

SYMBOLIC STRUGGLE IN CYCLING POLICY AND SMART MOBILITY

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ABSTRACT

This article seeks to disclose the symbolic game in the process of development of the cycling policy in the Federal District (FD), as part of the urban planning of Brasília, with regard to the active mobility policies implemented in the last 15 years, related to the resignification of mobility based on the use of bicycles, in the context of the Human, Smart, Creative and Sustainable City (CHICS). The analysis is carried out from a systemic and relational perspective of the structures of domination proposed by Pierre Bourdieu, based on the assumption of socially and historically constructed everyday life. The study will seek to elucidate whether the cycling policy in the FD would have emerged from microprocesses of social construction that would denote the formation of a local cycling culture. Or, on the other hand, if the public actions would have been

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the result of symbolic domination and meaning formatting towards an agenda aimed at reframing Brasília as a smart city. A contextual turn is suggested, based on the various actors' dynamics' change as established in Latour's actor-network theory, which considers a collective consciousness formation based on the use of more integrated, homogeneous and cohesive mobility solutions in the urban context of CHICS. The study deals with the dialectic-inductive methodology, observing the different positions in the application of the instrument.

Keywords: cycling program; public policy; smart mobility; sustainability symbolic power.

LUTA SIMBÓLICA NA POLÍTICA CICLOVIÁRIA E MOBILIDADE INTELIGENTE

RESUMO

O presente artigo busca desvendar o jogo simbólico no processo de construção da política cicloviária do Distrito Federal (DF), como parte do planejamento urbano de Brasília, no que tange às políticas de mobilidade ativa implementadas nos últimos 15 anos, relacionada à ressignificação da mobilidade – no contexto da Cidade Humana, Inteligente, Criativa e Sustentável (CHICS) –, com apoio da bicicleta. A análise baseou-se na perspectiva sistêmica e relacional das estruturas de dominação propostas por Pierre Bourdieu, partindo do pressuposto do cotidiano construído socialmente e historicamente. Buscar-se-á elucidar se a política cicloviária no DF teria surgido de microprocessos de construção social que denotaria a formação de uma cultura ciclística local. Ou, por outro lado, se as ações públicas teriam sido fruto da construção simbólica de dominação e de formatação de significados, que incluiria uma agenda voltada à ressignificação de Brasília, no contexto das smart cities. Sugere-se uma virada contextual, a partir da alteração da dinâmica entre os diversos atores, com base na teoria ator-rede de Latour, cogitando a formação da consciência coletiva com soluções de mobilidade mais integradas, homogêneas e coesas do contexto urbano CHICS. Parte-se da metodologia da dialética-indutiva, com observância dos diversos posicionamentos na aplicação do instrumento.

Palavras-chave: mobilidade inteligente; poder simbólico; políticas públicas; programa cicloviário; sustentabilidade.

INTRODUCTION

The 21st century marks a turning point in urban mobility, until then focused on the multiplication of road policies supported by an automobile culture proliferating individual motorized transport modes in the urban environment and inseparable from their consequent negative externalities, especially congestion, pollution and traffic fatalities. An inverse movement has been observed in contemporary cities, such as Amsterdam, Copenhagen and Barcelona, which have started to prioritize the development of public policies that promote active mobility solutions, based on promoting the use of non-motorized means, in particular, the bicycle, as well as its integration with public transport modes, so as to provide the formation of more democratic, sustainable, humane and smart urban environments.

It is a trend based on the urban principle of promoting territorial sustainability, through which everyone's right to a sustainable city is recognized based on the convergence of social, economic and environmental dimensions. This reinforces an urban development attentive to the need to balance the relationship between the environment and human activities, based on the assumption that the expansion and preservation of green areas, the replacement of motorized modes by active mobility, and, consequently, the development of cycling policies can improve living conditions in cities.

Nevertheless, National Household Sample Surveys (PNAD), carried out in 2008 and 2019, reveal that, in Brazil, urban mobility by bicycle is not necessarily based on socio-environmental and health values, but is closely related to economic issues: the scarcity of family income, the deficiency of public transport systems, and spatial segregation in cities. Corroborating this assertion, there is the average profile of the Brazilian cyclist: low-income young people living in areas further away from the urban center. A tendency to decrease displacement by active modes as the family income grows has also been identified, bringing as a consequence the increase in motorization.

On the other hand, there is a worldwide tendency to build urban policies based on active mobility as part of a process of re-signification of the city as a smart, human and sustainable space. In the so-called smart cities, it is proposed to face urban challenges more efficiently through the use of Information and Communication Technologies (ICT) and other instruments, such as sensors and computerized systems for intelligent management. In this environment of innovation, the processing

of information takes place in an Integrated Command and Control Center (CCO), based on the integration between the processes of the city, so as to provide complementary subsidies to each other for the making of multiple decisions. Thus, the aim is to provide greater efficiency in urban operations and services and thus improve the quality of life of inhabitants and users, in order to meet the needs of all generations (current and future) under the economic, social and environmental aspects.

This phenomenon has been confirmed in Brazil, where, since 2016, approximately 76% of municipalities have started to foresee the adoption of digital technologies to optimize the provision of public services. In this sense, in 2019, the Federal District government pledged to structure and implement the National Urban Development Policy and the Brazilian Charter for Smart Cities aimed at promoting efficient public policies and sustainable actions based on investment in technology and innovation. Such actions include urban mobility programs supported by active mobility values to encourage the use of bicycles (and other modes based on human propulsion, such as skateboards or scooters) to replace motor vehicles.

In this context, it becomes relevant to examine the feasibility of implementing a cycling policy in Brasília, as a component of a process of redefining mobility (democratic, smart, humane and sustainable). Thus, we start by identifying some factors that would make the invitation to cycle in the city convincing, in Jan Gehl's terms: climatic and topographical feasibility, road structure, and local cycling culture. Next, the following hypotheses are investigated: (a) whether the development of cycling policies in Brasília would have arisen from microprocesses of social construction, which would have led to the formation of a local cycling culture; or, on the other hand; and (b) whether public actions in this sense would have been the result of a symbolic construction of domination and meaning formatting also aimed at justifying solutions specific to the smart city context.

Indeed, the present study aims to analyze the Cycling Program of the Federal District in the last 15 years, from the systemic and relational perspective of the domination structures proposed in Pierre Bourdieu's phenomenology. It is assumed that everyday life is socially and historically constructed in the midst of symbolic struggles around the (re)cognition of legitimate authority to say the meaning of things in the world, and on how to solve problems socially constructed from a system of principles of vision and division of the world, with its relatively structured sets of rules based

on references specially constructed for a given context. To this perception, and supported by Latour's actor-network theory, is added the logic of building socially shared values recognized by the community as a whole, to validate the formation of a cycling culture capable of accompanying more integrated, homogeneous and cohesive public cycling policies.

In this sense, the study aims to: (1) identify the presence of fundamentals in the context of the city (climate and topographic feasibility; road structure and cycling culture) that justify the implementation and continuity of the cycling policy; (2) analyze the local policies adopted in the last 15 years in order to identify the occurrence of symbolic struggles in the process of building government actions; and (3) indicate in what sense these public policies developed in the Federal District could contribute to the insertion of the Capital in the context of smart cities.

Regarding the methodology, a bibliographical research was carried out, aimed at building a theoretical basis on the subject, using the dialectic-inductive and exploratory-bibliographic method.

1 BRASÍLIA: A FAVORABLE STAGE FOR THE DEVELOPMENT OF CYCLING POLICIES?

The adoption of sustainable mobility policy and the consequent creation of cycling networks are usually justified from the identification of some factors in the city. They are: climatic and topographical feasibility, integration of the road structure and presence of cycling culture.

Initially, it is questioned whether the Federal Capital would present these characteristics in order to favor the implementation of a local cycling policy. Thus, proceeding to the analysis of the climatic and topographical feasibility requirement, it is concluded that the location in the Central Plateau gives Brasília a flat relief with slight undulations in its territorial extension. In addition, its tropical climate is marked by a mild temperature, with an average of 22°C, varying between 13°C and 30°C throughout the year. In addition, it has an average annual rainfall of 1500 mm (GOVERNO DO DISTRITO FEDERAL, 2021); with heavy rains of short duration predominantly in the summer, between October and the beginning of May. In winter, between June and September, there is a long period of drought, which can reach 100 days without the presence of rain.

Undoubtedly, the city has a climate and geography that are generally friendly to the use of bicycles as a daily mode of transport to replace

motorized transport, thus denoting climatic and topographical viability for the implementation of cycling policies. On the other hand, it cannot be ignored that its urban design, based on zoning and fragmentation, led to the formation of large voids and green strips between the satellite cities and the central area – the *Plano Piloto* (VELLOSO, 2015). Thus, a sprawling territorial structure led to the discontinuity of the urban fabric, resulting in a deconcentrated, dispersed and sparse urban expansion, which ended up encouraging mobility centered on the car.

It should be noted that this process results in a disconnected and unequal urban form of distribution of uses and activities, as well as the location of residential areas and economic activities in the territory. Indeed, it is observed that only a small portion of the population resides in the *Plano Piloto*, where, however, there is a large concentration of formal and informal jobs in the city (DOWALL; MONKKONEN, 2007). According to the 2018 District Household Sample Survey (PDAD), 7.68% of the FD's urban population resides in the *Plano Piloto*, while this is the place where 41% of people carry out their main work. The research also shows that the average household income of the population residing in the *Plano Piloto* is R\$ 15,056.90 (considered high income).

Without losing sight of these disparate scenarios, it is possible to find the presence of green areas surrounding the residential, commercial and institutional blocks, notably in the *Plano Piloto*, outlining a favorable context for the use of bicycles. This factor, combined with the other characteristics (climatic and topographical), translate a natural vocation of the Capital for cycling. It remains to be questioned whether the city has a compatible road structure and a sufficiently solid culture to justify the investment in urban policies in this sense.

As regards the road structure, of the 10,500 km that make up the FD network, 553.95 km – about 5%⁴, correspond to the lanes dedicated to bicycle transit. It is also identified the presence of 15 cycle micro paths along the Administrative Regions of the Federal District, which extend through the *Plano Piloto* (Asa Sul, Asa Norte, Eixo Monumental and Universidade de Brasília), Lago Sul and Lago Norte, in addition to the Administrative Regions Sudoeste, Cruzeiro, Octogonal, Taguatinga, Ceilândia, Águas Claras (and the Arniqueiras region), Sobradinho, Paranoá, Brazlândia, São Sebastião Riacho Fundo and Planaltina (VELLOSO, 2015).

4 Considering the data from MOBILIZE in 2015, in which the cycleway structure measured 400 km, while the road system extended over 10,500 km, the ratio was only 1.52% (VELLOSO, 2015).

It is the largest Brazilian cycling network. However, it is questioned whether the current structure would be properly interconnected and whether it would offer the necessary security for city dwellers to prioritize cycling in their daily commutes, although there are serious indications that both answers would be negative.

As regards the network's interconnection, With regard to the interconnection of the network, the focus on the development of a well-defined and connected micro cycling network in Brasília (central region, Sudoeste, Cruzeiro), Lago Sul and Lago Norte is observed in the original design of the Cycling Program of the FD (ABCP). Each of them currently has 119.95 km, 54.30 and 25.91 km in length, respectively. Also noteworthy is the Park Way cycling structure, currently the third largest in the FD, with 50.15 km in length. These four regions make up 40% of the FD's cycling network.

There are also plans to integrate cycle paths in the central area of the *Plano Piloto*, between blocks 900, on Via W5 (Fifth Avenue west of the Eixo Rodoviário), and 600, on Avenida L2 (Second Avenue east of the Eixo Rodoviário), following the implementation of the Light Rail Vehicle (VLT) on W3 (Third Avenue west of the Eixo Rodoviário) South and North. On the other hand, confirming the uneven distribution, there is a great discontinuity in cycling routes in the other Administrative Regions (AR), with sudden interruptions in sections of the Ceilândia, Taguatinga and Samambaia network, and absolute disconnections with the rest of the cycling network, as in Sobradinho, Gama and Santa Maria.

This context makes daily commuting focused on bicycle use between most Administrative Regions unfeasible, which is exacerbated by the restrictions on bicycle transport in the FD modes: bicycle boarding is allowed on the subway, in light vehicles on rail (VLT) and on tires (VLP), but it is not yet possible on buses. Although there is legislation determining the installation of supports or racks for the placement of bicycles for this purpose, an implementing norm has not yet been edited by the local administration, and, in practice, the law is still not capable of producing effects in the reality of Brasília residents.

Regarding the aspect of (un)safety in traffic, there is a large number of fatalities (collisions, rollovers or being run over) involving cyclists in the FD (BERTUCCI, 2016). In October 2020 alone, there were 14, an average of one event every five days. Compared to the same period in 2019, there were 19 occurrences (GARZON, 2020), and in 2005, before

the implementation of the cycling program, there had been 66 fatal events. This denotes a decrease in cases, but does not minimize the seriousness of the situation, which continues to point out the urgency of public policies consolidating measures to protect cyclists.

When comparing the occurrences by AR, relating them to the length of cycle routes built or under construction, it appears that most events are concentrated in Ceilândia (17%), which accounts for 8.5% of the infrastructure for cyclists; in Planaltina (16%), which has 2.4% of bicycle lanes; and in Taguatinga (10%), a region with only 1.4% of bicycle routes. At the other extreme is the cycle network Brasília (central region), Sudoeste, Cruzeiro, Lago Sul and Lago Norte (micro region), which concentrates more than 40% of the cycle paths in the FD, where only 4% of fatalities were recorded, according to the Rodas da Paz website (2014).

Based on these data, it can be concluded that there is a direct relationship between the provision of adequate infrastructure for bicycle traffic and the promotion of traffic safety, resulting in a more cyclist-friendly environment. Thus, it can be said that the micro-region would be the most favorable place for bicycle traffic; while Planaltina would be the least favorable for cycling in the FD.

In this context, it is important to note the presence of a protagonist who holds significant socio-political capital in the field of active mobility policies in the FD: Rodas da Paz. It is a Non-Governmental Organization (NGO) operating in the Capital, since 2003, in favor of building a safe environment in traffic, and in respect for cyclists, focusing on promoting sustainable, plural and peaceful mobility through awareness and citizen mobilization, social control and influence over public policies, according to the Rodas da Paz website. Its engagement in negotiations involving especially the interest of cyclists is noted, with emphasis on the preparation of the FD Cycling Program and its continuous inspection over the years.

Finally, we proceed to investigate the last requirement that will make it possible to state whether or not Brasília has an environment conducive to cyclomobility: a local cycling culture, that is, the inhabitants' predisposition to use the bicycle in their various daily journeys. Research indicates that, in all Administrative Regions of the Federal District, residents use the bicycle, in general, as a means of leisure and recreation, as a means of access to urban equipment, goods and services, and to carry out a neighborhood circuit – trips to bakeries, pharmacies, supermarkets and other activities in the neighborhood (VELLOSO, 2015). According to José Nivaldino Rodrigues

(2013), the various uses of the bicycle stand out depending on the AR, namely: for use at work, there are Taguatinga, Samambaia and Gama; for leisure/recreation, there are all locations with the exception of Planaltina; for access to goods and services, all locations except for Brazlândia and Gama; for neighborhood circuit, all locations, except Planaltina; as a sport/trail, there are Brazlândia, Planaltina and Paranoá; and as a substitute for the transport voucher, there are also Brazlândia, Planaltina and Taguatinga.

Added to this result is the analysis obtained through the National Cyclist Profile Survey⁵, which included such other criteria as age group, main destinations, travel time and motivations for using the bicycle – the latter being more relevant to determine the presence of a local cycling culture.

The survey involved 433 cyclists who use a bicycle at least once a week, mostly aged between 25 and 34 years (37.6% of respondents), with an average income between 1 and 2 minimum wages (22.2% of respondents), and high school education (44.4%), and distributed in 3 regions: central (micro-region), intermediate (Vicente Pires, Guará and Águas Claras) and peripheral (Taguatinga, Ceilândia and Planaltina). The results revealed that 81.6% of respondents use the bicycle to commute between home and work and 76.9% between home and school or college; 51.7% highlighted the importance of integrated use of public transport, while only 2.8% said they use the bicycle exclusively for leisure (BERTUCCI *et al.*, 2016).

The data show that the main reasons for opting for this mode of active mobility are related to the preservation of health (32.3%), speed and practicality (30.9%), in addition to the economic factor (21.6%). The motivation to continue cycling, for 36.5%, would be the practicality and speed of commuting; for 14.5%, it would be the reduced cost, and 8.1% link the option to an environmental concern.

However, the lack of incentive to continue using this mode of transport is linked to the precariousness of maintenance, combined with the discontinuity of routes and the lack of continuous planning that takes into account safety and demand indicators. The main complaints involve: lack of cycling infrastructure (28.7%), followed by lack of respect from drivers (22.7%) and traffic insecurity (22.5%) (BERTUCCI *et al.*, 2016).

Corroborating this result, it is possible to observe, on a daily basis, the

⁵ It was based on the empirical method of interviews: between August and September 2015, 5,012 cyclists were interviewed in ten cities: Aracaju, Belo Horizonte, Brasília, Porto Alegre, Manaus, Niterói, Recife, Rio de Janeiro, Salvador and São Paulo – O perfil do ciclista e os mitos sobre o uso da bicicleta no Distrito Federal (BERTUCCI *et al.*, 2016).

precariousness in the maintenance of the infrastructures currently installed in sections of the cycle path in Samambaia and Ceilândia, as well as the lack of cohesion or discontinuity in the network in a section of the bike path in Planaltina, which makes the invitation to cycle in these regions, to say the least, uninviting.

Still regarding the investigation of the presence of local cycling culture, it is important to mention the contribution of the bicycle sharing system. In Brasília, it was inaugurated in 2014 through public-private partnerships (Projeto + Bike), and in 5 years of operation, it registered more than 1.3 million trips, an average of 35 thousand per month (PMA, 2020)⁶. As reported by users, the advantages of this sharing system include: agility in commuting to work, healthy lifestyle, economic, sustainable and healthy form of transport. On the other hand, they point to inhibiting factors, such as insufficient equipment to meet current demand, the reduced scope of service availability, given its concentration in Plano Piloto, Lago Sul and Águas Claras, precarious traffic signaling, in addition to irregular use of bike paths and lanes by pedestrians and domestic animals, and drivers' lack of respect for cyclists (PASSOS, 2019).

In this context, the use of bicycles as a complement to public transport, and in place of automobiles, is shown to be a major challenge for the cycling policy supported by an active mobility plan. Especially when comparing the numbers of the motorized fleet in the FD (more than 1 million⁷ vehicles – an average of 1 car for every 2.3 inhabitants), and the number of trips carried out by bicycle (77 thousand or 2% of day trips), the existence of a strong local highway culture is also evident, despite the fact that it is possible to identify a cycling culture, still on a slow rise.

Having verified the requirements that evidenced a certain receptivity of the city and its population for the use of bicycles as a priority mode of transport, we now analyze to what extent this cycling culture would support the implementation and development of cycling policies in the FD, especially from the Cycling Program started in 2005. Furthermore, we aim to identify the degree of democratic participation in the formation process of these actions, as well as the presence of symbolic modeling conducted by certain privileged groups, endowed with socio-political-economic capital.

6 It should be noted that the + Bike Project was interrupted in January 2020, but a public call was launched in March 2021 to establish a new public-private partnership for a new sharing system, with wider operation – 24 hours everyday – and comprehensive – spread across all AR in the FD. Currently, Tembici is responsible for the shared bicycle system in the Capital (GIDF, 2020).

7 In 2018, the IBGE recorded the presence of 1,284,710 cars on the streets of the FD (IBGE, 2018).

2 THE SYMBOLIC POWER BEHIND CYCLING POLICIES IN THE FD IN THE LAST 15 YEARS

Since 2005, cycling policy in the FD has been significantly driven by a basic legislative tripod: the National Traffic Code (CTN), Law no. 9,503, of September 23, 1997, the Organic Law of the Federal District (LODF), of June 8, 1993, and a set of district laws.

In the CTN, in its art. 24, II, municipalities were given the competence to organize local traffic from the planning, regulation and operationalization of vehicle, pedestrian and animal traffic, in addition to the attribution of promoting the development of circulation and safety for cyclists; therefore, this federal law is seen as an important incentive for the design of policies aimed at the development of cycle mobility in Brazil.

At the local level, the LODF provides, in art. 335, *caput*, that “the Transport System of the Federal District is subordinated to the principles of life preservation, safety, comfort of people, defense of the environment and architectural and landscape heritage”. In addition, § 2 of the same article provides that “the Government will encourage the use of non-polluting vehicles that enable energy savings, through educational campaigns and the construction of cycle paths throughout its territory”.

The rule therefore determines the need to make the implementation of cycling structures and incentives for the use of cycle mobility compatible with citizen and environment protection, in addition to stressing the necessary respect for Brasília’s heritage – an issue that is always relevant when considering innovating the city’s urban infrastructure. Indeed, care must be taken to observe the limitations arising from the need to protect the historical-cultural heritage present there, without, however, presupposing that heritage-listing would have the power to freeze the urban space, but bearing in mind that the revitalization and urban modernization process cannot occur despite the memory of the city (OLIVEIRA, 2020).

Regarding the district laws on the subject, in terms of relevance and generality, the *Plano Piloto* of the Federal District, Complementary Law no. 803, of April 25, 2009, which provides, among the sectorial guidelines for the road and circulation system, the promotion of pedestrian and cyclist accessibility to the transport system (art. 20). Furthermore, it determines the identification of the Structural Network of Public Transport, through revisions and adjustments to the road system, in order to prioritize safe and comfortable movements of pedestrians and cyclists (art. 22). It also

provides for the inclusion, in local development plans, of strategies and actions to improve accessibility conditions for cyclists (art. 152).

Associated with these more extensive local regulations, there are a series of district laws supporting urban mobility by bicycle, with special emphasis on:

- Law no. 3,639/2005, which provides for the implementation of cycle paths in all road projects, including roads under construction in the Federal District, whenever the relief of the region is compatible.
- Law no. 3,721/2005, which establishes the journey in *Cidade Sem Meu Carro* and sets the date September 22 as the day of mobility and accessibility in favor of the use of bicycles, as a means of encouraging the use of alternative transport to the car;
- Law no. 3,885/2006, which ensures the Cycling Urban Mobility Policy, establishing guidelines to encourage the use of bicycles and their inclusion in sustainable urban mobility in order to enable the insertion of this mode of transport in the road system and its integration into the existing public transport system in the Federal District based on guaranteeing access to technology (bicycles and furniture), the elimination of urban barriers to cyclists and the implementation of cycling infrastructure (bicycle path, cycle lanes, shared lanes, bicycle parking, signage, etc.), also stimulating spatial planning and territorial for non-motorized travel – *Plano Piloto* based on proximity and accessibility;
- Law no. 4030, of October 16, 2007, which establishes the date October 26 as the cyclist's day in the Federal District with a view to spreading the respect and practice of cycling in the city.
- Law no. 4,216, of October 6, 2008, which provides for the transport of bicycles in the subway, light rail vehicles (VLT) and light vehicles on tires (VLP) as an incentive for the use of bicycles for transport, and as a contribution to sustainable development of mobility; the law determines the reservation of the last subway car for this purpose, and in other modes, as a rule, the quantity is limited to 5 bicycles per trip (perhaps an attempt to balance the cyclist's need with the comfort of other passengers).
- Law no. 4,397, of August 27, 2009, which creates the FD Cycling System as an incentive to use bicycles as a means of transport for daily activities and the development of sustainable mobility; deals with the road network for bicycle transport (cycle paths, cycle lanes, shared lanes and operational cycling routes) and determines the creation of specific

parking spaces (bike parking racks).

- Law no. 4,423, of November 10, 2009, which partially complements the previous law by instituting the obligation to install bicycle parking in places of great public influx, such as district public bodies, parks, public and private educational institutions, hospitals, museums and others of a cultural nature;
- Law no. 4,566, of May 4, 2011, which provides for the Transport and Mobility *Plano Piloto*, which is based on the articulation of the various modes of transport in order to meet the population's mobility requirements, and to achieve the general efficiency of the System of Collective Public Transport of the Federal District, guaranteeing as well adequate mobility conditions for users;
- Law no. 4,757, of February 14, 2012, which provides for the establishment of the Eixão do Lazer in the Administrative Region of Brasília – RA I, covering the South and North Road Axes, which will be released to the population on Sundays and holidays from 6 a.m. to 6 p.m., and corresponds to the recognition of a practice that was already in force in the city dwellers' routine since 1991;
- Law no. 5,458, of February 26, 2015, which determines the installation of racks for placing bicycles on buses in the Federal District, opening the possibility for the integration of cycling networks to this mode of public transport, although its implementation in practice is still pending.

More recently, Decree no. 40,877, of June 9, 2020, which defines cordoning off block 702 to 716 south for vehicle traffic on Sundays and holidays, reserving the space on Avenida W3 South for the free movement of pedestrians and non-motorized vehicles, with emphasis on the bicycle.

All this normative reference makes up the basis of the Cycling Program of the Federal District, which aims to develop projects and actions aimed at the effective use of the bicycle as a healthy and sustainable way of life and its integration with other modes of public transport, providing for actions aimed at promoting traffic safety and reducing the number of accidents involving cyclists. In addition, the Active Mobility Plan⁸ aims to value active transport citizens, demonstrating an affirmative political position of planning aimed at the mobility of people rather than motor vehicles. Indeed, the plan sets objectives around the improvement and expansion of active

⁸ The Active Mobility Plan (PMA) corresponds to a planning and management instrument of the Transport and Mobility Secretariat (SEMOB) in accordance with the City Statute (Federal Law no. 10.257/2001, art. 41, § 3), with the National Urban Mobility Policy (Federal Law no. 12.587/2012, art. 6, II), and with the *Plano Piloto* for Urban Transport and Mobility of the Federal District – PDTU/DF (District Law no. 4.566/2011, arts. 19 to 23) (FEDERAL DISTRICT, 2020).

mobility infrastructure, aiming to transform the Administrative Regions of the Federal District into more human cities (DISTRITO FEDERAL, 2020).

Having drawn the scenario of the normative support of the FD mobility program, at this point, it is necessary to expand the analysis in order to disclose the power structures that would be behind the FD's cycling policies. We thus seek to question the scientifically accepted truths, as well as to apprehend the logic of symbolic domination present in the field where social relations are developed aimed at the development of correlated governmental actions.

The focus is brought to the phenomena of social perception, symbolic perception and informal power relations developed from the capital of distinction (especially the social, economic and political one), making a methodological cut to consider as field the social space for debate that preceded the preparation of public cycling policies in the FD. In this context, we seek to identify the mechanisms of differentiation or affirmation of distance by dominant social groups, initially in a symbolic conflict by the imposition of a given representation of society (BOURDIEU, 1989).

It is necessary to complement that the symbolic systems, being these structured and structuring instruments of communication and knowledge, would act as political tools of imposition or legitimation of the domination of one class over another, in a kind of "domestication of the dominated" – in the sense given by Max Weber –, generating symbolic violence. In other words, there would be a symbolic struggle for imposing the definition of the social world that would meet the interests of the dominant classes (BOURDIEU, 1989).

Indeed, when analyzing the context of the implementation of cycling policies in the FD, it is possible to identify the appropriation of distinctive goods – the bicycle as a sustainable and healthy mode of transport –, which would pull a new, more sustainable and more human world behind it. This translates into a symbolic game that has promoted institutional and legal advances, as well as changes in regulations that have driven affirmative cycling policies to cyclomobility, but which, at the same time, bring to light imbalances, inequalities and selectivities in the implementation of government actions.

Furthermore, in the field of construction of the Cycling Program in the FD, the presence of protagonists involved in the symbolic struggles of defining meanings (demand, priorities, guidelines, among others) is identified. Initially, in the working group that gave rise to the definition of

the agenda around the policy in question, a large majority of representatives of Federal District bodies can be identified. Among them: representatives of State Departments, with emphasis on Infrastructure and Works, Transport, and Coordination of Regional Administrations; the Department of Traffic, and the Department of Highways. In joint action, there was a reduced representation of organized civil society: one member from the Rodas da Paz Organization, another from the Federação Brasileira de Triátlon, and one from the Federação Metropolitana de Ciclismo (VELLOSO, 2015).

At this point, it should be noted that the absence of participation of representative groups from regional administrations or neighborhood associations that could benefit directly from the implementation of the policy reflects a democratic deficit in the management of the city, and, at the same time, highlights the few protagonists who would be on the stage of the power struggles around the implementation of cycling infrastructures. However, one cannot forget the presence of “backstage actors”, who also hold symbolic capital to influence the formation of agendas and the definition of priorities (COELHO FILHO, 2016).

In an attempt to unravel the appropriations, codes and subjective relationship networks hidden behind the process of building the public policy in question, we seek to isolate the structure that emanates from some symbolic productions, having selected 4 (out of 13) guidelines of the cycling program, resulting from that initial study carried out in 2005. The aim is to proceed with a non-allegorical reading (BOURDIEU, 1989), around the formation of consensus among the actors responsible for the program design.

Thus, the first guideline determines that the cycling infrastructure should focus primarily on serving cyclists who use the bicycle for work and/or school. Clearly, it is intended to promote cycle mobility as a form of transport for daily use as a priority to replace motor vehicles. This naturally leads to the following question: is the guideline being considered in government actions to implement the program, in view of the demand for bicycle use and the effective implementation of cycling routes?

In this sense, it is useful to consider the result of the research carried out by José Nivaldino Rodrigues (2013), which showed the uses of bicycles in the various regions of the FD. As far as commuting from home to work is concerned, there was a greater concentration of demand in the Taguatinga, Samambaia and Gama ARs – regions where there are less than 10% of the total cycleway structures. On the other hand, the highest concentrations

of cycleway networks are observed in Plano Piloto, Lago Sul and Park Way, totaling 174.95 km in length or 31.6% of the networks built or under construction.

Plano Piloto, one of Brasília's noblest regions, concentrates the largest extension of the FD's cycling network, with 119.95 km of cycling routes or 21.65% of the total network. It is also where 46.33% of opportunities in the entire FD are concentrated (CODEPLAN, 2019), which could justify investment in the region. The other 2 regions that have the largest extensions of bike paths, Lago Sul and Park Way, are also one of the most coveted areas to live in the FD. Almost 20% of cycleway structures are concentrated there (CARVALHO, 2019), however, the research reveals that its users, in general, do not use the bicycle as a daily transport to replace the car, but for leisure or sport purposes at weekends, which demonstrates that they do not fit the parameter designed in the program under analysis.

These data corroborate the results obtained in the evaluation of cycling structures based on the demand for AR carried out in 2005, which indicated the leadership of the rank of daily flow of bicycles by the Planaltina, Ceilândia and Samambaia regions, where 4,038, 2,533 and 2,500 trips were accounted for, respectively⁹.

On the other hand, only 1,253 bicycle trips were recorded daily in Plano Piloto and 101 in Lago Sul (VELLOSO, 2015). Paradoxically, there is a greater concentration of bike paths built or planned (more than 40% of the total) in the central area of Plano Piloto (119.95 km), in Lago Sul (54.30 km) and in Park Way (50.15 km); while the regions with the highest demand add up to just over 60 km of cycle paths: Planaltina, with 7.84 km; Ceilândia, with 36.01 km, and Samambaia, with 17.15 km of cycle path. Such data lead to the conclusion that there was a great inconsistency between the initial design of the Cycling Program, based on demand, and the consequent definition of the places for implantation of the corresponding structures.

Furthermore, the cross-referencing of data between the locations chosen for the installation of structures and the socio-political-economic capital of the residents of the FD makes it possible to identify a great disparity involving the implementation of the program throughout the 33 Administrative Regions of the FD. Five of these AR concentrate almost half of the income generated by families in Brasília, namely: Lago Sul, Sudoeste/Octogonal, Park Way, Lago Norte and Plano Piloto, with average

⁹ Data used in the design of the FD Cycling Program, based on the Household Transport Survey, 2000. Research including other RAs created more recently, reveal that 3 other regions even exceed bicycle traffic: Itapoã (6,555) and Varjão (3,970).

per capita income above R\$5,000; at the other extreme, there are Planaltina, Ceilândia and Samambaia, accounting for an average per capita income of around R\$700 (CODEPLAN, 2014).

It is noteworthy that there are studies correlating low income with the more frequent use of bicycles as a primary means of daily transport. Thus, it can be concluded that the AR with the lowest incomes in the FD would correspond to urban areas with great potential for bicycle use, also considering the favorable topography and/or the precariousness and high cost of the public transport system (VELLOSO, 2015).

Another relevant factor to consider is the geographical proximity of nobler Administrative Regions to the homes of informal workers who live in the ARs with a low-income population. For example: with 25.91 km of cycle paths, Lago Norte receives caretakers, pool workers and other domestic workers who live 10 km away, in the Varjão region, which has only 0.44 km of cycle paths built or under construction. A similar interaction can be found between residents of Lago Sul (with 54.30 km of cycle paths) and Paranoá (with 13.11 km of cycle paths). For these workers, the bicycle is the most economical and practical form of travel, signaling the need to invest in infrastructure to support cycling, linking regions that have this relationship of dependence on the provision of informal services.

Thus, considering the factors concentration of cycling structures, income inequality, accumulation of demand and dependence on informal services, it would be possible to consider the presence of power structures in the prioritization of actions to encourage cycling in the FD. This is because, contrary to the program's guidelines, there is an evident prioritization of actions that end up benefiting the residents of the city's noblest regions. On the other hand, the populations furthest from the field of negotiations, coincidentally, are those who inhabit the peripheral regions. Due to their limited symbolic capital, they seem to remain oblivious to the construction of structures and meanings that define policies in this field.

Moving forward, with regard to the second guideline, a compromise is established around the formation of an adequate cycling network that is sufficiently interconnected with the road and subway terminals. It is possible to observe a direct relationship between the length of cycle paths and the ability to bring users closer to the terminals that serve public transport.

In this sense, when analyzing the FD road network, one cannot lose sight of the fact that access to subway lines is limited to the RAs Ceilândia,

Taguatinga, Águas Claras, Samambaia and Plano Piloto (Asa Sul) – the RAs that concentrate most of the cycling demand in the FD, in addition to Gama, excluded from the subway network planning, but served by Bus Rapid Transit (BRT). In fact, BRT surpasses the subway in terms of reach, considering that it serves users as far as Asa Norte, while the subway is limited to Asa Sul and ends at the Plano Piloto Bus Station. However, this transport mode is equally capable of promoting the integration of its residents with the central region of Brasília – as already mentioned, this is where the greatest concentration of job opportunities occurs in the FD. Thus, at this point, it can be said that the power structures resulted in a configuration that largely coincided with the program, especially in the aspect referring to the integration of the network so that users with greater demand can use cyclomobility as a means of access to work.

Regarding the third guideline, it was determined that a systematic monitoring of traffic accidents with cyclists should be carried out in order to define and implement mitigating measures. This requires carrying out constant assessments of traffic incidents, including, for example, information about quantities, locations, reasons, respect for traffic rules and signs, and the profile of those involved (age, schooling, family income, bicycle use).

Furthermore, it denotes the importance of monitoring and updating public policies so that they meet their objectives of protecting road users, especially cyclists – the most vulnerable part of this relationship. In this context, the study carried out by the NGO Rodas da Paz in the period from 2011 to 2014, aimed at counting the occurrences in traffic in the FD, is of great importance. An analysis was made of the relationship between kilometers built (or under construction) of bicycle lanes by AR and fatalities involving cyclists. Therefore, it was possible to map the most dangerous roads that, consequently, demand greater investment in infrastructure. The main ones were identified as being: Ceilândia, with 17% of fatalities and 8.5% of cycle paths; Planaltina accounting for 16% of the occurrences and only 2.4% of the structures; Samambaia, with 11% of events and 4.7% of the lanes for cycling, and Taguatinga, totaling 10% of fatalities and 1.4% of bike paths (RODA DA PAZ, 2014).

Finally, with regard to the fourth guideline, it was determined that the GDF's bicycle transport policies should always be discussed with civil society, highlighting the importance of democratic management around the design of all public policies, notably those for urban purposes.

This normally takes place through the participation of the population and associations representing the various segments of the community in the formulation, execution and monitoring of urban development plans, programs and projects (Law No. 10,257, of July 10, 2001, art. 2º, II), such as the FD Cycling Program.

It refers to the right to participate in decision-making that involves the making of public actions in order to enable the engagement of interested parties in dialogues and debates with chances of mirroring their desires and needs in these same plans, programs or projects. In this sense, it would be possible to find in urbanism the instrument of conciliation between the consensus and the conflicts of the protagonists of territorial organization, which would allow the production of a concerted action between these actors, according to collectively defined objectives (GUERRA, 2003).

In this regard, when proceeding to the analysis of the model adopted for the discussion in the initial phase of the cycle program's implementation, it is questioned if popular participation would have been sufficiently broad to make the discussion possible, at least, by the majority of those interested in the making of the policy in question. When it is verified that the preparation of the guidelines was practically restricted to the scope of the administration, having had little participation of the civil society – Rodas da Paz, the Federação Brasileira de Triátlon, and the Federação Metropolitana de Ciclismo (MOBILIDADE, 2014)¹⁰ –, it is possible to signal a weak opportunity for the participation of actors directly interested and affected by government action.

This is because, at that initial moment of designing the policy, there would be no records of popular participation: neither in the form of public hearings, which would have provided the opportunity for the engagement of administrations and residents' associations of AR representing the greatest demand for cycle mobility, nor of public consultations aimed at building the public policy in question. This distancing of the population from symbolic struggles and the absence of its leading role in the definition of cycling policies in the FD directly affect the results obtained and the deviations from the program's original intention, which end up privileging certain groups endowed with greater social, economic and political capital and also a greater awareness of the importance of the symbol at stake.

Therefore, it would be possible to infer the existence of a (symbolic)

¹⁰ However, it is important to note a certain openness for society's participation in political decisions on mobility from the creation of the Pedala DF Working Group and the Management Committee for Cycling Policies.

power that is being exercised, on the one hand, with the complicity of those who ignore it, unrelated to the making of these policies, and, on the other hand, of those who effectively exercise it. This last group would be composed of protagonists, but also of more discreet actors. The former would correspond to those effectively involved in the struggles for meaning making and the processes of appropriation of distinctive goods – in this case, the bicycle as a sustainable mode of transport – such as the members Rodas da Paz, Federação Brasileira de Triátlon, and Federação Metropolitana de Ciclismo, who participated in the design of the local cycling program (RODRIGUES, 2013). The more discreet, almost imperceptible ones, would be endowed with fundamental socio-political-economic capital for backstage negotiations, enabling the control of results so that the actions can give them greater benefit – in this context, more access to cycling routes (such as residents of the AR that received greater cycling infrastructure: Plano Piloto, Lago Sul and Park Way).

Consequently, the symbolic game behind cycling policies, reinforced by distribution structures and by the strength of groups with greater capital, would have directed the agreement of structuring subjectivities to a strategic, unequal and selective distribution of cycling networks and other cycle mobility infrastructures for the noblest regions of the city.

However, in the dynamics of symbolic power that involves the development of cycling policies in the FD, those who make daily use of cycle mobility, stripped of cultural, economic and political capital, “remain in a condition of social invisibility, without the necessary recognition as members of the transit system and the circulation environment” (VASCONCELOS, 2012, p. 58). This leads to the conclusion that the existing circulation space in the FD’s urban environment does not favor bicycle use, nor does it contribute to the social inclusion of cyclists who depend on this transport mode to commute daily from home to work.

In fact, there is a mismatch between the real need of cyclists and government actions, resulting in the absence of adequate public cycling policies for regions where the demand for cycle mobility is greater. In this sense, it is observed that, in the passage from the discursive plot to the action, a conceptual design is developed that transmits norms of cognition around public actions (SILVA, 2019) – such as the prioritization of AR with greater demand and a priority cycling culture of commuting from home to work –, which may not be used in relational conditions in decision-making processes – in practice, encouraging the construction of bicycle path infrastructures in low-demand AR (i.e., few users) –, where the cycling

culture is geared towards non-essential uses such as leisure or sport.

This dynamic evidences that the position in a field is a fundamental factor for the interaction between beliefs, habits, traditions and practices. Viewed from another angle, it is possible to glimpse the role of certain actors in favor of the formation of values and beliefs favorable to the whole community, depending on the formation of a collective conscience in this sense. Its influence in the field could contribute to the making of beliefs that would become known and accepted by everyone, and that, for this very reason, would arouse passions, fears and respect (LATOURE; WOOLGAR, 1997). In this sense, one could see the birth of a local cycling culture strong enough to demand a serious response from the government regarding the implementation of the cycling program in the FD.

But how could this be built? Supported by LATOUR's actor-network theory, the awakening to the importance of the integration of cycling networks in the FD can emerge if the population of the central and economically more favored Administrative Regions, and more accepted as influential social actors, interacted with the government and defended the expansion of the cycling network in the interests of the other AR in the surroundings (they represent AR around the Plano Piloto and whose population is economically less favored). Thus, the participation of actors relegated to a subsidiary plan in the game of dispute of symbolic power is made possible (LATOURE, 2012).

Thus, it would be possible to aggregate the actors in the building of the social object, in terms of values shared and recognized by the group – the value of the bicycle, cycling networks and their positive externalities for the entire community, composing an inseparable whole in favor of more integrated, homogeneous and cohesive cycling policies.

With this in mind, we now turn to investigate in what sense the cycling public policies developed in the last two decades in the FD could contribute to the insertion of the Capital in the context of smart cities, and if there would be a symbolic struggle behind this process of resignification of the city.

3 THE CYCLING PROGRAM IN THE PROCESS OF RESIGNIFYING A CHICS BRASILIA

To think of a Human, Creative, Smart and Sustainable City (CHICS)¹¹ is to imagine an innovative urban ecosystem marked by the widespread use

¹¹ Concept adopted by the Brazilian Network of Human, Creative, Smart and Sustainable Cities (REDE CHICS).

of Information and Communication Technology (ICT) in the management of its resources, infrastructure and services, in order to enhance the economy, governance, mobility, and, above all, to promote the environment and the quality of life of people (residents and users of the city). The transformation of an urban space into a smart city requires a whole process of resignification and modification of the traditional urban infrastructure, having creativity as the main driving force, responsible for improvements and innovations in the urban environment; a process that considers and involves the complexities and different dimensions of the city, above all: the economic, environmental, and political dimensions.

Smart solutions involve basic structures or services, which include: smart street lighting, smart and active urban mobility, smart bus stops, shared bicycles and electric cars and their respective charging stations, smart traffic lights, smart public parking spaces, camera monitoring and wi-fi zone (BRAZIL, 2018).

But they also include cultural resources or more subjective and intangible components of the city, such as culture, tradition, values and identity. Its symbolic dimension can be expressed in narratives that describe the city and contribute to configuring it as an imagined space. And, thus, the city starts to be understood in its representational dimension under three aspects: first, as a material reality that is socially constructed, habitable, with which a symbolic relationship is established; second, as a set of specific practices, structures and institutions that both precede people and produce them – and that are sometimes reproduced; third, as an imaginary representation, a discursive symbolic construction, a product of imagination and, especially, of language (DEPINÉ, 2018).

In this sense, the smart city could be seen as a stage for experiments, or a kind of product created as a machine to (re)invent modernity, extend it and reproduce it: a true ideological artifact of modernity. And so, contemporary cities would be more than the accumulation of capital and work, but would become spaces for the flourishing of social, cultural and political phenomena, which would crystallize in different ways and generate processes of interaction and modeling of the dimensions of urban life.

These processes and dimensions evolve as changes in the means of wealth creation also alter the social order in cities. Therefore, new learnings, demands and the need for different resources arise. In this sense, the concept of smart cities (REDE CHICS) represents a visionary

impulse towards the new urbanism, based mainly on a planning linked to technological advances and supported by the actors of the urban space, such as: citizens, government, companies and academy (DEPINÉ, 2018).

And so, developing smarter cities would not be a mere ideal, but would have become (or manufactured) a necessity driven mainly by new trends in urbanization, economic growth, technological progress and environmental sustainability. At the same time, smart cities also represent more humane and more sustainable cities, denoting the concern with environmental preservation and balance and people's quality of life in cities.

In this sense, the concept of cities for people emerges (or is created), a sustainable environment, with areas for walking and cycling, pleasant, healthy public spaces full of life; a humane city, with streets, squares and parks carefully designed to promote healthy interaction between people who live there or pass by (GEHL, 2013). This brings to mind the notion of smart and sustainable mobility centered on the bicycle, as a clean and healthy modal, which requires urban planning aimed at optimizing road space and the humanization and sustainability of cities.

Indeed, urban cycling emerges as an important strategy to improve mobility conditions in the context of contemporary cities, and has been promoted through incentive programs and infrastructure implementation, in addition to its inclusion in road requalifications. Thus, from the inclusion of cycling lanes in the road system with the effective, cohesive, connected and continuous integration of the networks in the urban mobility system, the city qualifies as cycle-inclusive (KUNZ, 2018).

This is a trend adopted across the globe in several smart cities, especially Copenhagen and Amsterdam. In Copenhagen, currently 62% of the population uses a bicycle in their daily commute from home to work/school, while only 9% use the car, something which has earned it the title of world capital of urban cycling. It is worth noting that the city has a carbon neutral plan, which is based on the bicycle as a central tool for promoting the changes that began in the 1970s, when urban planning policies that favored the efficient movement of people around the city began to be prioritized, and not the cars.

And so the local government began to invest massively¹² in infrastructure and services for cyclists, which include 429 km of bike paths, an automated system for traffic lights that prioritizes cyclists, raised

12 In the last 10 years, investments in excess of €134 million have been made in infrastructure and services for cyclists (GUILLIOD, 2018).

curbs to separate bike lanes from car lanes, and 16 bridges exclusively for pedestrians and cyclists; a real incentive for cycle mobility, to the point that, currently, there are 650 thousand bicycles, in a proportion of five for every car in the city. There are also public policies aimed at making the use of bicycles safe, simple and attractive, with campaigns associating the act of cycling with values such as freedom, health and energy. The motto “*Let’s make cycling sexy again*” was even created!

In Amsterdam, cycling infrastructure has been incorporated into urban planning in a very organic way, so that cycling networks do not necessarily coincide with the path of the streets, but prioritizing the path of cyclists to be as fast, pleasant and beautiful as possible. In the city of bicycles, this is the first urban mobility option for 58% of the local population; it is even estimated that the number of these human-powered vehicles exceeds the population quantity; there are 880 thousand bicycles for 800 thousand inhabitants. This would be the result of an urban mobility plan, also started in the 1970s, which prioritizes pedestrians and cyclists through the implementation of a cohesive and accessible cycling infrastructure for the population, totaling 760 km of bike paths, in addition to other infrastructures, such as ample bicycle parking throughout the city – there are 10,000 spaces near the central train station, for example. In recent years, there has been an investment of 120 million euros in cycling policies in the Dutch capital (EM MOVIMENTO, 2018).

However, when comparing the cycling reality of the FD with those of Copenhagen and Amsterdam, for example, it is possible to find a large gap in the results obtained. This is because, in Brasília, government actions have focused on implementing cycleway structures, not necessarily cohesive and integrated into the transport system. There are 554 km of cycling networks; however, there are discontinuities in the network, concentration in prime areas to the detriment of the places with the greatest demand. There are bike parking racks in strategic places, especially close to subway stations, however, there is a lack of equipment to support bicycle traffic (smart traffic lights that include cycle traffic lights) aimed at integration into the rest of the road network. On the other hand, there are still large investments in road policies – such as the construction of viaducts and road duplication (VINHOTE, 2021)¹³, in addition to discontinuity in some

¹³ GDF invests BRL 160 million to renovate 40 viaducts and build four, and also to build two bridges, under the slogan “the Government helps the flow of vehicles, moves the economy and generates jobs and income” (VINHOTE, 2021).

important programs, such as bike sharing, interrupted in January 2020.

There is still a long way to go in order to make the Capital's mobility smart, human and sustainable. Even so, it cannot be denied that the FD Cycling Program can be considered a component of urban policies to encourage cycling, which, in turn, are in line with government actions specific to the context of smart cities. In this sense, it is also possible to affirm that the program would integrate the process of re-signification of the city aimed at the incorporation of smart solutions and, progressively, its transformation into a human, smart, creative and sustainable city.

CONCLUSION

The present study offered an analysis of the Federal District Cycling Program from the systemic and relational perspective of the structures of domination proposed in Pierre Bourdieu's phenomenology. We sought to analyze the urban mobility actions carried out in the last 15 years in the Capital, especially the FD Cycling Program, starting from the observation of the policy design, and including the reading of the normative repertoire that underpins governmental actions so that it is possible to evaluate the current state of the art.

It was possible to identify the presence of symbolic struggles around the (re)cognition of legitimate authority to choose the meanings and priorities around government actions aimed at implementing the active mobility plan. Furthermore, we sought to highlight the process of validating the bicycle as an asset of distinction, which carries within itself the symbol of sustainability and healthy living. This narrative, typical of contemporary cities, is built around its discourse of repudiation of the highway mentality, environmental preservation and humanization of cities. After all, encouraging non-motorized travel tends to improve people's relationship with the public space, results in reduced pollution, promotes improvements in public health and contributes to the reduction of expenses (public and private).

Thus, with regard to the process of designing the cycling program in the FD, it was observed that it was born amid the dynamics of the field of symbolic struggles, which highlighted (and highlights), on the one hand, the preponderance of a protagonism of government entities in defining the social world that meets the interests of the ruling classes – in this context, the residents and users of the Plano Piloto, Lago Sul, Cruzeiro

and Sudoeste microgrids, and Park Way, where the policy has virtuously improved. On the other hand, there is a deficit in participatory management resulting from the weak participation of civil society in the management of the city, which has resulted in government actions that are distanced from the program guidelines.

This denotes, at the same time, the apathy of the actors directly interested in the implementation of active mobility infrastructures – notably the residents of the lowest income AR –, who use the bicycle primarily as a means of daily commuting, where the demand for cycling actions is actually located, but it also highlights the strength of groups with greater (socio-economic-political) capital in making their interests prevail in the installation of cycling networks and in influencing the concentration of infrastructure in the city's noblest regions, resulting in an unequal distribution and selective urban policy of active mobility. On the other hand, the application of LATOUR's actor-network theory was envisaged to consider a possible aggregation of actors – residents representing the 33 AR – in the making of the social object, based on the values shared and recognized by the group around the bicycle, cycling networks and their positive externalities for the entire community, in order to promote more integrated, homogeneous and cohesive cycling policies.

Furthermore, it would be possible to identify a political agenda aimed at validating smart solutions in the city, as well as the beginning of a process of re-signification of urban space, preparing it to receive the structures of a smart city. In this sense, there is also an affirmative discourse supported by the successes of several cities around the world that have implemented active mobility solutions associated with Information and Communication Technology (ICT) to validate the adoption of similar actions by the local government.

However, there is still a long way to go, which includes the adoption of more cohesive government actions to expand the cycling network and the integration of the various modes of public transport, in addition to promoting the strengthening of the participation of the various social actors in the cycling policy institutionalization process in order to promote truly democratic management. This also requires from the government a position more linked to the active mobility plans and guidelines, so that public policies can come to meet the interests of the community, but above all of those who most need public actions. Thus, it would be possible to balance the forces and games that involve symbolic power in the field of

definition of local urban policies, enforce the ideals of the Democratic State of Law, open space for a re-signification of the city and, thus, insert Brasília in the context of the creative, humane, smart and sustainable cities.

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