

# Selective waste collection in the city of São Paulo: urban public services under the neoliberal logic

Coleta seletiva na cidade de São Paulo: serviços públicos urbanos sob a lógica neoliberal

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## Abstract

The aim of this study is to analyze the influence of the neoliberal logic on São Paulo's municipal selective waste collection program. The study analyzed a set of public hearings and events that discussed waste management in São Paulo to understand the discourses, views and actions undertaken by the actors that form the system. Results showed that the neoliberal logic has been present in the agenda of all the municipal administrations since the beginning of the selective collection program in the city, whether they assume center-right or center-left positions. The consequence of this is a tendency to make technocratic choices that, under the arguments of "modernity" and need for "technological solutions", end up being centralized in technology, socially exclusionary, and inefficient.

**Keywords:** neoliberalism; selective collection; urban public service; institutional logic.

## Resumo

*É objetivo deste trabalho analisar a influência da lógica neoliberal no programa municipal de coleta seletiva paulistano. O trabalho analisou um conjunto de audiências públicas e eventos relacionados que discutiam a gestão de resíduos em São Paulo, de forma a entender os discursos, as visões e as ações empreendidas pelos atores que compõem esse sistema. O que se percebe é que a lógica neoliberal está presente na agenda programática de todas as gestões municipais paulistanas desde o início do programa de coleta seletiva, sejam elas de centro-direita ou de centro-esquerda. A consequência disso é a tendência a escolhas tecnocráticas que, sob os argumentos de "modernidade" e da necessidade de "soluções tecnológicas", acabam sendo centralizadoras em tecnologia, excludentes e ineficientes.*

**Palavras-chave:** neoliberalismo; coleta seletiva; serviço público urbano; lógica institucional.



## Introduction

This paper aims to analyze the influence of the neoliberal logic on the municipal solid waste (MSW) selective collection program in the city of São Paulo (Brazil) between 1989 and 2020, under the concept of institutional logic. Institutional logics are “supra-organizational patterns” by which individuals and organizations produce and reproduce their material subsistence, organize time and space, giving meaning to their everyday activity (Glynn and Lounsbury, 2005; Thornton, Ocasio and Lounsbury, 2012). This concept has been adopted by sociologists in approaches to higher-order belief systems that influence understanding and action. Therefore, institutional logics directly interfere in decision-making processes, since they shape the perception of decision-makers about the priority of issues to be addressed. This theoretical framework is relevant to understand the varied forms taken by neoliberalism in the current context as the dominant logic.

From this perspective, the neoliberal logic is considered a rationality whose main characteristic is “the generalization of competition as a norm of conduct and of the company as a model of subjectivation” (Dardot and Laval, 2016, p. 17). This rationality – which becomes hegemonic – has concrete reflection in urban territories. Here, the commodification of both services and public spaces stands out, supported by a competitive view that yearns for increasing capital accumulation. Tonucci Filho and Magalhães (2017) draw attention to the neoliberal imperative on a local scale

based on comparative advantages. In this context, planning and management are always based on a supposed efficiency “guided by market standards, therefore, gaining territory for its expansion and predominance” (p. 434).

Dardot and Laval (2016) claim that neoliberalism is not a form of government or economic management – ultimately, these reflect the neoliberal logic. The neoliberal rationality in public management has severe impacts on the dynamics of metropolises. Management contracts signed between the State and private companies, for example,

[...] contain measures of efficiency and effectiveness that come from the private sector, and that are not agreed with the population for which services are intended. They represent the technocratic/managerial locus – a kind of “bureaucratic insulation” – whose “management instruments” are understood as unquestionable. (Fonseca, 2019, p. 405)

Therefore, choosing the city of São Paulo as object of study is justified both by its socioeconomic importance in the Brazilian and Latin American contexts, as well as by the history of its MSW selective collection program. It is in São Paulo where the first Brazilian experience of assigning public spaces to a waste pickers’ organization (WPO) took place, during mayor Erundina administration, in the late 1980s. At the same time, where the first Latin American initiative to “modernize” MSW selective collection was implemented, with installation of Material Recovery Facilities (MRFs) for sorting recyclable waste with high processing capacity, during mayor Haddad administration in 2014.

The complexities in the MSW selective collection in São Paulo are an opportune empirical experience to analyze the influence of neoliberalism on decision-making in urban public services. When specifically focusing on the field of solid waste and selective collection, and in the delegation of services to the private sector, “the profitability of the service becomes its main objective, submitting the technological choices, the decisions that affect the environment and the working conditions to this imperative” (Wirth and Oliveira, 2016, p. 223). An important aspect of MSW selective collection is the heterogeneity of actors involved in these services. If, at the beginning of the provision of these services by the municipalities, it was common for the operation to be done by the municipality, what is currently observed is an increasing trend of delegation. MSW services are mainly delegated to the private sector and WPOs. This movement is consolidated as a result of the neoliberal reforms of the State that have taken place since the 1990s in Brazil. Also, there is a strong pressure from the waste pickers’ (WPs) movement with support from civil society organizations (such as NGOs) claiming their legitimacy as protagonists in the provision of MSW selective collection services.

It is important to emphasize that the main point of legitimizing WPs in MSW selective collection programs is their essential role in the Brazilian recycling industry (Gonçalves-Dias, 2009; Burgos, 2008). WPs, through street collection, were and still are the group of actors that contributes most to recycling industries, such as aluminum, plastics and cardboard (Campos, 2014; Gutberlet, 2015). From this, a coalition was

structured that defended the formation of WPs’ cooperatives and their inclusion in MSW selective collection systems; in this coalition, the performance of the Lixo & Cidadania Forum (Santos, et al., 2011) stands out. This common view became known as “solidarity recycling” (Candido, Soulé and Neto, 2019) or “solidarity selective collection” (Gutberlet, Besen and Morais, 2020). This coalition included – in addition to the WPs – technicians, environmentalists, NGOs, academics, social movements, ecclesiastical communities and even multinational companies.<sup>1</sup>

In this sense, institutional logics provide a relevant interpretive framework to understand the ways in which this view, assumed as a neoliberal “logic”, achieves a role of dominance. Institutional logics are seen as providing the organizing principles of a field, as they guide the behavior of actors through systems of beliefs and practices adopted. It can be said, therefore, that institutional logics are also creators of common sense and unity within fields. It is believed that the in-depth analysis of the history of the MSW selective collection program of the city of São Paulo as well as the technological choices and arrangements for the provision of services are good objects to put the supposed neoliberal neutrality in check. This is of great relevance today, in which neoliberal rationality gains a place of consensus, ideological neutrality and even common sense (Dardot and Laval, 2016). For this, we contest the efficiency of the MSW selective collection program in São Paulo and seek to reveal the disputes and conflicts between the actors involved in these dynamics, often covered by neoliberal rationality.

## Neoliberalism, cities and public services

The rise of neoliberalism takes place in response to the economic crises attributed to Keynesianism, in a process that Dardot and Laval (*ibid.*) call “The Great Turn”. In relation to high inflation and the slowdown in economic growth in the 1980s, criticism – anchored in ideologists such as Hayek, von Mises and Friedman and led by politicians such as Reagan and Thatcher – turned against taxation, social programs and state regulations to the economy. Unlike the conceptions that point to neoliberalism as a return to *laissez-faire* and the absence of the State, Dardot and Laval (*ibid.*) point to neoliberalism as a worldview that values competition in a model that extrapolates the entrepreneurial vision arising from the market to society. Through this rationality, neoliberalism permeates the economy and governments, also occupying the subjectivities of individuals.

This perspective reinforces the vision of neoliberalism not as the absence of the State, but as the establishment of a new dominant institutional logic. In this sense, contrary to current conceptions of Minimum State, “States and the most powerful in the first place introduced and universalized neoliberalism logic in the economy, in society and even in themselves through a logic of competition and business models” (*ibid.*, 2016, p. 19). This point of view draws attention to the so-called “dominant institutional logics”, those with greater power of influence in individuals and organizations (Reay and Hinings, 2009).

Thus, the State, instead of being absent from neoliberalism, plays a key role in guaranteeing the reproduction of this system and before that, of this neoliberal “rationality”. There is a disciplinary character in the State, which has

[...] the role of guardian of legal, monetary and behavioral rules, attributes [to the disciplinary character based on the State] the official function of overseeing competition rules in the context of an unofficial collusion with large oligopolies and, perhaps even more, gives it the objective of creating market situations and training individuals adapted to the market logics. (Dardot and Laval, 2016, p. 191).

Therefore, neoliberalism, more than an economic current, has a reproduction strategy, equipped with discourses, practices, and devices to establish and maintain its vision internalized in society.

Dardot and Laval (*ibid.*) summarize this strategy through three aspects: ideology, discipline and rationality. For ideology, the view of the State as a source of wasted resources stands out, while markets are seen as a source of technical quality, “efficiency” and “effectiveness”. Added to this are criticisms of the State concerning welfare, in which social programs provided by the State act to exempt individuals from their responsibilities and encourage leisure to work.

One reflection of the neoliberal logic on governance, of special importance for the purposes of this study, is the State reform carried out by former President Fernando Henrique Cardoso’s (FHC) administration

(PSDB political party) in the 1990s. This reform advocated the adoption of business standards for public management, encompassing competition, efficiency and effectiveness in the context of the “new public management”. For Dardot and Laval (*ibid.*, p. 302), this new management “consists of making public agents no longer act simply in compliance with bureaucratic rules, but seek to maximize results and respect customer expectations”.

This logic favors the delegation of services to private companies, which has consequences for the way services are provided. As for the services of interest to the private sector, the commodification of public services “articulates with the privatized and anti-popular political system aimed at the elites, preventing the ‘radicalization’ of democracy, that is, its participatory and redistributive deepening in political –and social terms” (Fonseca, 2019, p. 411). At the same time, this system has other negative consequences for cities, especially

[...] deindustrialization, gentrification, financialization, indebtedness, the omnipresence of the ethos of competition, the weakening and scrapping of collective structures and the imperative of private and individual solutions to public order problems, privatization of public spaces and infrastructure, among countless others. (Tonucci Filho and Magalhães, 2017, p. 451).

Regarding discipline, the authors point to a “conduct of conducts”, according to which the rules of the game are imposed and incorporated by individuals, not necessarily by coercion, but through a system of individual rewards and punishments. In this context, the State disciplined new possibilities for links with

private agents through “management logics, techniques and tools coming from private administration and transposed to –public administration that have been implying the ‘contractualization’ of the administration and public services with private agents” (Fonseca, 2019, p. 394).

In addition to the Social Organizations, Civil Society Organization of Public Interest and Public-Private Partnerships (PPPs), the concession regimes (of equipment and public services), the endless private “consultancy” and “advisory services”, which mostly insert privatist visions/instruments into the public sector, and the different forms of action of the private sector – whether for profit or not –, generically and ideologically called “third sector”, have solidified the hybrid character of public administration. In this, there is a predominance of the private sector and, particularly, in the governance of metropolises, “management by results” is imposed, where metrics are strongly derived from the private sector. (*Ibid.*, p. 394).

This way, the neoliberal rationality is organically incorporated by administrators and specialists, or even by politicians, including those from the left spectrum. This rationality, therefore, is given as “neutral” or “natural”:

[...] all “responsible”, “modern” and “realistic” discourse, that is, that participates in this rationality, is characterized by the prior acceptance of the market economy, the virtues of competition, the advantages of the globalization of markets and the unavoidable demands of financial and technological “modernization”. The practice of neoliberalism has imposed itself as a fact, a reality to which nothing can be done but adapt.” (Dardot and Laval, 2016, p. 234)

In this sense, the Brazilian law n. 8,987/1995 provides for the concession and permission regime for the provision of public services. Based on this law, the municipality of São Paulo would enact a law that reformed the São Paulo urban cleaning system (municipal law n. 12,378/2002), which regulated concessions and permissions in the municipal system and directly influenced the way in which the MSW selective collection program was developed in the municipality. The next section provides a brief contextualization of the MSW selective collection service.

## MSW selective collection services: brief contextualization

Recycling has been highlighted as a way to mitigate impacts from a growing generation of waste by the global population in recent years. Recycling is an industrial process intrinsically operated by private agents, but for the recycling process to be effective, structuring waste selective collection public programs is essential (Besen et al., 2014; Godoy, 2016). More than sorting recyclable materials for sale to the recycling industry, MSW selective collection also encompasses the stages of segregating of materials by populations in their homes (i.e. source segregation) as well as collection and transport of materials (Bringhenti, 2004). To ensure adequate source segregation, structuring environmental education and communication programs is also essential.

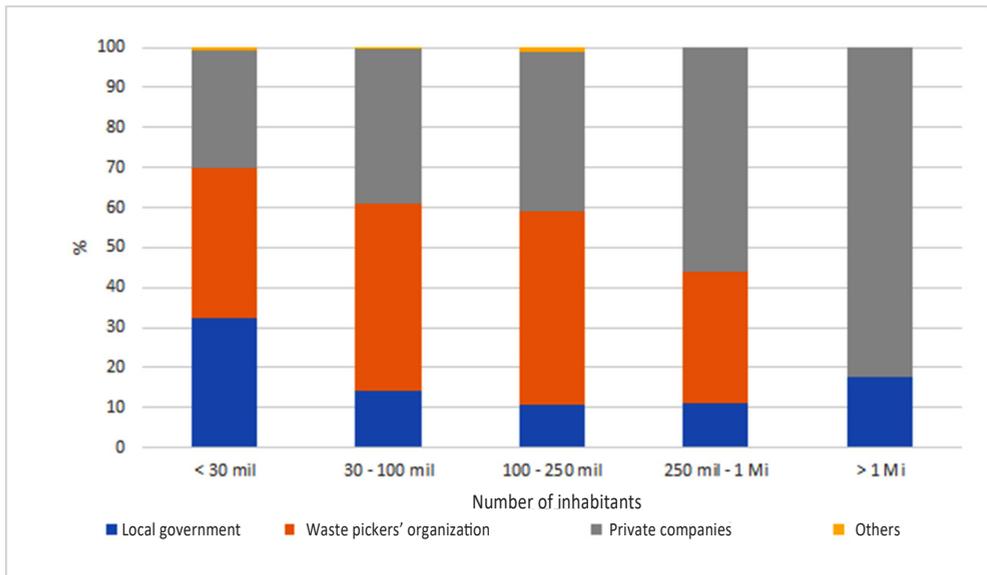
The themes of MSW selective collection and recycling started to grow in Brazil and gain attention and support from the media and

the population from the end of the 1980s. However, since then, what has been evaluated is that municipal selective collection programs are still incipient. In 2019, only 38.7% of Brazilian municipalities reported having some type of MSW selective collection service (Brasil, 2020). When referring to door-to-door MSW selective collection service (i.e., one in which a vehicle passes by collecting recyclable materials at each house), this number drops to 33%. Furthermore, even this minority of municipalities that provide door-to-door collection service still has a very poor average coverage: only 41.4% of the total population (ibid.).

In the 2000s and 2010s, public policies and national laws contributed to the consolidation of the institutional space of WPOs (Besen et al., 2014; Candido, Soulé and Neto, 2019; Gutberlet, 2015), which may be illustrated by the increase in the number of WPOs in Brazil. In the metropolitan region of São Paulo (RMSP), Besen et al. (2014) show that from 30 municipalities with selective collection service, 28 had partnerships with WPOs. However, in general WPOs do not carry out a door-to-door service, leaving this under the responsibility of private companies. WPOs usually work in sorting sheds, receiving materials collected by companies and performing the segregation by types of material, color, etc.

The performance of WPOs restricted to sorting recyclable materials in sheds is a reflection of the progress of urban cleaning companies in selective collection services, especially in metropolises. Graph 1 explains the differences in the provision of selective collection services by the number of inhabitants.

Graph 1 – Executor of the provision of selective collection services in Brazilian municipalities



Source: elaborated by the authors based on Brazil (2020).

Groups of municipalities with a population of up to 250,000 inhabitants have WPOs as the main service provider. In contrast, municipalities with more than one million inhabitants for the most part do not have formal relations with waste pickers for the provision of selective collection services. It should be noted that during the 1990s the participation of private companies in urban cleaning services was strengthened with the movement influenced by the “new public management” in the FHC government (Godoy, 2015), materialized in law n. 8,987/1995, which provides for permission and concession contracts. This movement is complemented during the Lula government

by law n. 11,079/2004, which establishes rules for contracting in Public-Private Partnerships (PPP) within the scope of public administration (Gambi, 2018).

It is also worth noting that the confinement of WPOs to sorting in sheds, called “confined inclusion” by Campos (2020), is harmful to the economic and financial sustainability of these enterprises. Remuneration for the sorting service is rarely granted by municipalities and the income of WPOs is restricted to the sales of selected recyclable materials. With low remuneration, WPOs face challenges to their financial health, such as high worker turnover and lack of adequate infrastructure (Gutberlet,

2015). These contradictions and dilemmas are analyzed in depth with regard to the insertion of waste pickers in the recycling industry, as follows.

[...] The work of the waste picker feeds several recycling segments that are linked to very different production chains, from various sectors of the economy. They work for the plastics, PET, paper, and metal recycling industry. But none of these feel the slightest or remotely responsible for what is going on at the end. And none of these companies feel responsible because the waste picker does not only work for the PET industry. The relationship is remote, marginal, on the “peripheries” of the market. (Gonçalves-Dias, 2009, p. 259).

So, there is a contradiction of the “immersion” of organizations guided by solidarity and cooperativism in a capitalist structure (ibid.; Gonçalves-Dias, Santos, 2012), which is also revealed below:

If the aim of these non-capitalist forms of labor organization is still the production of exchange values, for example, and if the ability of private persons to appropriate the social power of labor remains unchecked, then associated workers, solidarity economies and planned production regimes fail or become complicit in their own exploitation. The effort to establish the conditions for non-alienated work is frustrated. (Harvey, 2016, pp. 70-71)

It appears, therefore, that “MSW selective collection in Brazil is undoubtedly based on the flagrant exploitation of the waste pickers' workforce by local governments and the recycling industry” (Campos, 2014, p. 134). Thus, this article was based on the results of

a survey on disputes related to MSW selective collection in the city of São Paulo, whose methodological procedures are presented in the next section.

## Methodology

The research carried out had an exploratory character, characterized as qualitative, descriptive and documentary. Two main types of documents were used: (1) public hearings and (2) online events with participation of key actors in MSW selective collection in São Paulo. 16 public hearings were identified as directly or indirectly related to the topic and selected, with a time horizon from 2010 to 2020. Of the 16 documents selected, 14 were in text format (708 pages total) and 2 were in video format (5 hours and 20 minutes total). The hearings in video format were transcribed, resulting in a total of 796 pages. Public hearings were a relevant source of data to follow the implementation of selective collection over the last decade, as well as to follow actors' discourses to justify the institutional logic in the technological choices and the provision of the service to the city. The relevant actors identified were: members of the municipal legislative power, represented by the city councilors, members of the executive power (secretariat of services and works, urban cleaning authority), civil society organizations (CSOs), waste picker organizations (WPOs) and representatives from companies that provide urban cleaning services.

16 online events were selected, all of which took place in 2020 and in video format. The criteria for choosing these events

were twofold: direct or indirect involvement in the “MSW selective collection in São Paulo” agenda and the participation of key actors identified in the bibliographic review (namely, waste picker organizations, the social movement of waste pickers, urban cleaning or representative associations, municipal public employees involved in the urban cleaning system and selective collection). The 16 events identified were transcribed, totaling 521 pages. The research corpus was therefore based on 32 documents totaling 1,317 pages.

After transcribing the materials, a thematic analysis of the research corpus was performed, according to the guidelines of Braun and Clarke (2006). For this paper, data concerning two key themes were used: the political-institutional history of the municipal selective collection program and the different views of the actors present in the MSW selective collection in the city of São Paulo.

## 20 years of São Paulo's MSW selective collection program

To present an overview of the MSW selective collection program in São Paulo, it is necessary to recall the regulations and policies created in 2002. At the end of that year, in the context of the “new public management”, law n. 13,478/2002 provided for the new urban cleaning system in São Paulo (São Paulo, 2002a). One of the main changes resulting from this administrative reform was the regulation of concession and permission contracts for urban cleaning services. To regulate the delegations of public services,

the law created a regulatory body for the city’s urban cleaning system, called Amlurb (Municipal Urban Cleaning Authority). The law also discriminates differences in the nature of public urban cleaning services: indivisible services (sweeping public areas, clearing culverts, among others) and divisible services (collection, transport, treatment and final disposal of waste).

This division of the nature of services was created to make concession contracts viable, which “apply only when the services are divisible, that is, when it is possible to individualize their results and charge for it” (Gambi, 2018, p. 49). Within this arrangement, concession contracts were drawn up, which included selective collection services and environmental education. At the end of the process, in 2004, two concession contracts were established with two different companies and 20 years each, based on a geographic division of the municipality into two groups: EcoUrbis Ambiental (South and East Zones of the city) and Loga Ambiental (North, West and Center Zones).

Before the enactment of the law of the new urban cleaning system that would launch the concession contracts, still in 2002, municipal decree n. 42,290/2002 (São Paulo, 2002b) created the MSW selective collection program. In short, the program aimed to form new cooperatives made up of waste pickers to operate in sorting sheds. The decree came in response to the growing demands of organized civil society, which were partially met. It would be amended in 2007 by municipal decree n. 48,799/2007 (São Paulo, 2007) which partially maintains the original text, modifying only the deliberative role of the program, which was

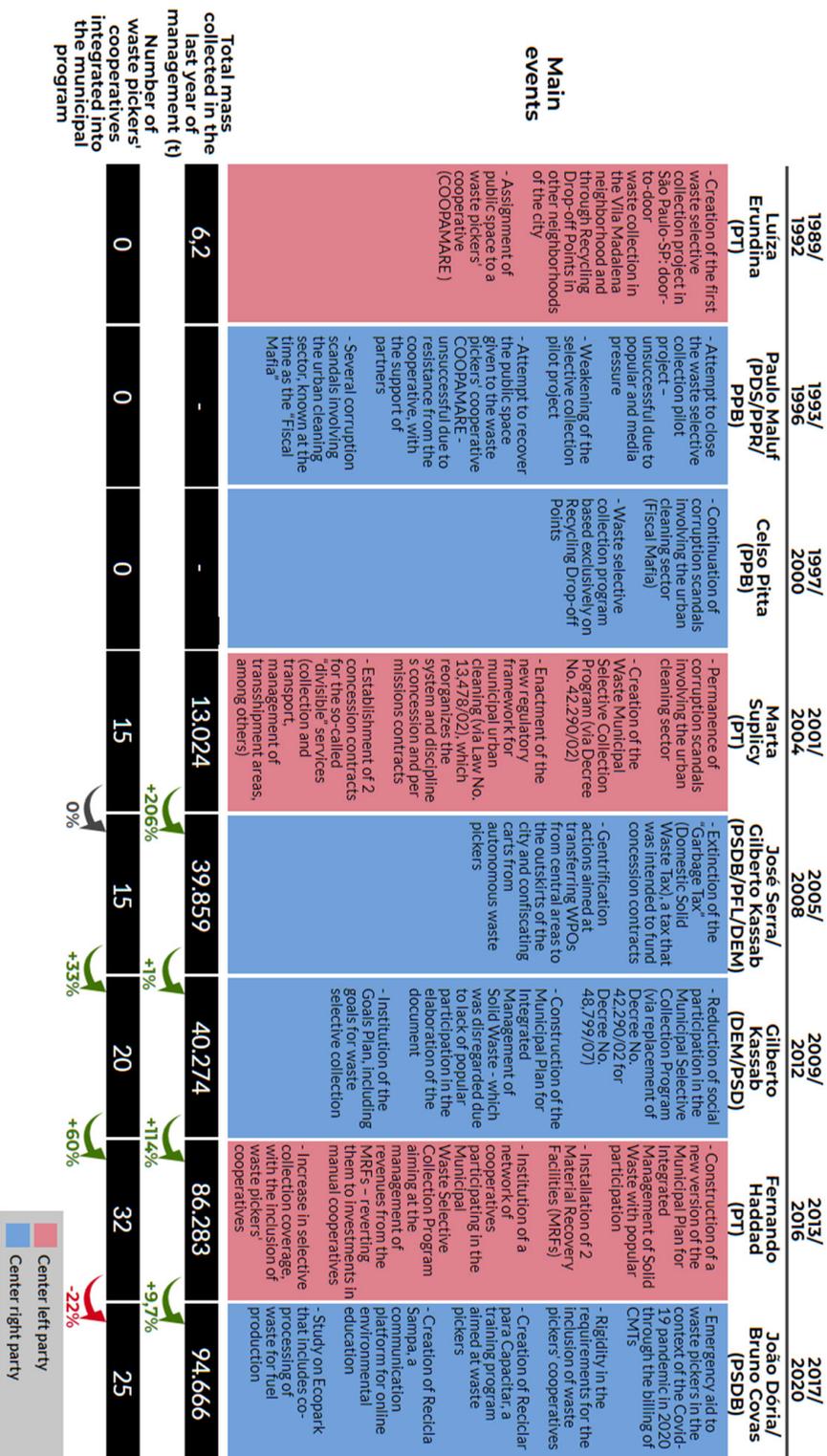
previously shared with civil society organizations and waste pickers and, later, became centralized by the municipality bureaucracy.

Within the scope of contracts concerning MSW selective collection, the two concessionary companies were responsible for carrying out the collection and transport of household recyclable waste, environmental education, and the construction of sorting centers to be operated by waste pickers' cooperatives (Santos and Gonçalves-Dias, 2012; Godoy, 2015). The concession contract was originally to be financed by the Household Solid Waste Tax (TRSD), informally known as the "Waste Tax", which was discontinued in 2005 by the administration of José Serra. Gambi (2018) points to the contradiction of this concession contract, since with the cancellation of the fee, its framework and governance mechanisms are completely uncharacterized, leaving the contracts with a format similar to Public-Private Partnerships, in which there is public subsidy instead of individualized user fees. Figure 1 summarizes the history of the MSW selective collection program through different political administrations.

When analyzing São Paulo administrations since the redemocratization in 1989, a pendulum movement can be seen following the pattern of alternation of a mandate of center-left political orientation administration and two mandates of center-right administrations. The center-left mandates were always assumed by the Workers' Party (PT), while the center-right mandates were assumed by several parties: PSDB, PSD, PFL/DEM and PPB (currently PP).

As for actions implemented, it appears that the most effective initiatives in favor of selective collection – whether successful or not – come from PT's management. During Luiza Erundina's administration (1989-1992), the assignment of a property to a WPs' cooperative called Coopamare stands out, an innovative action at the time that inspired several other municipalities, as well as the first pilot project of selective collection in the city. During Marta Suplicy's administration (2001-2004), the Socio-environmental Program for Selective Collection of Recyclable Waste (PSCS)<sup>2</sup> was implemented – in a model that remains very similar in its operating format to the present day. In the Fernando Haddad's administration (2013-2016), the numbers of the PSCS grew significantly, more than doubling the numbers of the previous administration - which is due to the greater coverage of household collection as well as the expansion of manual sorting centers, including 12 new cooperatives and installing two MRFs. Still, a greater bias of social participation is perceived in the actions implemented by these mandates. This can be exemplified in the construction of the MSW selective collection program itself, which had the effective participation of the network of civil society organizations that made up the Lixo e Cidadania Forum, the Forum for the Development of the East Zone and the São Paulo Recycle Forum, as well as the creation of a Municipal Plan for Integrated Solid Waste Management, a public policy instrument prepared with broad participation of civil society, published in 2014.

Figure 1 – MSW selective collection program in São Paulo over the years



Source: elaborated by the authors based on research data from: Jacobi and Viveiros (2006), Grimberg (2007), Puech (2008), Santos and Gonçalves-Dias (2012), Godoy (2015), Sampaio (2018) and São Paulo (2021).

On the other hand, center-right mandates in general tend to discontinue actions implemented by center-left mandates. This can be seen in Paulo Maluf's administration, with the attempt to extinguish the selective collection project and recover the land ceded to Coopamare cooperative. During the José Serra and Gilberto Kassab periods, the change in the functioning of the PSCS is highlighted through a new decree that removed the deliberative power of cooperatives and civil society and concentrated it in the State (São Paulo, 2007) and changes in the concession contract. A similar episode took place during the João Dória and Bruno Covas administration periods, when they removed the deliberative power of the waste picker cooperatives participating in the PSCS over the financial accounting fund arising from the commercialization of MRFs and concentrated this attribution to the State.<sup>3</sup> In general, the relationship between the municipality and cooperatives in right-wing administrations is marked by a lack of dialogue and truculence, with several cases of attempts to withdraw cooperatives from public and deliberative spaces previously ceded to them.

This “center-left versus center-right” dichotomy has a marked influence on the progress of the PSCS, mainly due to the lack of continuity in implemented actions. However, when one thinks about the influence of neoliberalism in this dynamic of alternation, one realizes that the logic is found on both spectrums. This is due to the fact that neoliberalism is not a specific form of government, but a logic. Neoliberalism therefore assumes what Laval and Dardot (2016) call “ideological neutralization”, with its concept above political-ideological discussions.

In this sense, “the prior acceptance of the market economy, the virtues of competition [...], and the unavoidable demands of 'financial and technological modernization'” (p. 234) assumes an air of common sense.

This view affects center-left political programs, which historically approached social democracy:

Nothing better illustrates the neoliberal turn of the left than the change in the meaning of social policy, breaking with the entire social-democratic tradition that had as a guideline a way of sharing social goods indispensable to full citizenship. *The fight against inequalities, which was central to the old social-democratic project, was replaced by the “fight against poverty”, according to an ideology of “equity” and “individual responsibility” [...].* (Dardot and Laval, 2016, p. 233; emphasis added)

This type of vision of the center-left with neoliberal influence is reflected, for example, in the economic policy of class conciliation implemented by the Workers' Party at the federal level – positively impacting the poorest populations, while maintaining the country's chronic inequality framework (Marques, Ximenes and Ugino, 2018). Keeping due proportions, one can make a parallel between this strategy and the actions taken by PT governments in the scope of selective collection in São Paulo. As already presented, the PT administrations clearly represented social and environmental gains for the municipality. However, these gains are constantly accompanied by strategies of “modernization” with the private sector of urban cleaning, as in a kind of conciliation between social inclusion and the logic of neoliberal competition. Meanwhile,

ambiguities in government's agenda remain. Under Marta Suplicy's administration, the municipality implemented the PSCS in a participatory manner with waste pickers and organized civil society and, in the same administration, a new regulatory framework and robust concession contracts were instituted, delegated to the private sector. In Fernando Haddad's administration, the installation of two MRFs which centralize through the automation of work the stage of sorting recyclable materials stands out. At the same time, this administration effectively increased support for WPs, increasing the number of cooperatives linked to the program from 20 to 32 and including them in selective collection services and even in the operation of manual stages of the MRFs. There was also the participatory construction of the Municipal Plan for Integrated Solid Waste Management (São Paulo, 2014).

Within this ambiguous and contradictory dynamic, the political and strategic differences between center-left and center-right administrations stand out – which in fact exist. However, there is clearly a common element: neoliberal rationality. This rationality works as “a kind of new regime of evidence that imposed itself on rulers of all lines as the only framework for the intelligibility of human conduct” (Dardot and Laval, 2016, p. 193).

Taking these factors into account, what can be seen is that, even with the changes in administrations over the years, there is a progressive increase in the mass of waste collected. However, some caveats must be made. Even with the gradual evolution of the mass of MSW collected selectively, the level of selective collection remains very low when compared to the amount of MSW sent to the

landfill. If we analyze what selective collection represents compared to total household collection (regular collection + selective collection), we will reach the rate of 2.04%, 2.14% and 2.54% of the total waste collected by the municipal solid waste program, in 2018, 2019 and 2020 respectively (São Paulo, 2021). Many of the factors that justify these low numbers have their origin, ultimately, in the neoliberal vision of the management of municipal selective collection. In order to deepen the discussion between neoliberalism and the management and operation of the MSW selective collection program, the next section analyzes the technological choices made by the municipality.

## Options for technological routes in MSW selective collection: rational choices or sociotechnical disputes?

As Dardot and Laval (2016, p. 231) argue, “the most important thing in the neoliberal turn was not so much the 'withdrawal of the State', but the modification of its intervention modalities in the name of 'rationalization' and 'modernization' of companies and public administration”. In the field of solid waste management, this is reflected in the use of the concept “integrated solid waste management” by municipalities and urban cleaning companies to support socio-technical decision-making of implemented technological routes. Integrated solid waste management (ISWM) can be defined as “the selection and application of suitable techniques, technologies, and management programs to

achieve specific waste management objectives and goals” (Tchobanoglous, Kreith and Williams, 2002, chap. 1, p. 8).

Armed with the ISWM concept, municipalities and companies discursively incite a rationality in which all technological alternatives are important and cannot be discarded. However, when this discourse is put into practice, the alternatives in question are, almost always, restricted to centralized, modern, capital and technology intensive enterprises that demand a small contingent of people. This speech is illustrated in an excerpt from an Abrelpe representative in a discussion about solutions for solid waste management in the city of São Paulo:

[...] any successful system in the management of urban solid waste are the integrated solutions to deal with this urban solid waste. We cannot start from a scenario in which we choose that this solution cannot, that alternative I don't want, that one won't be able to, because I won't accept it... We won't really be able to have an adequate system if we don't incorporate all these alternatives. (C. S., Abrelpe representative, 2020; emphasis added)<sup>4</sup>

What can be seen in this study is that the technological routes applied by the municipality for MSW selective collection are subjected to this rationality at the expense of the very success of selective collection and, consequently, of the recovery and recycling of recyclable materials collected. To deepen the analysis of these aspects, see Chart 1.

Among the three stages of selective collection – communication and environmental education, collection and sorting – centralization is observed as a common feature: information on selective collection

centralized in one website, collection and transport centralized in high-capacity trucks and centralized sorting in two MRFs. Thus, centralization is the common tendency among the technological routes in the different stages of selective collection – especially when there is participation of urban cleaning companies.

As for communication and environmental education, it can be seen that strategies are centered on *Recicla Sampa*, an online platform with journalistic pieces, communicative materials with instructions on how to participate in selective collection, among other information. Therefore, there are no diversified communication actions for selective collection in order to adapt to the different territories for selective collection. The argument adopted by representatives of Amlurb is that this diversity is covered by the content of the website.

We are going to upload a website, and it is very simple, a very well-designed website, with this money, and aimed at that diversity, which someone put here, that exists in the city of São Paulo: the language for Campo Limpo, the language for Campo Belo, the language for São Miguel Paulista. How do we do this work? We are very happy. (E. T., Amlurb representative, 2018)<sup>5</sup>

According to these representatives, the platform is effective in engaging the population to participate in the selective collection program. Without presenting data and indicators, an AMLURB representative evaluates *Recicla Sampa*:

Look, if I don't have the involvement of organized civil society, firm actions of environmental education, communication, like *Recicla Sampa*,

Chart 1 – Technological routes adopted in the selective collection system, their respective operating agents and type of contract (in 2020)

Steps of selective collection	Technological routes	Operator agent	Contract Type
Communication and Environmental Education	Online platform Recicla Sampa Program	Concession companies (initiative)	Concession agreement for divisible services (a)
Collection and Transport	Compactor trucks (door-to-door household collection)	Concessionary companies (divisible)	
	Point-to-point collection model (with container in residential buildings and recycling drop-off points)	Concessionary companies (divisible) with container Companies that perform sweeping services (indivisible) with recycling drop-off points	
Sorting	Manual sorting centers	Waste pickers' cooperatives linked to the MSW selective collection program	Collaboration terms (c)
	Material Recovery Facilities (mechanized sorting)	Waste pickers' cooperatives linked to the MSW selective collection program	Collaboration terms and donation term with charges (c)
		Concession companies	Concession agreement for divisible services (a)

Subtitle:

(a) Contracts n. 27/SSO/2004 (Loga Ambiental) and n. 26/SSO/2004 (EcoUrbis Ambiental). Available at: <https://www.prefeitura.sp.gov.br/cidade/secretarias/subprefeituras/amlurb/contratos/index.php?p=170859> . Accessed on: 8 July 2021.

(b) Six contracts for the provision of indivisible services signed in 2019: three with private companies and another three with consortia between companies. Available at: <https://www.prefeitura.sp.gov.br/cidade/secretarias/subprefeituras/amlurb/contratos/index.php?p=170859> . Accessed on: 8 July 2021.

(c) Terms with each of the waste pickers' organizations in 2018 and 2019. Provided for in Amlurb Resolution n. 109/2017 (São Paulo, 2017).

Source: elaborated by the authors.

people... Recicla Sampa's work was very good. It was very well done, right? And it is actually having an effect. People are recycling more and thinking more in terms of waste. (M.D., Amlurb representative, 2020)<sup>6</sup>

The choice of this communication format as the main strategy for engaging the population reveals a vision of this population as a set of atomized actors, who upon receiving specific information about selective collection

will immediately participate by segregating their recyclable materials. From this point of view, "citizens-consumers" can exercise their individual power of choice, engaging and participating in selective collection motivated by Recicla Sampa's online communication pieces. This view, therefore, ignores the collective and political manifestations that citizens may have with the selective collection program, as well as the lack of internet access or even interest in looking for these contents online.

The technological choices for sorting the material are equally emblematic for thinking about the logic to which the selective collection program has been operating. For this, it is best to go back to the program history. Originally, Marta Suplicy's management had as a conception and, later, as a goal the installation of 32 manual sorting centers to be operated by WPOs. The idea was to include each of the 32 submunicipality<sup>7</sup> in the São Paulo city with a sorting center for the segregation of waste. Her administration ended in 2004 with 15 centers in operation and included in the concession contract signed that same year mandating concessionary companies to build 17 new sorting centers for WPOs to operate. From these 17, five were responsibility of Loga Ambiental and 12 were responsibility of EcoUrbis. The construction of these new centers has dragged on over the years and they were discussed in public hearings.

When we invited Mr. E. A. C. [...] to understand why Company A has not yet complied with the clause entered into its contract, signed in 2003, which would have to build five sheds, with infrastructure, such as a conveyor belt, compactor, trucks, providing conditions and creating sorting centers for the materials it collects. But until 2011 we didn't see the cooperatives in operation. From public, we would like you to explain why as it is in the contract that Company A has signed. Why wasn't it made possible? What is the reason? There was a lack of money, area, political will, what was missing? It's serious. (I. C., city councilor in São Paulo, 2011)<sup>8</sup>

The argument about the non-construction of sorting sheds was that the construction had not been carried out due

to a contractual change still during the José Serra administration (2005-2006), successor of Marta Suplicy, who extended the deadlines for the construction of the sheds. Even with the money in hand from federal transfers (Klein, Gonçalves-Dias and Olivieri, 2020), the construction of the sheds did not materialize in subsequent administrations.

We have been denouncing, President, for more than three years – and the WPs for even longer – about money that the Federal Government has for the city of São Paulo to *build ten sorting centers, and it does not do so because land is not destined. Oh, no land?* Mayor Kassab created a department headed by then Secretary Rodrigo Garcia, now a federal deputy, and soon, if I'm not mistaken, he mapped all the public areas available in the city of São Paulo. I don't need to go to the subprefecture and ask the subprefect if he has it because he wants to make a pretty square! He wants to take the people off the street to say that his region is beautiful. *He will not pass on a public area to make a recycling shed.* (I. C., city councilor in São Paulo, 2011; emphasis added)<sup>9</sup>

The argument in the excerpt above is quite symbolic as it explains gentrification in the metropolis. The same logic with which some municipal administrations sought to “transport” cooperatives installed in central regions to peripheral regions is the one that imposes barriers for the installation of sheds for the operation of WPOs. This is the logic of commodification of space, in which “[...] everywhere, the exchange value is the master and the use value is the slave” (Harvey, 2016, p. 65). In other words, the housing market established in cities causes gentrification policies to increase the value of real estate

in the region (exchange value), to the same extent that the installation of “unwanted” developments will lead to the opposite.

The fact is that the barriers imposed on the construction of sheds for WPOs remained and the municipality's strategy in this regard was to centralize the sorting in the MRFs. This replacement is explicitly configured in an amendment to the concession contracts taken from the Municipal Accounting Court:

[...] Amlurb chose to replace the 12 (twelve) manual plants with fully mechanized plants, with an estimated production of 250 ton/day per plant. Amlurb informed that, in view of the authorization for the execution of new MRFs to replace the centers provided for in the 2012 Municipal Accounting Court decision, the concessionaire would be released from complying with this contractual framework. (Sao Paulo, 2016)

As a result, two MRFs were installed in the city in 2014, with São Paulo being the first city in Latin America to have this type of sorting enterprise. This fact in itself was widely publicized by the PT government at the time, in order to emphasize how “modern” the selective collection operation in São Paulo had become. If, on the one hand, modernity and technological advances arising from MRFs are highlighted, on the other hand, the results showed low efficiency and inadequacy. Souza, Lima and Varella (2021) when analyzing one of the MRFs came to the conclusion that the operation of the plants generates a high amount of rejected waste, low quality end products and precarious work conditions of the WPs who

work there. The MRF in question does not have specific flows for the separation of materials, such as glass: this material, although collected, is not sorted by the MRF and is discarded. Even materials such as paper or plastics, which have specific reverse flows in mechanized sorting, are poorly segregated, resulting in an end product with mixed recyclable materials which negatively impacts their sales value. For example, it is estimated that the rate of material rejects arriving at MRFs is around 50% (ibid.; Haddad et al., 2020). That is, half of what is selectively collected reaches the MRFs is sorted and sent as waste to landfills, characterizing wasted work, according to Silva and Gonçalves-Dias (2019).

In this sense, despite being labeled as “modern” or “advanced”, are these technological choices really efficient? The numbers reply that this is not the case. As shown, in a quantitative perspective, the level of selective collection is very low still representing 2% of the total mass collected. When analyzed qualitatively, the shortcomings of this system are also clear.

The municipality's discourse recognizes that the results of selective collection are unsatisfactory. However, the technological choices mentioned here are never put into debate. On the contrary, the municipality's prognosis in this regard tends to invest in more centralized technologies. In this regard, the partnership with Abrelpe (Brazilian Association of Urban Cleaning and Special Waste Companies) stands out, which has been working closely with the city of São Paulo on technological solutions:

[...] and, in this sense, to think about the future, that the largest city in Latin America, which is the largest city in Brazil, can structure itself and set an example. And, in our understanding, this goes in two ways: one way is precisely *by incorporating new technologies for the recovery of solid waste, for a better use of solid waste, in the organic fraction, in the recyclable fraction and even the rejects with the production of Refuse Derived Fuel – from RDF – with the production of energy and, also, in the matter of ensuring economic and financial sustainability.* (C.S., Abrelpe representative, 2020; emphasis added)<sup>10</sup>

It should be noted that the co-processing technology for the production of Refuse Derived Fuel (RDF), which involves the burning of waste, is a technological route that is not provided for in the Municipal Plan for Integrated Solid Waste Management – which privileges recovery through MSW selective collection, composting and biodigestion (São Paulo, 2014). But even so, studies in partnership between Amlurb, Abrelpe and ISWA (International Solid Waste Association) have been carried out regarding the implementation of a co-processing unit in an ecopark (São Paulo, 2018).

A counterpoint to the directions that the city of São Paulo has been taking are other alternative solutions for solidary selective collection presented by Rutkowski and Rutkowski (2015). The authors present case studies of municipalities that structured their selective collection programs from the point of view of solidary selective collection (the same perspective claimed by organized civil society in the first discussions about the municipal program in São Paulo). In summary, in these municipalities, collection is carried

out by WPs' cooperatives with trucks of lower capacity, in flows that increase collection efficiency.<sup>11</sup> Environmental education is carried out in person in all households by WPs from the cooperatives or by city officials, as well as at the time of collection – which may include the delivery of pamphlets. The authors highlight the importance of what they call “regular personal contact” between residents and WPs. Finally, the sorting is carried out in the cooperatives' sheds with the benefit that, as the same actors who carried out the collection are the ones who carry out the sorting, there is an optimization in the process.

In summary, Rutkowski and Rutkowski (2015) point out that this system with human interface is much more efficient than centralized and mechanized systems of selective collection: the collection and recovery rates of materials are higher, at an operational and installation cost considerably smaller. In addition, the systems assertively integrate the WPs, paying for the services provided and guaranteeing transfers above the minimum wage. This efficiency was also exemplified in a case study carried out by Lima (2006) in the city of Londrina, in which through solidary selective collection in 2005, the municipality reached 100% coverage of households, a reject rate of only 4% and a recyclables recovery rate of 18.69% (already subtracted from the rejects collected). These solidary selective collection systems that include WPs and engage the participation of society can be considered the antithesis of the configurations that the São Paulo selective collection program has been taking, valuing technocratic solutions to the detriment of serving the population and the recovery of recyclable materials.

## Final considerations

The analysis of the MSW selective collection program in the city of São Paulo demonstrates that the rationality of the neoliberal logic is present since the origin of the program with the concession of services to the private sector, which remains until today. This attests that neoliberalism, as an institutional logic, has in fact assumed a dominant character, influencing the current social order and daily practices in the scope of selective collection in its forms, models, contours, and characteristics. This logic directly influences the technological choices made by the municipality, which tend to centralizing and capital- and technology-intensive solutions. In the background of this neoliberal logic is the atomized view of the population, which does not take into account collective solutions that value the importance of participation and social control for citizen engagement in the selective collection program. At the same time, WPOs participating in the solidary selective collection program are

confined to sorting sheds, which implies a reduction in activities and revenue for them. On the other hand, for the municipality, this restriction implies not taking advantage of the potential that WPOs have in relation to the engagement of the population, when performing collection, communication, and environmental education services.

Theoretically, what is observed is a “supra-organizational pattern” in which the neoliberal logic is produced and reproduced in the waste management of the city of São Paulo. Thus, with the argument of “not being able to discard 'solutions' for waste management”, this logic is directed only to centralized solutions, including the burning of urban solid waste in co-processing facilities. A parallel is then made to the “freedom to choose” defended by neoliberals, revealing itself as a coercion to choose. In the field of selective collection, solutions that demonstrate results because they are alien to neoliberal logic, such as decentralized, collective, and self-managed solutions, do not enter the spectrum of technocentric options selected by the state bureaucracy for the municipality.

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**Translation:** this article was translated from Portuguese to English by Nathalia Silva de Souza Lima Cano, [nathslima@hotmail.com](mailto:nathslima@hotmail.com)

## Acknowledgements

The study that supported this paper was carried out with the support of the Coordination for the Improvement of Higher Education Personnel – Brazil (CAPES) – Financing Code 001. The authors also thank the members of the Center for Research in Organizations, Society and Sustainability (NOSS) from USP for the countless reflections on the issue of urban solid waste.

## Notes

- (1) Candido, Soulé and Neto (2019, pp. 378-379) state that multinationals such as Ambev, Coca-Cola and Nestlé, through the organization Cempre (Business Commitment to Recycling), supported the organization of cooperatives and associations of waste pickers, “as a way to reduce costs and avoid liability for the packaging waste generated”.
- (2) The MSW selective collection program has had more than one name. For standardization purposes, the Socio-environmental Program for Selective Collection of Recyclable Waste (PCSC) was adopted, since it is the name used in the most recent standard, municipal decree n. 42,799/2007 (São Paulo, 2007).
- (3) During Fernando Haddad's administration, there was a Management Council for the Accounting Fund, composed of 3 municipal administration bodies, 3 representatives of partner WPs' cooperatives, 1 civil society entity, 1 higher education and research institution and a Technical Group of Monitoring composed of 6 municipal administration bodies. These spaces were extinguished in the João Doria/Bruno Covas Management, being replaced by the Monitoring Council, composed of 4 municipal administration bodies, 1 representative of the manager of MRF Ponte Pequena and another from MRF of Carolina Maria de Jesus and 1 representative of partner cooperatives.
- (4) Taken from a public event held on June 2nd, 2020. Available at: <https://www.youtube.com/watch?v=vuz6fOPUKDo&t=94s>.
- (5) Taken from a public hearing held on October 30, 2018.
- (6) Taken from a public event held on June 2, 2020. Available at: <https://www.youtube.com/watch?v=vuz6fOPUKDo&t=94s>
- (7) Submunicipality is a deconcentrated executive branch administration within the city. The highest authority in a submunicipality is the submayor, which is usually indicated directly by the mayor of the municipality. The São Paulo City is underadministered in 32 submunicipalities. This administrative division was established by Municipal Law No. 13,399/2002. Since 2013, each submunicipality has had a council elected every two years by direct vote, composed of representatives of civil society.
- (8) Taken from a public hearing held on May 4, 2011.
- (9) Taken from a public hearing held on May 4, 2011.

- (10) Taken from a public event held on June 2, 2020. Link: <https://www.youtube.com/watch?v=vuz6fOPUKDo&t=94s>
- (11) This type of collection, known as “flags”, consists of door-to-door collection, with low-capacity vehicles, which deposit recyclable materials collected at strategic points so that, later, a truck of greater capacity (without compaction) passes only at these points, thereby reducing its route (Rutkowski and Rutkowski, 2015).

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Received: October 22, 2021

Approved: March 2, 2022