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Micromobility and financial capital: the case of Tembici (Itaú Bank) in the city of São Paulo, Brazil

Micromobilidade urbana e atuação de agentes financeiros: o caso da empresa Tembici (Banco Itaú) na cidade de São Paulo, Brasil

Micromovilidad urbana y el rol de agentes financieros: el caso de Tembici (Banco Itaú) en la ciudad de São Paulo, Brasil

Micromobilité urbaine et rôle des acteurs financiers: le cas de l'entreprise Tembici (Banque Itaú) dans la ville de São Paulo, Brésil

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ABSTRACT

The financialization process and information technologies have driven market development in different sectors of society. Urban mobility is one of the urban sectors that has been most impacted. This paper aims to discuss the concept of micromobility and how financial institutions operate in this sector in the city of São Paulo (SP), highlighting the case of Tembici (Itaú Bank). The methodology adopted includes a bibliographic review of national and international scientific productions, both primary and secondary, and qualitative and quantitative data, collected through fieldwork and reports. We sought to interpret the territorial impacts of specific digital platforms, examining different uses of the territory, and analyzing how this company promotes the expansion of mobility services. The results reveal how urban space, driven by the use of technology by financial institutions, becomes a profitable market that directly affects urban mobility.

KEYWORDS: urban mobility; financialization; Itaú Bank; São Paulo; Brazil.

RESUMO

O processo de financeirização associado às tecnologias da informação tem impulsionado o avanço mercadológico nos diferentes setores da sociedade. A mobilidade urbana é um dos setores citadinos que mais tem sido impactado. Este trabalho objetiva discutir o conceito de micromobilidade urbana e o papel das instituições financeiras atuantes nesse setor na cidade de São Paulo (SP), com especial ênfase no caso da empresa Tembici (do Banco Itaú). A metodologia adotada neste estudo inclui revisão bibliográfica de produções científicas nacionais e internacionais, dados primários e secundários, qualitativos e quantitativos, obtidos através de trabalho de campo e relatórios. Buscamos interpretar os impactos territoriais das plataformas digitais discutidas, examinando diferentes usos do território e analisando a forma como essa empresa se insere no processo de expansão dos serviços de mobilidade. Os resultados

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revelam como o espaço urbano, impulsionado pelo uso da tecnologia por entidades financeiras, torna-se mercado lucrativo, afetando diretamente a mobilidade urbana.
PALAVRAS-CHAVE: mobilidade urbana; financeirização; Banco Itaú; São Paulo; Brasil.

RESUMEN

El proceso de financierización asociado a las tecnologías de la información ha impulsado el avance del mercado en diferentes sectores de la sociedad. La movilidad urbana es uno de estos sectores urbanos que se ha visto afectado. El objetivo de este trabajo es discutir el concepto de micromovilidad urbana y el papel de las instituciones financieras que actúan en São Paulo (SP), estudiando particularmente el caso de la empresa Tembici (Banco Itaú). La metodología incluye la revisión bibliográfica de producciones científicas, datos primarios y secundarios, cualitativos y cuantitativos. Buscamos interpretar los impactos territoriales de las plataformas digitales, examinando diferentes usos del territorio y analizando cómo esta empresa se incorpora en el proceso de expansión de los servicios de movilidad. Los resultados destacan cómo la tecnología utilizada por instituciones financieras convierte el espacio urbano en un mercado lucrativo, con repercusiones directas en la movilidad.
PALABRAS-CLAVE: movilidad urbana; financiarización; Banco Itaú; São Paulo; Brasil.

RÉSUMÉ

Le processus de financiarisation associé aux technologies de l'information a stimulé la pénétration du marché dans différents secteurs, notamment la mobilité urbaine. Cette étude se concentre sur la micromobilité urbaine et le rôle des institutions financières dans ce secteur à São Paulo, Brésil, avec une attention particulière sur le cas de l'entreprise Tembici (Banque Itaú). La méthodologie adoptée dans cette étude comprend une revue bibliographique de publications scientifiques nationales et internationales, ainsi que des données primaires et secondaires, qualitatives et quantitatives, obtenues grâce à des travaux de terrain et des rapports. Nous cherchons à interpréter les impacts territoriaux des plateformes numériques discutées, en examinant les différentes utilisations du territoire et en analysant la manière dont cette entreprise s'insère dans le processus d'expansion des services de mobilité. Les résultats révèlent comment l'espace urbain, stimulé par l'utilisation de la technologie par des institutions financières, devient un marché lucratif, affectant directement la mobilité urbaine.
MOTS-CLÉS : mobilité urbaine ; financiarisation ; Banque Itaú ; São Paulo ; Brésil.

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INTRODUCTION

As part of a speculative context driven by real estate capital, large urban centers underwent an abrupt demographic increase in the second half of the 20th century. This transition conditioned urban planning practices in shaping urban space. In trying to improve urban mobility patterns, urban planning seeks to upgrade the traffic flow, paying attention to environmental conditions and how the use of the territory is organized.

It is possible, in this sense, to observe the growing discussion and elaboration of practices aimed at traffic improvement in urban areas (MARQUES, 2014; ANDREIA, 2004). Downtown is marked by its intense flow of vehicles and people, which requires the adoption of measures to facilitate and organize these movements. In this context, different means of transportation are emerging as alternatives for mobility in large urban centers.

The current technical-scientific-informational milieu (SANTOS, 2002) is characterized by the construction and expansion of the universalization of hegemonic rationalities in territories. Digital platforms, at the service of the rich, enhance trade relations and the great pervasiveness of finance in production networks and extraction of surplus value (CONTEL, 2006). The rules for the concession of public services are now managed through contracts establishing the hegemonization of territorial practices. However, these concessions are in line with large companies that establish monopolies and spheres of influence in several municipalities and their territorial organization. Information is a key element in this process of appropriation and profiting from the control of these territories.

Representing the strengthening of the financialized economy over the production processes, financialization is the main vector of structuring and reorganization of national territories. The neoliberal economy and its political forms of institutional deregulation are fundamental to this debate. Both contracts and their ideological concession operations are part of a psychosphere and technosphere of modernization (SANTOS, 2002). The capacity to use the territory derives from its form of implementation, distorting the territorial planning in favor of companies interested.

The new moment of technical advancement is related to a new stage of capital expansion that materializes in the appropriation of new means of spoliative investments, always in the search for locations that will provide it with profit. Large institutional financial funds, born with the fictitious capital era (the 1970s onwards), are in this spoliation arena in search of locations to invest their capital. This understanding grasps the interest of financial capital in the mobility sector since such a public utility service proves to be favorable to investment and income extraction with ease and security. Public spaces and private service provision to the Brazilian State, depict

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how the logic of financial capital permeates the normative sphere in planning the national territory.

A well-known case is the expansion of the financialization of parking lots and the performance of the company Estapar S.A., which has a history of providing services related to new urban mobility practices. After gathering information on the companies operating in the segment, it was demonstrated the links between Estapar and the financial markets, basically through their capitalization and the investment system of the Stock Exchange (B3). The penetration of financial capital into urban planning systems, as exemplified by the car park sector, opens up a wide field for study and analysis of how urban territories are used and planned (MANOCCHIO, BARBERIO, GALLO, 2021).

Given the strong involvement of finance capital in urban planning and mobility, there is a need to explore new forms of mobility. The concept of urban micromobility encompasses light, personal and electric means of transport, such as scooters and bicycles, typically used for short distances within cities in a way that facilitates locomotion and reduces dependency on cars. Urban micromobility is emerging as a viable, promising alternative to improve urban flow and reduce pollution and congestion. However, a critical eye is needed to ensure that urban micromobility is implemented properly and does not contribute to the birth of new forms of social exclusion.

Our objective is to discuss the concept of urban micromobility and the financialization of part of this alternative transport system. Specifically, we will analyze the role of financial institutions operating in this sector in São Paulo (SP), considering the role of technology in urban planning, with a focus on the company Tembici. The methodology of this work involves conducting a bibliographic survey of national and international scientific publications to examine the concepts of urban mobility, micromobility, land use, and financialization. It seeks to analyze urban mobility systems and their imbalances concerning the spatial organization and agents of financialization of the territory. Nevertheless, we have used qualitative and quantitative secondary data from newspapers and magazines, and data obtained through technical reports from associations and organizations (Aliança Bike, Observatório das Metrópoles, ITDP - Institute for Transport and Development Policies). Finally, to understand how these actions influence urban mobility planning processes, we also collected information on companies investing in this sector.

URBAN PLANNING AND MOBILITY IN DOWNTOWN

As a starting point, it is worth emphasizing that urban mobility is a central issue in contemporary debates (LERNER, 2013). The accelerated growth of cities in a short period of time, combined with the increase in urban population, poses challenges to the

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efficient circulation of people, goods and services. It is therefore necessary to discuss the search for sustainable solutions that enable mobility that is more accessible, safer, and less damaging to the environment.

According to Vasconcellos et al. (2011), the beginning of urban mobility transformations dates back to the 1960s, when the urbanization process incorporated vehicles such as cars and buses, reducing the use of trams and increasing the use of fossil fuels. The author stresses that policies to stimulate individual transport and the increase in public transport costs have aggravated the problems of urban mobility, especially in large cities. Besides the everyday problems of congestion, accidents and pollution, such policies lead to the social exclusion of those who cannot afford a private vehicle.

Urban dynamics and people's mobility are at the heart of urban planning. The search for more effective methods of displacing urban citizens is dimensioned by new urban structures that give space to other means of transportation, which happened in the 1960s. This was the result of urbanization and the increased mobility of people. The excessive growth of private transport, as a result of the escalation of car buying in recent decades, has led to a significant increment in car flows in urban areas. This situation is attributed to new study practices regarding the notions of mobility, transport planning and their dynamization models (MARQUES, 2014).

The formation of large urban agglomerations has its origins in the process of population movement from rural areas to cities. It was the result of the mechanization of the countryside and the Green Revolution in the mid-1960s (SANTOS; SILVEIRA, 2001). These events have led to an increase in population density in urban areas and the dynamization of transportation in central locations.

According to Bergman and Rabi (2005), the concept of mobility must be read from the perspective that transportation represents a system by which society can access the desired destinations in the city. The urban mobility system can be considered as a structured set of modes, networks and infrastructures that can guarantee mobility while keeping strong interactions with other urban policies (BERGMAN; RABI, 2005, p.10)

> Considering that the essential characteristic of a system is the interaction of its parts and not the performance of its components taken separately, a determining factor in the overall performance of the system is how its parts fit together. This is directly related to the level of interaction and compatibility between the agents and processes involved in the system (MACÁRIO, 2003 apud BERGMAN; RABI, 2005, p.10).

Throughout the 1970s, the road transport system was consolidated, and the number of cars increased. The urban planning of metropolitan regions in this period adhered to the building of radials and marginals to streamline the flow of vehicles in the central areas of cities (NOBLE, 2010). This new composition of

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the urban environment is reflected in the road system, where the downtown area receives new forms of leisure and cultural facilities, and the streets and avenues are widened for better traffic circulation.

The emergence of normative tools at the end of the twentieth century and the beginning of the twenty-first century has facilitated the development of urban and social policies regarding the accessibility of resources, the right to the city, and the utilization of public transportation systems. The 1988 Federative Constitution of Brazil serves as a regulatory framework for social rights and the appropriate use and occupation of municipal territories. Urban mobility and the right to housing are the guiding principles of these regulatory frameworks. The City Statute (Law No. 10,257/2001) and the Mobility Law (Law No. 12,587/2012) represents steps towards achieving equal access to resources in the planning of urban mobility (FAUSTINO, PROUNI, 2016).

The high volume of cars in city centers exacerbates the issue of congestion and displacement of people who are trying to navigate through these areas. The central area holds the highest commercial and economic activity, as it houses department stores, banks, shops, and various services (MENDES, 2010). Therefore, the geographical categorization that is defined as the "center" is influenced by speculative conditions and land valuation based on the interests of capital. These factors contribute to the transformative margins of their forms and functions, as observed in the spatial construction of the city (FX, 2000, 2009; CARLOS; VOLOCHKO; ALVAREZ, 2015).

The normative discussions on urban planning are currently being conducted by various stakeholders involved in the governance of urban mobility and its impact on transportation in cities. These factors are now being considered in terms of mobility, to find a new approach to addressing the issues in the central areas of the municipalities. Thus, the implementation of new transportation infrastructure in urban centers has become a priority for traffic management departments in various municipalities.

Data presented in the survey *Map of Individual Motorization in Brazil – Report 2019* highlights the increase in the number of cars between 2008 and 2018. Over the period analyzed, the number of private cars in Brazil increased from 37.1 million to 65.7 million, with 40% of this growth occurring in seventeen metropolitan regions. Research indicates that the number of private vehicles is growing in Brazil. This fact, coupled with the absence of public policies that promote the development and enhancement of public transportation, serves as an incentive for the consumer car market. The historical origins of the advent of these means of transportation remain embedded in a discourse that prioritizes private motor vehicles as consumer propaganda.

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This is linked to the continuous growth of government incentives to this sector. Given this context, the automotive circulation has experienced significant growth in the country, leading to the development of new strategies for urban transportation in municipalities across the nation (ANDREA, 2004). In this way, the paradigm of national urban planning changes the methodology of action, and there is a need to prioritize new urban mobility projects for cities[1]. According to Neto and Galindo (2015), public policies define how transportation systems are organized and the various approaches used to meet the population's mobility needs. This fact leads to a debate on urban opportunities and the provision of quality public transport. The viability of these means formalizes the significance of permanent investment programs for mass transport infrastructure, prioritizing areas and sectors of the city that are not included in plans seen as speculation by capital agents (CARVALHO, 2016).

The economic policies of territorial and social development are embedded within the framework of globalization and its apologetic discourse on modernization flows and fixed structures (SANTOS, 2001). In the 1990s, cities and urban planning began to adopt managerial formats. This characterization of urban space design prioritizes market technical parameters when thinking about the city. Development projects are based on speculative practices in spatial areas. Their aim is to increase their percentage of investments in favorable areas in the maintenance of accumulated capital and greater extraction of profits for their levels of investors (MESTRE, 2009).

The formation of large urban agglomerations brings to light the profile of corporate cities (SANTOS, 2005). The hegemonic forces of capital, through their speculative methods of urban development, operate within the realms of urban regulation and urban land use (Fix, 2000). The use of the territory and the intentions integrated by dominant actors into the geographical space, define how the urban environment and its territorial structure are integrated into the logic of capitalism. Cities become hotbeds of speculation for idle capital, a consequence of the era of financial accumulation, as major institutions shape the processes of transforming geographical space to suit their interests. This set of interests marks the formation of large shopping centers in line with the needs of capital and its structures of fluid and accelerated instruments (SANTOS, 2005).

URBAN MOBILITY AND NEW TECHNOLOGICAL TOOLS

Urban mobility has been discussed as a policy to enhance the accessibility and quality of life for city dwellers (BLANCO, BOSOER, 2022). The means of transport embodies the daily commute in the urban network, highlighting its significance as a social aspect of the territory. Mobility and its adaptation to the

1. *Silva (2016) points out that in many approaches there is the misconception of treating mobility as a simple synonym for accessibility, however, "although both are part of the same debate on displacement, they refer to different objects" (SILVA, 2016, p. 297).*

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new realities of city formation are linked to economic cycles and present a reorganization of urban space. This process has introduced a new dynamic that is related to social and environmental impacts. It has led to changes in daily travel patterns, including various modes of transportation and traffic management. As a result, there have been new configurations in the urban fabric and planning strategies related to mobility[2].

Machado and Piccinini (2018) point out that mobility is a chronic and structural problem in cities. They point out that urbanization can be considered a driver of development, but it can also cause negative externalities that directly impact the economy, the city, and people's lives. Therefore, it is necessary to plan and predict the impacts that urbanization can have on cities. (MACHADO; PICCININI, 2018, p. 86).

The relationships of everyday life and the various forms of transportation are the factors that define urban mobility. State planning, when carrying out the process of organizing the territory, is structured based on the interests of dominant agents. This biased transformation of daily life has been applied to large institutions (both financial and non-financial, public and private) that seek to establish their operational framework for the standardization of urban services. The commercialization of the city is made possible through planning and normative actions, which turn it into a profitable product.

The relationship between the process of financialization and the current developments in urban mobility sheds light on the understanding of financing operations and public expenditures. This is because the exploration of its main spatial dimensions (scales, places, networks, and territories) considers the city as a means of exploitation and profit extraction (KLINK; SOUZA, 2017). Urban mobility is intertwined with these new ways of utilizing the territory, as the various actors involved in planning and implementing their intentions to use the space shape the process of structuring it (GUTIERREZ, 2012).

The analysis of the State's performance characterizes how urban planning has been implemented. Gutierrez (2012) discusses how urban mobility should be analyzed as a territorial phenomenon that was shaped by historical events that generated different situations in different times and places. This placement allows us to discuss the manifestations of urban space and how its transformation is characterized by the representation of its productive functionality.

The organization of transportation is linked to urban accessibility services, as well as the goals of capitalism and its representatives, reflecting the model of accumulation in which government planning aims to fulfill its functions. This process is characterized by conflicts and contradictions (GUTIERREZ, 2012; CRUZ; FONSECA, 2018). The form of realization and application in mobility will

2. *Urban mobility can be understood "as a result of the interaction of flows of people and goods in urban space". It would be an attribute of the city, while urban transportation is a set of "services and modes of transportation used in displacements within the urban space" (BERGMAN; RABI, 2005, p.11).*

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characterize the different forms of use of the territory. The involvement of different actors raises concerns about the effectiveness of services and new questions to the debates surrounding urban accessibility.

Displacements in everyday life are a matter of thinking about transportation options and the accessibility that cities offer. These types of studies are conducted in various universities and fields of urban planning and mobility. This is because the need for efficient and practical transportation methods is evident in the context of residents' mobility in large cities (BLANCO; BOSOER, 2022). Thus, considering the participation of different actors in shaping the cities and their structures, enables the development of a planning approach that aims to achieve social fulfillment through the use of geographic space.

As a means of planning the central area of the city and generating revenue from urban land, the new forms of urban mobility are categorized as part of urban planning and serve a technical function in reflecting on geographic space. This brings the concessioning process and how municipalities obtain resources to the fore, as well as the interest of private capital in these services.

Brazilian's wave of privatization and concessions in the 1990s, allowed private market entities to operate in various sectors. We understand that, given this fact, dominant capital begins to control municipal areas that were previously governed by public institutions, as all planning and organization are now guided by the standards set by private companies. This fact aligns with the growth of the financial market and its focus on transportation within cities and their urban centers. The discussion about alternative modes of transportation and quick movement seems to be connected to the current focus on light vehicles that travel at speeds of up to 25 km/h and are used for trips within a 10 km radius. This phenomenon signifies a new integration of the city into the discourses of modernization.

ON URBAN MICROMOBILITY

Martendal (2023) points out that with the ongoing technological evolution, various alternatives for urban mobility are emerging. From the performance of non-traditional agents, such as *startups* and platform companies, who tailor their services based on customer profiles, there is an observed development of more flexible products and services. However, these services are designed for individual use and, as a result, are not effective in addressing collective issues.

From a prospective view of the concept of urban mobility, Quaresma, Fonseca, and Burlamaqui (2022) highlight three trends for the future of mobility in cities. The first trend, called "shared journey," can be understood as one in which the user has access to various modes of public and shared transportation. The second trend, known as a "*high-tech journey*", is characterized by the

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innovation and implementation of technological solutions. This supports the idea that technology, and its continuous development, play a crucial role in addressing the challenges faced in the field of urban mobility. Finally, the authors expose the third trend titled "active journey," which can be defined as choosing forms of transportation that prioritize physically active locomotion, such as bicycles and scooters.

In recent years, there has been a significant increase in the availability of shared bicycles and electric scooters through mobile applications in several Brazilian cities, particularly in metropolitan areas. Additionally, there has been a rise in the number of public calls for proposals aimed at providing bicycle-sharing services. Considering the numerous transportation issues in urban areas, these new modes of travel offer practical, flexible, and sustainable alternatives for short and medium-distance trips.

In light of the issues with public transportation and the ongoing congestion in major cities, bicycles and scooters have been introduced (and are still being introduced) to the public as potential solutions for urban mobility. In addition to the practicality and flexibility offered by these new forms of transportation, the discussion also includes the role of technology. After all, the hiring of these services, which are provided by startups, is done through applications.

In general, it can be argued that the practicality of these new modes of transport lies in simplifying the processes of contracting services to the population[3]. In addition, the absence of expenses for maintenance and repairs is a factor that consumers of these new forms of mobility perceive as extremely positive.

Thus, it is possible to affirm that these new forms of individual transport align with the concept of urban micromobility. Micromobility, in summary, refers to the use of lightweight vehicles for short-distance travel, typically up to 10km, at speeds ranging from low (up to 25km/h) to moderate (up to 45km/h). This concept includes vehicles such as scooters, electric scooters, bicycles, skateboards, and tricycles (ITDP, 2023). It is also worth noting that, in addition to presenting itself as an alternative to congested traffic in large Brazilian cities, the concept of micromobility has positive impacts on the environment. It reduces the emission of polluting gases and promotes the use of these new transportation options.

Considered a more sustainable option for transportation in densely populated urban areas, micromobility has gained popularity due to its reduced environmental impact. Micromobility emits fewer polluting gases than combustion vehicles. However, while these new mobility options are presented as sustainable and disruptive, they also introduce new challenges for the city. These include the lack of a clearly defined regulatory framework for these companies and the irregular parking of bicycles and scooters, obstructing pedes-

3. *The simplification of these processes occurs mainly because all the procedures are carried out within the application. The contractor of this service can find bicycles and scooters distributed throughout the city (the locations are to be found within a limited area established by the companies).*

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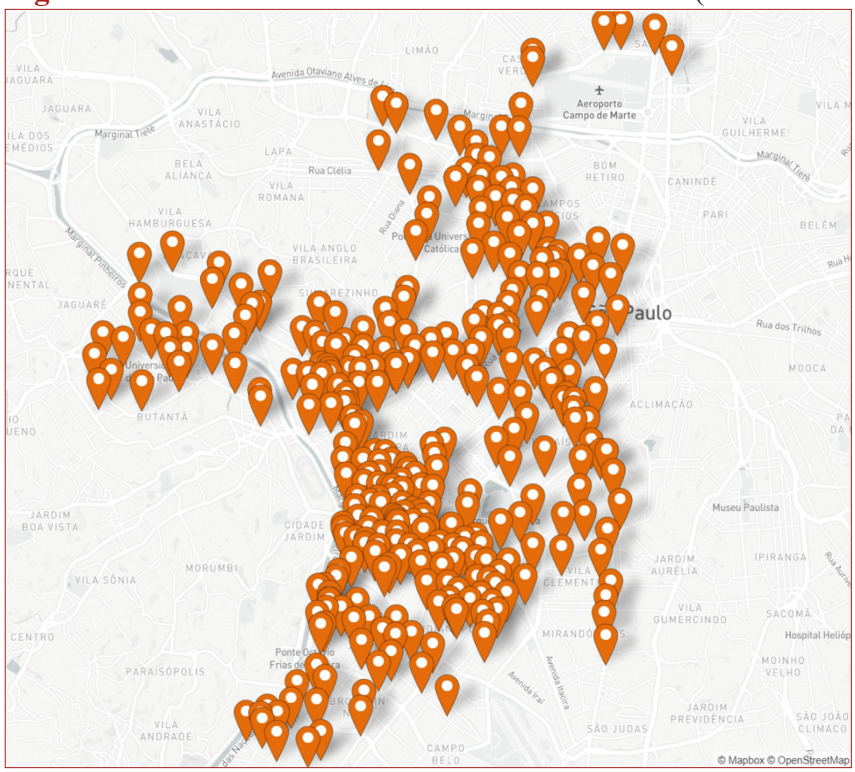
trian pathways and exacerbating accessibility problems.

A point that deserves to be highlighted within this debate is the involvement of economic actors in this scenario. As we will try to explain, various institutions are interested in competing for this market and investing in urban mobility services. In addition, Banco Itaú S.A., for instance, offers a diverse range of equipment options associated with urban micromobility.

Bike Itaú is a project that aims to provide electric and conventional bicycles for daily commuting; it is operated by the company Tembici and sponsored by Banco Itaú S.A. According to the "Terms of Use, General Conditions, and Privacy Policy," the Tembici System is currently operated by M1 Transportes Sustentáveis LTDA., a private legal entity with its headquarters in São Paulo. In addition, the system is operated in the cities of Recife, Rio de Janeiro, Porto Alegre, and Salvador by M2 Soluções em Engenharia LTDA., also located in São Paulo. Both companies are part of the Tembici Group, with Itaú Unibanco S.A., headquartered in São Paulo, serving as the sponsor for all Itaú bike projects.

Tembici emerged as a startup from the idea of implementing a shared bicycle system within the University of São Paulo. At first, the startup focused on offering work for projects in the private sector, specifically in commercial and residential condominiums. However, in 2011, the company received external investments for its projects as interested institutions aimed to expedite and broaden this type of service to other urban

Figure 1. Location of Itaú Bike stations in São Paulo (SP



Source: https://bikeitau.com.br/sao-paulo/. (Accessed on July 18, 2023).

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areas. Itaú Bank was the major investor during the acquisition of the startup, and its investment had a significant impact on the acquisition of the company and its expansion into other metropolitan areas. In 2017, Bike Itaú gained visibility and began managing the main shared bicycle projects in Brazil after acquiring Samba Transporte Sustentável, a competitor with the largest scale of operation.

Currently, Bike Itaú has 2,600 bicycles and 500 electric bicycles in the city of São Paulo, and it aims to increase its fleet in the coming years (figure 1).

The company's website refers to the modernization of transportation and an alternative approach to dealing with the traffic in large cities. Payment methods are associated with smartphones and their applications, providing an accelerated process for exchanging goods and services, and making payments for service requests. The bicycle rental app can be used in Brazil and other South American countries, such as Chile, Colombia, and Argentina. Brazil's major cities, such as São Paulo, Recife, Brasília, Rio de Janeiro, Porto Alegre, and Salvador, have the highest concentration of services.

Figure 2. Bike Itaú rental service in downtown São Paulo (SP).

Source: From the authors (2023).

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In the past four years, companies involved in urban micromobility transportation have made significant investments in this type of business venture. Tembici, Banco Itaú's bicycle company received a US$47m investment in 2020 to improve services in Brazil (BRIGATTO, 2023). The event was organized by Valor Capital Group and Redpoint Ventures, with the participation of the International Finance Corporation (IFC) and Joá Investimentos. In 2022, the expansion of bicycle rentals was once again featured on news sites, as the modernization of this service in the central areas of São Paulo was highlighted. It emphasized the usefulness of bicycles for people traveling through spaces such as the regions of Pinheiros and Faria Lima. Also in 2022, Tembici announced the renewal of the sponsorship agreement with Banco Itaú, whose partnership began in 2012. The new agreement extends the association for another decade. The contract renewal stipulates that the bank will continue to serve as a sponsor of the bike-sharing program, covering the costs of bicycle maintenance and physical stations (GUERRA, 2022).

Regarding Valor Capital Group, one of the investors who contributed US$47 million in 2020, it is worth mentioning that it is a venture capital firm specializing in investments in technological companies operating in Brazil. This classification also applies to Redpoint Ventures. In Valor's view, Brazil's technological ecosystem has shown an exponential growth curve, primarily driven by the expansion of the middle class and the ongoing digitalization across industries. This factor, according to the company, creates significant investment opportunities in the technological sector (MEDEIROS, 2020). Thus, even with all the economic and political problems that the country has gone through in the last decade, the factors highlighted by Valor Capital Group qualify Brazil as an interesting investment scenario for the company's objectives.

Given this scenario, it is worth noting that Valor Capital Group, which contributed almost US$50 million to the development of TemBici, is a company that focuses its investments on the technology market. Thus, although bicycles and scooters are instruments aimed at urban micromobility, Banco Itaú's company attracts investments from funds and companies focused on the technological sector. This fact explains the complexity of this new model of financialized mobility, which brings together agents from different sectors in the logic of urban planning.

Nevertheless, it is worth briefly outlining the evolution of Banco Itaú. The formation of Banco Itaú is currently undergoing a process of structuring as an institution for the association and functionalization of financial capital. Created in 1943, it originated from the Central Bank of Credit and began operations in 1945. Over the years, Banco Itaú S.A. made several acquisitions and incorporations. In 1973, the

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bank adopted the name Banco Itaú S.A. The 1990s were marked by the privatization process of state-owned banks, which allowed Itaú to acquire banks from several Brazilian states, including Banco do Estado do Rio de Janeiro S.A. - Banerj (1997), Bemge - Banco do Estado de Minas Gerais S.A. (1998), Banestado - Banco do Estado do Paraná S.A. (2000), and BEG - Banco do Estado de Goiás S.A. (2001). This condition favored the expansion and growth of the financial institution in Latin America. As a result, it was listed on the New York Stock Exchange in 2006, earning it the title of the largest private bank in Brazil and one of the largest financial institutions in Latin America.

The development of activities related to environmental and corporate governance practices characterized Banco Itaú's actions in the project of bicycles and electric bicycles in the selected cities. This factor was essential for the allocation and availability of business services in the urban mobility sector. The alternative mode of transportation implemented by cyclists aligns with the company's guidelines and its ESG (Environmental, Social, and Corporate Governance) policies, which aim to address environmental risks through planning efforts. This environmental policy is included in the forms of presentation and argumentation to highlight the relative importance of the TemBici project.

The financial phase of capital encompasses new discourses of adaptation and structuring that will determine its performance. The cyclical processes of plunder and confiscation continue to occur as crises are resolved or reduced whenever capital accumulation is diverted towards large groups of monopolies and oligopolies. This phenomenon of wandering is exemplified by the new concepts of acquisition and merger that dominant entities undertake in various service sectors.

In the capital of São Paulo, the bicycle rental service is available at 320 stations. As of May 2023, the rental plans are divided into four categories: Single, Leisure, Monthly Basic, and Annual Basic. What draws attention to these plans are the criteria for bicycle rental. In all plans, there are limitations on the number of trips and time allowed within the contracted period. If the time is exceeded, an additional charge will apply. There is also an extra fee for the option of using an electric bike. The Basic Monthly plan, for instance, costs R$37.90 (around seven dollars at the current exchange rate) and allows you to take up to four trips of up to 45 minutes per day. If this time is exceeded, there is an additional charge of R$4.90 (around one dollar at the current exchange rate for every 30 minutes. Furthermore, if the option is to use the electric bike, there is an additional charge of R$3.50 (less than 1 dollar) for every 15 minutes of use. These values are applicable for May 2023 (BIKE Itaú, 2023).

The bike rental service has often been used by app delivery workers. A study conducted in 2019 by the Brazilian Asso-

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ciation of the Bicycle Sector - Aliança Bike highlighted the challenges faced by individuals who opt to rent bicycles for delivery purposes. The Association's research shows that, in addition to bicycle owners, there are also a number of couriers who utilize bicycle rental services as an alternative because they do not currently possess their own bicycles. This study interviewed 38 workers and to the question on the motivations for using bike-sharing services the three most common answers were because it is "cheaper than buying and maintaining my bicycle" (21 out of 67 mentions), "I still don't have the money to have my bicycle" (18 of 67), "There is a lot of fear that the bike is going to be stolen" (14) (...)". (ALIANÇA BIKE, 2019, p. 13). A report by the newspaper El País highlighted the precarious nature of work for app-based delivery people who use bicycles. According to Alessi (2019), the bicycle delivery service is an entry point into the delivery industry. One of the challenges faced by these workers is the requirement to exchange bicycles based on the rental plans they have purchased. Alessi (2019) also noted that this situation can result in the delivery person losing work while returning one bicycle and picking up another.

The (re)functionalization of the neoliberal economy has led to the spread of digital platforms connected to the market and the emergence of new forms of social exploitation in labor practices. The term "platform capitalism" emerged from the center of the debate on digital platforms and their expanding influence on dominant societal structures, owing to their remarkable adaptability. This phenomenon is the basis of understanding that brings attention to the financialization of urban mobility and the new models of labor organization for delivery workers in digital platforms[4].

These new corporations, which rely on mobile application platforms, currently represent new forms of organization for socio-spatial relations. Tozi (2021), who calls this new pattern of capitalist relations platform capitalism, states that this term describes the phenomenon of global actions through a spatially organized situation in favor of transnational companies and their profit interests. This phenomenon sets a new pattern for the international division of labor, which increasingly favors a single engine for extracting added value and utilizing technologies. The rental of bicycles and the delivery of platform applications are interdependent in this digital labor revenue relationship, as both situations transcend the boundaries of specific branches or sectors within this model of capital accumulation. These various fronts, characterized by their high capacity for flexibility, undergo daily changes due to the emergence of technologies that enable intercommunication between traditional economic sectors and telematic technical objects in the development of new labor relations (TOZI, 2021).

4. *On this discussion, see Oliveira, Santos, Rocha (2020).*

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The instability of employment, which is directly linked to the process of "uberization" of many professions, is closely connected to another aspect of digital capitalism. This aspect shapes the identities of individuals through their actions and spatial modeling for mobility. The combination of rental bicycles and the work of digital platform couriers demonstrates how capitalism has transformed the logic of spatial organization into a commodified object for the stock market. The diversity of relationships is structured within an unequal capitalist development manifests in many compositions of the working class and the provision of services under precarious conditions. The PNADC/IBGE survey conducted in late 2022 indicated that 30,983 people in Brazil work as couriers using micromobility vehicles, mostly mechanical or electric bicycles (ESTEVES, PHINTENER, 2023).

The precarious work and the division of platform mobility are intertwined in the discussion of spatial and labor modernization in social involvement. The characteristics of the ideal of sustainability, linked to the environmental imperative of reducing pollution, and the prerogative of a new way of generating income, put pressure on the liberalization of a spatial-territorial organization with a neoliberal management principle. The combination of bicycle rentals and unemployed workers in the labor market contributes to the growth of large companies associated with financial capital monopolies.

CONCLUDING REMARKS

From what has been observed, it is evident that urban mobility planning has been adversely affected by the actions of the financial market and its actors. It is increasingly common for banking and financial institutions to be involved in activities that were once the domain of planning agents. This process highlights the presence of a vast area of research and critical examination in the planning of municipalities, while also suggesting a diminishing level of government autonomy.

This process shows the existence of a wide field of study and critical analysis in the way municipalities are being planned and, at the same time, indicates a loss of autonomy on the part of the government. Micromobility encompasses light and electric means of transport, such as scooters and bicycles, and presents itself as a sustainable alternative for short-distance journeys. The recent popularization of this concept is closely linked to the fluctuations in the stock market and the interests of its investors. This has brought to the forefront the debate on how urban planning has attracted the attention of various financialized agents.

Within this scenario, it can be inferred that the social dynamics of urban land use and occupation are being commodified based on the interests of capital and its pursuit of profit, facilitated by the utilization of technology. This condition brings about new dynamics in urban mobility, disrupting the social responsibility

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of transportation and access to the city, and introducing financial market strategies into the concept of urban displacement. Furthermore, it is worth noting the impact of financial agents entering the aforementioned sector on various urban dynamics. These dynamics encompass discussions on traffic as well as labor-related issues, such as those involving couriers and app drivers.

As an empirical example of the theoretical discussions mentioned, we highlight the case of Tembici. This company, which is owned by Banco Itaú and has received multiple rounds of international investments, exemplifying how financial institutions are expanding their presence in various sectors within municipalities. The popularization of this phenomenon, supported by technological development and the widespread use of the internet, highlights the increasing socio-spatial segregation processes. This is due to the limited availability of bicycles and scooters, which are strictly regulated by the company's policies. Also, it is worth mentioning that this phenomenon directly and indirectly impacts the precariousness of work. Many delivery people find themselves dependent on and "employed" by one or more platforms, such as bicycle rental and delivery platforms. Consequently, couriers find themselves even more dependent on this new predatory logic, which is typical of platform capitalism.

Finally, we aim to contribute to the debate on the comprehension of emerging mobility dynamics, which are becoming more apparent in urban areas and are accompanied by inherent contradictions. Thus, understanding the phenomenon of the insertion of the financial market and its agents provides new paradigms for urban space planning, which can alter its social aspect in several ways. ●

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