavery regime do not end with the formation of quilombos; their constitution was, in fact, one of several forms of resistance adopted to oppose the current regime that included uprisings, revolts and strikes over the centuries.

Meanwhile, in Nossa Senhora do Livramento, the sesmaria that gave rise to Quilombo Ribeirão do Mutuca and the community of Mata Cavalos, was divided and went under new dynamics and new

owners. Part of Sesmaria Rondon was sold in 1877 to Marcelino Paes de Barros, a former slave and member who originated one of the family branches of a community that integrates Mata Cavalos. The other part was donated to enslaved people from the same Sesmaria (as an inheritance from their former owners), and later sold to Graciano da Silva Tavares, who was still enslaved and formed one of the branches of the Mata Cavalo de Baixo community. Later, Vicente Ferreira Mendes (now, a free man), bought a portion of the neighboring land and settled down with his family, which today makes up the Ribeirão do Mutuca community. The story of formerly enslaved black people who purchased parts of the sesmarias is iconic: the free black men, now, are able to acquire the land where he had been enslaved.

Gomes (2015, p. 19) recovers the different "socio-historical-territorial structures of formation and origin" of the lands occupied by quilombolas. The author identifies several forms of land occupation that include the purchase of property by former slaves, donations of land, occupation of abandoned farms, payments for services rendered in wars (e.g.: War of Paraguay), donation of land to public religious orders (Terras de Santo), occupations of Union lands and under the control of the Brazilian Navy.

Despite having the donation and land purchase documents in their hands, this was not enough to guarantee the security of tenure for the Mata Cavalo community. The record of the first expropriation attempt dates back to 1890, just 7 years after receiving the donation from part of Sesmaria Boa Vida. Even suffering threats, the families remained in Mata Cavalo and expanded the quilombo by acquiring adjacent lands and establishing family centers in other locations in Sesmarias Boa Vida and Rondon.

The beginning of the 20th century was marked by the policies of the Estado Novo. In 1938, Getúlio Vargas implemented the Marcha para o Oeste [March to the West], aiming to integrate the areas of the Central West and North, considered as "empty spaces" to the national economy, with the purpose of building a "new Brazil" . This movement was consolidated in Mato Grosso, based on a project for the territorial and social reorganization of the state and grounded on a productivist expansion model. In Mata Cavalos, the year 1943 was marked by the expropriation of land by farmers (in the region) seduced by the appreciation of land and state incentives for agricultural production. The families that occupied the territory and established their customs - building methods, planting and religious practices - were expelled from the land and migrated to the outskirts of nearby cities (Nossa Senhora do Livramento, Poconé, Cuiabá and Várzea Grande). After the families were casted out, they began a process of re-territorialization in the urban centers where they settled, and preserved customs and the relationship with the territory to the extent that life in the urban context allowed them to.

The period of the military dictatorship was characterized by the policies aimed at integrating the Amazon and the Central-West, strongly centralized in the federal government. Combined with the modernization of extensive agriculture, these actions reached the state of Mato Grosso with a new movement focused on colonizing "empty spaces". The term "empty" was once again used in the government narrative with a strong ideological appeal, as the Central West region and the state of Mato Grosso were home to a wide variety of indigenous ethnicities, quilombolas, among other peoples, but the state had an economy that was poorly integrated with the national circuit and until then, agricultural production was

basically for subsistence, and did not fit into the interests of the federal government. The author also points to the contradictions in the public policies which, in the obsession with the so-called "modernization", disregarded the existence of the rural population and did not propose material conditions for improving life or being adequate to these populations (AZEVEDO, 2015, p. 50).

In reaction to the end of the military regime, new actors emerged on the political scene, in a context of awareness about other directions for economic and social development. During this period, the first organized social movements emerged, arising from concern about social inequalities in urban and rural areas.

In 1986, the recovery of land by descendants of former slaves (who used to occupy the lands of Mata Cavalos since the 18th century) began. This action was part of a larger movement of racial awareness, in the course of which, families began to identify themselves as quilombo remnants, supported by the Black Movement and the recently created *Movimento dos Trabalhadores Sem-Terra* [Landless Workers Movement], making use of national and state legislation (still in elaboration stage) in order to demand the devolution of the lands. Meanwhile, the growing precariousness of living and working conditions in the cities could be observed. It directly affected this portion of the population of Mata Cavalo who, in the 1940s, migrated to the outskirts of the cities in search of better living conditions.

With the end of the military dictatorship, in 1987 the National Constituent Assembly was formed, with the responsibility of drafting the new Federal Constitution. The conflicts over the recognition of the lands of quilombo remnants in the Constituent

Assembly took place at a conceptual level, as on the one hand the interpretation of the black movement was placed with the bias of struggle for land and recognition of territories, on the opposite side were the ruralists who advocated that this right be discussed within the scope of culture, with the intention of taking the focus away from the land issue (SOUZA, 2010, p. 26).

Ten years later, in 1998, the community of Mata Cavalos (fig.2) was recognized by the government of the state of Mato Grosso as a quilombo remnant, according to the concepts defined by the Federal Constitution of 1988, and at the end of 2000, the Fundação Cultural Palmares [Palmares Cultural Foundation] issued a domain title for the area, recognizing the community as a quilombo remnant.

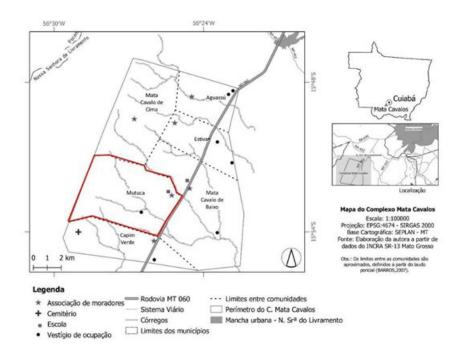


Figure 2. Map of the Quilombola community Mata Cavalo and its six communities, highlighting Quilombo do Mutuca. Source: elaborated by the author.

From 2003 onwards, with the beginning of president Luís Inácio Lula da Silva's government mandate, "black and guilombola social movements understand that they have reached a favorable environment for the execution of their immediate and historical demands" (SOUZA, 2010, p. 35). In 2004, the Secretaria Especial de Políticas de Promoção da Igualdade Racial (SEPPIR) [Special Secretariat for Policies for the Promotion of Racial Equality], a department linked directly to the office of the presidency of the republic, launched two programs: Promoção de Políticas Afirmativas para Igualdade Racial Program [Program for the Promotion of Affirmative Policies for Racial Equality], with the aim of combating racism and reducing racial inequalities in the fields of health, education and solidarity economy, and Programa Brasil Quilombola (PBQ) [Brasil Quilombola Program]. Both aimed to articulate structuring social policies with specific focus on the black population, concomitantly with the regulation of legal provisions for the recognition of guilombola communities.

However, this implementation comes up against structural issues such as the dispute over land, the country's historical and traditional formation (which makes it difficult for communities to obtain titles and, consequently, access productive credits and security of investment in agricultural production); and the fragility of the institutions responsible for the infrastructure and educational actions, as it requires action at different administrative levels (municipality, federal government and agencies such as INCRA, Fundação Palmares and SEPPIR).

Until 2016, the implementation of these policies continued to advance (though in a slow pace) either due to the struggles and achievements of social movements of the remaining quilombo

communities (and consequently of the black population as a whole); or due to the democratic structure of participatory councils established in the public sphere that gave voice to social movements. In 2016, there was an inflection in public policies in Brazil. As a result of the impeachment of President Dilma Rousseff and the entry of the new conservative government, racial equality policies were interrupted.

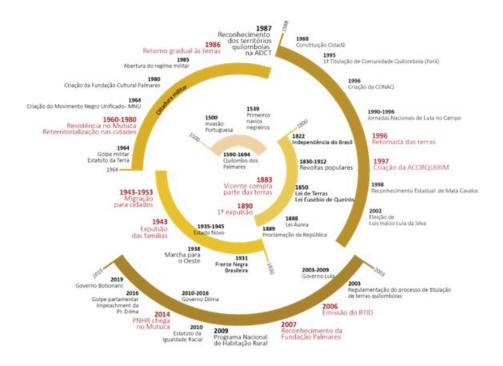


Figure 3. Wheel of Time representing the chronology of Mutuca from 1500 to 2019. Source: elaborated by the author.

In the midst of political cycles (fig.3), the discourse of occupation of the "empty spaces" and "modernization" becomes a constant, updated with each period. It justifies territorial policies and violence that seek to make the ways of producing space as homogeneous as the ways of relating to nature and to work. The quilombos only alternative left was to resist. Conflicts over land

ownership in Mata Cavalo have been ongoing for more than 100 years, and today, the community continues to withstand threats from farmers and large groups interested in their land. Security of tenure is related to reparation, and the permanence of these communities in their territories demands structural actions, especially concerning the way they are considered in the spectrum of public policy development and territorial planning, so that they are no longer seen as "empty spaces" or backward forms of living, but considered in their potential for human, territorial, agrarian and social development instead.

Casa - terreiro as a category for the analysis of the quilombola habitat

The house of memory

The house portrays a wooden structure and a roof with striped babassu straw, the closing walls vary, the left side is closed with prepared wood, the right side with a metal plate, while the wall that delimits the balcony is also made with prepared wood, a technique they call "pau a pique" [doub house] and consists of pieces of the center of the babassu leaf assembled and fixed together with nails. The house has a cement floor and most of it is occupied by a large balcony approximately 6 by 3 meters wide. The area (or balcony) is where we found D. Justina, who welcomes everyone who passes by and it was where she welcomed me when I arrived to visit the houses, almost always surrounded by her grandchildren or children. The house is surrounded by babassu trees, parts of which are used in the construction of the house, its leaves make up the roof, the walls are closed with braided straw or equipped bamboo trees. (Field diary, Souza, 2020)

The houses (fig.4) are the smallest nucleus of the territorial configuration made up of the *terreiros* [farmyards], *sítios* [ranches] and *roças* [small planting fields], which form the Mutuca community. Santos (1996, p. 267) situates the geographic space as "an inseparable set of systems of objects and systems of actions, its definition varies across times, that is, with the nature of the objects and the nature of the actions in each historical moment". Therefore, when we observe the configuration and formation of the space and territory of Mutuca, we consider it from a historical perspective, where it is part of a network of systems and objects that define the country's rural space and the place of quilombola communities in this process.

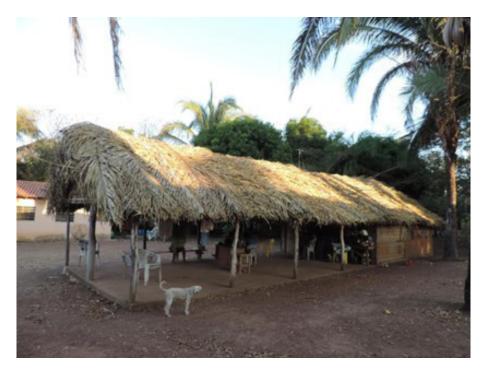


Figure 4. Justina's family house. Source: author's personal collection.

Even considering the different locations, the "house" in the interlocutors' memory is always the same. Bachelard (1978) proposes the understanding of the metaphysical connection that makes up the relationship between the human being and space, the author refers to the house as a dwelling with a profound value of protection of the 'being intimacy'. Therefore, even changing location, shape or aesthetics, the space is revived in memory and imagination, as "every truly inhabited space that brings the essence of the notion of home" (BACHELARD, 1978, p. 200).

For Bachelard, the spaces of the house are within us, just as we are within them. And this reciprocity starts from our first home, the home that is engraved in our spirit, where we learn the real sense of belonging, and which is the primary reference for all the other homes that we will inhabit throughout our lives:

[...] the home of our birth is physically inscribed in us. It is a group of organic habits. Every twenty years, despite all the anonymous stairs (we might experiment), we would rediscover the reflections of the "first staircase", we would not insist on remaining on a somewhat high step. The entire being of the house would unfold, true to our being. (BACHELARD, 1978, p. 206. Our emphasis).

During the conversations with the interviewees, the notion of "home" for the interlocutors never ended within the constructed walls, but extended throughout the yard and, went further, mixing with the homes of their parents and closest relatives. Despite having a strong symbolic value, the notion of living originates in the "shelter house", but it evolves beyond the limits of housing. In the first visits, there was no invitation to enter the family's intimate spaces, but I was offered a walk around the

entire yard, the medicines and even the wood stove where herb baths and bottled drinks are taken. Likewise, at another sister's house, we talked in the shack where the feast of Nossa Senhora de Aparecida takes place, we passed by the fresh water well that has a sophisticated crank mechanism built in wood, took a break in the kitchen, appreciated the wood stove, visited the chicken coop and the huge leafy trees that shaded her grandchildren, who played football.

At the time of the visits, the brothers and children were busy planting in the field; for this reason, they were unable to receive us in their *casa do sítio* [ranch houses], as they were in the farmhouse [*casa da roça*]⁶. The farmhouse is one of these extensions of the habitat, as it shelters families while they are developing the farming activities. The house, therefore, comprises the yard with the kitchen, the oven and the medicinal herbs; it is the place that welcomes activities which are not confined to the body of the house. It is in the yard that you will find the *roça* - the planting area cultivated for subsistence - closest to the house, animal husbandry and even health units, now abandoned. The *terreiros* are like living organisms, and the surroundings of the house are an active part of the lives of its inhabitants and shape the habitat (Figure 5).

^{6.} casa do sítio (translated in this paper as ranch house) and casa-terreiro or casa da roça (translated in this paper as farmhouse) are two distinct terms related to their locations and functions, respectively, the first corresponds to the "homes" (their steady residences), that is, the place where they live with their families and located at shared portions of land, away from the city centers. Distinctly, the latter is the house people use for working purposes. It is a temporary residence where the responsible persons for the planting field stay, sleep and establish themselves during the most intense periods of work, as these shelters are located away from their steady residences.



Figure 5. Elements that make up the *casas-terreiro* of Mutuca [Mutuca farmyard-houses]. Source: author's personal collection.

From this perspective, we see a parallel of *casa da roça* [farmhouse] with the concept of *casa-quintal* [backyard-house] described by Arruda (2007, p. 80), as "the space of use and production of use value, that is, as a material and symbolic construction of the space where its structure of appropriation and physical consolidation is established according to the sociocultural organization that elaborates it". The term *casa-quintal* adopted by Arruda (2007) to address the family farmers backyard-house is adapted here to *casa-terreiro* - the farmyard house – more appropriate and recurrently heard expression in our visits to Mutuca, referring to this qualitative space with use value and symbolic content.

The anthropological report, in turn, describes the houses based on their constructive elements and appropriation, connecting the ways of building, rescued from memory, with the houses effectively built in the most recent centers of reoccupation (BANDEIRA et al, 1996p. 52). In the same document, these houses are characterized as "constructions in a precarious state" (ibid., p. 83) and admits that "The situation of the houses, besides signifying the enormous effort of families to survive, also demonstrates their resistance to the situation of permanent oppression to which they are exposed".

It is by understanding the relationship of belonging to the place – between subjects (quilombolas) and the claimed land (quilombo) –, that we intend to understand the territory. In this process, we see a dialectical movement where the so-called "quilombola identity" produces a certain type of territory, while the forms of construction, occupation and relationship with the territory produce identity, always considering that the process is the result of collective actions of these subjects (MALCHER, 2009, p. 3).

Antonio Candido (2001), in the context of his studies about the *caipiras paulistas* [rural dwellers from São Paulo] in the 1930s, elaborates the argument about obtaining the means of living as a result of needs: "every social group presupposes the achievement of a relative balance between its needs and the resources of the physical environment" (CANDIDO, 2001, p. 29). For the author, this "balance" ensues from both a social character (relative to the social organization to obtain these means of subsistence), and a natural character (relaive to the resources of the physical environment).

Therefore, Candido elaborates the notions of "vital minimum" and "social minimum" - parameters that define the survival limit of each group. From these notions, below the vital minimum there would be hunger, and below the social minimum there would be anomie – a situation of social deregulation and weakening of relationships.

The "simplicity" of the house, described by Candido and perceived in Mutuca, can both refer to a vital minimum of obtaining the means of living (2001, p. 29), and to the past marked by the violence experienced by the families. Thatched houses are often referred to as "shacks", without a direct connection with the meaning

of "precariousness" attributed to this word by common sense, as they are also remembered in their subjective dimension and are related to the notion of ethnic identity.

Terreiro of Justina (Fig.6) also houses the headquarters of the Mutuca residents' association, where the Banana Festival and other events are held, and this use requires more robust structures. The kitchen, which is used by both Dona Justina's family and other nearby families gathered at parties, has a larger space that can accommodate this volume of work.



Figure 6. Illustrated map of Justina's family farm. Source: elaborated by the author.

The kitchen (fig.7) gains centrality in the *terreiros*. It shelters the wood stove and has a connection with the production flows of the planting sites. Despite having kitchens inside their homes, some more equipped than others, children continue to share their mothers' terreiro kitchen or even expanding this space. The kitchen

reveals itself as a place of encounter, consumption and production. It is the main destination for the cultivated products, whether to feed the family or to produce banana derivatives for sale.



Figure 7. Outdoor kitchen in a terreiro [farmyard] of Mutuca. Source: author's personal collection.

The construction of houses, ranches, ovens, kitchens and other living structures are based on life experiences, endogenous knowledge and mastery of the means of production. Here, construction acquires other dimensions beyond the act of building itself. It can also be understood as an act of memory, a form of narrative. The value given to the terreiro-house is expressed beyond everyday functionality: the territory brings together affective meanings and represents the historical trajectory of these quilombola families.

The construction process of the wattle and daub "shacks", present in the buildings of the terreiros visited in Mutuca, was briefly described to us by Justina during one of the visits. During

the conversations, the information is that men are responsible for building the houses – they are called engineers and artisans. Men are the holders of knowledge, but the construction is done in "muxirum", a form of associated collective work carried out in this community. This way, everyone who participates in the construction can at least explain all the steps. Some processes require specialization, and the work on site is carried out collectively in associated work. In addition to the production of the house itself, it is a place for the transmission of knowledge, as the reports point out.

The way of building the quilombola house in Mutuca manifests ancestral knowledge and construction traditions adapted to the local climate and available materials. In addition to being based on the muxirum, they reinforce the symbolic aspects of this way of building.

In the context prior to the provision of housing via PNHR, it must be considered that the housing construction was established based on this adjustment to the minimum material necessary for shelter and reproduction of life, or the adjustment to the economic situation experienced by the quilombo remnants.

It would be the conformation of the knowledge contained in the construction technique and use of abundant materials in the location (in this case, babassu), fulfilling the needs of shelter and security. The quilombola house reveals itself as a space with use value and cultural dimension, symbolically appropriated over time.

However, there is a fine line between the culturalist and the historical materialist views. The first observes the quilombola way of living taking into account the aesthetics that results from their peculiar ways of building - at risk of falling into anachronisms - and the second, that focuses on the quilombola's way of living and the transformations it has undergone overtime.

Furthermore, this view may ignore other determinants of this process, such as the economic situation experienced by the inhabitants of Mutuca and the needs and desires that are updated over the years. This explains the importance of considering culture in movement and appropriate to its historical, political and economic context.

Candido (2001) defends the idea that the social disorganization of the caipiras [rural dwellers] might result from transformations in the countryside and the extension of large estates. The result of these transformations would possibly be aggravated if the culture and sociability of the groups in question were not taken into account. The author recovers the tradition of the caipiras at the propositional and political levels, in the face of Brazilian social problems, where the contributions of technical development should converge with the knowledge of these groups to create new vital and social minimums (CANDIDO, 2001).

At this point, we also agree with Candido's concern about analyzing and understanding the social organization of São Paulo's caipiras, since the so-called technical development reaches Mutuca in different ways that are full of contradictions.

The house of the National Rural Housing Program (PNHR)

Historically, the knowledge that comes from traditional communities in the countryside, waters and forests goes through processes of erasure. The first public rural housing policies have a strong hygienist nature, pointing out the way of life in the countryside as inadequate and unhygienic. This process contributed to the gradual abandonment of construction techniques using natural materials such as earth and wood, extinguished trades and disrupted work relationships on construction sites.

Until 2013, the 120 families currently living in the remaining quilombo community of Ribeirão da Mutuca – or just Mutuca – lived in houses made of wood and babassu straw, as described in the previous section. This year, families had access to the Programa Nacional de Habitação Rural [National Rural Housing Program], a housing provision policy launched in 2009 by the Ministério das Cidades [Ministry of Cities], which financed the construction of 150 houses in Mutuca between 2013 and 2016 (fig.7). Until now, few public infrastructure policies had reached the location. The energy network extended to all houses in Mutuca and other communities in Mata Cavalo was only installed in 2008, with the "Luz para todos" [Light for all program]. Access to water is via artesian wells or streams and waterholes, and until 2013, health units used rudimentary septic tanks and were installed outside the houses.

Bolaffi (1982) points out that, historically, the concept of housing deficit appears as a false problem. It used to guide public policies justifying that the production of new units would be a solution to face the scarcity or crisis, disregarding the fact that the root of the problem was inherent to social inequality and low income.



Figure 8. House built by PNHR in Justina's terreiro. Source: author's personal collection.

In fact, deficit data facilitates the reading of historical series and can help understanding some of the dimensions that shape housing political processes. However, in territories located in the countryside, waters and forest, the same methodology adopted for urban households is employed. Furthermore, no data is collected on the inadequacy of households, only on the quantitative deficit. Therefore, there is no official analysis of the situation of rural households that takes into account criteria such as land inadequacy, lack of infrastructure (electricity, water supply, sewage, garbage collection), absence of exclusive restrooms, inadequate coverage and excessive density of private houses.

While observing these data, and relating them to the reality of Brazilian rural scenery, it can be inferred that the deficit data disguises processes in which the central issue is often the access to land, permanence and basic sanitation. And, by automatically and inadequately associating the construction material, they further reinforce prejudices against the knowledge, ways of living and construction techniques of social groups such as quilombolas (LENZI, 2017). Added to this scenario, is the absence of specific statistical data on quilombola territories, which strengthens the 'erasure' of this socio-spatial group and its housing needs in the construction of specific public policies. It is worth noting that there is a prospect of change in this aspect, since the census carried out in 2022 shows a specific identification area for quilombola territories, the result of the years-long struggle of the Coordenação Nacional de Articulação dos Quilombos (CONAQ) [National Coordination for the Articulation of Quilombos] for this change in the Census.

In 2009, the federal government's Minha Casa Minha Vida Program (PMCMV) was launched, seeking to address/solve the housing deficit, but above all, to boost the economy in a period of crisis, mainly in the construction sector. A decade after the launch of the program, a series of studies indicate that the program veils the "problem" of housing highlighted by Bolaffi (1982) and, again, disguises the "false problem" in order to strengthen the construction production chain, leaving aside tackling structural and specific problems involving the issue of urban and rural housing.

The federal program was marked by contradictions and reflected the political and economic conditions of the period, which generated heterogeneous results. If, on the one hand, it appears as an anti-cyclical economic policy, on the other, it was the public policy that allocated the most resources to the construction of housing units for the population with incomes of 0 to 3 minimum wages. And, with regard to rural housing policies, for the first time

the definition of beneficiaries includes other social groups from the countryside, waters and forests, such as quilombolas, indigenous people, extractivists, fishermen and foresters.

The enterprise called "PNHR Antonia Cassemira Pinto", the first one carried out in the Mutuca community, is considered by Caixa Economica Federal (CEF)⁷ as a successful case in the state of Mato Grosso, especially due to the involvement of the residents' association in its achievement and in the social technical work that won a national award from CEF. This action was the first experience of ACORQUIRIM in public housing policies, which until then, had performed mainly on family farming, agroecology and solidarity economy projects.

The PNHR Antonia Cassemira began in October 2013, when a contract was signed with CEF for the construction of 50 scattered housing units. The architectural plan was based on a standard from the CEF project database, single-story houses measuring approximately 36 m² distributed in 2 bedrooms, 1 bathroom, living room combined with kitchen and open laundry area.

The house dimension based on the description and size of the minimum furniture, leads to the design of a 'program of necessities' similar to the typology adopted by the urban version of the housing program in question. The selected construction systems followed the conventional pattern frequently used with industrialized materials.

^{7.} Brazilian financial institution, in the form of a public company, with its own assets and administrative autonomy, headquartered in Brasília, in the Federal District, and with branches throughout the national territory. Also referred to by its initials, CEF is the Bank which operationalizes habitation programs with public resources.

A foundation frame (concrete plate on which the house is put) was used; fence with ceramic brick masonry, ceramic tile covering, metal structure and PVC lining, coverings (such as ceramic floors, tiles in the kitchen and bathroom), windows and doors with aluminum frames.

Regarding the form of execution, the association reached an agreement with the construction company that carried out the work on a global contract basis, and the latter hired members of the community to provide food for the team and the quilombola workers were registered as bricklayers and servants. Even though they were building houses for their own families, on a salaried basis, the builders were part of a logic of work mediated by the construction company. It is possible to notice that when they do the same work to self-build their houses, made of masonry or babassu straw, they place themselves in a different logic of production and organization of work on the construction site.

Some reports indicate that families participated in some decisions, however, the real meaning of "participation", observed in the narratives about the PNHR experience in Mutuca, reveal it is, in fact, a "pseudo-participation" (KAPP, 2011, p. 3). That is, the choice quilombolas are allowed to make is based on a set of options given by others (for example, the future residents of the new houses could choose between the American or compartmentalized kitchen, and whether the bathroom would be within the house). There is also a contradiction between this action of heteronomy represented by the housing policy and its insertion in a territory socially produced with a high degree of autonomy, which has inherent qualities regarding the appropriation of the space. At the same time, It (the territory) coexists with the precariousness ensued from material poverty, thus justifying the State's actions of heteronomy.

This configuration of the territory guaranteed the gaps that constituted certain degrees of autonomy achieved in the PNHR process. Internally, decisions were always made collectively during community meetings. Within the program's contracting stages, the association sought to find out about the regulations and institutional procedures necessary for managing the enterprise as an Organizing Entity.

The allocation of a large volume of resources for rural housing is certainly an advance, however the inclusion of the PNHR into the PMCMV program interrupts efforts to include housing provision within the scope of rural development (underway in recent years). The way housing provision is carried out in Mutuca and its contradictions are nothing more than a local reflection of a process that takes place on a larger scale.

For ACORQUIRIM, one of the biggest gains of PNHR Antonia Cassemira was the engagement of residents in the process, as it recognizes the community's effort and responsibility in developing its projects. The recognition of the association by society "outside" the quilombo was consolidated in the dissemination of the Organizing Entities (EO) authorized by CEF. The Association was the only organizing entity qualified to execute PNHR projects in Mato Grosso. After the success of the first project, in 2016 the association launched two other projects in the community, with 50 units each, totaling 150 homes built by the association between 2013 and 2018.

With regard to adaptation to new homes, in the perception of the interlocutors, they all agreed that the living condition improved. This perception is connected to the feeling of comfort, related to the bathroom connected to a sewage system; and safety, both in the

constructive aspect of shelter from the weather, and in the aspect of not having to leave the house to use the bathroom at night, whether for fear of attack by animals or people.

The issue of basic sanitation arises in conversations about homes as the most significant improvement in relation to the previous situation, constantly associated with expressions of "comfort" and "dignity". The housing units are also associated with "modernity", where everything is "plumbed", the houses are tiled and there is no risk of raining indoors. These observed improvements strengthen the material aspect of this achievement by the Association of Residents, which since its creation in 1996 has struggled to improve the living conditions and citizenship of Mutuca's residents.

Regarding the organization of the house, according to the interlocutors, the biggest change was in relation to the plan, as in the straw shacks there was no compartmentalization of the rooms, there was only one bedroom and some subtle internal partition, the kitchen was outside, as well as the bathroom, and the area (terrace) served as a living room. The use of the outdoor kitchen remains a tradition, and the indoor kitchen is similar to a pantry. The new houses are associated with a new time, which is not the time of evictions and violence (experienced by so many generations), but the time of the safe, steady house that symbolically suggests permanence.

At the same time, they recognize comfort and improved living conditions; Several statements indicate that the straw house was cooler – so much so that some people had to buy a fan to withstand the heat of the savannah in the new houses. Other statements do not leave room for contradiction as they assume that

this new house is much better than the previous conditions, and the residents were able to "choose" what the house would be like. In fact, there is an increase in the health and material conditions of housing, but this should not shield the process (and the project) from criticism, especially from residents, considering that at the time the program was considered a public policy in construction. From the point of view of territorial implications, the project had a visible impact on the number of houses built, and these changes reflected the relationships existing in the place. The new houses were attached to the *terreiros* [farmyards] (fig.8) and became part of the territory, along with straw houses, kitchens, chicken coops and planting fields. Kinship relationships were materialized in the territory in such a way that the interlocutors' generation of children started to have their own homes in the same terreiro where they grew up.



Figure 9. PNHR houses sharing the same backyard. Source: author's personal collection.

The house of mixture

Within this complex framework of advances and setbacks during the production of this territory, there are several margins of maneuver for the adaptation of this new constructed space, based on the expansion and reorganization of the uses of the buildings. The new houses became part of the routine and were appropriated by families, who adapted them to a greater or lesser extent to their daily lives. While the old houses, made of straw or prepared wood, when preserved, undertook other uses.

In one of the cases, the old house was partially dismantled, the straw kitchen remained and is the most used because it is close to the water hole and other structures in the terreiro, close to the shed where the saint's festivities take place. The new house was built at a higher point, and the interlocutor did not make any changes to her house, but says that if she could reformulate something, she would make a larger area in the front of the house, but the lack of money to bear the costs of materials makes it difficult. The priority, in terms of renovations and construction, is the shed that hosts the Feast of Our Lady of Aparecida, to which a large part of the family's savings are directed.

In another yard, the PNHR houses have not been altered, but there is a desire to change: they would like to enlarge the living room and create a terrace. Currently, the residents use their sister's kitchen, "because it's bigger and everyone ends up cooking together" (verbal report, SOUZA,2020). She showed us around the house, in the kitchen we could see the utensils carefully stored in the cupboard, and on the counter, the banana candies she makes. The appliances were covered in matching embroidered dish towels. The room didn't

have much furniture, and the window was covered by a dark curtain. Outside the house there are several pots with ornamental plants and medicinal herbs, which are used to make medicine.

The change in construction materials adopted also impacted the consumption pattern of residents, who had to buy fans for the new masonry houses as they are hotter than the old houses, as they have low ceilings and are less ventilated than the straw houses.

One of Justina's nephews told us that this new house is better than the old one, where they used to live with their parents, as the former had one single room and couldn't accommodate the whole family comfortably. The old wooden house remains next to the new house, and he and his brothers still use their mother's kitchen, built separately from the new house with babassu straw. If he could, he would enlarge one piece and make a bigger terrace. What makes the renovation difficult is the lack of work (job positions), which, in turn, makes it difficult to access financial resources to buy construction materials.

Each family has its specificities and ways of organization regarding the house, but, in general, there is a desire to expand the common spaces in the area (terraces) and the kitchen, which remains separate from the other rooms and must contain a wood burning stove.

Some families have already expanded their houses, as is the case of Anísia and her son, who expanded the kitchen (figs.9 and 10). This expansion is unfinished, revealing the limits of financial resources available to complete the renovation. Renovations and expansions are not usually a reason to call for a "muxirum" that mobilizes several family members, as occurs with the construction of straw houses. Self-construction takes place with the help of the closest children or nephews, or brothers who have some experience with construction using materials purchased in nearby cities.



Figure 10. Expansion carried out at the PNHR house in Mutuca. Source: author's personal collection.



Figure 11. Expansion of the external area for house activities related to agroecological production. Source: author's personal collection.

It is worth noting that the construction of housing by rural dwellers in rural areas does not have the same meaning as the recurrent construction of housing by outskirts dwellers on the outskirts of Brazilian cities, understood as the super-exploitation of the worker's workforce. According to the reflection proposed by Lenzi (2018, p. 95), construction within the context of Mutuca by its residents is part of another logic and produces other consequences.

The author suggests that "construction in the peasantry by peasants is nothing more than a portion of the production of their family's means of life, production of one of the family's self-consumption items" (LENZI, 2017, p. 97). In this sense, the reality of Mutuca is close to the situation observed in the peasantry, and the house is considered a vital minimum and constitutes itself as "a job like any other everyday job, you produce for yourself, and the product of this work will continue to be yours, for your usufruct" (ibidem, p. 96).

There are two distinct moments during the construction practices in Mutuca by its residents, *the first* of which takes place in the building of wattle and daub houses and other structures in the habitat – related to work in muxirum, and to endogenous ancestral knowledge regarding construction techniques with local materials (wooden structure, wattle and daub, closures with braided babassu straw and different types of babassu straw coverings), in short, it is part of the sociability practices observed in the location.

The second moment takes place during the renovation and expansion of the PNHR houses, when construction (by residents) is carried out using systems and work organization closer to the PNHR mode of production (compared to that experienced in the

construction of straw houses). The logic expanded by the program disseminated construction systems that employ industrialized materials and organization of work on the construction site, different from straw houses, as verified in the interviews. In these cases, when something in the structure of the house deteriorates, families do not always have access to the materials and financial resources necessary for repairs. In cases of improvements or expansions, the workforce is restricted to those who have had some experience with civil construction outside the quilombo, and access to materials demands financial resources that sometimes do not fit into family budgets.

In this movement, more and more families become integrated into the capitalist mode of production of the house, this time by means of incentives for a public housing provision policy. And so, dependence on ways of building based on the logic of industrialized civil construction gradually takes the place of ancestral ways of building.

Preliminary considerations

From the grounds of the Ribeirão da Mutuca Community, it was possible to perceive the connection between the shared past and the present, which is revealed both in reaffirming quilombola identity through cultural and training activities with young people, and in the daily practices where residents update the knowledge of their ancestors without falling into anachronisms, such as the collective use of land and agroecological production.

The community strengthens networks with "outsiders" and is politically included in agroecology and solidarity economy groups that articulate rural communities across the state and the country, consolidating a front of resistance from rural populations against agribusiness. Among these struggles, the priority issue for the community is still the regularization of lands and the right to have its existence recognized and valued, in the same way that the ancestors did over the centuries. However, there is an understanding that the property title is not enough to guarantee permanence, but that legal security must be combined with elements that guarantee better living conditions for this population, such as incentives for production and income generation, improvements in habitability and infrastructure, and access to education and health services.

The process of space production in Mutuca is a fragment through which we intend to understand, in general terms, the strategies and mechanisms of the production of Brazilian space and the reproduction of different territories and identities over hundreds of years. Historically, the state project materializes in strategies of "colonization" of the so-called "empties", and thus making the capitalist logic of production of rural space viable.

The processes that began with the colonial occupation of the country in the 16th century, the march to the west in the 1930s, the expansion of agribusiness in the 1980s and the 2000s marked by the continued expansion of this productive model in the countryside, where "agro \(\epsilon POP\)" [agro is a Point of Presence] suggest reflection on the formation of space, its contradictions and historicity. These

^{8.} This slogan is a reference to a wide Brazilian agribusiness propaganda broadcast in the country's media, sponsored by large soybean producers in Mato Grosso, which values this sector of the economy but hides its contradictions and violence, especially regarding the illegal occupation of original lands.

processes suggest the updating of a mode of production that since the beginning generates socio-spatial impacts, and promotes it as the only possible option, or the country's "vocation".

As we have seen, the State's actions have almost always served the interests of agribusiness and only in the last 20 years have they had a positive impact on the people who inhabit the countryside, waters and forests. Affirmative policies such as the Brasil Quilombola Program, and the National Rural Housing Program itself with all its contradictions, are actions that contribute to the recognition of rural territories as a space for the reproduction of life and work, in addition to agricultural production or tourism.

In this sense, the analyzes were marked by the movement between the immediate improvement of living conditions and the fragility of public actions in the face of the particularities of the territory. From the dialogue with the interlocutors in the field research, we realized that the houses built according to housing policy have a direct impact on improving quality of life and health, but do little to contribute materially to guaranteeing 'permanence', which demands the coordination of other dimensions such as productive capacity and security of tenure.

So, when State action effectively reaches Mutuca and provides new housing conditions, it symbolically transforms the state of precariousness and materially modifies housing with new construction systems and new ways of building. In this dynamics, the "house of memory" – and all its symbolic content of know-how – remains alive in all other elements of the habitat (kitchen, party shack, etc.) and aggregates this additional object – the house of "material" – both in concrete dimension as well as the symbolic

dimension. This new masonry house is not described by residents as a "quilombola house", but it integrates with the habitat, fulfills the vital minimum and updates the social minimum.

From the description and analysis of how residents in Mutuca obtain their living means and which adjustments they have made over the years to reach vital and social survival, it is clear that the community was able to materially preserve the ways of collective work in their farming practices, while the 'roça de toco' [the traditional slash-and-burn agriculture] becomes part of the agroecology logic; and the occupation of common territory – recognized by law – as a type of special property. The ways of building, on the other hand, change radically and, as observed in the narratives, this factor does not seem to impact the effort to preserve the quilombola ways of life.

The PNHR house is based on a logic that admits the house as an object and commodity; in turn, the quilombola house is built from relationships founded in the territory and carries the quilombola worldview (the ways of doing things – their know-how), in the choice of materials and in the organization of work. The territory encompasses these two dimensions and all contradictions involved.

The construction of the PNHR house modifies the content of the collective work present in the construction of the quilombola house, at the same time as it strengthens the institutional consolidation of ACORQUIRIM in the fight for better living conditions. So, on the one hand there is the ancestral way of building, using local materials (and the entire context of maintaining knowledge and organizing work), but deeply connected with the idea of precariousness and a past of violence. On the other hand, there are industrialized materials that quickly promote the desired feeling of security and

social advancement. Urban architectural typology and conventional civil construction arrive with more force and as the only possible option when associated with public policy.

Public policy, in turn, signals State action towards the recognition of this territory. If in one hand, there is an amount of resources allocated for this purpose, on the other, this action is part of a national policy that homogenizes rural space disregarding the formation of different territories and neglecting the ways of living of social groups who originally occupy them, disjointed from other sectoral policies. At the same time, conditions of insecurity of ownership and difficulty in remaining in their territory reveal the inability of housing policy (for being sectoral and disjointed from others) to understand and respond to the housing needs of quilombola populations – which encompass the habitat as a whole.

In this sense, we do not consider that valuing the ancestral way of building (solely for its cultural value) is sufficient when this way of building does not meet the demands for adequate housing for these people. A path must be outlined that makes the material conditions viable so that the potential contained in the ancestral knowledge of the way of living and producing the quilombola habitat is expressed, without falling into anachronisms or possible romanticization of precariousness.

We understand that the guidance arising from structured public policies, or specific service actions, must always start from dialogical processes of collective construction and self-determination. If for urban territories such as favelas and occupations the elaboration of popular plans is a consolidated instrument as a technical alternative to sometimes imposing actions, in guilombola

territories it is important to seek the experiences of territorial plans that consider the provision of education, health, generation of income, legal security, and beyond. This type of instrument is already part of the legislation that operates on indigenous lands, the so-called Planos de Gestão Territorial e Ambiental⁹, [Territorial and Environmental Management Plans], and activates the possibility of popular and purposeful territorial planning that is based on the needs and desires of residents.

Technical support would be provided in an appropriate manner to the reality, with the aim of promoting the right to citizenship beyond the urban space. On a local scale, territorial plans drawn up with residents would guide public policies and the actions of leaders at broader levels. At the regional scale, the preparation of data must be stimulated so that these territories appear on maps and official reports and are considered in the regional planning as occupied and productive territories, and no longer as empty. Transversally to all these actions, is the need to strengthen participatory and deliberative bodies, with the presence of leaders and residents in decision-making processes about their territories, articulated in a multidisciplinary way with reference to structures such as the "Brazil Quilombola Program" and the city councils, in a way that articulates the programs and spheres of public power, based on the real needs and desires for development of quilombola territories.

^{9.} The Plano de Gestão Territorial e Ambiental (PGTA) [Territorial and Environmental Management Plan] is an instrument of the Politica Nacional de Gestão Territorial e Ambiental de Terras Indígenas (PNGATI) [National Policy for Territorial and Environmental Management of Indigenous Lands] — established by Decree No. 7,747, of June 5, 2012.

By connecting the history of the Mata Cavalos community to the context of each historical period, we intend to recover the dynamic nature of this territory, where there were several attempts to annul, diminish and even exterminate it, its inhabitants and the relationships involved in building it. But, as shown, at each attack to the Mata-Cavalos community, and especially to Ribeirão da Mutuca, they sought different ways to resist and maintain their way of life.

There are many possibilities to approach the issue. Apropriate initial questions could be about the autonomous forms of space production that already existed in these locations. The house, for example, was part of the context of quilombola territoriality. It has been based on relationships of solidarity, with the land, with the ancestors, with the *roça*, the river, the *cerrado*, and thus, shapes the territory. The community portrays a way of life that is not stagnant, nor does it reproduce all the traditional practices, but remains essentially connected with ancestry, through the relationship with nature, which is reflected in the way of occupying the territory and in the actions of resistance and elaboration of desires for the future, whether with masonry houses or babassu straw houses.

References

- ARRUDA, A. F. **O espaço concebido e o espaço vivido da moradia rural**: políticas públicas x modo de vida camponês. Dissertação (Mestrado) Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, 2007.
- AZEVEDO, D. Políticas territoriais, redes técnicas e políticas na estruturação do espaço em Mato Grosso. Tese (Doutorado em Planejamento Urbano e Regional) Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, 2015.
- BACHELARD, G. **A poética do espaço**. São Paulo: Abril Cultural, 1978.
- BANDEIRA, M. de L. **Mata Cavalos (MT)** Relatório Histórico Antropológico. Brasília: Ministério da Cultura, Fundação Palmares, Cuiabá: Universidade de Cuiabá, 1996.
- BOLAFFI, G. Habitação e urbanismo: o problema e o falso problema. *In*: MARICATO, E. (Org.). "A produção capitalista da casa (e da cidade) no Brasil industrial". 2ª ed. São Paulo, Alfa-Ômega, 1982.
- CANDIDO, A. **Os parceiros do Rio Bonito**: estudo sobre o caipira paulista e a transformação dos seus meios de vida. 9. ed. São Paulo: Ed. 34, 2001.
- FIABIANI, A. **Mato, palhoça e pilão**: o quilombo, da escravidão às comunidades remanescentes (1532-2004). São Paulo: Expressão Popular, 2005.
- GOMES, F. **Mocambos e quilombos**: Uma história do campesinato negro no Brasil.1a ed. São Paulo: Claro Enigma, 2015.
- GOMES, L. **Escravidão**: Vol. 1: Do primeiro leilão de cativos em Portugal até a morte de Zumbi dos Palmares. 1. ed. Rio de Janeiro: Globo Livros, 2019. 504 p. v. 1.

- LENZI, C. C. A habitação camponesa no programa MCMV. Dissertação (Mestrado em Arquitetura, Urbanismo e Tecnologia) Instituto de Arquitetura e Urbanismo, Universidade de São Paulo, São Carlos, 2017.
- MAGNANI, J. G. C. "De perto e de dentro: notas para uma etnografia urbana" **Rev. bras. Ci. Soc.** [online]. 2002, vol.17, n.49, pp. 11-29. ISSN 0102-6909.
- MALCHER, M. A. F. "Identidade quilombola e território". *In*: **Comunicação do Fórum Mundial de Teologia e Libertação**, Artigos. Belém, 2009. p. 399-421.
- MARTINS, J. de S. **A imigração e a crise do Brasil agrário**. São Paulo: Livraria Pioneira Editora, 1973.
- ______. **O Cativeiro da Terra**. 3. ed. São Paulo: Ciências Humanas, 1986.
- SANTOS, M. **A natureza do espaço**: técnica e tempo. Razão e emoção, São Paulo, Hucitec, 1996.
- SOUZA, A. C. de. A luta pela garantia dos direitos quilombolas e as políticas públicas de ação afirmativa: Limites e Desafios. Programa de Formação de Conselheiros Nacionais, UFMG. Brasília, 2010.
- SOUZA, E. O. de. **Modos de morar no Quilombo Ribeirão da Mutuca**: ajustes e transformações do território à luz da política de habitação rural. Dissertação (Mestrado). Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo. São Paulo, 2020.
- ZUQUIM, M. de L. **Os caminhos da Bocaina**: uma questão agrária ambiental. (Tese de Doutorado em Arquitetura e Urbanismo), Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo, São Paulo, 2002.

Conflicts in the public management of "virtual land":

Is the additional building potential a public good transferable to private property?

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Introduction

Operação Urbana Consorciada - OUC [Consortium Urban Operation - CUO] may use, as a means to achieve its purposes, the issuance of certificates of Certificados de Potencial Adicional de Construção – CEPACs [Additional Building Potential], securities that can be sold on the financial market. The Estatuto da Cidade [City Statute] establishes that these titles will be converted into the right to build in the area of the Consortium Urban Operation - CUO, providing that this exercise is possible above the basic coefficient adopted up to the maximum allowed.

However, there is an intense debate among the authors of Urban Law on the legal nature of the "right to build" and about what title this 'good' or 'right' may be transferred and incorporated to, thus becoming part of the asset of individuals who adhered to the CUO

^{1.} This article originates from the work presented at the SEMINÁRIO FORUM 21, on September 29, 2021, in São Paulo.

Program. There is a strand that understands the additional building potential (acquired by joining the CUO) is definitely incorporated into the individual's private property by means of its binding to the lot and, consequently, it can be widely used and negotiated on the market and even be subject to legitimate or testamentary succession.

In this context, this article intends to propose a reflection on the possible impacts on city planning resulting from this reasoning, based on the case of CUO Faria Lima, which illustrates the debate and provides more precise contours to the issues presented.

The CUO, using the space adrift mechanism [solo criado ou terra criada], provides for the transfer of additional building potential to the individual, a right to be acquired through the conversion of the CEPAC by the municipal body. The resources received by the Municipality from the transfer of this asset² to the individual are, in turn, intended to promote the proposed set of urban, social and environmental interventions and transformations of urban operations. It should be noted, however, that the City Statute, in the articles that regulate this instrument, does not explain the legal nature of the building potential, nor it clarifies to what title this potential is transferrable to individuals within the scope of CUO, leaving such aspects under the responsibility of the municipal legislation that instituted the instrument.

The reflection we propose requires a return to the foundations of the "instituto do solo criado" [space adrift institute], which are enshrined in the Carta de Embu [Embu Charter] and

^{2.} And of the other urban rights the law authorizes access to (by individuals) by means of urban operations.

in the decision of the Federal Supreme Court³ in 2008. For some authors of urban law, the nature of the additional building potential, as a public good, results from the notion of separation between the right to property and the right to build, an idea that already existed in similar international institutes and in Brazil during the first debates on space adrift. This idea leads to the understanding that the right to build above the basic coefficient belongs to the community and, for this reason, can only be accessed by individuals (private agents) with a concession or authorization from the competent public authority, in this case the Municipality. There are at least three theories that discuss this separation between the right to build and the right to property and the ensued impacts on the actions of public authorities regarding the limitations on the right to property, which will be dealt with in the next item.

In the case of the Municipality of São Paulo (in municipal urban legislation) there is a difference between the regime of the Outorga Onerosa do Direito de Construir - OODC [Onerous Grant of the Right to Build - OGRB] and the regime of Consortium Urban Operations, which is the pillar of this debate. The difference lies in the possibility of converting Certificados Adicionais de Potencial de Construção (CEPAC) [Certificates of Additional Building] into the right to build independently of the edification approval, which does not occur in OGRB, whose grant is strictly linked to the project presented. This is the so-called "binding CEPACs to the land", as provided for in §2 of article 143 of Plano Diretor Estratégico - Lei nº 16.050/2014 [Strategic Master Plan - Law No. 16,050/2014] and various provisions of current consortium urban operations.

^{3.} STF, RE 387047/SC – Rapporteur: Minister Eros Grau, judgment date: 03/06/2008, DJe; 04/30/2008

The concept of 'binding CEPAC to the land' lot is not clearly defined in the law, allowing the emergence of the thesis that the binding results in a definitive and permanent transfer of the acquired additional building potential to that lot. That is, the transfer or "binding" of the additional building potential constitutes a perpetual right, attached to the property, to construct on those new levels acquired. The basis of this thesis is the nature of the additional building potential as an 'available' public good.

As a result, there are those who argue that within the scope of CUO, and being the additional building potential an available public good, its transfer corresponds to a costly alienation to the individual, which means the definitive incorporation into private property. We do not share this understanding, and our objective in this article is to demonstrate how the "space adrift" mechanism is incorporated into the CUO instrument and how (to which title) the additional building potential enters private property, after its conversion based on the presentation from CEPAC. Furthermore, we also aim to understand the limits of this mechanism when inserted in a specific urban planning instrument and point out some normative gaps that impact the issue. The aim is to demonstrate that, despite the differences between this instrument and the OGRB, the mechanism used for "space adrift" is the same and, therefore, they must share equivalent concept and treatment, despite the differences in conception that permeate these instruments.

Urban Operations: historical background and incorporation of the space adrift mechanism

The CUO instrument was introduced into the Brazilian legal system in 2001 with the publication of the City Statute, but its origin and application are admittedly prior to this law. In 1986⁴, the so-called interconnected urban operations (and integrated urban operations⁵) were established in São Paulo (considered the first Brazilian experiences of the instrument). It is important to remark that the interconnected urban operations were foreseen in the scope of Plano Diretor de São Paulo [São Paulo Master Plan] since 1985. They aimed to encourage the provision of housing units (of social interest) by owners of lands occupied by favelas, via municipal authorization to modify rates and characteristics of land use and occupation (for these areas of favelas) or others owned by them.

The formatting of this instrument in Brazilian legislation was influenced by international experiences, discussed and implemented in the 1970s and 1980s, especially French legislation on the Zônes d'Aménagement Concerté – ZACs, established by the French Urban Planning Code in 1967, and which have "joint development" as their guiding principle, that is, concerted actions between public authorities and private operators. ZACs are areas

^{4.} Municipal law no 10,239, of December 9, 19866

^{5.} According to COSTA (2014), integrated urban operations are those that occur on the initiative of the Municipality or via proposal from the private sector. In the latter case, the significant majority of owners of lots or plots of land will be able to submit proposals in the public interest, as long as they finance the infrastructure necessary to make the project viable.

acquired by the public authorities to promote urban transformations and improvements, which are subsequently transferred to private agents as a way of recovering the costs resulting from the appreciation achieved by the interventions carried out.

Maricato and Ferreira (2002), point out that although Brazilian urban planners usually agree that the creation of urban operations in Brazil was influenced by the French experience, it is not possible to affirm that the urban operations established here correspond to a mere import of concepts and regulations of the French instrument. There are important differences between the economic and social contexts of France and Brazil that impact the results and the configuration of the instruments in each country.

The normative design of CUO, as currently stated in the City Statute, also involves debates and reflections produced in Brazil during the 1970s and 1980s, by renowned Brazilian jurists and urban planners, on the concept of "space adrift". These debates that took place mainly in seminars held in São Sebastião, São Paulo and Embu, resulted in the production of an important document that became known as the "Embu Charter", published in 1976, in which the understanding established on the concept of space adrift, its legal basis and its constitutionality are stated. The "space adrift" as defined in the Embu Charter is considered the embryo of the onerous grant instruments and the transfer of the right to build, also included in the City Statute in 2001.

Just like urban operations, the creation of the concept of space adrift is influenced by other international experiences underway in the USA and Europe, which were being implemented to contain the negative effects of urbanization and promote greater

control over urban land. Rezende et al, 2009 points out that in all cases, or in a substantial part of them, there is an underlying conviction that there is a need for separation between the 'right to build' and the 'right to property'.

The importance of consolidating, at that time, a theoretical understanding about the separation or not of the right to build lay in the need to find a legal path so that it would be possible to limit the intense densification that cities had been undergoing due to the emergence of new construction techniques – techniques that allow optimized use of land, especially those aimed at the erection of buildings.

Undoubtedly, the impacts caused by the densification stemming from these new forms of construction would be harmful to the quality of life of people in cities, significantly burdening urban and environmental infrastructure. The predominant understanding was that only the autonomy of the right to build would make it possible to adequately discipline the idea of space adrift, in order to respond to the obstacles highlighted by the Romanesque civilist doctrine, which defended a classical conception of property, where the right to build is conceived as inherent to the right of property, as they are supported by the provisions of the Civil Code (CC), which in addition to granting the owner powers of use, enjoyment and free disposition of the property, provides that his corresponding right to build was to be limited only by neighborhood law and administrative regulations⁶.

^{6.} The CC in its art. 1228 provides that "The owner has the right to use, enjoy and dispose of the thing, and the right to recover it from the power of whoever unjustly possesses or holds it". The art. 1,299, which deals with the right to build, provides that "The owner may build on his land whatever construction he sees fit, subject to the rights of neighbors and administrative regulations.

However, according to Marques Neto (2010), an intermediate doctrinal position prevailed in the formation of the concept of space adrift, according to which there is no absolute separation between the right to build and the right to property. For this part of the doctrine, the owner's right to build is limited to a level to be established by the public authorities and, for anything beyond this level, the right to build belongs to the community and no longer to the individual, explaining why its use can be conditioned to a compensation (which may be financial) to the public authorities. This position is similar to that adopted by the French experience when the institute plafond légal de densité ("legal density limit") was created, establishing that to build above the established density limit, it would be necessary to obtain authorization from the public authorities and pay a counterpart called "versement pour dépassement du PLD (VPLD)" (Costa, 2014).

At the other extreme, the jurists who defended the complete separation of the right to property from the right to build, based themselves on the fact that the second is entirely owned by the community and, therefore, any construction on the lot must be subject to the scrutiny and authorization of the Public Authorities. This position was advocated by the jurist Eros Grau, who participated intensely in the debates and seminars on the space adrift institute. However, Marques Neto (2010) clarifies that this position ended up being discarded based on the conclusion approved by the participants of a seminar held by GEGRAN (São Paulo Executive Group), in 1975, in which it was recognized that the right to property is composed of the right to build, but the use and disposition of this right must be limited by ordinary law.

Urban operations are then designed based on the incorporation of the space adrift mechanism in its structuring form. We highlight that, even before the publication of the City Statute, there were already some experiences with the instrument. In São Paulo, during the 1990s, four urban operations were established: Vale do Anhangabaú, Faria Lima, Água Branca and Centro⁷. The Faria Lima Urban Operation, for example, conceptualized the instrument as an integrated set of interventions coordinated by the Municipal Administration, through the Empresa Municipal de Urbanização – EMURB [Municipal Urbanization Company], with the participation of owners, residents, users and investors in general, aiming at improving and the environmental valorization of the area of influence" and also conceptualized the additional building potential (space adrift) as the computable building area that could be added to that permitted by current legislation and that could be granted under the terms of this law"8. This urban operation also provided for the issuance of the CEPAC, explaining that these certificates would be converted into square meters of computable building area within the perimeter of the urban operation and linked to a specific lot and, furthermore, CEPACs could be freely negotiated until effective binding to the lot.

However, although CEPACs have been included in the law since 1995, their effective application only occurred years later, after the publication of the City Statute, when the Urban Operations Faria

^{7.} The aforementioned urban operations were established by the following municipal laws, respectively: Law n° 1,091/1991, Law n° 11,732/1995, Law n° 11,774/1995 and Law n° 12,349/1997.

^{8.} Law No. 11,732, of March 14, 1995 – art. 1st and art. 2nd.

Lima and Água Espraiada were transformed into CUOs. Until then, the counterparts had to be paid in cash, as provided for in the decree regulating urban operations from 1995. Given the characteristics of urban operations in São Paulo, it is possible to state that the space adrift mechanism was already incorporated into urban operations before the City Statute, even when payments were made in cash.

A few years later, the City Statute established the CUOs, consolidating a specific model of urban intervention characterized by the participation of private agents and the use of resources from private capital to promote the objectives set out by the instrument (COSTA, 2014). The definition of the instrument presented by federal law corroborates this understanding, as it establishes that consortium urban operations are considered to be the set of interventions and measures coordinated by the Municipal Public Power, with the participation of owners, residents, permanent users and private investors, with the purpose of achieving structural urban transformations, social improvements and environmental appreciation in an area.

The federal regulation of CUOs seeks to recognize the possibility of using the space adrift mechanism in the structuring of the instrument, as it provides that indices and characteristics of subdivision, use and occupation of soil and subsoil may be modified. This idea is reinforced at the point it establishes the specific law that approves the urban operation may provide for the issuance of CEPACs, that may be sold at auctions or used directly to pay for the works necessary for the operation itself. It also provides that CEPACs will be freely negotiated, but convertible into the right to build solely in the area subject to the operation.

In these terms, according to COSTA (2014), CEPACs correspond to the possibility of creating land within the scope of CUOs. However, debates remain about the legal nature of the space adrift (created land) in CUOs and about how this potential is transferred to private properties.

Urban Operations in the Municipality of São Paulo: São Paulo Master Plan and the Faria Lima Urban Operation

Apprehending the regulation of urban operations in the Municipality of São Paulo will help us to better understand the conflicts and debates that we intend to highlight about the transfer of additional building potential to private agents. Considering the City Statute is a law of general guidelines, it is only within the scope of local regulation of the instrument that it is possible to explain more precisely where such conflicts reside. Therefore, in the sequence of this study, we will discuss how the CUOs are structured in the Municipality of São Paulo, especially in the Plano Diretor Estratégico (PDE) [Master Plan]. Next, we will deal with Urban Operation Faria Lima, highlighting the fact that this operation appeared before the City Statute, but its publication was subsequently reissued to comply with the dictates of the federal law. Therefore, it is an urban operation that, in addition to being considered one of the most successful (from the point of view of fundraising⁹), was originally conceived in the wake of debates on the formulation of the concept of space adrift.

^{9.} There is, however, several studies critical of this instrument, demonstrating that the supposed success in fundraising was not effectively converted into urban improvements and transformations that would serve the most vulnerable population. On this issue, see MARÓSTICA STROHER (2019).

The current Master Plan of the Municipality of São Paulo¹⁰, published in 2014, regulated urban consortium operations in its articles 137 to 143. In general terms, the regulation of the instrument in the municipality, follows the contours outlined by federal law, but establishes a rule that adhers to the municipal urban policy strategy, for example, the determination of consortium urban operations can only be created in the Macroárea de Estruturação Metropolitana [Macro Area of Metropolitan Structuring].

Regarding specifically the granting of additional building potential, article 140 provides that it will be governed exclusively by the provisions of its specific laws. However, it determines that the specific law clarifies the transition rules from the legal regime of the consortium urban operation to the ordinary legal regime of the Lei de Parcelamento [Land Subdivision Law] and Lei de Uso e Ocupação do solo [Use and Occupation Law] applicable at the end of each urban operation¹¹.

Furthermore, when dealing with the possibility of issuing the CEPACs, it provides that their binding may be carried out at the time of approval of the specific building project for the land or, in case of request by the interested party, the CEPACs may be bonded directly to the land, independently of the approval of the building project.

It should be noted that the Master Plan does not clarify what the expression "binding additional building potential directly to the land" precisely means, but the idea contrasts with the alternative concept that the CEPAC could be linked to the building

^{10.} Municipal law no 16,050, of July 31, 2014.

^{11.} Art. 141, XVI do PDE de 2014. Art. 141, XVI of the PDE of 2014.

project (as in the case of the OGRB). In any case, it seems to us that the decision on how to bind CEPAC must be defined in the specific law that establishes it. Still on this topic, the Master Plan provides that the specific law may also establish mechanisms to encourage or discourage the binding of CEPACs depending on the time elapsed between the CEPAC auction and its binding. Finally, it is still necessary to highlight that the Master Plan determines that a general norm be published regulating operations related to CEPACs, a norm that has not yet been published.

To understand the elaboration of CUO in the Municipality of São Paulo, it is also important to use the definitions of some essential elements in the formation of the instrument presented by the Master Plan. Table 1 of the PDE, which gathers all these definitions, presents some fundamental guidances for the application of the instrument: (i) utilization coefficient, (relationship between the built area – excluding the non-computable area –, and the area of lot dividing it into: a) basic utilization coefficient (the one that results from the free building potential inherent to urban lots and plots); b) a maximum utilization coefficient (such as that which cannot be exceeded) and; c) a minimum utilization coefficient (below which, the property can be considered underutilized).

The concept of 'basic coefficient' corresponds to what Marques Neto (2010) points out as a reflection of the intermediate theory regarding the separation of the right to property and the right to build, as presented in our first item. Another fundamental concept for this study is that of financial compensation, which according to the PDE, is the economic value – corresponding to the onerous grant of additional building potential – to be paid to the Public Authorities by the property owner, in cash or in

Additional Potential Certificates. It should be noted that, under the terms of the Municipal Master Plan, the financial counterpart (or compensation) is the economic value of the onerous grant of additional building potential, which makes clear the use of the onerous grant mechanism of the right to build within the CUO. The definition of onerous grant, in turn, establishes that its nature is 'of concession by the Public Power', 'of additional building potential' (above that resulting from the application of the basic utilization coefficient, up to the limit of maximum utilization), 'of shifting use and urban planning parameters', upon payment of financial compensation.

The definition of onerous grant in the Master Plan is quite similar to the definition of space adrift contained in the Embu Charter, which defined space adrift (created land) as any building above the single coefficient, whether involving the occupation of airspace or subsoil. In the case of São Paulo, the space adrift is located between the basic coefficient and the maximum coefficient (to be defined for each established urban operation).

Finally, the definition given by the Master Plan for additional building potential must be highlighted. The definition presents the additional building potential as *bem dominical* (a legal good available for public common use), owned by the municipality government, with urban and social-environmental functions, corresponding to the difference between the basic and maximum building potential of the lot. This definition appears in Table 1, but is also provided for in article 116 of the Master Plan, inserted in the subsection that deals with the OGRB instrument.

This is a legal definition that innovates in what concerns the configuration of the legal nature of the space adrift, constituting it as an 'available, for common use' good, referring to a traditional classification of public goods existing in the Brazilian Civil Code. The Brazilian CC classifies the public goods according to their use or affectation. Further on, we will deal more specifically with the implications of this definition by the Master Plan and its repercussion on the concepts of the urban operation instrument. First, we will discuss the Faria Lima Urban Operation, starting with analysis on its original format, established by Law No. 11,732/1995 and, later, by Law No. 13,769/2004, aiming to adapt the Faria Lima Urban Operation to the provisions of the City Statute. This look at the two urban operations of Faria Lima will help us understand: how the mechanism for binding the CEPACs to the land was designed over time (even after new rules for urban operations were introduced by the City Statute) and how the 2014 Master Plan adopted it in its provisions.

Law 11,732 published in 1995 established the Faria Lima Urban Operation and its article 1st established the system and concept of operation, as we have already transcribed in this study. To achieve the intended objectives, art. 6th of this law authorized the Federal Executive Power to carry out, in an onerous manner, the granting of building potential and alteration of urban parameters, as a means of obtaining the necessary resources to enable the interventions foreseen in the Faria Lima Urban Operation.

Among the legal provisions, one establishes that the granting of building potential occurs through its binding to a specific lot. In fact, the grant procedure, even in the system of current laws on CUOs, corresponds to "binding additional building potential and urban

parameters to the lot", which results in the issuance of a Certificate, a document that proves payment of the grant and certifies to the Municipal body, responsible for building licensing, the entirety of the additional building potential and other urban parameters acquired.

The same dynamics was maintained for the CUO Faria Lima. The idea of binding additional building potential to a specific lot appears in Law No. 13,769/2004, which established it¹², but also in Decree No. 53,094/2012, which expressly provides that the issuance of the Onerous Grant Payment Certificate in CEPACs does not depend on the prior existence of any building licensing application. In this sense, the certificate issued has the sole function of certifying the payment of the counterpart for the urban operation and of demonstrating the "binding" of the additional building potential (and any other urban parameters that can be obtained) to a lot.

Considering this entire systematization of the consortium urban operation instrument, it is possible to ascertain that there are, in the Municipality of São Paulo, two distinct forms of "binding" the OGRB: one that occurs at the time of obtaining the license for the construction building project and another that allows the binding of additional building potential based on the exclusive indication of the lot where this right to build will be exercised. As a rule, in Urban Operations or even in Consortium Urban Operations (created after the City Statute) the exclusive idea of binding to the lot was conceived in a way that was completely dissociated from the moment of building licensing, that is, from the building project.

^{12.} Art. 7th, §1st of Law No. 13,769/2004 provides that CEPACs will be converted, at the discretion of their holder, into a number of square meters of additional building area computable in the case of an increase in building potential, established according to a specific lot.

Historically, there is a difference between the OGRB and the onerous granting mechanism for additional building potential linked to Urban Operations. In the case of the OGRB instrument, the payment of the grant is strictly linked to the building licensing and the payment of the counterpart takes place in the process of requesting approval for the building project and is, therefore, connected to it. For this reason, the OGRB instrument follows the same path as the specific project. In this sense, the Court of Justice of São Paulo¹³ has already decided on the impossibility of refunding the amount paid by the private agent (as an OGRB) for a project that was not executed and which, due to intense modifications, had to be subject to new building licensing. The Court of Justice understood that the possible right to build above the basic coefficient of the land, as well as the counterpart (compensation) associated with this right, perish in the event of abandonment of the project, extinction due to expiry of the permit, non-compliance with legal requirements or any other reason that results in the non-continuation of the exercise of the license obtained.

On the other hand, in the case of the grant mechanism related to urban operations, the understanding is divergent. The historical idea of binding the building potential to the lot generated the perception that the additional building potential is an autonomous good that is definitively connected to the land when CEPACs are converted into the right to build with the corresponding payment of counterpart. There are even authors who defend the idea that additional building potential (space adrift) constitutes an intangible and autonomous civil good, with economic value.

^{13.} Appeal No. 1013904-47.2019.8.26.0053 judged by the 3^a Câmara de Direito Público [3rd Chamber of Public Law], on February 19, 2021.

This position leads us to assess whether the so-called binding of the building potential to the lot has a definitive and irrevocable character, that is, if it becomes part of one's property as an acquired good by means of alienation from public authorities. In this last hypothesis, it's clear that the additional building potential could be considered a good over which the private agent acquires his property and can freely negotiate it on the market (separate from the property itself?) and even transmit it to his heirs.

The next section of this paper intends to present these divergent understandings and problematize the various doctrinal reasonings regarding how the additional building potential is transferred to the private sector and point out possible impacts on city planning resulting from the understanding that the additional building potential is subject to alienation to the private sector.

Debates about the nature of additional building potential: public good or right to build, alienation or authorization?

Initially, we highlight our awareness about the fact that the question raised is of fundamental importance. Consortium Urban Operations (CUO) have, in theory, limited additional building potential, as the stock of building potential to be made available within the perimeter of the CUO must include impact studies on the densification they will provoke, in order to assess whether the existing urban infrastructure and those eventually designed as urban improvements will be sufficient to support the densification resulting from the availability of building stock.

In distant Urban Operations, as is the case of the Faria Lima (in force for more than 20 years, if we take into account its version prior to the City Statute), in which several CEPAC auctions are launched, modifications to the urban structure tend to be renewed and the reuse of a building potential linked within the scope of this instrument may emerge as a profitable opportunity for the real estate developer, thus making it plausible to use the thesis that the space adrift mechanism in urban operations areas require their alienation to private entrepreneurs.

This, however, is not a new thesis. Since the debates about the constitution of the space adrift mechanism in Brazil, already reported in this article, show some disagreement between the authors about the nature of this institute. Marques Neto (2010), argues that the space adrift constitutes a patrimonial good different from the ownership of the corresponding property. For this author, because it is an autonomous intangible (or immaterial) asset, it is subject to alienation by the public authorities (precisely through the onerous grant) and, is also subject to alienation by the owners who acquired it. For him, it is a commercial good, although a scarce one, explaining why the public authorities should consider its alienation.

It is worth noting that, regarding the concept of alienation of public goods, Marques Neto (2009) understands that this should be understood as the transfer of ownership, by any legal transaction provided for in law, making the public good no longer 'public' and turning it into something possible to be owned by someone other than the legal entity governed by public law. It is not, therefore, a form of granting the use of the good, which would presuppose the possibility of resumption by the public authorities.

Apparecido Jr (2017) also understands that additional building potential is an intangible thing, with economic value and that can be the object of a legal patrimonial relationship. For this author, it also constitutes an autonomous right in relation to property rights. As it is intangible, consisting of the potential of urban lots, it cannot be confused with the building itself. Apparecido Jr. (2017) clarifies that the building potential, once bounded to the lot, through the conversion of CEPAC or even the OGRB, becomes a type of accession to the land, being definitively incorporated to the owner's right, as it treats accession as a means of acquiring property.

Also in this sense, Grau (1977), analyzing the possibilities of transferring the space adrift to individuals, based on the considerations and debates that took place in the seminars for the formulation of the Embu Charter, excludes forms of transfer such as authorization or use permission, as they constitute a discretionary and precarious administrative act, it also rules out the possibility of a license, as this allows individuals to carry out specific activities. For Grau (1977), the transference cannot be considered a concession of use either, as this presupposes the transfer of use of property in the public domain to a private individual. Thus, for this author, what occurs in the granting of space adrift is the sale of a specific good, that is, the transfer of an asset upon the respective remuneration. The jurist also adds that the problem would only lie in the need to create a flexible system for negotiating such rights by the public sector.

Seabra Fagundes (1977) understands that the right to build should not be made autonomous in relation to the right to property. He understands that the purpose of the space adrift is to create limitations on the exercise of property rights, otherwise the property right will be emptied.

Finally, Costa (2014) argues that the space adrift does not exist by itself. The space adrift, that is, the range between the basic utilization coefficient and the maximum utilization coefficient, is stipulated by law by the public authorities as an urban development strategy in certain perimeters of the city. It is not, therefore, an autonomous legal good or dissociated from the right to build. In this sense, for this author, the mere use of this mechanism by an individual does not constitute a requirement for its existence. Costa (2014) highlights that, so much so, that if the public authorities decide not to establish a coefficient higher than the basic one for certain perimeters of the city, there will be no need to talk about space adrift.

It is important to highlight that the authors referred in this paper recognize the constitutionality of the limitations imposed on the owner's right to property and the right to build regarding the establishment of urban rules (that means the establishment of a basic coefficient), as this is clearly a limitation that arises from the application of the social function of property, as highlighted since the first debates on space adrift. Furthermore, it should not be forgotten that the additional building potential fulfills essential urban planning and environmental functions for the city.

In this sense, Martins Refinetti and Magami (2022) explore the fundamental urban and environmental bases of additional building potential, demonstrating how it corresponds to an important mechanism for urban policy and urban development strategies to be put into practice through the various urban instruments that contemplate the mechanism of the space adrift.

Considering this complexity, the definition of the title to which the additional building potential is transferred, especially within the scope of CUO, is rigorous, because as we have seen, even the authors who focus on the urban functions of the space adrift understand that the mechanism involves its definitive transfer to private property.

It seems to us that it is the role of the specific laws (that establish consortium urban operations and also of the Municipal Master Plans) to reflect on the strategies for transferring this good to private agents. Within the scope of law, the legal consequences arising from the sale of assets affect the possibility of broad negotiation of this good on the market, as well as the possibility of succession transmission.

Another aspect that must be taken into account is the possibility of negotiating additional building potential as an autonomous good dissociated from property rights and the impacts that this understanding may have on the dynamics of the city's urban regulations. It is important to consider that if the building potential is treated as an accession, this lot will be permanently given another level of basic utilization coefficient, even if the municipal government understands, years later, that it is important to reduce the densification of that area. This understanding leads to the possibility of the owner, for example, demolishing and rebuilding with the same utilization coefficient obtained on a permanent basis.

The Municipality of São Paulo seems to be moving in this direction when it establishes the concept of additional building potential as a property good. The classification of public good as property assets means that they are devoid of any affectation and, therefore, are part of the available public assets, that is, they only have patrimonial interest. The idea of binding the building potential to the land reinforces this understanding and is even contradictory to the idea that this asset concentrates relevant urban and environmental functions.

With this debate, we intend to have contributed to the formation and consolidation of a clear conception of the legal nature of the additional building potential, taking into account its public urban and environmental functions, in a way that directly impacts the way in which this good is transferred to individuals. Finally, as we have already pointed out, this reflection starts from the Consortium Urban Operations of the Municipality of São Paulo which, due to their history and complexity, allow for a better observation of this problem and its effects on the instrument and on the city's urban planning. Moreover, although this issue was the subject of a specific case, it is not limited to it, given the obscurity of practices in relation to theories.

References

APPARECIDO JÚNIOR, José Antonio. Direito urbanístico aplicado: os caminhos da eficiência jurídica nos projetos urbanísticos. Curitiba: Juruá, 2017.

COSTA, José Maria da. Solo Criado. São Paulo: Migalhas, 2014.

Direito Urbanístico: estudos fundamentais.

Odete Medauar, Vitor Rhein Schirato, Luiz Felipe Hadlich Miguel, Bruno Grego-Santos (Coord.). Belo Horizonte: Fórum, 2019.

GRAU, Eros Roberto. Aspectos jurídicos da noção de solo criado. In: O Solo Criado/Carta de Embu. São Paulo: Fundação Prefeito Faria Lima; Centro de Estudos e Pesquisas de Administração Municipal (CEPAM), 1977.

MARICATO, Ermínia; FERREIRA, João Sette Whitaker. Operação Urbana Consorciada: diversificação urbanística participativa ou aprofundamento da desigualdade? In: OSÓRIO, Letícia Marques (org.). Estatuto da Cidade e reforma urbana: novas perspectivas para as cidades brasileiras. Porto Alegre/São Paulo, 2002.

MARQUES NETO, Floriano de Azevedo. Bens Públicos: função social e exploração econômica: o regime jurídico das utilidades públicas. Belo Horizonte: Fórum, 2009.

MARQUES NETO, Floriano de Azevedo. Outorga onerosa do direito de construir (solo criado). In: Dallari, Adilson Abreu; Ferraz, Sérgio (Coords). Estatuto da Cidade: comentário à Lei Federal 10.257/2001. 3ª ed. São Paulo: Malheiros, 2010.

MARÓSTICA STROHER, Laisa Eleonora. A constituição social da financeirização urbana no Brasil: o papel das Operações Urbanas com Cepac. Tese de Doutorado. Universidade Federal do ABC. Santo André, 2019.

MARTINS REFINETTI, Maria Lucia; MAGAMI, Douglas Tadashi. Solo Criado em São Paulo: terra virtual produzindo espaço e desigualdade. Cadernos da Metrópole. São Paulo, v. 25, n.56, pp.143/163.

REZENDE, Vera F.; FURTADO, Fernanda; OLIVEIRA, Maria Tereza C.; JORGENSEN JR, Pedro. A outorga onerosa do direito de construir e o solo criado: uma necessária avaliação das matrizes conceituais. Revista Brasileira de Estudos Urbanos e Regionais. Recife, v. 11, n. 2, 2009, pp. 51-71.

SEABRA FAGUNDES, Miguel. Aspectos jurídicos do solo criado. Rio de Janeiro, Revista de Direito Admnistrativo, nº 129, 1977.

SÃO PAULO (Município) (2014). Lei n. 16.050, de 31 de julho. Aprova a Política de Desenvolvimento Urbano e o Plano Diretor Estratégico do Município de São Paulo e revoga a Lei n. 13.430/2002. Available at: https://gestaourbana.prefeitura. sp.gov.br/marco-regulatorio/plano-diretor/. Retrived in: 2 jun 2019.



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