



MOVIMENTOS SOCIAIS NA OCUPAÇÃO DE IMÓVEIS VAZIOS NAS ÁREAS CENTRAIS E O ENFRENTAMENTO INCLUSIVO DAS MUDANÇAS CLIMÁTICAS: OS CASOS DE SÃO PAULO E NATAL

Social Movements on the Occupation of Urban Voids in Central Areas and the Inclusive Facing of Climate Change: The Cases of São Paulo and Natal

Emanuel Ramos Cavalcanti

Universidade Federal do Rio Grande do Norte – UFRN, Natal, RN, Brasil.

Lattes: <http://lattes.cnpq.br/6805137553894905> Orcid: <https://orcid.org/0000-0002-3131-7786>

E-mail: emanuel.cavalcanti.au@gmail.com

Amíria Bezerra Brasil

Universidade Federal do Rio Grande do Norte - UFRN, Natal, RN, Brasil.

Lattes: <http://lattes.cnpq.br/8887892378979463> Orcid: <https://orcid.org/0000-0001-6877-4916>

E-mail: amiriabrasil@gmail.com

Ricardo de Sousa Moretti

Universidade Federal do ABC, Santo André, SP, Brasil

Lattes: <http://lattes.cnpq.br/7819421851048499> Orcid: <https://orcid.org/0000-0002-3807-4684>

E-mail: ufabc.moretti@gmail.com

Julia Azevedo Moretti

Pontifícia Universidade Católica de São Paulo (PUC/SP), São Paulo, SP, Brasil

Lattes: <http://lattes.cnpq.br/4735094906899872> Orcid: <https://orcid.org/0000-0003-4898-1824>

E-mail: moretti.julia@gmail.com

Trabalho enviado em 10 de setembro de 2020 e aceito em 14 de maio de 2021



This work is licensed under a Creative Commons Attribution 4.0 International License.



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

ABSTRACT

Popular housing movements have been challenging the Brazilian's exclusionary pattern of urbanization. Occupations of vacant buildings by social movements constrain the State to guarantee the right to the city, including housing. Climate change accentuates risks related to exclusionary urbanization and responses to its impacts demand mitigation and adaptation measures that support transformations tackling structural inequalities and helping to overcome vulnerabilities. The article aimed to highlight the dimensions of vulnerability and inequality, as well as the role of social movements in denouncing unequal processes and creating housing alternatives, using vacant buildings in central areas. To this purpose, we started from the premise of climate justice which highlights a social justice problem at the heart of climate change issues and performed a comparative analysis between urbanization dynamics and recent insurgent practices of social movements in São Paulo and Natal. It was found that the use of vacant properties in central areas promoted by social movements is aligned with the inclusive confrontation of climate change. However, difficulties persist such as a deadlock situation regarding measures to improve the safety and qualify the use of occupied buildings as well as to implement the right to the city comprising access to housing and infrastructure.

Keywords: Right to the city; Urban voids; Social movements; Climate change; Climate justice.

RESUMO

Os movimentos populares pela habitação têm desafiado o padrão excludente da urbanização brasileira. As ocupações de imóveis vazios, pelos movimentos sociais, têm pressionado o Estado pelo seu dever de garantir o direito à cidade, inclusive à moradia. As mudanças climáticas tendem a acentuar riscos relacionados à urbanização excludente e seu enfrentamento, inclusive, ensejaria ações mitigatórias ou adaptativas, corrigindo desigualdades estruturantes e superando vulnerabilidades. O artigo objetivou destacar as dimensões da vulnerabilidade e da desigualdade, bem como o papel dos movimentos sociais na denúncia de processos desiguais e na construção de alternativas habitacionais, utilizando imóveis ociosos das áreas centrais. Para tanto, partiu-se da premissa da justiça climática, que destaca um problema de justiça social no cerne das questões das mudanças climáticas e, como método, uma análise comparativa entre a dinâmica da urbanização e práticas insurgentes recentes de movimentos sociais, em São Paulo e Natal. Verificou-se que a atuação dos movimentos no uso alternativo de imóveis ociosos em áreas centrais mostrou-se alinhada com o enfrentamento inclusivo das mudanças climáticas. No entanto, persistem dificuldades como no impasse quanto às medidas de melhoria da segurança e qualificação dos edifícios ocupados e na efetivação do direito à cidade, com acesso à moradia e infraestrutura.

Palavras-chave: Direito à cidade; Vazios urbanos; Movimentos sociais; Mudanças climáticas; Justiça climática



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

INTRODUCTION

The strategies of social movements for the affirmation of the constitutional right to housing (article 6 of the Federal Constitution - FC), in São Paulo and Natal, take place at a time of expansion of the debate on the role of cities in facing climate change and of growing concern with the obtaining responses to the negative effects of these changes in a context of urban poverty and informality. The pandemic of the new coronavirus unraveled structural inequalities and reinforced that facing global crises involves the need for adequate housing for the most socioeconomically vulnerable population.

The hypothesis of this article is that the action of social movements to enable the use of idle properties (empty, underused or unused) in central areas converges with the inclusive approach to face climate change, since, among other factors, it would press for an increase of housing supply in central areas, questioning a model of peripheral urban growth, which puts pressure on green areas or even generates an increase in displacements and energy costs with the associated environmental consequences. However, such action has faced many difficulties: from a slow implementation (and rapid dismantling) of urban policies aimed at the use of idle properties, in order to fulfill their social function, to constant initiatives to criminalize these social movements.

Based on a comparative analysis between the dynamics of urban occupation¹ and recent insurgent practices of social movements in São Paulo and Natal, this article makes use of the concept of climate justice to highlight the dimension of vulnerability and inequality, as well as the role of social movements in denouncing unequal processes and construction of alternatives for production of social housing, using idle properties in central areas, initiatives that can be seen as an inclusive way of tackling climate change, asserting the right to the city.

To this end, the article is structured in four parts: the first is conceptual, in which the concepts of vulnerability and climate justice are discussed in the context of the inclusive confrontation of climate change and the construction of resilient cities, as well as the role of the use of idle properties located in central areas of cities as one of the strategies in this process. The second part presents a review of the collective actions undertaken by social movements for housing located in central urban areas of the city of São Paulo, with emphasis on the recent process of discussion on the gradual qualification of security and the constitution of public-popular partnerships, as strategies to enable the permanence of residents in about 50 occupied buildings in the central area of the city. The third part discusses the process of urban expansion in the city of Natal, presenting recent initiatives of social movements that have been engaged in ensuring the occupation for housing purposes of idle public buildings located in



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amária Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

the central areas of the city, in a strategy of confluence and articulation between the agendas of provision of collective equipment for homeless people and social movements for housing and access to the city. In the fourth and last part, concluding remarks point out common aspects of the two cases, bringing a reflection on the role that social movements have been playing in the search for the expansion of the use of idle properties in central areas, signaling new academic studies that can contribute to this process.

1. THE ROLE OF THE USE OF IDLE PROPERTIES IN CENTRAL AREAS IN THE INCLUSIVE CONFRONTATION OF CLIMATE CHANGE

1.1 CLIMATE JUSTICE AND AN INCLUSIVE APPROACH TO CLIMATE CHANGE

The urban issue has been increasingly highlighted in the debate on climate change and there is increasing evidence on the relevance of cities in terms of the impacts of climate change and responses to the effects of these changes. In this sense, the Intergovernmental Panel on Climate Change (IPCC) itself has devoted more and more space to urban issues (DODMAN; ARCHER; SATTERTHWAITE, 2019).

To place cities at the center of the debate, it would suffice to remember that the world and Brazilian population is already mostly urban and that cities have high energy consumption and greenhouse gas (GHG) emissions. With this, we also value their political influence and leadership capacity to address urban climate governance, remembering the growing movements of local government articulation (MARTINS; FERREIRA, 2011).

But in the context of poverty, informality and inequality that marks the Brazilian urbanization process (and also many other cities in the global south), it is fundamental that the confrontation of climate change takes place from an inclusive perspective, aiming at the reduction of risks and vulnerabilities of the poorest population (DODMAN; ARCHER; SATTERTHWAITE, 2019; WILLIAMS et al., 2019). Climate change tends to accentuate existing risks associated with an exclusionary pattern of urbanization². Thus, the climate issue can be seen as an opportunity to – through mitigation measures and, mainly, adaptation – correct structural inequalities and overcome vulnerabilities³ and urban-environmental problems linked to the Brazilian urbanization pattern (MARTINS; FERREIRA, 2011).

Still, what we see is a paradoxical situation in several studies on climate change. Diagnoses identify, even if subtly, patterns of inequality, but in the actions suggested for mitigation and adaptation, inequality and inclusive practices are not addressed. There is a faith in efficient and clean



technology, in solutions that need market incentives⁴. Thus, it can be said that there is an urgent need to expand studies that highlight the inclusive approach to climate change.

When it comes to mitigation, the central issue is the reduction of emissions and the expansion of sinkholes in order to limit climate change, stop global warming. In urban areas, this issue is translated into actions aimed at the main sources of emissions, such as energy standards, transport and solid waste management. Adaptation, on the other hand, deals with action focused on a certain vulnerable system to mitigate impacts and reduce damage considering the current and future scenario⁵. The two dimensions cannot be seen as mutually exclusive, but complementary (MARTINS; FERREIRA, 2011) and in both it is possible to adopt an inclusive perspective in the face of climate change, although in adaptation, even due to the concept of vulnerability, this dimension of social justice is more evident.

Vulnerability is defined by the IPCC itself as a propensity or predisposition to be adversely affected, a concept that involves other elements such as susceptibility to damage and lack of ability to cope and adapt (IPCC, 2014, p. 5). It is also important to note that vulnerability encompasses social, economic, political and biophysical aspects (WILLIAMS et al., 2019).

Vulnerability is a central aspect in several studies that address climate change from an inclusive bias. Relating it to risk and resilience (taken as an antonym of vulnerability) and seeking propositional alternatives that involve the affected population in the decision-making process (WILLIAMS et al., 2019) puts into practice the notion of right to the city. This is because, it is worth remembering, the right to the city has a practical-reclaiming reading key (TAVOLARI, 2016) that can foster more inclusive climate actions, encompassing the impact of climate on the set of other rights understood as central components of the right to the city, namely, social function of land, environmental sustainability, democratic management, prohibition of retrogression, right to adequate housing, access to public space (ALFONSIN et al., 2017). The relationship between right to the city, vulnerability, and climate change already appears in IPCC reports that argue that reducing basic service deficits, improving housing conditions, and building resilient infrastructure systems can significantly reduce vulnerability and exposure in urban areas (IPCC, 2014, p. 18).

Empirical studies that highlight the link between poverty and vulnerability in the context of climate change show that the lack of public services and infrastructure provided by the State perpetuates the cycle of poverty, vulnerability, and inequality, and community efforts undertaken to cope with the negative impacts of extreme climate events may even have an effect in restoring living



conditions before the occurrence of a disaster, but they are not enough to promote significant improvements in the quality of life. In other words, resilience to climate phenomena should be understood from two aspects: resumption of previous conditions (bounce back) and improvement of living conditions with overcoming of deficits (bounce forward), and in this second aspect the intervention of the State through public policies is fundamental (WILLIAMS et al., 2019).

It is important to note that building resilience in the face of climate change presupposes understanding the mutual dependence of environmental, political and socioeconomic aspects (WILLIAMS et al., 2019). This interface is notorious in the environmental justice movement, which was a pioneer in highlighting the dimension of inequalities in environmental issues.

The environmental justice movement originated in the 1960s in the United States in the context of complaints against toxic contamination and environmental racism, that is, cases of unequal distribution of environmental risks and institutionalized discrimination against certain groups, linking race, poverty, and pollution (CALGARO; RECH, 2017). It is important to highlight that the emergence of this "submerged agenda" (ACSELRAD, 2002), which articulates social, territorial, environmental, and civil rights demands, and which has gained legitimacy in the public space, is made from the combination of social conflicts and knowledge production, since "scientific knowledge has been commonly evoked by those who intend to reduce environmental policies to the adoption of mere technical solutions, the environmental justice movement has structured its resistance strategies by resorting in an innovative way to the production of knowledge itself" (ACSELRAD, 2002, p. 53). In Henri Acselrad's (2002) view, this is a combination of subjectivist and objectivist moments in which the confrontation of forces in practical terms (objectivist moment), for example territorial and locational conflicts, is associated with the production of knowledge that can have an impact on the construction of discourses and representations, including scientific ones, of reality (subjectivist moment). Thus, the importance of collective actions led by social movements is emphasized.

In fact, differentiated exposure to risk refers to the idea of environmental injustice, a term established to highlight the differences imposed on social groups with less financial, political and informational resources with regard to exposure to environmental risks (ACSELRAD; MELLO; BEZERRA, 2009).

Climate justice can be seen as one of the strands, a thematic specialization of environmental justice that highlights a problem of social justice at the heart of the issue of climate change, after all "as consequências ambientais decorrentes das alterações climáticas não são suportadas na mesma



proporção por todas as parcelas da população” (the environmental consequences resulting from climate change are not borne in the same proportion by all portions of the population. Free translation. RAMMÊ, 2012, p. 371).

It is worth noting that the topic of climate change has a national normative basis (Law No. 12,187/2009) and the imperative need for dialogue with urban planning has been gaining space, but the inclusion of the topic in Master Plans is still happening slowly, with mentions and indirect contributions, of a more principled nature (APPOLARO; ALVIM, 2017; ESPÍNDOLA; RIBEIRO, 2020). The inclusive confrontation of climate change is addressed in a timid way in the federal law, which only inserts among the purposes of the National Policy on Climate Change the need to make economic and social development compatible with the protection of the climate system (article 4, I, Law No. 12,187/09), as well as harmonize climate policies with sustainable development in order to seek economic growth, poverty eradication and reduction of social inequalities (article 4, sole paragraph, Law No. 12,187/09), also recognizing in adaptation measures the need to reduce vulnerabilities, including social and economic ones (article 2, I, Law No. 12,187/09). However, the inclusive perspective does not find solid operational bases in the planning and financial instruments foreseen in Decree 9,578/18. Despite a recent change (Decree 10,143/19) including sensitive urban issues to inequalities, such as sanitation and mobility, among the priorities of the Climate Fund, the management of the fund's resources was centralized in the federal government and in confederations that represent industry, commerce, and agriculture interests, removing from the composition of the Fund's Steering Committee representatives of NGOs, the scientific community, as well as representatives of urban and rural workers (article 14, II of Decree 9,578/18, as amended by Decree 10,143/19).

1.2 THE IMPACT OF SPRAWLING URBAN OCCUPATION AND NON-USE OF PROPERTIES IN CENTRAL AREAS

It is true that, from a mitigation perspective, the reduction of GHG emissions is central to combating climate change. The 2017 Greenhouse Gas Emissions Inventory of the Municipality of São Paulo⁶ indicates that the main emission source is transportation, that is, a commuting model based on motorized modes of transportation, very often on an individual basis, in addition to contradicting the guidelines of the National Urban Mobility Policy Law (Art. 6, II, Law No. 12,587/12), generates high rates of fossil fuel burning and increased GHG emissions.

Mitigation and adaptation measures should be seen as complementary (MARTINS; FERREIRA, 2011) and the issue of emission sources has a clear point of contact with the demand for housing in



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

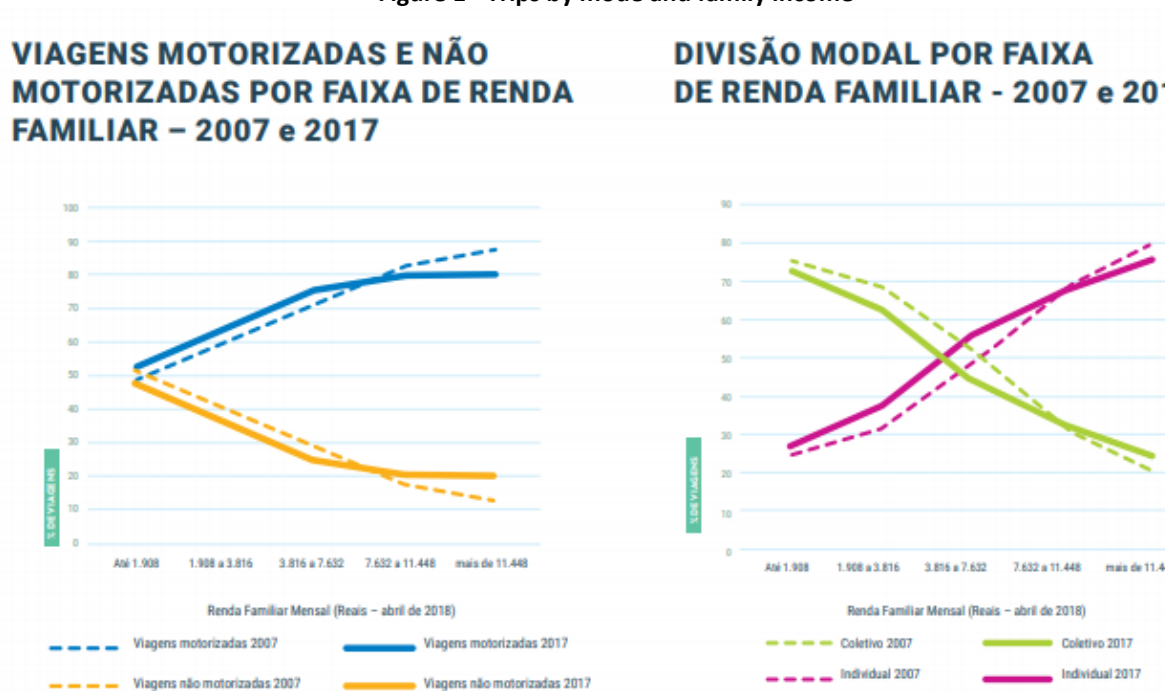
Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

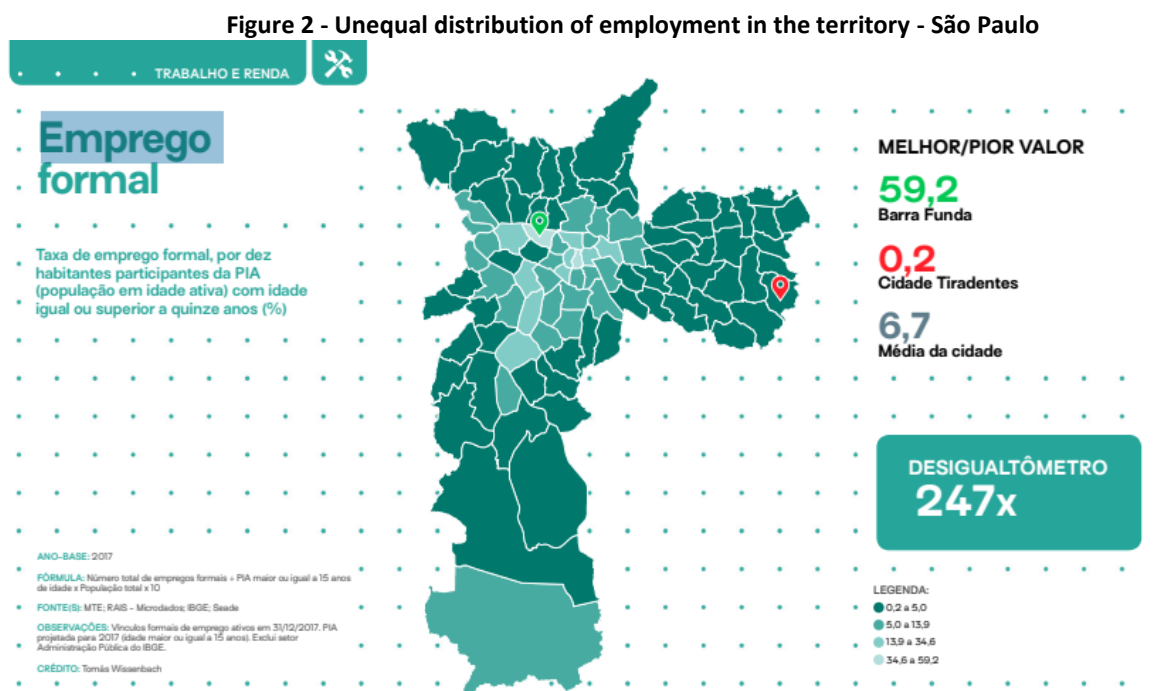
central areas when considering the context of peripheral, unequal and excluding urbanization associated with a strong road network under tires. Data from the Origin-Destination (OD) 2017 survey (METRÔ, 2019) show an increase of the private motorized fleet in proportions much greater than the population increase: while the private car fleet increased by 22.8% between 2007 and 2017, the population growth was of 6.6%. On the other hand, when the mode of travel is crossed with the income range (Figure 1), it is evident that the low-income population makes use of collective motorized trips and non-motorized trips⁷. The higher-income population predominantly uses individual motorized means.

Now, if collective trips take, on average, 3 times longer than individual trips (METRÔ, 2019) and jobs are concentrated in central districts (Figure 2), it is clear that the poor population is exposed to pollution longer to travel long stretches of travel in collective transports – those who contribute the least, suffer the most, whether with the time spent, with traffic accidents or with exposure to pollution.

Figure 1 - Trips by mode and family income



Source: Origin-Destination Survey 2017 (METRÔ, 2019).



Source: Map of Social Inequality - NOSSA SÃO PAULO, 2019.

In this context, mobility and transportation act as structuring systems of socio-spatial relations of housing and work, i.e., being (or aiming to be) inserted/close to housing and work options fed by transportation systems is fundamental for insertion in the metropolis - fruit of dispersed urbanization/slums. Moreover, as these systems and mobility are the main drivers of the logic of real estate valuation, the expulsion of the poorest from the most accessible regions is a common fact, as occurs in São Paulo (ZANDONADE; AUTHOR, 2012). Thus, a mismatch is created between housing and employment places: the central areas with high density of jobs and low housing density in contrast to the distant and less densely populated peripheries (ZANDONADE, 2012). In the end, there are different levels of access to the city, because "quem tem mais renda, mora nos lugares mais estratégicos, paga o valor gerado pela acessibilidade, e se desloca com maior velocidade. Quem tem menos renda, se desloca de forma mais devagar e de forma mais precária e desconfortável" (those who have more income, live in the most strategic places, pay the value generated by accessibility, and commute with greater speed. Those who have less income, commute more slowly and in a more precarious and uncomfortable way. Free translation. ZANDONADE; AUTHOR, 2012, p. 95-96).

In addition, when we look at the relationship between urban mobility and energy use, we find that the choice of individual/private, motorized transport presents significant consumption of space

and time, with high energy demand (human and fossil fuel), increased congestion, pollution, mortality and, mainly, as a contributor to dispersed urbanization, especially in the form of metropolization (ZANDONADE, 2012).

The inclusive confrontation of climate change presupposes fairer, more compact, more energy-efficient cities, which require, among others, less displacement and more housing in central areas and in their immediate expansions, close to jobs. Such strategies are explicitly indicated in São Paulo's climate change law (Municipal Law No. 14,933/09), which, with regard to land use and occupation, "dispõe que a sustentabilidade da distribuição da população ao ocupar o território deve ser norteadada pelo Princípio da Cidade Compacta" (states that the sustainability of population distribution when occupying the territory should be guided by the Compact City Principle. Free translation. SOUZA; SOTTO, 2012, p. 329). The adoption of these paradigms and actions inspired by them (public policies, planning and projects) could positively impact the fight against dispersed/sprawl urbanization that, among other effects, acts in the transformation of rural areas into urban areas with great impact on the environment (waterproofing) and the underutilization of existing infrastructure available, which generates the contradiction of the urbanization of areas not yet endowed with infrastructure, in the distant peripheries, to the detriment of urbanization in areas that already have infrastructure or in the process of being urbanized.

A fundamental action in the discussion on the compact city and combating dispersed urbanization is the use of idle properties (empty, unused or underutilized). In the central areas of Brazilian metropolises, but also at smaller urban levels, there is visibly a stock of unused or underutilized real estate, especially empty buildings, which contrasts with the housing deficit. In the city of São Paulo, for example, there are studies based on census data showing that the resumption of growth in some central districts reflects a complex and heterogeneous process within the metropolis (MARQUES; REQUENA, 2013). Thus, although it is no longer possible to establish a direct correlation between demographic growth, average income and location - with growth of urban boundaries, in places with less access to infrastructure and low-income population, as opposed to the emptying of consolidated central areas inhabited by higher income population - the demographic trajectories show the "permanência dos elevados padrões de segregação presentes na cidade" (permanence of high patterns of segregation present in the city. Free translation. MARQUES; REQUENA; 2013, p. 28). Thus, locational conflicts, that is, the dispute for a better located place, for an installed infrastructure, for



services and jobs, in short, the claim for access to urban infrastructure that constitute the city as "public artifact" (ROLNIK, 2019, p. 14) remain a reality.

One way to face this scenario is to resort to compulsory installment, construction and use (PEUC), linked to successive sanctions for non-compliance with obligations (progressive IPTU over time and expropriation with public debt securities), all provided for in the Federal Constitution (article 182, §4, FC). However, there was a low adhesion of the Municipalities in its use: in an extensive survey carried out by the Ministry of Justice, the effective application of the set of instruments was found in only 8 municipalities (BRASIL, 2015).

São Paulo, which was one of the few cities that regulated the PEUC and progressive IPTU instruments and, relying on a structured institutional arrangement, started the most expressive (in quantitative terms) process of notification of unbuilt, underutilized or unused properties: 1,388 properties were notified between 2014 and 2018 and, in 2018, 392 properties were already suffering the incidence of progressive IPTU over time (CAMPOS, 2019). However, with the change of management, the administrative structure set up was emptied with drastic reduction of the measures of compliance with the social function.

2 SOCIAL MOVEMENTS IN SÃO PAULO: STRATEGIES AND ACTIONS TO AFFIRM THE RIGHT TO HOUSING IN THE CITY CENTER

2.1 THE HISTORY OF COLLECTIVE ACTIONS FOR HOUSING IN THE CENTRAL AREAS OF SÃO PAULO

The demand for housing in the central areas of São Paulo must be seen with a broader view of the evolution of collective actions carried out by social housing movements in the city and the multiple strategies and actions used, whether of an insurgent or institutional nature.

The process of exclusionary urbanization associated with a peripheral capitalist model, marked by a process of industrialization with low wages (MARICATO, 1996), to which is added an insufficiency (or absence) of public housing policies for the lower income population are the engines of collective actions carried out by housing movements.

The 1970s was marked by a process of periphery explosion, in a predominant process of self-construction in irregular or illegal subdivisions, many of which were characterized by the occupation of environmental, floodable or risky areas. This situation leads to a growing mobilization of residents of self-built peripheral subdivisions⁸, fosters popular organization and collective actions of these residents in the search for urban improvements through the implementation of infrastructure and



services in the neighborhoods, as well as the defense of their right to land and property, in the context of possessory conflicts. Such a movement, according to James Holston, subverts the concept of citizenship, which is now understood in an insurgent way (HOLSTON, 2008). There is a growing discourse about the right to have rights due to the contribution to the construction of the city by the formal worker who acquired a lot and built his or her residence on it.

This period also saw the emergence of the first movements organized around the issue of *favelas*, their regularization and defense of the right to land, being emblematic the emergence of the Movement for the Defense of Slum Dwellers (Movimento de Defesa do Favelado – MDF), the first national movement, which began to act alongside other movements that had an older regional character, such as the Federação de Favelas do Rio de Janeiro, or “Rio *Favela* Federation” (COMARÚ; BARBOSA, 2019). These movements start to count on contributions from technical advisors, universities, collectives and professionals linked to the public administration that enhance the urban struggle (BONDUKI, 2018). In other words, it is from the encounter of insurgency with institutionality that the urban reform agenda becomes a global strategy and breaks with local action.

Accordingly, the 1980s marked the consolidation (institutionalization) of popular housing organizations and the creation of nationwide movements. In a scenario of redemocratization, the actors of the Movimento Nacional da Reforma Urbana or “National Urban Reform Movement” (now the Fórum Nacional da Reforma Urbana or “National Urban Reform Forum”) were being formed and mobilization occurred from the perspective of social participation in the constituent process (COMARÚ; BARBOSA, 2019; BONDUKI, 2018). The popular initiative amendment on urban reform dealt with a broad agenda, more extensive than what ended up incorporated in articles 182 and 183 of the 1988 Federal Constitution. If the themes were not necessarily new and some of them had already been discussed since PL 775/83, “[o] diferencial foi a inclusão de muitas das reivindicações dos movimentos de moradia e das entidades técnicas, formuladas durante o processo de redemocratização” ([t]he differential was the inclusion of many of the claims of the housing movements and technical entities, formulated during the redemocratization process. Free translation. BONDUKI, 2008, p. 103), which translates the political force coming from collective actions, especially of popular character led by housing movements.

At the executive level, one can remember the pressure and mobilization of popular movements in the municipal administrations of the 1990s, with their innovative practices and experiments and, in recent years, in the conception of Minha Casa Minha Vida - Entidades, a program



that made possible the reform of buildings in central and well-located areas and has provided good examples of producing quality housing at low cost (Figure 3).

Figure 3 - Frei Tito and Nelson Mandela Housing Complexes – São Bernardo do Campo



Source: Personal Archive.

The performance of housing movements focused on institutional spaces has been object of criticism, especially due to the distancing from the base, with a decrease in the vigor of the strategies of confrontation and grassroots organization. Although we do not defend the removal of institutional spaces, they should be given "a importância e o peso relativo que têm no conjunto de correlação de forças em jogo e disputa" (the importance and the relative weight they have in the correlation of forces in play and dispute. Free translation. COMARÚ; BARBOSA, 2019, p. 39).

The legal and institutional character of many of the achievements reflects a “estratégia de pressão/negociação baseada em pequenos avanços sucessivos” (pressure/negotiation strategy based on small successive advances. Free translation. BONDUKI, 2008, p. 109) that accepts the rules of the capitalist market and bets on conciliation. In the context of environmental justice, the discussion is based on the adoption of mechanisms for “resolução negociada dos conflitos como parte da constituição dos sistemas ditos de ‘governança’ próprios das dinâmicas extra-estatais das reformas liberalizantes” (negotiated conflict resolution as part of the constitution of the so-called 'governance' systems typical of the extra-state dynamics of liberalizing reforms. Free translation. ACSELRAD; MELLO; BEZERRA, 2009, p. 96), which is heavily criticized for covering up conflicts, which remain latent.

Thus, without refusing to participate in negotiation spaces, including through participation in institutional instances of negotiated conflict resolution, housing movements never abandoned other strategies of grassroots work, which involves an educational action on rights and duties, but also of

denunciation and confrontation, after all “quando envolve atores sociais com acentuada desigualdade de poder, a resolução negociada de conflitos pode operar como uma tecnologia social de desmobilização social” (when it involves social actors with marked inequality of power, the negotiated resolution of conflicts⁹ can operate as a social technology of social demobilization. Free translation. ACSELRAD; MELLO; BEZERRA, 2009, p. 101).

The grassroots work counts on debates, study groups, theater, organization of acts and occupations, measures that aim at the organization and awareness of rights, duties, citizenship, in short, the “desenvolvimento de capacidades e habilidades para convivência em grupos de forma organizada – como observado no caso das ocupações de edifícios abandonados das áreas centrais” (development of skills and abilities to live in groups in an organized way - as observed in the case of the occupations of abandoned buildings in central areas. Free translation. COMARÚ; BARBOSA, 2019, p. 40).

Regarding the occupations in central areas, it should be noted that until the end of the 1990s they were more individual and diffuse strategies, actions led by individuals or groups on a small scale. The occupation of the '*Casarão Santos Dumont*', in the Campos Elísios neighborhood, promoted by the Unificação das Lutas dos Cortiços (ULC), is considered the initial milestone of a strategy of systematic, organized and large-scale occupations that goes beyond civil disobedience or an affront of the law to highlight an injustice: it uses the law as a justification to legitimize the occupation (empty properties that do not fulfill the social function), which can be seen as transgressive citizenship (EARLE, 2012). In a more lyrical language, “[o]cupar era uma urgência dos corpos, convertida no mais contundente dos atos políticos, a afrontar a resignação dos serenos. Ocupar, nem que fosse para estar entre muitos, para existir ainda uma vez em coletivo” ([o]cuping was an urgency of the bodies, converted into the most forceful of political acts, to confront the resignation of the serene. To occupy, if only to be among many, to exist yet once collectively. Free translation. FUKS, 2019, p. 105).

The emptying of central areas, in contrast to the population growth in increasingly peripheral areas, despite having decreased after the 2000s, is still striking in the city of São Paulo and the opposition between the number of empty properties and the housing deficit is one of the facets of urban contradictions. In the Metropolitan Region of São Paulo (RMSP), for example, the João Pinheiro Foundation estimates that there are 595,691 vacant homes while the housing deficit is estimated at 638,763 homes (FUNDAÇÃO JOÃO PINHEIRO, 2018). The pressure made by housing movements for the occupation of vacant properties is immense: the occupations are sometimes political acts, as in the



case of the numerous editions of the "red April" or lightning occupations of government institutions, measures aimed at increasing the visibility of the problem (COMARÚ; BARBOSA, 2019). Other times, the occupations are consolidated as true alternatives to high rent costs, the most relevant factor in the current composition of the housing deficit (FUNDAÇÃO JOÃO PINHEIRO, 2018), as exemplified by the nearly 70 properties occupied for housing purposes in the city of São Paulo (70% of them in the central region).

But the history of collective actions whose agenda is housing in the central region is not restricted to occupations by social movements. Tenements, with their veiled reality and social invisibility, have for centuries been configured as a housing alternative for the low-income population that accepts to pay high prices and live in a situation of complete precariousness (CARICARI; KOHARA, 2006), but near work spots in central regions. This is a situation of high vulnerability, which places its residents in a condition of periphery in social terms (EARLE, 2012). It is estimated that there are approximately 80,000 households in tenements in São Paulo (SÃO PAULO, 2016). Although the first actions date back to the 1970s, the first organized group of the housing movement focusing on downtown housing, the Unificação de Lutas de Cortiços (ULC), was formed only in 1991 (CARICARI; KOHARA, 2006).

If territory is power and every power is opposed by a counterpower (RAFFESTIN, 1993), the history of collective actions led by housing movements in central areas of São Paulo shows the tensions between power and counterpower in the urban space, the conflict between the city built and inhabited by people and the capital city, a territory of dispute for the real estate market, understanding that conflicts are not dysfunctional: in a capitalist society they are inherent and to eliminate them is authoritarianism.

2.2 TECHNICAL VISITS FOR SAFETY QUALIFICATION AFTER THE FIRE AT THE WILTON PAES DE ALMEIDA BUILDING AND THE APPROACH TO PUBLIC-POPULAR PARTNERSHIPS

The fire and subsequent collapse of the Wilton Paes de Almeida building that occurred on May 1, 2018, had great media coverage and generated commotion. It was a publicly owned property¹⁰ in downtown São Paulo that had been occupied by one of the housing movements demanding housing in the central area of the city. The disaster generated great pressure for the City Hall to take measures to avoid new occurrences.

The Housing Secretariat mobilized technicians from the Fire Department and from several areas of the city administration that deal with licensing and building safety and invited the leaders of



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

the housing movements for a dialogue, which had the perspective of conducting inspections in the occupied buildings, in order to identify the degree of existing risk. From the beginning it was pointed out that the City Hall did not have a housing solution to resettle the families that were occupying the buildings at risk, and that the rent assistance program, which at that moment had already assisted more than 25 thousand families, would not be a viable solution on a large scale.

The members of the technical assistance to the movements, who were present at the first meetings and followed the process, tried to show the need to change the character of these inspections. It was pointed out that, since these were old buildings, an analysis of the degree of risk in light of the normative parameters of the current legislation would lead to the interdiction of practically all the occupied buildings, creating a social problem that would affect thousands of families.

After extensive discussions, it was concluded that visits were carried out, in which priority measures and works would be identified to qualify the safety of the properties, involving topics such as fire prevention, structural problems and physical injuries, such as falls. They would have the character of a visit and not of an inspection and would be accompanied by leaders of the movements and by members of the technical assistance of the movements. The focus would thus be on identifying priority actions to minimize the problem and not simply assessing the degree of the problem. A group was formed to survey and evaluate possible sources of funds to enable the execution of the priority measures and works that would result from the visit process.

The visits were carried out from May 7 to June 14, 2018. The technical work was carried out in 51 occupied properties, of which 46 are in Sé and Mooca boroughs. The synthesis of information on the visits was consolidated in a technical report issued by the City of São Paulo entitled: “Situação das Ocupações na Cidade de São Paulo” (SÃO PAULO, 2018). This document records an estimated population of 3,500 families and 10,650 people; among the 51 properties, 44% have been occupied for more than 5 years, 57% are linked to some type of housing movement and 31% are public property.

In parallel with the process of visits to the occupied buildings, discussions were held with the Public Ministry of the State of São Paulo, to clarify the nature and purpose of these visits. It was tried to show that the absence of solutions for the housing provision foreseen as a constitutional right, has led to a situation in which the population has to choose between eating or paying rent and that the occupation of the properties meets the attempt to enforce the social role of property, insofar as abandoned buildings are occupied. On the other hand, it was argued that actions for repossession (44 properties are subject to legal actions, and for 16 of them there was, in 2018, a provision for immediate



repossession) have only changed the type of risk or the risk address (AUTOR, 2015). Part of the residents who were in the Wilton Paes de Almeida building, for example, had been the target of removal actions promoted by the City Hall, in the Campos Elíseos neighborhood. On the other hand, real estate reintegration could pose social risks, perhaps even greater than those associated with fires.

Parallel to the visits, an important initiative occurred, which was the voluntary help of a civilian firefighter, who was at the time a student of architecture and urbanism and who worked on the formation of fire brigades in several occupied buildings in which there was interest in this sense. The importance of this initiative was demonstrated a few months later, when there was a fire in a 21-story building located on Avenida Prestes Maia, which fortunately had no major consequences, due to the precise action of the building's fire brigade. The level of organization is one of the aspects analyzed in the City Hall's technical report, which indicates that 57% of the occupied properties are linked to some kind of social movement and that, in these cases, there is a higher incidence of organizational components, such as internal regulations (identified in 62.7% of occupied buildings, 52.9% of which are linked to movements and 9.8% are unrelated to movements) and some type of building maintenance (observed in 74.4% of occupied buildings, 52.9% of which are linked to movements and the other 21.6% are unrelated to movements).

The reports resulting from the visit process focused on safety qualification are now being the basis for the attempt to set up a public-popular partnership (CARVALHO; BEDESCHI, 2019)¹¹. The goal is that in the case of publicly owned properties, the group of residents would commit and take responsibility for the gradual implementation of a set of works and priority measures for safety qualification and improvement of the building's habitability conditions over time, based on the results of the technical visits, receiving in exchange the concession of the right to use the building, for a period of 20 or 30 years. The property would continue to be public, thus assuring the social function of public property and the demand for housing in an adequate place for the population in the social interest zone.

Finally, it is important to highlight that after the collapse of the Wilton Paes de Almeida Building, the Public Prosecutor's Office opened investigations into the collection of money from squatters, which led to the arrest in 2019 of several leaders, many of whom did not even participate in the occupation of the building that collapsed. This reaction, on the one hand, shows the dimension of the process of criminalization of social housing movements, but, on the other hand, it highlights the importance and visibility that these movements have acquired.



3. RECENT OCCUPATIONS AND THE PERFORMANCE OF THE SOCIAL MOVEMENT FOR THE USE OF URBAN VOIDS IN THE CENTRAL AREA OF NATAL

3.1 THE SPREAD OF URBAN OCCUPATION IN NATAL AND THE EMPTYING OF THE CENTRAL DISTRICTS.

The municipality of Natal, located in the Northeast coast of Brazil, has an area of 168 km², being totally urban. It showed intense territorial growth during the twentieth century, being currently with a large part of its territory occupied and an advanced process of conurbation with other municipalities of its Metropolitan Region (RMN). This occupation process, however, did not happen in a continuous and homogeneous way, but was induced by processes that socially and morphologically characterized the territory and marked it with different urban voids along its extension.

The initial occupation of the municipality occurred on the margins of the Potengi River, near the port, where the first economic activities took place, an area equivalent, today, to the district of Ribeira that, together with the districts of Cidade Alta, Rocas and Alecrim, make up the historic center of Natal. In the beginning of the 20th century, the city's expansion started with the demarcation of the so-called Cidade Nova - an area incorporated in later urbanistic plans - which conformed the formal land market and boosted growth in an easterly direction. From the 1970s on, the expansion was linked to the construction of housing estates in the outskirts, initially by the Institutos de Aposentadorias e Pensões (IAPs) and later by the policy of the Banco Nacional de Habitação (BNH).

The expansion to the north, towards the limits with Extremoz and São Gonçalo do Amarante, occurred from the construction of low-income housing developments by the Companhia de Habitação (COHAB), while to the south was driven by developments of the Instituto de Orientação às Cooperativas Habitacionais (INOCOOP) aimed at higher income population, consolidating neighborhoods such as Ponta Negra, originally characterized by farms and second homes (FERREIRA, 2016). The southward expansion was also driven by important equipment such as the Administrative Center of the State Government and the Federal University of Rio Grande do Norte (UFRN), both in the 1970s, which required the implementation of urban infrastructure necessary for this growth, such as the opening of the BR-101 highway (access to UFRN and the conjuntos dos professores and Cidade Satélite), Roberto Freire Avenue (former Ponta Negra road), the main access to Ponta Negra and, finally, Via Costeira, where part of the hotels supporting the tourist activity were installed (CAVALCANTE, 2019).

Until 1970, Ribeira neighborhood still had important infrastructures, such as the bus and railway stations, the port (for passengers and goods), as well as institutional buildings (City Hall and State Government). In the 1980s, the transfer of the bus station to the Cidade da Esperança



neighborhood impacted the commercial and small lodging activities connected to it, while the retraction of the railway activity in Brazil caused many buildings to lose their uses: the expansion of the city caused a process of emptying this neighborhood, the abandonment of many buildings and, little by little, Ribeira lost its identity (TINOCO et al., 2008).

The physical expansion of the city also stimulated the expansion of the formal real estate market and the beginning of verticalization in neighborhoods such as Tirol, Petrópolis, Capim Macio, and Ponta Negra, with valorization of urban voids left along the expansion axes (CAVALCANTE, 2019; FERREIRA, 2016). In the 1990s and 2000s, real estate production extrapolated the limits of Natal with the construction of condominiums, especially in Parnamirim, consolidating the southeast axis and intensifying its verticalization. This expansion was stimulated by investments in tourism, both towards the south coast and towards the north coast, which was strengthened in 2014 with the transfer of the airport to São Gonçalo do Amarante, with investments from the FIFA World Cup (FERREIRA, 2016).

The process of expansion throughout the 20th century resulted in numerous urban voids, but the recent production of social housing (HIS) has not occupied these areas, already endowed with infrastructure. On the contrary, it focused on the production of new units by the Minha Casa Minha Vida Program (PMCMV), aimed at the low-income population (0 to 3 minimum wages), but located on the outskirts of the city (north and west) and in the cities of the RMN. This logic of urban expansion with the production of new developments goes against what is defended about urban sustainability. On the other hand, some social movements claim for the occupation of central urban voids and, therefore, it is important to know them, based on an exercise on the topic that is being done in Natal.

3.2 THE URBAN VOIDS IN NATAL

On the part of the City Hall, there is no comprehensive and detailed survey of urban voids in Natal. There is an urgent need for a broad study that includes the knowledge of formative and transforming processes, the definition, categorization and identification methodologies of these spaces. In practice, the data produced have been, notably, on unbuilt terrain, more easily identifiable by orbital images. In addition to the little knowledge about the other categories of urban voids (empty or underused buildings, underused land, etc.), in order for these data to support adequate public policies, other information, in addition to morphological configurations – such as ownership, tax situation, vacancy time etc. – would have to be properly lifted. Finally, the lack of knowledge of urban voids fundamentally weakens the application of urban planning instruments (in addition to the



omission of the municipal government) provided for in the Master Plan of Natal (PDN), Complementary Law 082/07 (in force and under review since 2017), which does not clearly define these spaces, lacking details from the 1988 Federal Constitution (FC) and the City Statute (EC), of 2001.

In the FC, which establishes the national urban policy (articles 182 and 183), urban voids are “[...] solo urbano não edificado, subutilizado ou não utilizado [...]” (unbuilt, underused or unused urban land. Free translation. BRASIL, 1988), as in the EC, in its 5th article (CÂMARA DOS DEPUTADOS, 2001). In this legislative context, the fundamental principle is the fulfillment of the social function of the city and of the property to be operationalized by instruments such as the Compulsory Installment or Edification (PEUC), the Tax on Urban Property and Territorial Property (IPTU) progressive in time and expropriation with payment through public debt bonds, essential in the fight against speculative retention of the land. On this same front line, there is also the Civil Code (CC), Federal Law No. 10,406/02, which defines, in its articles 1,275 and 1,276, the possibility of losing the property due to abandonment: “[...] poderá ser arrecadado, como bem vago, e passar, três anos depois, à propriedade do Município ou à do Distrito Federal, se se achar nas respectivas circunscrições” (may be collected, as a vacant asset, and passed, three years later, to the property of the Municipality or the Federal District, if it is found in the respective districts. Free translation. BRASIL, 2002). The application of the CC can act as an effective instrument in the fight against speculative retention of the land and the ruin of buildings, since the execution of the law in the abandoned property can comprise a faster process (approximately 3 years) compared to the PEUC/IPTU progressive in time/expropriation with payment in government bonds (which may take 15 years or more if the owner does not comply with successive notifications).

In the PDN, although associated with the application of the PEUC and linked to actions in the Special Areas of Social Interest (AEIS), the urban voids remain defined as in the FC and in the EC, with no deepening in their definitions and no perspective of implementation of the urban instruments foreseen. Currently, the PDN revision has produced a draft of the new text of the Law and, despite the recommendations made by several groups during the revision¹², it has not included, for instance, a conceptualization (not even a glossary) and a map of the urban voids in Natal (the wording remains the same as the one in force since 2007), which will compromise, once again, the use of urbanistic instruments. Besides, the theme of climate change was not inserted, not even the urgent discussion of coastal erosion pointed out by several studies (AMARO et al., 2012; BUSMAN et al., 2013), putting



the new PDN wording in the opposite direction of the national normative, provided in Law No. 12,187/09 that, as pointed out earlier, has been timidly included in master plans around the country.

At the local academic level, there are also no comprehensive surveys, although case studies by neighborhood have presented diverse results on urban voids in Natal. Marinho (2018) and Cavalcante (2019) contributed with the analysis and classification of urban voids for the neighborhoods of Lagoa Nova and Ponta Negra, respectively, identifying vacant and unused land as significant areas of real estate speculation and developments for middle and upper classes. Silva (2019), in turn, analyzed the transformation potential of urban voids in the Mãe Luiza neighborhood, a coastal zone and important AEIS of the city.

Currently under execution, the research project "Omitido para avaliação às cegas"¹³, has been contributing to a comprehensive survey of urban voids in the city, from theoretical grounding and methodological rigor in the categorization of these spaces and the elaboration of some case studies, as, for example, for the neighborhoods of Capim Macio, Ribeira and Rocas. The first of these neighborhoods is an area of recent expansion, with considerable supply of residential developments (vertical condominiums) of medium and high standards; the last two, comprise the historical central area of Natal, where it is possible to observe, in the last decade, significant pressure from the real estate market (verticalization), attracted by the notable number of vacant lots and buildings (unused or underused), whether as a result of the constant emptying of industrial activities (including railways and ports), or ruins of old buildings (many of significant historical value). Added to this scenario is the presence of some areas/buildings occupied for social housing purposes, a subject detailed below.

3.3 SOCIAL MOVEMENTS AND EFFORTS TO REMAIN IN THE CENTRAL AREA OF NATAL

In 2010, the housing deficit in Natal was 22,185 HUs¹⁴ and, during this decade, the production of social housing units accounted for a total of 2,864 new HUs through PMCMV until 2015. Besides the mismatch in numbers, there was no use of the empty buildings in the neighborhoods of the original core of the city, already provided with infrastructure. Recently, in view of the growing need for housing and discussions about the impacts of moving around the city, social movements - especially the Movimento Nacional da População em Situação de Rua (MNPR) and the Movimento de Luta nos Bairros, Vilas e Favelas (MLB) - started to press the City Hall for housing and social assistance in accessible areas with infrastructure, questioning the urban voids in the core neighborhoods, especially in Ribeira.



In Natal, there is no exact number of the homeless population¹⁵, but according to data from the Municipal Secretariat of Labor and Social Assistance (SEMTAS) there are more than 1,000 social registers (NATAL, 2018). The neighborhoods with the highest concentration of homeless people are the central ones - Alecrim, Cidade Alta and Ribeira - and some in the Northern Region (NATAL, 2018). Currently, there is little support equipment: three hostels in Cidade Alta that serve about 60 people and a POP Center¹⁶, which was closed and recently reopened, in the Barro Vermelho neighborhood.

In 2018, the Municipal Council of Social Interest Housing (Conselho Municipal de Habitação de Interesse Social - CONHABINS) received a demand from the MNPR and systematized a document on the situation of these people and forwarded their requests to the Public Ministry of Rio Grande do Norte (MP/RN) with claims especially for the use of empty buildings in central neighborhoods, where there is already available infrastructure and already concentrates part of this population. The request sent to the MP/RN asks the Municipal Department of Taxation (Secretaria Municipal de Tributação – SEMUT) to identify empty properties - land and buildings - and in debt with the tax authorities so that the appropriate instruments can be applied and they can be transformed into social housing or equipment. It also requests that two of the properties of the Federal Union, in the Ribeira neighborhood, currently vacant, be ceded to the Municipality of Natal and destined for MNPR service equipment (NATAL, 2018).

The first building is located at 76 Esplanada Silva Jardim, on the corner of Frei Miguelino Street (Figure 4). The City Hall did not accept the design proposed by the MP/RN, claiming to have no resources for the adaptation and maintenance of the building and adequate services and, in an Official Letter of May 04, 2020, the Secretariat of Union Property (Secretaria do Patrimônio da União – SPU) communicated to the MP that the building was offered to the Associação Centro Católico de Evangelização Reviver Pela Misericórdia (BRASIL, 2020), which has already presented the necessary documentation. The other property is a set of warehouses of the extinct Rede Ferroviária Federal S/A (RFFSA), located at 21 Almino Afonso street (Figure 4). These warehouses were accepted by the City Hall, but according to the aforementioned Official Letter, "foi ofertado para o Município do Natal/RN, para que seja utilizado como estacionamento para os servidores públicos" (it was offered to the Municipality of Natal/RN, to be used as a parking lot for public servants. Free translation. BRASIL, 2020).



Figure 4 - SPU Building (left) and RFFSA Warehouses (right) requested by the MNPR for the construction of equipment and HIS to support the homeless population

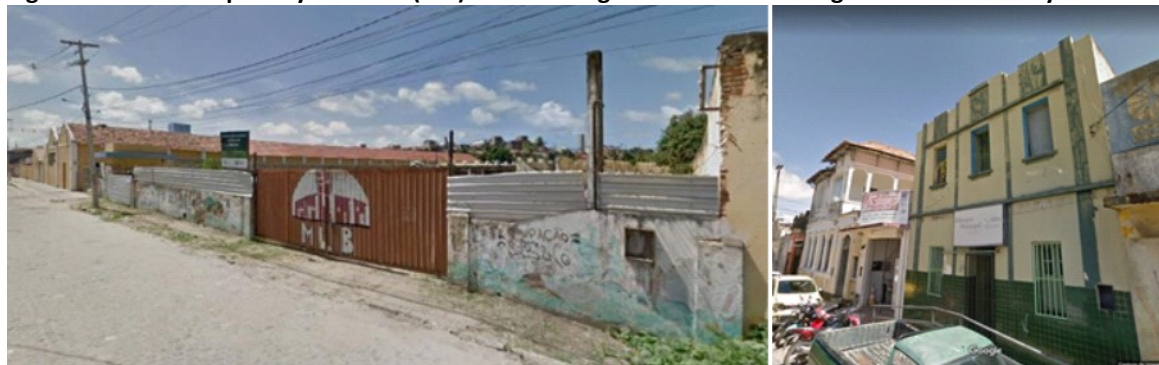


Source: Google Street View (May 11, 2020).

The MLB, which has a history of participating in collegiate urban policy bodies, acted from an occupation in 2015 of a land also owned by RFFSA, neighboring the current Federal Institute of Rio Grande do Norte (IFRN) (Figure 5). The occupation called “Padre Sabino” had more than 100 families and its objective was to pressure the City Hall for dialogue on the population's housing conditions.

The City Hall negotiated with the families to vacate the land, which was incorporated into the IFRN property. Of the total, 110 of them were included in the PMCMV and served in the Conjunto Village de Prata – in the distant Planalto neighborhood (about 11 km away). Those families that were not included made a new occupation, this time in an old vacant hostel of the City Hall, on Rua Câmara Cascudo, also in Ribeira (Figure 5). This occupation, like the other one, has the objective of putting pressure on the municipal government to talk about housing solutions for the other families in the movement, since the previous service was not enough.

Figure 5 - Land occupied by the MLB (left) and Building of the former Albergue da Prefeitura by the MLB



Source: Google Street View (May 11, 2020).

Called “Pedro Melo”, this occupation hosts 21 families, 39 people in all, having been established on December 22, 2018. Each family, in general, occupies a room and all share the wet areas (a bathroom and a laundry room). Kitchens are improvised inside the rooms. The entire building adaptation was carried out by the movement¹⁷, including water and energy connections and sanitary

sewage solutions, which would require some safety qualification measures. It is estimated that with adequate measures the building could house about 20 families, but there is a risk that the action to repossess the property, currently in process, will materialize.

The discussions underway, illuminated by the actions of these two movements, show the need and the possibility of using the urban voids in the city's central neighborhoods, especially Ribeira, which has many buildings and some empty lots, with good infrastructure conditions and located near the main employment areas. However, the model of building new units in the peripheral areas is still chosen, intensifying disperse urbanization.

FINAL CONSIDERATIONS: PARALLELS BETWEEN THE SITUATION OF SÃO PAULO AND NATAL

São Paulo and Natal are two cities of very different sizes, with very different cultural, social and economic structures, but which present several points of convergence when it comes to analyzing their dynamic of expansive, peripheral and unequal urban occupation. There is also convergence in the insurgent (or transgressive) attempt of social movements to confront the hegemonic axis of urban policies, giving visibility to inequalities, to the problem of idle properties in urban centers.

Despite the existence of an important normative framework that could provide a basis for the use of idle properties in an inclusive way, articulating housing, climate justice and the right to the city, urban policies have not been fully able to address this agenda in tune with the idea of urban reform. Housing supply policies such as Minha Casa Minha Vida have continued to produce peripheral developments, in places with low supply of jobs and public services, reinforcing the commuting movement and increasingly driving urban expansion, which brings more impact on mobility (and, consequently, GHG emissions) and requires more conversion of green areas and expansion of the already fragile urban infrastructure (in detriment to the necessary adaptation measures). The regulation and effective implementation of policies to enforce the social function of property and the city, using, for example, the PEUC, proceed slowly and suffer constant attacks, either in the legislative plan (see discussion of PEC 80/2019¹⁸) or in the deliberate dismantling of ongoing policies, as occurred in the city of São Paulo. The legal, urbanistic and financial impasses to qualify the security of occupied buildings, avoiding the removal of residents, are pressing issues that have not yet been resolved. The resistance of the movements, however, continues trying to give visibility to the problem of the amount of idle central properties and to influence public policies, building alternatives for the use of these properties in a practice of transgressive citizenship (EARLE, 2012), one that takes the law as a starting



point for the dialogue with the State and its public policies. In this sense, the popular movement undertakes efforts, in both cities, for the affirmation of the constitutional right to housing and has adopted strategies of direct action through the use of empty properties in central areas, through the occupation of these properties, following the precepts of the social function of property provided for in the Constitution, the City Statute and the Master Plans of each of these cities.

The pandemic of the new coronavirus (Sars-CoV-2) brings new scenarios, new challenges, increasing the complexity of this articulation between climate justice, central housing and right to the city, not only in São Paulo and Natal. The large commuting to be overcome by public transportation expose the most vulnerable population in a disproportionate way and the intensive use of the car has a great impact on GHG emissions. Urban policies that allow a pattern of land use and occupation that generates less commuting will be fundamental, and, more than ever, seeking ways to use real estate in the areas where jobs are located is strategic. Urban infrastructure, already considered vulnerable aspects of Brazilian cities to climate change, needs to be improved in order to guarantee universalization of services such as sanitation that has proven so essential in the fight against Covid-19. Ensuring housing in central areas, putting idle properties to use, in addition to ensuring the necessary social distance, impossible in highly densely populated areas, allows access to an already existing infrastructure. At the height of the crisis, the use of hotel rooms was discussed¹⁹ and the issue of empty or underused real estate was made very difficult by the need to adapt several properties, as well as by discussions about the articulation of measures such as the PEUC and abandonment with requisition measures, authorized by Law no. 13,979/2020, which deals the measures for dealing with the public health emergency resulting from the new coronavirus, conditioning them to subsequent compensation. In the period immediately after the acute crisis, it will be necessary to guarantee the continuity of measures such as those that expanded access to water and increased the supply of adequate housing in central areas.

The social movements and their practices point to ways to confront climate change in an inclusive way. The question is how to make them be heard.

Notes

1. The national legislation (Law 13,465/2017 in article 11, VIII; CPC in articles 554, §§1 and 2, 590, sole paragraph) adopts the term "occupier" as an operational term, this expression being authentic to designate one "que mantém poder de fato sobre lote ou fração ideal de terras públicas ou privadas em núcleos urbanos informais". (that maintains de facto power over an ideal lot or fraction of public or private land in informal urban centers. Free translation. FERREIRA, 2019, p. 104). Thus, collective actions promoted by social housing movements that adopt strategies of occupation of idle buildings as a way to claim the affirmation of the constitutional right to



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

housing are understood in this normative context as occupations, and the use of derogatory terms such as "invasion" must be avoided.

2. Examples of impacts of climate change on populations living in informal urban centers and street vendors are: mortality and increase in diseases resulting from thermal fluctuations (heat waves and colder days), aggravated by the density of occupations, low thermal quality of construction materials, exposure of workers to bad weather and an increase in disease vectors (such as mosquitoes). Also damage to life, property and infrastructure, due to landslides, more frequent flooding (changes in the rainfall regime, recurrent extreme events and sea level rise), situations that can also compromise sources of drinking water supply (DODMAN; ARCHER; SATTERHWAITE, 2019).

3. The Special Report on Cities and Climate Change (Relatório Especial sobre Cidades e Mudanças Climáticas) places great emphasis on urban infrastructure as vulnerable aspects of Brazilian cities to climate change (PBMC, 2016).

4. The Special Report on Cities and Climate Change (Relatório Especial sobre Cidades e Mudanças Climáticas. PBMC, 2016) is emblematic in this sense: it recognizes that climate change accentuates existing risks arising from a pattern of urban development with deficits in infrastructure and mentions, for each infrastructure sector, weaknesses associated with lack of access. However, the mitigation and adaptation alternatives presented do not have an inclusive approach and the inequalities are far from the vocabulary and actions proposed in the report.

5. Such concepts are defined in Law No. 12,187/09 and Decree No. 9,578/18 which deal with the National Policy on Climate Change, with mitigation being "mudanças e substituições tecnológicas que reduzam o uso de recursos e as emissões por unidade de produção, bem como a implementação de medidas que reduzam as emissões de gases de efeito estufa e aumentem os sumidouros" (technological changes and replacements that reduce the use of resources and emissions per unit of production, as well as the implementation of measures that reduce greenhouse gas emissions and increase sinkholes. Free translation of art. 2, VII, Law No. 12,187/09) and adaptation "iniciativas e medidas para reduzir a vulnerabilidade dos sistemas naturais e humanos frente aos efeitos atuais e esperados da mudança do clima" (initiatives and measures to reduce the vulnerability of natural and human systems to current and expected climate change effects. Free translation of art. 2, I, Law nº 12.187/09).

6. The inventory is not yet available to the public, but it was reported on the São Paulo City Hall website (SÃO PAULO, 2019).

7. In the Metropolitan Region of São Paulo, walking trips represent 31.8% of commuting (METRÔ, 2019).

8. The peripheral auto-construction served capital, reducing the costs of reproduction of the labor force and allowing the reduction of wages, and in this way, the very omission of the State in controlling land use in a large part of the territory of the cities can be considered an intentional absence adequate to the interests in industrial expansion and conniving with the desire of the elite to maintain segregation in the city, a process that became known as 'urban spoliation', in the expression coined by Lúcio Kowarick (EARLE, 2012).

9. In relation to the rights agenda, these authors treat the practices of consensus building and negotiated resolution as ways to "dissolver a discussão sobre direitos e reintroduzir a variável 'força' em conflitos particulares: o encaminhamento do conflito não se dá pela discussão sobre aquilo que é justo ou injusto, mas pela maior ou menor capacidade dos agentes de barganharem seus interesses" (dissolve the discussion about rights and reintroduce the variable 'force' in particular conflicts: the routing of the conflict does not occur by discussing what is fair or unfair, but by the greater or lesser ability of agents to bargain their interests. Free translation. ACSELRAD; MELLO; BEZERRA, 2009, p. 101). Still, the works linked to the notion of cooperative conflict are relevant, which can be seen as a possible way out between the tension that is established between the Habermasian idea of consensus *vis-à-vis* the Foucauldian idea of conflict. Cooperative conflict recognizes the coexistence of both dimensions, since patterns of cooperation are useful for interdependent social organizations that sustain a production process that nevertheless generates conflict by divisions (SEN, 1990). Amartya Sen, based on Nash's concept of bargaining problems, understands cooperative conflict as "qualitative relations in the form of directional responses of the outcome to certain variables determining the information base" (SEN, 1990, p. 125 – Free translation).



10. The property belonged to the Federal Government and had been empty since the beginning of the 2000s when it ceased to be the headquarters of the Federal Police. Since then, it has only been occupied by an agency of the Instituto Nacional do Seguro Social (INSS) and the conditions of degradation and abandonment ended up frustrating attempts to allocate the building. Currently, an agreement has been signed between the Federal Government and the City of São Paulo for the construction of affordable housing on the land where the building used to be.

11. With another approach, but also reinforcing initiatives of local character, a PL (draft bill) on Popular Public-Private Partnership is being processed in the House of Representatives. The PL 4,517/19 allows the transfer of public funds to residents of a block or community to carry out small urban improvement works, such as paving, renovation of public facilities, creation of leisure areas or green areas. It is possible to assign public areas for the execution of works and/or services, which are carried out in exchange for possible tax reductions on the properties of the applicants. The PL also foresees more extensive partnerships, by means of Consortiated Urban Operations (OUCs), without specifying operational details. There are controversial questions about the purpose of the allocation of resources and public goods (such as parking and community security), also because they would imply in access restriction and charging, without reference to bidding issues. In any case, the conditions for direct transfer to the population make the application very limited, since the instrument could only be used in municipalities with up to 200 thousand inhabitants and for works of up to R\$ 150 thousand.

12. The authors of this article (author and author professors) participated in the Plan review process as members of the extension project “Omitido para avaliação às cegas”, proposing, among other changes/incorporations, definitions and classifications for urban voids.

13. Coordinated by the authors of this article, professors Author and Author, developed in the “Omitido para avaliação às cegas” of “Omitido para avaliação às cegas”.

14. Municipal Housing Deficit in Brazil (Déficit Habitacional Municipal no Brasil. 2010/FJP-MCIDADES, 2013 apud FERREIRA, 2016).

15. We understand homeless people as “um grupo populacional heterogêneo, mas que possui em comum a pobreza extrema, os vínculos familiares interrompidos ou fragilizados e a inexistência de moradia convencional regular” (a heterogeneous population group, but which has in common extreme poverty, broken or weakened family ties and the lack of regular conventional housing. Free translation. SILVA, 2006, p.22), or that is, the most vulnerable stratum of society (NATAL/ SEHARPE, 2018).

16. “Centro POP na Tipificação Nacional é classificado como serviço especializado para Pessoas em Situação de Rua. [...] tem como finalidade desenvolver sociabilidades, analisar as demandas dos usuários, promover orientação individual e coletiva e encaminhar os usuários a demais serviços socioassistenciais. O Centro deve oferecer espaços de guarda de pertences, higiene pessoal e alimentação, bem como prover documentação civil e endereço institucional” (POP Center in the National Classification is classified as a specialized service for Homeless People. [...] its purpose is to develop sociability, analyze users' demands, promote individual and collective guidance and refer users to other social assistance services. The Center must offer spaces for storing belongings, personal hygiene and food, as well as providing civil documentation and institutional address. Free translation. NATAL/SEHARPE, 2018).

17. Observations about the adaptation of the building for temporary housing for families of the movement were made during a visit to the occupation in 2019.

18. PEC nº 80/2019, authored by Senator Flávio Bolsonaro, changes article 182 of the Constitution, giving new contours to the concept of social function, removing from the Master Plan the full attribution of meaning to the principle according to the conflicts, reality and local needs, as well as restricting the use of instruments to enforce the compulsory use of idle properties, ending the expropriation with public debt bonds (compensation always at market value) and requiring legislative authorization or judicial order to decree the non-compliance with the social function and the use of compulsory parcelling, building and utilization (PEUC), linked to successive sanctions for the non-compliance with the obligations (progressive IPTU over time and expropriation with public debt bonds).

19. In cities like London and Paris, hotel rooms are now being offered to homeless families. In Brazil, a strong movement pressured governments to demand the use of idle vacancies in the hotel chain to ensure the social



isolation of vulnerable families. The fruitful measures were basically the result of voluntary agreements, but in many cases there were restrictions on the use of hotels for homeless people.

References

ACSELRAD, Henri; MELLO, Cecília Campelo do Amaral; BEZERRA, Gustavo das Neves. **O que é justiça ambiental**. 1. ed. Rio de Janeiro: Garamond, 2009.

ALFONSIN, Betânia de Moraes; SALTZ, Alexandre; FERNANDEZ, Daniel; VIVAN FILHO, Gerson Tadeu Astolfi; FACCENDA, Guilherme; MULLER, Renata. Das Ruas de Paris a Quito: o Direito à Cidade na Nova Agenda Urbana – Habitat III. **Revista de Direito da Cidade**, Rio de Janeiro, v. 09, n. 3, p. 1.214-1.245, 2017.

AMARO, Venerando Eustáquio (Coord.); SCUDELARI, A. C.; NEVES, C. F.; TABOSA, W. F.; LIMA Z. M.; SANTOS JR., O. F.; FERREIRA, A. T. S.; SANTOS, A. L. S.; BUSMAN, D. V. **Laudo Pericial Item B – Obras Emergenciais de Contenção e Reparação dos Equipamentos Públicos e de Segurança dos Frequentadores da Praia de Ponta Negra, Natal – RN**. Natal: UFRN - Centro de Ciências Exatas e da Terra (Departamento de Geologia), 2012.

APOLLARO, Camila; ALVIM, Angélica Tanus Benatti. Planejamento urbano para a adaptação de cidades frente à mudança climática – Uma análise sobre o Plano Diretor Estratégico do Município de São Paulo. **Thésis**, Rio de Janeiro, v. 2, n. 4, p. 118-137, nov./ dez. 2017.

BUSMAN, D.V.; AMARO, V.E.; PRUDÊNCIO, M.C.; LIMA, F.G.F.; MATOS, M.F.A.; MOURA, J.E. Shoreline changes from 1986 to 2010 on Ponta Negra beach, Natal / RN, Northeast Brazil. **SCACR International Short Course, Conference on Applied Coastal Research**. Lisboa, Portugal: SCACR International Short Course, 2013.

BONDUKI, Nabil. Dos movimentos sociais e da luta pela reforma urbana na Constituinte ao Estatuto da Cidade (1981-2001). In: BONDUKI, Nabil (org.). **A luta pela reforma urbana no Brasil: do Seminário de Habitação e Reforma Urbana ao Plano Diretor de São Paulo**. São Paulo: Instituto Casa da Cidade, 2018. p. 81-136.

BRASIL. MINISTÉRIO DA JUSTIÇA. **Parcelamento, edificação ou utilização compulsórios e IPTU progressivo no tempo: regulação e aplicação**. Brasília: Ministério da Justiça, Secretaria de Assuntos Legislativos (SAL), 2015. Disponível em: http://pensando.mj.gov.br/wpcontent/uploads/2015/11/PoD_56_web1.pdf. Acesso em: 24 jan. 2020.

BRASIL. **Ofício SEI Nº 105505/2020/ME**. Natal: Superintendência do Patrimônio da União no Rio Grande do Norte (SPU-RN), 2020.

CALGARO, Cleide; RECH, Moisés João. Justiça Ambiental, Direitos Humanos e Meio Ambiente: uma relação em construção. **Revista de Direito e Sustentabilidade**, Florianópolis, v. 3, n. 2, p. 1-16, jul./dez. 2017.



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

CAMPOS, Gustavo Soares Pires de. **Função Social da Propriedade na escala da Metrópole:** construção de uma política fundiária e atuação do Departamento de Controle da Função Social da Propriedade na Cidade de São Paulo (2013-2016). 2019. Dissertação (Mestrado em Arquitetura e Urbanismo) - Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, 2019.

CARICARI, Ana Maria; KOHARA, Luiz Tokuzi (orgs.). **Cortiços de São Paulo:** soluções viáveis para habitação social no centro da cidade e legislação de proteção à moradia. São Paulo: Mídia Alternativa: Centro Gaspar Garcia de Direitos Humanos; Salvador, BA: CESE, 2006.

CARVALHO, Celso Santos; BEDESCHI, Luciana. Parceria Público Popular: uma proposta social contra a especulação imobiliária. **Carta Capital**, São Paulo, ago. 2019. Seção Blog BrCidades. Disponível em: <https://www.cartacapital.com.br/blogs/br-cidades/parceria-publico-popular-uma-proposta-social-contra-a-especulacao-imobiliaria/>. Acesso em: 25 mai. 2020.

CAVALCANTE, Saulo Matheus de Oliveira Lima. 2019. **Especulação sol e mar:** os vazios urbanos de Ponta Negra. Trabalho Final de Graduação (Arquitetura e Urbanismo) – Universidade Federal do Rio Grande do Norte, Natal, 2019.

COMARÚ, Francisco de Assis.; BARBOSA, Benedito. **Movimentos Sociais e habitação.** Salvador: UFBA, Escola de Administração; Superintendência de Educação à Distância, 2019.

DODMAN, David; ARCHER Diane; SATTERTHWAITE, David. Editorial: Responding to climate change in contexts of urban poverty and informality. **Environment and Urbanization**, v. 31, n.1, p. 3-12, abr. 2019. Disponível em: <https://journals.sagepub.com/doi/pdf/10.1177/0956247819830004>. Acesso em: 25 mai. 2020.

EARLE, Lucy. From Insurgent to Transgressive Citizenship: Housing, Social Movements and the Politics of Rights in São Paulo. **Journal of Latin American Studies**, v. 44, n. 1, p. 97-126, 2012.

ESPÍNDOLA, Isabela Battistello; RIBEIRO, Wagner Costa. Cidades e mudanças climáticas: desafios para os planos diretores municipais brasileiros. **Cadernos Metrôpoles**, v. 22, n.48, p. 365-395, mai. /ago. 2020.

FERREIRA, Allan Ramalho. Os limites do reconhecimento do ocupante como sujeito da política fundiária: uma reflexão sobre os corpos que não importam. In: CHIARELLO, Felipe; PIRES, Lilian Regina Gabriel Moreira (org.). **Novos paradigmas da regularização fundiária urbana.** São Paulo: Almedina, 2019.

FERREIRA, Glenda Dantas. **Produção habitacional, agentes e território:** uma análise do PMCMV na RMNatal (2009-2014). 2016. Tese (Doutorado em Arquitetura e Urbanismo) – Universidade Federal do Rio Grande do Norte, Natal, 2016.

FUKS, Julián. **A ocupação.** São Paulo: Companhia das Letras, 2019.

HOLSTON, James. **Insurgent Citizenship:** disjunctions of democracy and modernity in Brazil. Princeton e Oxford: Princeton University Press, 2008.



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

IPCC. **Climate Change 2014: impacts, adaptation, and vulnerability: Part A: global and sectoral aspects**. Cambridge, UK: Cambridge University Press, 2014. p. 1-32. Disponível em: https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA_FINAL.pdf. Acesso em: 26 mai. 2020.

FUNDAÇÃO JOÃO PINHEIRO. **Déficit Habitacional no Brasil 2015**. Belo Horizonte: FJP, 2018.

MARICATO, Ermínia. **Metrópole na periferia do capitalismo: ilegalidade, desigualdade e violência**. São Paulo: Hucitec, 1996.

MARQUES, Eduardo; REQUENA, Carolina. O centro voltou a crescer? Trajetórias demográficas diversas e heterogeneidade na São Paulo dos anos 2000. In: **Novos Estudos**, nº 95, p. 17-36, março 2013.

MARTINS, Rafael D’Almeida.; FERREIRA, Leila da Costa. Uma revisão crítica sobre cidades e mudança climática: vinho velho em garra nova ou um novo paradigma para a governança local? **Revista da Administração Pública (RAP)**, v. 45, n. 3, p. 611-641, mai. /jun. 2011.

METRÔ (Companhia do Metropolitano de São Paulo). **Pesquisa Origem Destino 2017: Versão 4**, 24/07/2019. Disponível em: http://www.metro.sp.gov.br/pesquisaod/arquivos/Ebook%20Pesquisa%20OD%202017_final_240719-versao_4.pdf. Acesso em: 20 mai. 2020.

AUTOR, 2015. Omitido para avaliação às cegas.

NATAL. **EU NÃO TENHO ONDE MORAR. Relatório sobre a população em situação de rua na cidade do Natal**: encaminhamentos preliminares em busca da elaboração de políticas habitacionais. Natal: Secretaria Municipal de Habitação, Regularização Fundiária e Projetos Estruturantes, 2018.

REDE NOSSA SÃO PAULO. **Mapa da Desigualdade 2019**. São Paulo: Rede Nossa São Paulo, 2019. Disponível em: <https://www.nossasaopaulo.org.br/2019/11/05/mapa-da-desigualdade-2019-e-lancado-em-sao-paulo/>. Acesso em: 26 mai. 2020.

PBMC. **Mudanças Climáticas e Cidades. Relatório Especial do Painel Brasileiro de Mudanças Climáticas**. Rio de Janeiro: PBMC, COPPE–UFRJ, 2016. Disponível em: http://www.pbmc.coppe.ufrj.br/documentos/Relatorio_UM_v10-2017-1.pdf. Acesso em: 26 mai. 2020.

RAFFESTIN, Claude. **Por uma Geografia do Poder**. São Paulo: Editora Ática, 1993.

RAMMÊ, Rogério Santos. A política da justiça climática: conjugando riscos, vulnerabilidades e injustiças decorrentes das mudanças climáticas. **Revista de Direito Ambiental**, v. 17, n. 65, p. 367-389, jan. /mar. 2012.

ROLNIK, Raquel. **Guerra dos Lugares: a colonização da terra e da moradia na era das finanças**. 2ª ed. São Paulo: Boitempo, 2019.



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721

SÃO PAULO. Ambiente: São Paulo apresenta Inventário sobre Emissões de Gases de Efeito Estufa. **Portal de Notícias**, São Paulo, ago. 2019. Disponível em: <http://www.capital.sp.gov.br/noticia/ambiente-sao-paulo-apresenta-inventario-sobre-emissoes-de-gases-de-efeito-estufa>. Acesso em: 24 mai. 2020.

_____. **Situação das Ocupações na Cidade de São Paulo (Relatório)**. São Paulo, 2018.

_____. **Plano Municipal de Habitação de São Paulo – Projeto de Lei nº 619/16**. São Paulo, 2016. Disponível em: https://gestaourbana.prefeitura.sp.gov.br/wpcontent/uploads/2014/08/20161221_PMH_PL_bxa.pdf. Acesso em: 26 mai. 2020.

SEN, Amartya. Gender and cooperative conflicts. In: Tinker, I. (org). **Persistent inequalities: women and world development**. New York; Oxford: Oxford University Press, 1990.

SILVA, Maria Lucia Lopes da. **Mudanças recentes no mundo do trabalho e o fenômeno população em situação de rua no Brasil 1995-2005**. 2006. Dissertação (Mestrado em Política Social) – Universidade de Brasília, Brasília, 2006.

SOUZA, Luciana Correia Gaspar; SOTTO, Débora. A lei de mudanças climáticas da cidade de São Paulo: aspectos ambientais e urbanísticos. **Revista Direito Ambiental e Sociedade**, Caxias do Sul, v. 2, n. 1, p. 318-346, 2012.

TAVOLARI, Bianca. Direito à cidade: uma trajetória conceitual. **Novos Estudos**, ed. 104, v. 35, n. 1, p. 93-108, mar. 2016,

TINOCO, Marcelo Bezerra de Melo; BENTES SOBRINHA, Maria Dulce Picanço; TRIGUEIRO, Edja Bezerra Faria (Orgs.). **Plano de reabilitação de áreas urbanas centrais – PRAC/Ribeira**. Natal: EDUFN, 2008.

WILLIAMS, David Samuel; COSTA, Maria Máñez; SUTHERLAND, Catherine; CELLIER, Louis; SCHEFFRAN, Jürgen. Vulnerability of informal settlements in the context of rapid urbanization and climate change. **Environment and Urbanization**, v. 31, n. 1, p. 157-176, abr. 2019. Disponível em: <https://journals.sagepub.com/doi/full/10.1177/0956247818819694>. Acesso em: 25 mai. 2020.

ZANDONADE, Patricia. **Mobilidade urbana e utilização energética**: estudo dos padrões das metrópoles de São Paulo e Paris. 2012. Tese (Doutorado em Energia) – Universidade Federal do ABC, Santo André, 2012.

ZANDONADE, Patricia; AUTOR. 2012. Omitido para avaliação às cegas.



Sobre os autores:

Emanuel Ramos Cavalcanti

Graduação pela Universidade Federal do Ceará (2004), mestrado pela Universidade Federal de Pernambuco (2008) e doutorado pela Universidade Presbiteriana Mackenzie (2018) com período "sanduíche" de um ano no Instituto Superior Técnico de Lisboa. Professor substituto do Departamento de Arquitetura (DARQ) da Universidade Federal do Rio Grande do Norte (UFRN). Universidade Federal do Rio Grande do Norte – UFRN, Natal, RN, Brasil.

Lattes: <http://lattes.cnpq.br/6805137553894905> Orcid: <https://orcid.org/0000-0002-3131-7786>

E-mail: emanuel.cavalcanti.au@gmail.com

Amíria Bezerra Brasil

Graduada em Arquitetura e Urbanismo (UFC - 2003). Doutora em Arquitetura e Urbanismo (USP - 2016). Docente do ensino superior do Departamento de Arquitetura da Universidade Federal do Rio Grande do Norte (UFRN). Membro do Observatório das Metrópoles Núcleo Rio Grande do Norte (RN). Universidade Federal do Rio Grande do Norte - UFRN, Natal, RN, Brasil.

Lattes: <http://lattes.cnpq.br/8887892378979463> Orcid: <https://orcid.org/0000-0001-6877-4916>

E-mail: amiriabrasil@gmail.com

Ricardo de Sousa Moretti

Engenheiro civil, Mestre em Engenharia de Solos e Doutor em Engenharia de Construção Civil e Urbana pela SP. Foi pesquisador do IPT e professor do Mestrado em Habitação desta instituição. Trabalhou como professor e pesquisador na Arquitetura da PUC - Campinas e como professor visitante da UFRN. Professor titular da UFABC onde ingressou em 2007. Aposentado desde 2017, atualmente é professor colaborador do Programa de Planejamento e Gestão do Território da UFABC. Universidade Federal do ABC, Santo André, SP, Brasil

Lattes: <http://lattes.cnpq.br/7819421851048499> Orcid: <https://orcid.org/0000-0002-3807-4684>

E-mail: ufabc.moretti@gmail.com

Julia Azevedo Moretti

Mestre em Direito Urbanístico pela Pontifícia Universidade Católica de São Paulo (PUC/SP) e mestre em Meio Ambiente e Desenvolvimento Sustentável pela Universidade de Londres (Development Planning Unit - DPU/UCL). Doutoranda pela Universidade de São Paulo (USP), advogada popular e professora assistente no curso de especialização de Direito Contratual do COGEAE PUC/SP. Pontifícia Universidade Católica de São Paulo (PUC/SP), São Paulo, SP, Brasil

Lattes: <http://lattes.cnpq.br/4735094906899872> Orcid: <https://orcid.org/0000-0003-4898-1824>

E-mail: moretti.julia@gmail.com

Os autores contribuíram igualmente para a redação do artigo.



Rev. Dir. Cid., Rio de Janeiro, Vol. 14, N.01., 2022, p. 138 - 169.

Emanuel Ramos Cavalcanti, Amíria Bezerra Brasil, Ricardo de Sousa Moretti e Julia Azevedo Moretti

DOI: 10.12957/rdc.2022.54363 | ISSN 2317-7721