

Urban public spaces in Teresina's new Master Plan for Territorial Planning

Espaços públicos urbanos no novo Plano Diretor de Ordenamento Territorial de Teresina

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Abstract

Public spaces affect urban dynamics, with implications for environmental and cultural management, the population's well-being, and local sustainability. Thus, the correct regulation and management of urban spaces has potential for promoting the democratic place. This article analyzes the Municipal Complementary Law n. 5.481/2019 – the new Master Plan of Teresina (acronym in Portuguese: PDOT) –, mapping the approach to and the treatment of the issue of urban space. It also surveys the state-of-the-art in urban open spaces. The conclusion is that the PDOT presents protective devices for urban spaces but does not use effective tools to identify, manage and preserve urban open spaces within the scope of the municipality of Teresina.

Keywords: City, Public Management, Public Policies, Legislation, Teresina.

Resumo

Os espaços públicos impactam na dinâmica urbana, com implicações na gestão ambiental e cultural, bem como no bem-estar da população e na sustentabilidade local. Assim, o correto disciplinamento e gerenciamento sobre espaços urbanos tem o potencial de promover o local democrático. Este artigo analisa a lei complementar municipal n. 5.481/2019 (novo Plano Diretor de Teresina – PDOT), mapeando a abordagem e o tratamento sobre a questão do espaço urbano. O presente trabalho também levanta o estado da arte sobre espaços livres urbanos. Conclui-se, ao final, que o PDOT apresenta dispositivos protetivos dos espaços urbanos; mas não utiliza ferramentas mais efetivas para a identificação, gerenciamento e conservação dos espaços livres urbanos no âmbito do município de Teresina.

Palavras-chave: cidade; gestão pública; políticas públicas; legislação; Teresina.



Introduction

Urban areas grow continuously, therefore they are ecosystems that need care and balance in order to ensure the urban, economic, and social sustainability of the city and minimize the negative impacts that arise from urbanization and suppression of the environment. In this sense, Labaki et al. (2011, p. 1) claim that “in recent decades, cities have shown great growth in population, space, and activities, dramatically transforming both the natural and the built environment”, which often leads to urban problems and damage to the quality of life of the population.

According to Barbosa and Nascimento Júnior (2009, p. 32), in order to achieve better welfare in cities, one must invest in proper environmental management, “which has in its essence the need to ensure socioeconomic activity and urban environmental quality, compartmentalize fertile territories and avoid degradation processes in deprived areas that lack resources in the urban environment”.

Concerning urban sustainability, Araújo and Cândido (2014, p. 8) state that a “sustainable city has to be, first of all, democratic and fair. Therefore, a sustainable city meets the basic urban needs of the population, such as urban infrastructure”. It is understood that to achieve urban sustainability several aspects must be considered, such as social, environmental, cultural, and spatial factors.

In regards to environmental aspects of the city, it is important to highlight the role of public open spaces, which can contribute positively, according to Bonzi (2017, p. 7) “to a great extent: the drainage, mobility, water

cleaning, thermal comfort in buildings and flood control [...]”. It is evident, then, that the urbanization and expansion of cities make open spaces increasingly necessary for the urban population, who see open spaces as a link between the urban environment and nature.

Public open spaces are of paramount importance to the city structure since they act in the maintenance of the urban ecosystem and facilitate social interactions. Negt (2002) states that the importance of city life is linked to the public space, as it is where social manifestations occur, and when this social environment disappears, so does urban life. According to Macedo et al. (2012), open spaces are often neglected due to deficiency in their distribution, discontinuity in the urban tissue, and territory disarticulation, worsening the situation of contemporary cities that are territorially fragmented.

The social dynamics between humans and nature generate useful information for science, allowing us to understand which environmental practices and behaviors are common in urban public open spaces, contributing to urban planning, environmental sustainability indicators, influence on sports practices, and psychological impact on users, ecosystems, and the generation of knowledge concerning the biodiversity present in these spaces (Toivonen et al., 2019).

Open spaces assume different typologies in the urban context, such as streets, avenues, squares, parks, gardens, vacant lots, corridors, villages, and alleys, being the raw material of urban landscaping and directly related to urban growth, by the control of the division, use, and occupation of land and street layout

(Serpa, 1997; Queiroga et al., 2011). In this sense, the present work examines open spaces in its broadest scope, with the purpose of mapping how the subject is addressed, from a macro perspective, in the new Master Plan of Teresina (PDOT).

The interrelated set of open space typologies constitutes the system of open spaces, which added to built structures configure, characterize and organize the urban scenario. The system of open spaces, according to Tardin (2008), is a fragile component in the structure of the city territory and is not given due importance in urban planning.

By adopting a more restricted view, Queiroga (2014) defines the official structure of Brazilian public systems of open space as being composed of squares, parks, gardens, and the like, places that have the function of providing conviviality and leisure to users. The scarcity, low quality, and fragmentation of these spaces reflect the punctual and disintegrated treatment given to their planning (Tardin, 2008).

The accelerated urban occupation and expansion in the last decades in Brazil have resulted in the scarcity of places that can represent opportunities for leisure and interaction for the population and, mainly, the preservation of natural resources. As in other places in the country, the city of Teresina, the capital of the State of Piauí, is also suffering from these changes. As reported by Lima, Lopes and Façanha (2017), Teresina has lost much of its vegetation and the process of urbanization and urban expansion is not sustainable, because the areas and urban infrastructure are not proportional to the growth of the city.

According to Lima, Lopes and Façanha (2021), the perimeter of Teresina, defined by Municipal Law n. 4.831, showed a 31.38% loss of permeable soils (vegetated soils and exposed soils) between the years 2000 and 2015, in which the permeable portion of the urban territory was of 72.18% in 2000 and reduced to 49.52% in 2015, meanwhile, the impermeable soils (urbanized soils) increased significantly, having 86.74% of the territory. The most significant losses of vegetation are located mainly around urban areas of consolidated areas, evidencing the sprawl and expansion of soil occupation by urbanization and anthropization (ibid.).

The municipality of Teresina has an area of 1.391,293 km², and an estimated population of 871.126 thousand people in 2021 (IBGE, 2022). Teresina has two rivers, Poti and Parnaíba, which, although being prominent elements in its landscape, have been losing their power of attraction in the urban space as the city grew (Matos et al., 2014). Therefore, these areas are not used, as they should be, for leisure and meeting activities, for example.

According to information present in Agenda 2030, the city of Teresina has 326 public open spaces, including 271 squares and 34 environmental parks which together have an area of 226.8 hectares, possessing a reserve of public areas of approximately 1,000 hectares (Teresina, 2015). It can be seen that the city has a significant number of open spaces, but the provision of these structures to meet the population needs is insufficient and disproportionate, not following the urban growth and expansion. It is possible to notice the existence of neighborhoods that have more open areas, while others lack public open spaces.

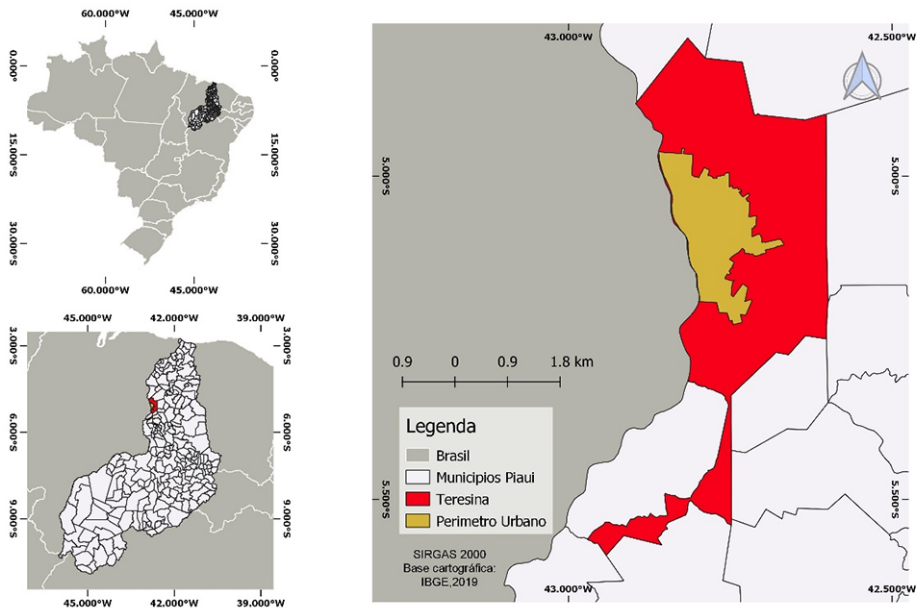
As stated in Law n. 10.257, of July 10, 2001, called the City Statute, the master plan, approved by municipal law, is “the basic instrument for urban development and expansion policy”. The Municipal Master Plan has the role of guiding the Territorial Development Policy, including the provisions on urban public spaces. The present work aims to verify the treatment given to the matter concerning public spaces in the Municipal Complementary Law n. 5,481, of December 20, 2019, which instituted the new Master Plan of Teresina, called “Master Plan for Territorial Ordination - PDOT”.

Materials and methods

Study area

The study will be conducted in the city of Teresina, capital of the State of Piauí, located in the north-central mesoregion of the State of Piauí, on the right bank of the Parnaíba River. According to Andrade (2016), Teresina is located in a transition zone, presenting morphoclimatic characteristics of *cerrado*, *caatinga*, and the Amazonian morphoclimatic domain, a fact that characterizes the uniqueness of the city landscape, however little used in the landscaping of urban open spaces.

Figure 1 – Map of Teresina, Piauí



Source: survey data, 2022.

Teresina has a tropical megathermal climate (AW). The city has geographical coordinates of 05°50'S (latitude) and 42°48'W (longitude), an average altitude of 72 meters in relation to sea level, and a maximum temperature with variation between 30.3°C and 35.1°C, with the variability of feels like temperature between 37°C and 43°C (Medeiros, 2019). Due to the geographical position characterized by low latitudes, the city receives intense solar radiation during the year, associated with the seasonality of rainfall resulting in high thermal sensation (Andrade, 2016).

Despite being the only capital of the Northeast region that is not located in a coastal area, distant approximately 350 km from the coast of Piauí, Teresina has two urban rivers, the Parnaíba River, which acts as the natural border between Teresina (Piauí) and Timon (Maranhão), and the Poti River, which crosses most of the city. According to Matos et al. (2014), within the urban area of Teresina, the Parnaíba River has a length of 59 kilometers and the Poti River 90 kilometers.

The bodies of water and vegetation, common in open spaces are essential to control air humidity, and solar irradiation and alleviate feels-like temperatures caused by high temperatures, in addition to mitigating air pollution.

Currently, the two rivers present in Teresina and their margins are protected as permanent preservation areas through national environmental laws, such as the Brazilian Forest Code (Brasil, 1965, 2006 and 2012), which defined the margins of urban rivers as permanent preservation

areas (APP), and most of these spaces are classified as Environmental Parks by municipal management.

According to Teresina (2015), amongst the 34 environmental parks existing in the city, those located on the banks of rivers have different profiles, such as the following areas: *Parque Ambiental Encontro dos Rios*, *Parque da Cidade*, *Parque Lagoas do Norte*, *Complexo Turístico Mirante da Ponte Estaiada*, *Parque Poticabana*, *Zoobotânico* and *Curva São Paulo*, which provide diversified options for leisure to the population.

The research presented in this study addresses the general aspects of characterization and implementation of public open spaces, and how public open spaces are regarded in the Master Plan of Teresina, seeking to identify public policy designs applied to public open spaces, considering the direct and indirect impact on the area as the city is concerned. It is observed, also, municipal laws concerning land use and occupation, zoning, and environment.

For the development of the research, after structuring the theoretical framework concerning the issue of urban open spaces in the city, primary and secondary data acquired from government agencies and institutions were collected, obtained from official sources made available by public agencies and research institutions, books, articles, theses, and dissertations. From the data obtained for analysis and evaluation of the pertinent legislation related to the subject matter of the study, the results are presented with a critique of the public policies that Teresina, the capital of the State of Piauí, makes available for its open public spaces.

Results and discussion

The urban space and the system of open space

The human intervention in the landscape modifies the physical environment and influences the culture and economy of a community. For Ardoin, Bowers and Gaillard (2020), the activities aimed at environmental management contribute to transformations in society and the environment, impacting the quality of life and the sustainable development of the urban environment.

For Queiroga (2014), the system of urban open spaces (SEL) is understood as a set of elements and relationships, capable of organizing and structuring a given urban perspective, from the intra-urban to the regional scale. Also, according to the author, public open spaces are considered an important physical connector of the urban soil, such as the road system (a subsystem of open spaces), which interconnects open spaces (connecting squares, parks, beaches, etc.) and built spaces.

Systems of open spaces for public use in a city include a set of open areas, vegetated or not, present in the urban environment available to the population for its use and appropriation. In general, an open space is that which belongs to society (Gomes; Chiesa, 2006). These spaces remind us of the idea of collective spaces, where residents build their identity relations with the urban environment in which they live since these spaces should be democratic, perceived, and experienced in everyday life.

According to Macedo et al. (2012) open spaces are often neglected due to deficiency in their distribution, discontinuity in the urban tissue, and disarticulation of territory, worsening the situation of contemporary cities that are territorially fragmented.

Social and economic transformations, new forms of housing, location factors and forms of industries and commerce, extensive verticalization, the proliferation of gated communities, the significant increase in vehicles, and other factors characteristic of urban expansion, especially in recent years, have significantly impacted the transformations of urban form and consequently the public open spaces (Tardin, 2008; Macedo et al., 2012).

Open spaces are important elements in the structuring and restructuring of urban territory, so they must occupy a prominent place in the process of design, planning, and management of cities. Tardin (2008, p. 55) states that the urban open space:

[...] is a space of opportunity for interventions in the territory, pursuant to the recognition of the potentialities it offers and the complete development of its attributes for a better urban quality, where the balance between collective needs and resources, through the orderly manifestation of the city, would mean the possibility to inhabit, live and plan, according to the needs of each part of the territory and its communities.

For Oliveira and Mascaro (2007), the higher the housing density, the greater the demand for open areas, as well as for the benefits originating from these spaces, since being outdoors is a human need. According

to Richards et al. (2020), the system of public open spaces in cities must be distributed democratically in the urban environment and also undergo constant maintenance of its infrastructure, which would enable the use and access to public spaces, especially for low-income communities.

The equal distribution of open spaces within the urban fabric should be proportional to the population density of a region. Cavalheiro and Del Picchia (1992) claim that public open spaces should be distributed within the urban fabric, quantitatively and qualitatively, to meet the needs of the community in an equal manner. Another important factor to be highlighted is the maintenance of these spaces so that they can meet the needs of the population.

Martins, Venturi, and Wingter (2019) affirm that it is necessary to maintain a correlation between analyses of ecological character and those of social character, as well as it is necessary to perform a systemic review of indicators and methodologies for the monitoring and control of public open areas, in order to assist in the conservation, public use, and management of these environments in the urban environment.

Plans and projects related to urban planning and management always mention the need to demarcate areas for the implementation of open spaces. However, it is essential to verify the existence, quality, and relationship of the public with the urban open space.

According to Federal Law n. 6.766, of 1979 (Brasil, 1979), for the creation of allotments, 35% (thirty-five percent) of the area must be reserved to be donated to the municipality for the construction of urban equipment such as squares, schools,

hospitals and other public services. As of 1999, according to Law n. 9.785/1999 (Brasil, 1999), the area to be donated for the implantation of urban and community equipment must be proportional to the density of the expected occupation.

Since the beginning of the existence of cities, urban open spaces have been important elements of city life. Therefore, in any urban formation, from the smallest cities to metropolises, the recognition of systems of open spaces of each of them is an important factor for the analysis, diagnosis, proposition, and management of public and private open spaces (Queiroga and Benfatti, 2007).

Urban public spaces, such as streets, attract a varied contingent of people who wish to express their dissatisfactions and desires. The streets are, in this sense, material spaces of expression and visibility of citizenship. According to Anjos, Dantas and Santana (2013), public spaces are physical places appropriated by the population that seeks to demonstrate and contest social and political measures. For the authors, the occupation of public spaces can be active, creative, and transformative, due to the multidisciplinary and democratic character of this environment. Lefebvre (2001) claims that the city depends on the use value of spaces. Moreover, urban public spaces provide the visibility and liveliness that the democratic and participatory debates aim to demonstrate in their fight for the guarantee of rights and duties.

The accelerated process of urban occupation and expansion in the last decades in Brazil, mainly by the informal and unplanned occupation of urban spaces by the neediest and less assisted social classes, has reserved few places that could represent opportunities

for leisure and social, cultural, and political interaction for the population, which, normally, is guaranteed by the public space, an environment for sociability and democratic and participatory visibility practices.

According to Maricato's analysis (2003), an important factor that aggravates the problems of social and environmental disorder problems is unplanned population growth, characterized by the rapid advance of the peripheries in relation to the city's core. It is understood, in this sense, that public spaces are established as a category of multiple understandings. The nature of the concept of public spaces presents two dimensions, a material and an immaterial one.

In line with that, Benevolo (1997) states that the social function of the public space originated from the Agora, which was an open space where meetings, conversations, and discussions about government, law, commerce, religion, industry, and sociability took place, that is, it was a place for meeting, discussion, and encounter. Thus, it is clear the interdisciplinary character that open spaces possess since the dawn of civility. For Oliveira and Menezes (2018, p. 111), open spaces are:

The materiality of space, its inertia, also provides for the establishment of everyday actions and rites that, in turn, are reflected in personal relationships of collective identity, belonging, and public affectivity, as well as in regard to the otherness and the possibilities of action and communication in the public sphere.

Lefebvre (2001, p. 56), claim that "the city and the urban cannot be understood without the institutions arising from class relations, because in its conception the city would be the projection of a society over a place, over

a specific plane, conceived by thought". The urban space is the reflection of a set of symbols and the arena of democratic struggles. The city is made by various actors, and consequently by various factors such as the concentration of capital, real estate speculation, spatial objects, and communities, elements that characterize the city, being essential to qualify the public spaces (Macedo et al., 2012).

The public space is the space in which the participation of the population without any kind of distinction, whether economic, social or local takes place, therefore it is a locus of citizenship and legal support of rights and duties. Rosaneli, Dalmolin and Faria (2019) affirm that the public space facilitates the participation of the population and the right to visibility, enabling citizenship formation and expression.

As claimed by Avritzer and Costa (2004), the public space corresponds to a legal sphere that comprises associations, groups, and movements, as the democratic theory is concerned, and it is, therefore, an environment of rationality and participation. A well-known practice of physical, spatial, and sociological obstruction to public spaces was the placement of railings and locks in squares and parks during the military dictatorship, which sought to restrain the gathering of people in public places at certain times. In Teresina, Piauí, the situation was no different. During the military dictatorship in Brazil in the 1970s, the model implemented in squares across the country was used in Marechal Deodoro Square and Costa e Silva Square (Anjos; Soares, 2010). In this period, the restriction of use at certain times and the prohibition of the gathering of groups of people diminished the democratic essence and space for social relations in public space.

As Fraser (2009) asserts, it is essential to have parity of participation involved in the process of evaluation and legitimation of democracy, so that there is a fair deliberation capable of contributing to decision making. The public space is no longer the process where opinions are formed, but the place where they become public, losing its original effectiveness to articulate conviviality and communication, turning us into passive spectators. In fact, the discussion on public space requires addressing the notion of citizenship (Rosaneli; Dalmolin; Faria, 2019).

The making of a city is composed of several agents, products, and values, which characterize the city, so it is necessary to qualify the urban form and the public spaces where social interaction and cultural exchange will be possible, differently from those generated through mercantile activities (Habermas, 2007). According to Macedo et al. (2012, p. 156):

The city is the preferred space for capitalist accumulation and reproduction of labor power, where the price and value of such power, as well as of ideas and objects are established; on the other hand, the city is also, as spatial form, the main space of resistance to hegemonic processes, for the establishment of culture and opportunities to exercise citizenship. It is important, therefore, to understand the production and appropriation of dynamic forms if one wishes to qualify not only the forms but the construction of the locus that contributes to the establishment of the citizenship condition of its inhabitants.

The public space relative to the access and participation of citizens in an unrestricted way has, thus, a connection with public life,

allowing "social mixing at different levels". The relationship of public space with the formation and expression of citizenship is introduced from the right to visibility and citizen participation. It is worth mentioning that the Master Plan, like the political spectrum, represents an arena of disputes and confrontations, but also resistance. Gomes (2018) points out that public spaces are territories of debate and dialogue, a place that does not cancel or judge conflicts and is actually, on the contrary, a democratic and participatory channel of communication. They are, so to speak, arenas for the improvement of battles in the search for the convergence of collective interests and, therefore, a territory for the formation of citizenship.

By observing the advances and scope of citizenship in the current world scenario, the need for new achievements and recognition is noticeable, and social movements seek their rights and the deconstruction of deep-rooted patriarchal practices, therefore it is a matter of social justice (Fraser, 2009). Because it is a democratic space of opinion and attention to collective yearnings, the public space is characterized as an irreplaceable sphere of the constitution of a state, as it is a place of essential mediation of communication between the government and the political system (Avritzer and Costa, 2004; Habermas, 2014).

According to Telles (1999), the public space is a politically organized community. Therefore, it is the place where one can fight for rights and fulfill duties, as a citizen belonging to a community (Gohn, 2004). In this sense, the public space reveals its power of communication as it allows different individuals to enjoy the same space and share ideas and actions. Thus, "communication is activated

by sharing the same space" (Gomes, 2018, p. 118). According to Gomes (2018), public spaces represent the arena where problems emerge and become evident, giving rise to debates and promoting communication and visibility among divergent actors, which can result in new arrangements and conciliation. Therefore, public spaces "bear reflexivity: we observe and are observed" (ibid., p. 118).

The public space is a place of claims that welcomes public manifestations, deliberated by citizens and elected representatives. Any subject or emblematic issue can be publicly discussed in it (Habermas, 2007). According to Queiroga (2012, p. 82), "[...] the public space enhances the actions of public life. [...] the morphometric, aesthetic, and environmental qualities of the systems of objects present relations with the system of actions, facilitating or hindering the public life, but never determining it".

Marshall (1967) alleges that the guarantee of some rights related to citizenship and social integration into public life represents slow and tedious progress for the lower-income strata. Hence, the public space is essential for public manifestations of citizenship, claiming rights, and democratic participation. Public leisure places are usually not located in the neighborhoods of people living in informal settlements. However, streets are often crowded, soccer fields are improvised, and places of worship and open-air stores attract people and become meeting points. Indeed, the public space is an important piece of the public sphere, even lacking varied attractive tools (Queiroga, 2018), and thus the need and search for open spaces that enable socialization is evident.

Physical and social public spaces are interrelated due to the spatiality, publicity, and features that the physical spaces provide to social and democratic manifestations that the social space produces through politics and citizenship, in order to construct an environment that promotes quality of life.

The public space in the Master Plan for Territorial Ordination (PDOT) of Teresina

The Municipal Supplementary Law n. 5.481, of December 20, 2019, established the new Master Plan of Teresina, entitled *Plano Diretor de Ordenamento Territorial* (Master Plan for Territorial Planning - PDOT). It is "the basic instrument of the territorial planning and development policy" (Teresina, 2019), which establishes the guidelines for sectoral plans and sets the guiding principles for other local urban norms, as well as for municipal territorial management.

The PDOT stands as a tool for municipal planning. However, the Master Plan is not limited to the public sector, as it also contemplates programs and actions for the private sector and is applied to the entire territorial extension of the Municipality of Teresina. The general objective of the PDOT aims to guide the Territorial Development Policy of the Municipality (Teresina, 2019) and must be executed in harmony with the provisions of the City Statute, Federal Law n. 10,257, of 2001, and the Statute of the Metropolis Federal Law n. 13,089, of 2015 (Brasil, 2015).

Regarding the issue of public spaces, it is important to note that the new Master Plan of Teresina defines the expression "Public Sphere" as an environment that includes public space and private areas that have direct contact with the public space, such as building façades, the first floors of buildings and everything that can be assimilated by the pedestrian (Teresina, 2019). Thus, it is possible to realize that the PDOT at times addresses specific guidelines for public spaces, but at other times, it considers the public sphere more broadly, including the private areas that have direct contact with the public space.

From this broader concept of the public sphere, the PDOT outlines territorial strategies aimed at the development of the public sphere as a democratic environment, a space of exchange and social coexistence. Thus, these places need to be empowered with a focus on people's use, and the search for a human and socially and culturally active city (ibid.). At this point, it is worth noting the focus given to the cultural environment as the public sphere is concerned, with emphasis on the humanization of spaces.

The strategy dedicated to the reconfiguration and appropriation of the public sphere, according to the provisions of Art. 18 of the PDOT, in Teresina (ibid.), has as its structural principles the security in urban public areas for greater flow of people and sociability, and the search for equality in the use of public spaces aimed at mobility, such as roads and streets. One can notice at this point how the municipal legislation is concerned with providing access to public spaces both in the promotion of public security and in the guarantee of equality in the use of spaces.

At this moment, it is worth reflecting on the "securitized territories, the power of management, and control of movements and actions in urban spaces, leading to the creation of different superimposed territory layers in the city" (Firmino, 2017, p. 24). The efforts that are currently undertaken in the area of securitization of public spaces are mostly linked to Information and Communication Technologies, which correspond to "fundamental conditions for the existence of an expected kind of smart urbanism, present in the imaginary of the so-called smart city" (ibid.). The PDOT of Teresina, however, is limited to mentioning the importance of security in urban spaces in a programmatic way. There are no indications of means or programs that enable measures to securitize public spaces. It is worth noting the absence of concrete or technological instruments of control and management of urban spaces, or any indication of the application of security technologies.

Concerning public spheres, the new Master Plan of Teresina, Art. 19 (Teresina, 2019), sets guidelines to consolidate and strengthen these places. Among these guidelines, the following ones that specifically focus on public spaces stand out:

I – Make public spaces attractive in order to provide health, safety and well-being to the population;

II – Strengthen Teresina's cultural identity;

III – Develop a policy of preservation of the tangible and intangible cultural heritage, including incentives and awareness campaigns for owners;

IV – Promote social interaction activities in public spaces, such as fairs, exhibitions, urban gardens, etc.;

V – Strengthen the City Center as a hub of vitality and urban diversity;

VI – Take advantage of underutilized spaces in the City Center and in new central areas for the promotion of public activities;

VII – Restrict the construction of walls and stimulate permeability on the limits between the private space and the public space;

VIII – Increase urban forestation through partnerships, public investments and incentives to citizens;

IX – Incorporate pedestrian streets and shared streets to the municipal road system - spaces of priority mobility for pedestrians.

According to PDOT, art. 10 (*ibid.*), the valuation of the urban public space is a measure to contain the expansion of urban sprawls and promote the densification of urban territory, making the city more compact, coordinated, and connected, through the provision of infrastructure and urban services that prioritize sustainable practices and natural environment. In this excerpt from the legislation, it is possible to notice the focus on the natural environment as a strategy to encourage urban compactness through the increase of public spaces and their use as part of urban infrastructure and services. In fact, by making cities "more compact and mixed-use, prioritizing urban growth in areas with supporting infrastructure, and emphasizing the use of urbanistic instruments that promote the social function of the city, it is possible to establish a new paradigm of urban development" (Leite; Saldiva and Bresser- Pereira, 2018, p. 1). However, there is no way the master plan can become reality without efficient urban instruments and catalysts of the designed transformation, as a public policy.

The PDOT proposes the promotion of the application of the instrument to control land occupation – Floor Area Ratio – as an instrument to stimulate densification (Art. 12, XI); however, it fails to set criteria for measuring the correct occupation of land and fails to establish indicators of the desired floor area ratio for each urban area.

The Urban Territorial Model (MTU) of PDOT Teresina also mentions the public space, since the MTU is a tool for the planning of land use, meeting the strategic objectives of the Master Plan, and delimiting the social function of property. The MTU is defined by the Urban Territorial Macro zoning, which is subdivided into Urban Zones and Special Urban Zones. One of the principles guiding Teresina's MTU is that public spaces must be designed for active mobility with comfort and safety (*ibid.*). Macro zoning is an instrument for planning the municipality's territory and is therefore the policy that should inform the municipality's public management of the preparation and execution of sectorized and targeted actions for each area of interest.

The qualification of the public space through investments is, moreover, how the PDOT proposes the densification of the Development Macrozone of Teresina (MZD). The Development Macrozone (MZD), proposed in Art. 55 of the PDOT, is a part of the municipal urban territory that is mostly occupied, with few urban voids, by a great availability of infrastructure and urban services, concentration of commerce, public and institutional equipment, and a consolidated road network (*ibid.*). Once again, the PDOT cites the public space as a catalyst for promoting urban densification and compactness.

The configuration of the public space for circulation, roads, and streets, suitable for active mobility practices with comfort and quality, is established, according to art. 63 of the Master Plan of Teresina, as one of the principles of the Sustainable Transport Oriented Development Model (DOTS).

Art. 282 of the PDOT refers to the pre-emption right granted to the Municipal Executive, i.e., the preference for acquisition of urban real estate subject to onerous disposal between private parties. According to §1º, Art. 282, of the Teresina Master Plan, the right of preemption will be exercised whenever the Municipal Executive needs areas for, among others, "the creation of public leisure spaces and green areas".

Another instrument that addresses the public space in its guidelines is the Specific Urbanization Plan (PEU). This is an instrument that aims to enhance the local peculiarities of strategic areas in the Urban Area, with consequent use of their development potential. The PEU must comply with the guidelines of the Territorial Resilience and Development Policy, as provided in the PDOT. The theme of Territorial Resilience is connected to "a rupture that can be social, economic, political, or cultural that occurs in the territory, destabilizing its structure and leading to a new reorganization of the territory that can even include a territorial development that is greater than the period before the collapse" (Tunes, 2016, p. 7).

Such a concept proves to be relevant in the debate concerning public spaces since in many cases it is not a matter of properly configuring a public space, but of rebuilding and reorganizing it in a way that encourages a rearrangement more beneficial than the

previous stage. In this perspective, it can be noticed that the requirements foreseen for the PEU include the indication of priority objectives of the intervention, the proposals regarding urbanistic, environmental, social, economic, financial, and democratic management aspects, among them "urban interventions to improve the urban, environmental, morphological, physical, functional and landscape conditions of public spaces" (Teresina, 2019, p. 34).

However, also in relation to the Specific Urbanization Plan (PEU), the PDOT of Teresina is limited to establishing generic rules in the sense of indicating priority objectives for urban interventions to improve the conditions of public spaces, without foreseeing the methods, programs, or systems that would make the intended public policies feasible.

Final considerations

The present study sought to deepen the knowledge concerning the development of urban public spaces and the social and environmental quality of life in Teresina, verifying concerns regarding public spaces and which existing public policies are aimed at ensuring that the population has access to public areas with vegetation, leisure and recreation spaces that meet local needs, in addition to verifying if there are measures, laws, practices, and projects aimed at regional sustainable development, under the perspective of urban public policies.

Given the analyses carried out, it was possible to know the arrangement and distribution of Teresina's public open spaces

and understand the role that these spaces play in the current context. In this aspect, the new Master Plan of Teresina, called "Plano Diretor de Ordenamento Territorial - PDOT", instituted by the municipal Complementary Law n. 5.481, 2019, lists the valuation of public spaces as an instrument of some of its tools, such as the Sustainable Transport Oriented Development Model (DOTS), Specific Urbanization Plan (PEU) and the Development Macrozone (MZD).

In other passages, the PDOT establishes specific provisions about the "Public Sphere" itself, covering in addition to public spaces "the private areas that have direct contact with the public space". Most of the provisions identified in the PDOT of Teresina on public spaces are of a programmatic and general nature, establishing guidelines that will guide actions and other local urbanistic norms. The City Statute itself, as a national law, establishes the master plan, approved by municipal law, as a "basic instrument of urban development and expansion policy".

Despite that, the PDOT could have advanced towards more effective and specific actions and commands regarding the identification, protection, increment, and conservation of public spaces in the area of the

Municipality of Teresina. One can even note the absence of identification and mapping of public spaces in the PDOT of Teresina. The Master Plan could have surveyed the municipal public spaces. This simple measure would give more publicity to the existing public spaces, encouraging their protection and appreciation.

Public open spaces are environments of social interaction, urban sustainability, and citizenship. It is noted that there are many references in the Master Plan of Teresina to the essentiality of these spaces in the spatial configuration of the urban territory. However, it is the application of the measures proposed in the PDOT, the creation of legal and effective projects, construction of open spaces in equitable ways in the city, and cataloging of existing open spaces, among other actions, that will enable the construction of an intelligent, sustainable and democratic city, contributing, in this particular, to the strengthening of citizenship and the consolidation of social justice.

For future research, it is suggested that a deeper study of public spaces in Teresina should be conducted stemming from the identification of programs and municipal public policies aimed specifically at valuing and conserving these areas.

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