

# REIMAGINING INFORMALITY AND PARTICIPATION IN NEW YORK CITY'S WASTE SYSTEM





# **REIMAGINING INFORMALITY AND PARTICIPATION IN NEW YORK CITY'S WASTE SYSTEM**

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# ABSTRACT

Autonomous waste pickers configure a hybrid of formal-informal system that operates collecting recyclable materials in New York City (NYC), along with the systems managed by NYC Department of Sanitation and by private carters. Currently, there is a controversial dispute between public authorities and waste pickers over NYC's valuable recyclables. Reconfigurations in all these systems are planned to occur in a near future, as required to achieve the ambitious goal set by the OneNYC plan of sending no waste to landfill by 2030. This context of current conflict and upcoming reconfiguration opens the ground for a timely discussion about the role of waste pickers in the present and future of NYC's waste system.

This research and practice study investigates the ecologies of waste picking in New York City, analyzing the current situation and exploring future possibilities. The main objectives of this study are to understand the social, economic and political dynamics of waste picking in New York City, and to rethink the existing relations within the waste systems, aiming to promote participation and recognition for the work of waste pickers. In this study, the theoretical basis is built through literature review and the exploratory phase involves methods such as media discourse analysis, interviewing, participant observation and mapping. The consolidation of the combined analysis of the theoretical and empirical research guide the realization of an intervention.

This study identifies incongruences in the narratives of waste picking in New York City, highlighting the public authorities' perspective and the waste pickers' perspective. Further, it exposes the challenges for reaching the legitimization of the waste pickers' activity in the institutional and in the social spheres. Finally, thorough an intervention in the situation, and consolidation of results, it proposes paths to create new relations within the waste system, and amplify the debate about a more sustainable and inclusionary system.

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# INTRODUCTION





The city of New York has developed parallel systems to deal with the complex nature of the materials that are discarded by its inhabitants. While the city relies on the Department of Sanitation (DSNY) and on private companies to collect the residential and the commercial waste, there exists a system formed by autonomous waste pickers. Commonly known as canners, they operate under the structure of the Returnable Container Act, (also known as the “Bottle Bill”), a state law created in 1982 to incentivize recycling. Canners walk the streets collecting discarded beverage containers that can be exchanged for five cents each.

The activity of canners aligns with the city’s goals, as it contributes to retrieve materials for recycling. Nonetheless, the monetary value attributed to certain discarded materials creates tensions between the existing systems. The containers collected by the canners reduce the revenues that the city would receive by selling these materials to the recycling industry. Moreover, the city authorities argue that, by collecting from the curbside, canners are stealing from DSNY’s property. However, there are incongruences in these claims. First, the right of the city authorities to claim property over waste is debatable. Second, even though city authorities might have a coherent argument about the collection cost, it only focuses on the economic aspects and thereby neglects the social benefits of the activities that the canners engage in.

This controversial dispute between public authorities and waste pickers over NYC’s valuable recyclables opens the ground for a timely discussion about waste management in the city. The systems that move discarded materials in the city are on the verge of change. Released in 2015, the OneNYC plan sets ambitious goals for sustainability in the waste system, which demands significant changes on behavioral, legal and technical dimensions. The work of canners has not been taken into account in the city’s plans to achieve the Zero Waste goal, and this formal-informal waste system that is now in place is likely to be disrupted.

The situation of waste pickers in New York City is not isolated. In an active engagement to understand the ecologies of the waste picking systems, this study highlights diverse contexts and different frameworks that result in the inclusion or exclusion of waste pickers worldwide. It focuses on connecting the situation in New York City to other realities, and on amplifying the discussions about the waste pickers’ participation in the waste system.

## **PROBLEM STATEMENT AND RESEARCH QUESTION**

Operating under the structure of the Bottle Bill, canners in New York City (NYC) configure a hybrid of formal-informal material recovery system. Although their work aligns with the city's goals, contributing to retrieve materials for recycling, the city authorities' discourse portrays these individuals as violators and as opponents in the recycling program. Major shifts in all NYC's waste systems are necessary to achieve the ambitious Zero Waste goal set by the OneNYC plan. However, the system formed by canners has not been taken into account in the city's plans, although it will certainly be affected. In this context of reconfiguring systems and planning for more just and sustainable practices in waste management, can canners be allies to achieve the city's goal of zero waste? How can we reframe NYC's waste management practices to promote the recognition of autonomous waste pickers as part of the waste system?

## **OBJECTIVES**

The main objective of this study is to understand the social, economic and political dynamics of the system formed by canners in New York City, and to rethink the relations and roles currently in place.

Some specific objectives are:

- i. to identify the current systems that move waste in New York City, reviewing legal frameworks, actors, economic and material exchanges, and social interactions;
- ii. to understand the working dynamics of canners in New York City, identifying the practices, the challenges for integration, and the possible points of intervention;
- iii. to analyze existing initiatives that promote integration of waste pickers in other contexts;
- iv. to propose an intervention that promotes change in the situation of canners in New York City, aiming to bring immediate improvements, and to contribute to a reflection about possible future actions.

## **METHODOLOGY**

The methodology for this research-and-practice-based study consists of four phases. First, the theoretical basis is built through literature review and aims to identify the economic, political, social and cultural aspects that influence the discussion about the inclusion of waste pickers in New York City. The research includes: i. an overview of waste management and waste picking in New York City; ii. a review of the economic and social implications of the recycling industry; iii. an overview of existing initiatives that employ

different methodologies to promote waste pickers' integration in waste management; iv. the implications of the integration of waste pickers in the institutional and social spheres.

Second, for the exploratory phase of this study, diverse field research methodologies in order to collect data and to understand the ecologies of waste picking systems. Four main research methods are used: media discourse analysis, interviewing, participant observation, and mapping.

Discourse analysis is employed to unpack the existing narratives about canners in New York City. The materials used to analyze the discourse of public authorities and mainstream media include a video published by DSNY and articles about canners published by influential news media. In addition, one article published online was open for comments, and the thoughts expressed by citizens in response to this article provided information about the general public view.

Semi structured interviews were conducted with three main groups: i. scholars who research about waste pickers worldwide; ii. waste pickers in São Paulo; iii. canners in New York City. The interviews with scholars happened remotely and provided information about other research perspectives and interdisciplinary narratives for analyzing the activity of waste pickers. The interviews with waste pickers happened in person, in São Paulo and in New York, and focused on information about their activity, their interaction with the urban environment and their relationship with other citizens.

The participant observation method is used to gather qualitative and quantitative data on field. In an earlier stage of the research, a waste picker in São Paulo was observed during his working day. This experiential data collection allowed the gathering of material from casual verbalizations and from the observation of unplanned situations. This experience in São Paulo was crucial to prepare the participant observation research in New York City. During the four months of this immersive field research, the routine of two canners was followed and their verbalizations, their route, the amount of materials collected and other observations were recorded. Further, occasional visits to Sure We Can, a canners' community hub, enabled the recording of casual conversations and insightful observations about their daily activities. The quantitative and qualitative data collected through the participant observation research allowed for the creation of unique data sets. Here, mapping techniques were employed to spatialize and visualize the waste pickers' working dynamics.

The third part of this methodology, is the experimental phase. During this phase, the concepts highlighted in the literature review are juxtaposed with the data obtained through the exploratory phase. The information and insights gathered through the diverse field research methods are used to support or oppose the theoretical concepts. This analysis combines empirical and theoretical research to describe the dynamics of waste picking,

to analyze the challenges for the inclusion of waste pickers in NYC's waste system, and to identify possible interventions.

The fourth stage comprises the intervention and consolidation phases. In this final stage of the work, a project is proposed to intervene in the reality that has been described and analyzed in the previous phases. The practice derives from the amalgamation of the theoretical review and the immersive field research. It aims to promote change in the existing situation, not only to bring immediate improvements, but also to generate substance to retrofit reflection about the current scenario and possible future actions. Finally, the consolidation of this work is a compilation of the insights and a review of the outcomes of this research and practice study.

## **LIMITATIONS**

It is important to highlight the challenges and limitations of this study. First, the lack of data about waste pickers in New York City posed a major challenge. There is virtually no research assessing the demographics and the characteristics of canners as a category. For this study, the information about canners comes primarily from the interviews conducted and the observations on field. Thus, one of the limitations in the analysis of the canners system is the reliance on qualitative data only, as quantitative data is nonexistent.

In this sense, it is important to notice that the qualitative data collected through the interviews also presents limitations. The five canners interviewed were males, between 40 and 60 years old, two of them were Latin Americans and three were African Americans. This is a narrow sample that does not reflect the diversity of individuals who engage in this activity. Although valid for the purpose of this study, the views expressed by the interviewees might not represent the experience of canners as a group.

Furthermore, the research on the public perception about canners was done primarily through the analysis of public comments posted in response to a New York Times Magazine article about canners. Entitled "How to Make Money Collecting Bottles and Cans," the article was published in a section named "Tip" on April 8, 2016. It presents an interview with the canner Eugene Gadsden about his activity collecting beverage containers in New York City and it received forty-seven comments from readers. Although this may provide a good sample for research, the views expressed there reflect the opinions of only a specific group, which has access to online articles and has interest in the New York Times Magazine publications. Thus, their perspective might not be represent the opinions of other groups in society. To expand this research, it would be crucial to have direct interviews and reach out to other groups.

In relation to this study as a whole, time and lack of resources were major constraints. All the literature review, field research, written analysis, visual synthesis, intervention and consolidation was done within a five-month period and was carried out by only one person. Lack of time and lack of human resources were constraints to the engagement in more immersive research. Furthermore, time restrictions did not allow for a review of the intervention results in the long run.

# RECOVERING DISCARDED MATERIALS IN NEW YORK CITY AND WORLDWIDE



## IS THE FUTURE OF NEW YORK CITY'S RECYCLING BEING STOLEN?

New York City inhabitants and businesses discard a total of 14 million tons of mixed materials per year<sup>1</sup> and parallel systems were developed to deal with the complex nature of these discarded materials. While the city relies on the DSNY and on private companies to collect residential and commercial waste, there are alternative waste systems, some examples are voluntary drop off sites, small scale pick up operations, and autonomous waste pickers.

Waste management in New York City can be considered successful for being able to remove from the city large amounts of discarded matter every day. However, in terms of material recovery, waste management in the city is inefficient and unsustainable. Approximately 60% of the materials discarded by residents in New York City have the potential to be diverted from disposal through recycling and composting,<sup>2</sup> but currently only 17% of these materials are retrieved by the city's collection programs.<sup>3</sup> This is approximately one third of what could be diverted from landfills, and is a low diversion rate<sup>4</sup> compared to other cities in the United States. The average for total material recovery in the country is 34.3%.<sup>5</sup> Since its launch in 1989, the city's recycling program has undergone various changes and, although never particularly successful in achieving high diversion rates, it has always been a central piece in the city's efforts to structure a sustainable waste management system.

However, according to DSNY, this program is being undermined by parallel waste collection practices, which threaten its continuity. This situation is described in a video published by DSNY in 2012, entitled "Stealing Recycling's Future".<sup>6</sup> It shows the activity of individuals who, according to the narrative, are scavengers and are "putting the Department of Sanitation's recycling program at risk by removing the most valuable recyclables, both redeemable containers and metal items."<sup>7</sup> As exposed in this statement, the term scavenger is used to refer to both the individuals who collect metal items to be sold in scrapyards, and the individuals who collect beverage containers to be redeemed.

To redeem a beverage container is to exchange it by five cents in authorized redemption centers, retrieving a deposit that was initiated when buying the beverage. This process is established by the Bottle Bill, which is an Extended Producer Responsibility (EPR) law promoted by New York State in the early 1980s to incentivize recycling.<sup>8</sup> Besides mandating a five cents deposit upon purchase of some bottled beverage, the law creates the structure to retrieve the containers - the redemption centers - and obliges the beverage producers to handle the returned containers for recycling.<sup>9</sup> This process happens parallel to the city's recycling program and, at times, they overlap.

As explained in the video, the cost of the recycling program in the city is paid through taxes

and by the money earned through the trade of recyclable materials. The decrease in the amount of recyclables collected reduce the revenues that the city would receive by selling these materials to the recycling industry. The narrator states that the municipal recycling trucks are funded by tax payer funds and that:

The cost of that service [the recycling program] is offset by the recyclables collected. As those recyclables diminish through scavenging, the offsets are lost. Widespread scavenging leads to increases in NYC's collection and processing costs because city collection trucks aren't filling up and the city's recycling's benders aren't receiving the valuable materials they expected.<sup>10</sup>

Images in the video illustrates this point, attributing money value to the waste being collected (green dialog boxes), and representing the cost of collection increasing as the waste disappears (red tag). The narrator goes on to remark that "Recycling is the law, scavenging is a crime. Don't allow scavenging to steal Recycling's future."<sup>12</sup> Hence, according to this narrative, waste collectors are criminals who threaten the future of NYC's recycling program.

## **WHO ARE THE "THIEVES"?**

As previously stated, the narrative promoted by DSNY refers to people who collect beverage containers to redeem, and people who collect metal items to sell in scrapyards. Throughout the video, images show both activities interchangeably. Indeed, both lead to the problem stated, which is the diversion of valuable materials that would generate revenue for the city's recycling program. However, the dynamics of these activities are different.

One group consists of individuals who target the collection of only cans, plastic and glass containers that can be redeemed. Commonly known as canners, these individuals operate under the structure created by the New York State Returnable Container Act, the Bottle Bill. Canners usually walk the streets carrying human-powered carts to collect discarded containers and use the authorized redemption centers to exchange them for money. These waste collectors are usually low income or marginalized individuals, often elderly, immigrants, homeless, who carry out this activity to earn a living or to complement their income.

The other group consists of people who collect metal items from the curb. These are often bigger pieces such as electric appliances and vehicle parts. The individuals performing this collection usually carry the materials in motorized vehicles. They exchange the items for money in scrapyards, and the price for each piece is defined according to its weight and its metal type. By isolating some scattered images throughout the video, it is possible to identify the different characteristics of the activities performed by each group.





Image 1: video's scenes illustrate the value in waste and the cost of collection



Image 2: left, video's first scene; right, video's closing scene



Image 3: video's scenes show canners' activity <sup>14</sup>



Image 4: video's scenes show metal scrap collectors' activity

The differentiation of these groups is important because, although both activities result in economic loss for the city, they are carried out by different people, under different circumstances. The criminalization of both groups compromises the activity of individuals who are in a socially vulnerable situation, but are helping themselves by carrying out legitimate work, and have the potential to support NYC's recycling program, instead of threatening it. In this context, I highlight the work of canners, who, although autonomous, configure a material recovery system by carrying out selective collection and by using the structure created by the Bottle Bill to return the discarded materials to be recycled.

Here a gap exists in the DSNY's narrative about waste pickers presented in the video. The city authorities' discourse, neglects social aspects involved in the recycling system, focusing mostly in economic arguments. Taken aside the dispute over the discarded materials' economic value, the canners' activity actually aligns with the city's goals for waste management, and with the mayor's commitment to equity and social justice. First, because it contributes to retrieve materials for recycling, diverting them from landfills. Second, because it allows underprivileged individuals to earn an income by engaging in a productive and environmentally sound activity.

## **THE FRAMEWORKS FOR RECYCLING IN NEW YORK CITY**

Over time, various shifts in waste management led to the consolidation of different legal frameworks that created the different systems currently operating in the city. Here, an overview and brief description of each system is presented, focusing on the dynamics of recyclables collection to expose the actors, processes and regulations involved.

	COMMERCIAL COLLECTION	RESIDENTIAL COLLECTION	CANNERS' SYSTEM
<b>Legal framework for recycling</b>	NYC Local Law 87, 1993 - makes recycling mandatory for business	NYC Local Law 19, 1989 - makes recycling mandatory for residents	New York State Returnable Container Act (Bottle Bill), 1982
<b>Related institutions</b>	The City of New York BIC Business Integrity Commission NYS Department of Environmental Conservation	The City of New York NYC Department of Sanitation NYS Department of Environmental Conservation	NYS Department of Environmental Conservation
<b>Categories of materials collected</b>	- Paper - Metal, Glass and Plastic	- Paper - Metal, Glass and Plastic - Organics in some areas	Beverage containers made of plastic, metal or glass, sorted according to the beverage producer brands
<b>Frequency of collection</b>	Depends on the agreement between the business and the carting company	Three times a week, according to DSNY schedule for each neighborhood	Not scheduled, ongoing, according to each worker's schedule
<b>Mode of collection</b>	Carters employees conduct truck for door to door collection	Truck door to door collection carried out by DSNY employees	Human powered vehicles conducted by self-employed workers
<b>Destination of the materials collected</b>	Recyclables go to Material Recovery Facilities for sorting, than are sold to recycling industries	Recyclables go to Material Recovery Facilities for sorting, than are sold to recycling industries	All containers are delivered to Redemption Centers or Redemption Machines, then are picked up by the beverage producer/distributor

Table 1: overview of actor and frameworks for recycling in the city

### *Commercial collection*

One of the systems operating in New York City is dedicated to collect the materials discarded by businesses, which generate about 5.5 million tons of waste per year.<sup>17</sup> Since the 1950's Businesses are required to manage their own waste collection.<sup>18</sup> Self-hauling is possible, but the most common practice is to contract private companies that provide waste management services – the private carters. Currently there are over 250 different private carting companies operating in New York City.<sup>19</sup>

The commercial recycling rules defined by the city divide business in two groups: non-food establishments, which must recycle paper and textiles; and food establishments, which are required to recycle containers made of glass or metal, plastic bottles and jugs, aluminum foil products, and cardboard.<sup>20</sup> In this system, the business are required to sort the materials following these guidelines, and the carters must provide selective collection and adequate destination for the materials to be recycled. There are public institutions responsible for overseeing this activity and verifying compliance, but the contracts are negotiated directly between the private haulers and the businesses, in a free-market system.<sup>21</sup>

### *Residential collection system*

Another recycling system operating in New York City is dedicated to collect household waste. The collection is carried out by DSNY and the collected materials are transported to Material Recovery Facilities (MRF) to be sorted, compacted and ultimately sold to recycling industries. Residents have to separate the discarded materials in two categories: paper and cardboard in one, and metal, glass and plastic (MGP) in another.<sup>22</sup>

Currently, the Sims Multi Recycling Recovery Facility receives NYC's residential MGP materials. Sims is a private company that has a 20-year contract with DSNY to manage recyclables in New York City. Since 1993 the city has turned completely to private processing to handle recyclable materials, due mainly to operational costs, and has recently shifted to long-term contracts.<sup>23</sup>

### *Alternative systems*

Other practices coexist alongside the commercial and residential systems. One of the alternative systems relies mostly on individual responsibility, providing locations for voluntary drop off for diverse materials. Some examples are the electronic waste drop off sites provided by retailers, and the textiles and organics drop off sites provided by GrowNYC and community gardens.<sup>24</sup> Another example of alternative system is the small-scale pick up service provided by organizations such as BKRot, which is a community-based composting initiative that operates collecting organic materials in the Bushwick area.<sup>25</sup>





Image 5: example of vehicle used for commercial waste collection



Image 6: example of vehicle used for commercial waste collection

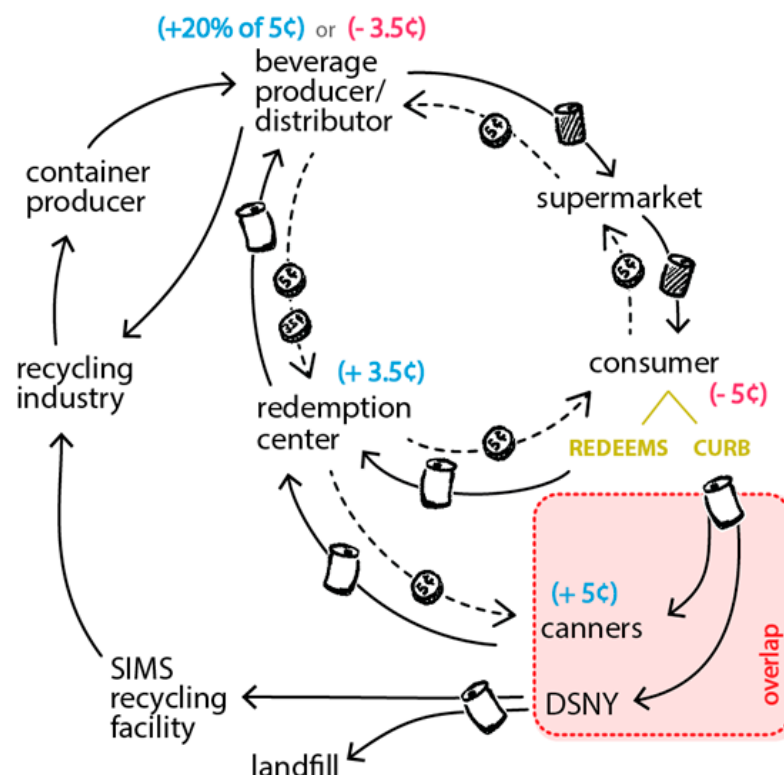


Image 7: a canner carrying a load of cans and bottles

For this study I focus on the work of the canners, who collect beverage containers for recycling, forming a third alternative system. As previously mentioned, they walk the streets picking up bottles and cans that can be returned in the exchange of the five-cent deposit, a process established by the New York State Bottle Bill. In practice, consumers nowadays rarely return the containers to retrieve the five-cent deposit and these containers are placed at the curbside with other discarded materials. However, the infrastructure to retrieve these containers is in place – compulsory deposit upon purchase, redemption centers, and mandate for producers to handle the post consumption packaging – and the economic value embedded in these containers allows for people to earn a living by collecting and redeeming them. Canners are usually self-employed, autonomous workers who, by using the structure created by the Bottle Bill, form a formal-informal hybrid system of selective collection in the city.

### *The Overlap*

The situation described in the DSNY video puts in evidence an overlap that happens between the system created by the Bottle Bill and the system created by DSNY to retrieve recyclable materials. The systems, created at different times, by different institutions, have generated different practices that are now in conflict. The network of money and material exchange defined by the Bottle Bill, and the overlap of the DSNY system with the Bottle Bill system are illustrated in the following diagram:



## WHAT IS PLANNED FOR THE FUTURE OF RECYCLING IN THE CITY?

All the systems that move discarded materials in New York City are on the verge of changing. On April 2015, Mayor Bill de Blasio released the OneNYC plan, which “establishes bold goals and specific targets for a strong, sustainable, resilient, and equitable city.”<sup>26</sup> In this plan, Vision 3 sets the goals for sustainability in the city, and the second goal is related to waste management. For the Zero Waste goal, the plan states, “the City will become a worldwide leader in solid waste management by achieving a goal of Zero Waste by 2030. We will eliminate the need to send our waste to out-of-state landfills, thus minimizing the overall environmental impact of our trash.”<sup>27</sup>

For this ambitious achievement, waste reduction and material recovery through recycling and composting are central practices. Changes in the current curbside recycling and organics program are planned, including “the expansion of the New York City Organics curbside collection and local drop-off site programs to serve all New Yorkers by the end of 2018” and the “enhancement of the City’s curbside recycling program by offering single-stream recycling by 2020.”<sup>28</sup>

Shifting the dynamics of waste management in New York City demands massive changes on behavioral, legal and technical dimensions. It demands reframing regulations and rethinking the role of agencies and actors involved. All these plans and decisions for the future of NYC’s waste system will surely affect the work of canners. However, these actors were not part of the conversations that led to these definitions and they are not taken in account in the official city plans. As previously mentioned, the city authorities’ discourse on recycling and canners focus mostly on economic factors, not social factors. With upcoming changes in all systems, it is important to include social and cultural variables in the equation.

### Vision 3

**New York City will be the most sustainable big city in the world and a global leader in the fight against climate change**

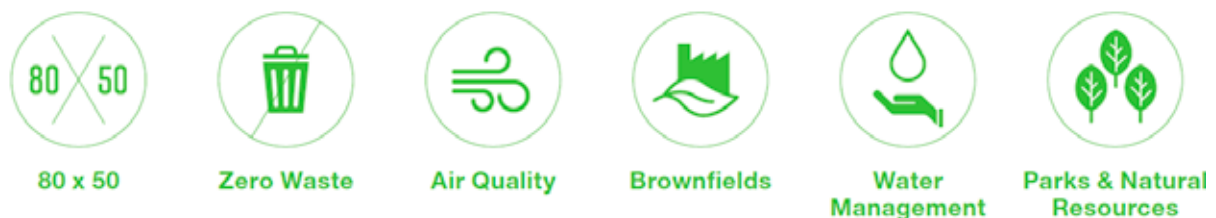
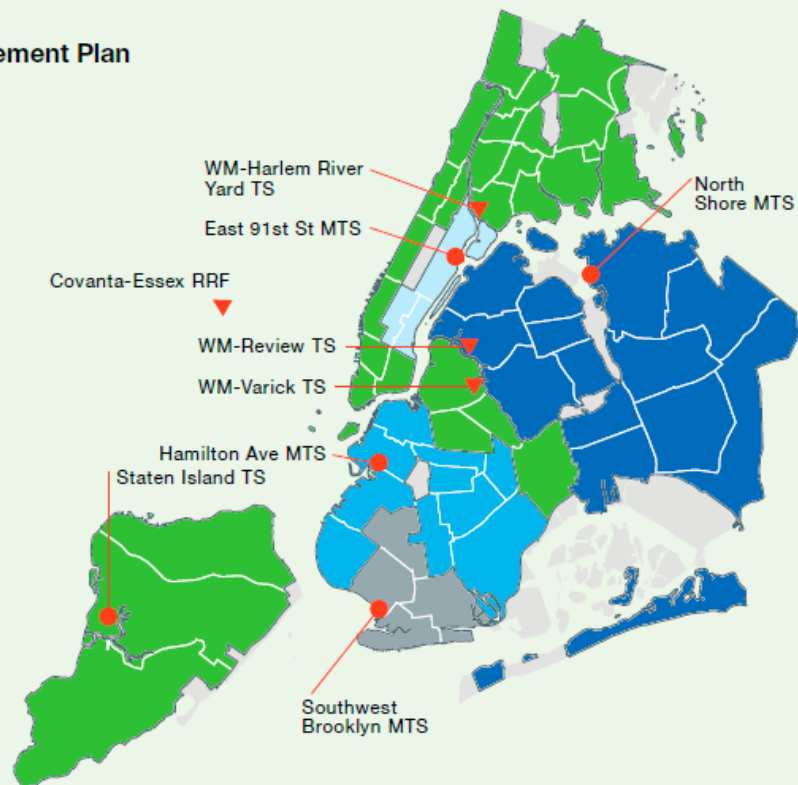


Image 8: Vision 3 in the OneNYC plan

## Solid Waste Management Plan Implementation



### In the 1970s and '80s, New York City came to symbolize the modern “garbage crisis.”

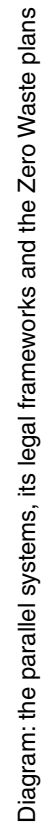
In 1973, the National League of Cities and the U.S. Conference of Mayors issued a report documenting the skyrocketing volume of solid waste and the sharp decline in available urban land for disposal sites. The notorious Fresh Kills Landfill in Staten Island became the largest in the country, and the City's incinerators burned garbage without the environmental controls of today's energy-from-waste facilities. With the gradual closure of Fresh Kills beginning in the 1990s, low-income and minority neighborhoods in the South Bronx, northern Brooklyn, and southeast Queens increasingly bore the burden of the City's waste processing facilities.

Over time, the City improved waste management operations, closing its incinerators and landfills and, in 1989, creating the nation's largest mandatory recycling program. The 2006 adoption of the City's comprehensive Solid Waste Management Plan (SWMP) was a landmark achievement for long-term waste planning and environmental justice. The plan was championed by grassroots environmental justice organizations, who long advocated for the City to switch from a truck-based waste export system that overburdened low-income communities to an equitable network of marine and rail transfer stations located in all five boroughs.

In 2015, the City opened the North Shore Marine Transfer Station in College Point, the first of four converted marine transfer stations that will open under the SWMP. At the North Shore facility, Department of Sanitation (DSNY) employees transfer waste from collection trucks into sealed shipping containers to be shipped out by barge. Once it operates at full capacity, that facility will shift nearly 1,000 tons of waste out of the overburdened neighborhood of Jamaica, Queens.

Image 9: Solid waste management plan implementation from OneNYC





## RETRIEVING VALUE IN WASTE: ECONOMIC AND SOCIAL ASPECTS OF RECYCLING

Over the years, different technologies were developed to deal with the materials we discard, different actors have been involved in the collection and disposal of residues, and various drivers influenced the development of waste systems. In his research about waste systems, Wilson exposes key drivers that triggered changes in waste management worldwide, since the Middle Ages until the present time. An overview of his analysis is used here to contextualize the evolution of urban waste systems.

From the Middle Ages until the Industrial Revolution, waste management was mostly precarious and there was no institutionalized service for waste collection and disposal. Cities were generally filthy and the main driver for waste collection was the resource value contained in waste. The trade of certain materials found in the discarded matter could generate revenue, and this is what drove collection efforts, mainly by individuals operating autonomously.<sup>29</sup>

In the period, between 1850 and 1970, public health was a main driver to guide the development of urban waste management. The discovery of the linkage between infectious diseases and poor sanitation conditions was important to trigger the concern for having clean and healthy cities. At that point waste management was being institutionalized, and defining stakeholders and assigning responsibilities for waste collection was an important change in many cities at that time.<sup>30</sup>

Since the 1970s, the rise of the environmental movement greatly influenced changes in the waste management, and environmental protection emerged as a main driver. Waste disposal was included in the political agenda and regulating the whole system, rather than focusing on collection, became a priority. “The change in focus from waste collection to environmentally sound waste management has served as a driver for inter-municipal co-operation, to realize economies of scale.”<sup>31</sup> This driver pushed a more holistic understanding of waste management, shifting to approach it as part of a resource management scheme. In this context, some emerging practices and technologies such as recycling and waste to energy were incorporated in urban waste management systems.

Recent approaches highlight the concept of waste prevention as a main goal for waste management. Campos *et al* point out that in the European Union, waste minimization is being prioritized over both energy recovery (waste to energy approaches) and material recovery (recycling or reusing). They state that:

The new European Waste Framework Directive, as well as the new Swedish Waste Management Plan states that legislation and politics of waste management should be guided by the waste hierarchy and waste prevention is at the top of the hierarchy.<sup>32</sup>

Although considered ideal, the prevention of waste is far from being a fact. There are few examples of situations where it is actually being implemented, and the mechanisms that will make it possible are not well defined. On the other hand, recycling, portrayed as a third option in the proposed waste hierarchy, is one of the most established and disseminated practices to deal with waste management nowadays.

By definition, recycling is the process of collecting products, components and/or materials, disassemble (when necessary), separating them into categories according to material (such as specific plastics and glass) and processing them into recycled products, components and/or materials.<sup>33</sup> The consolidation of recycling has important environmental, economic and social implications, and it has profoundly changed the urban waste systems in many cities.

In terms of environmental impact, we can mention the reduction in volume of residue that is sent to landfill, which contributes to expand the lifespan of these structures. Another benefit that derives from recycling is a decrease in the volume of raw materials extraction. This decrease also causes a reduction of the residue generated in this extraction and a reduction in the energy that is required for the process.

In terms of economic impacts, recycling has a major role in reversing the economic value attributed to discarded matter. Previously considered without commercial value, some discarded materials can now be traded in the market. Teodosio and Dias point out that:

The term valuing of wastes arises in this context as the economic result of the process of adding value to the products and materials post-consumption. Valuing solid wastes can be defined as the capacity of a productive chain to use the wastes as raw material.<sup>34</sup>

This reversal in economic value is a very important shift. The collection, transportation and disposal of discarded materials can now generate revenues. The resource value found in waste, which has been a main driver for waste management since the Middle Ages, continues to be a driver for waste collection today. Throughout the years, different discarded materials have been considered an economically valuable resource to be retrieved in waste. Nowadays the recyclable materials are the main valuable resource in the mixed matter that we discard.

In urban centers, the consolidation of the recycling market had social implications as it enabled an excluded part of the urban population to participate in an economic activity. When discussing the activities developed by the population living in economically impoverished situation in São Paulo, Harland and Santos point out that:

A significant number of this population live on the streets, where they develop their survival repertoire that involves material collection and recycling, what is known as 'catação'. It is a self-created economy that reuses the trash and leftovers of the city. Recyclable material collecting sometimes reaches or surpasses the minimum wage. This phenomenon conveys a significant relationship between poverty and waste, as a parallel and informal economy.<sup>35</sup>

The situation described by Harland and Santos can be observed in many other urban centers around the world, where an informal waste collection system has been developed to divert recyclable materials and is now consolidated as an economic activity for people who are often marginalized and excluded from the formal employment market. Wilson states that recovering materials from waste and selling them for a revenue is a key activity that connects the urban poor in many parts of the world to waste management, creating the 'informal sector'.<sup>36</sup>

Throughout time, formal and informal waste systems developed in parallel in various cities, and different interactions between these two systems were consolidated in different places. In Brazil, the work of 'catadores' has been legally recognized and, in the Brazilian Solid Waste National Plan, cooperatives and associations of *catadores* are included as part of the municipal solid waste system.<sup>37</sup> In Colombia, the municipality of Bogotá is promoting a program to pay the 'recicladores' individually, not only for the weight of materials collected but also for the service of collecting these discarded materials.<sup>38</sup> Similarly, in Argentina the municipality of Buenos Aires is hiring 'cartoneros' to collect the materials deposited in the municipal selective collection points.<sup>39</sup> In these cases informal waste systems are acknowledged by city authorities, there are initiatives to promote their continuity and attempts to promote better conditions for the workers.

In other cases, there is pressure to dismantle the existing informal waste systems or initiatives that dismiss or criminalize the activity. One example is the recent Environmental Law put forward by the Turkish government in the process of complying with the European Union Integrated Environmental Approximation Strategy.<sup>40</sup> The law emphasizes waste collection that is performed by licensed firms and clearly excludes the participation of informal waste. In Delhi, the municipal body responsible for public services views waste pickers as a nuisance and keeps a constant surveillance to avoid organizing initiatives.<sup>41</sup>

Although often discussed as a past situation for developed countries, informal waste picking is a common practice in many cities in the United States, as it is the case of New York City. As stated by Gowan:

Over the last ten years the US recycling industry has mushroomed on both the formal and informal levels, taking the form of a double tiered system which relies heavily on informal labor for sorting and collection, while reprocessing is dominated by large capital enterprises.<sup>42</sup>

Hence, the situation happening in New York City is not isolated and the discourse promoted by the city authorities is not unique, as similar situations happen worldwide. However, as also exposed in this research, there are more factors that can be considered in the narrative, and there are other possible perspectives regarding the participation of waste pickers in urban waste systems.

## **NARRATIVES FOR INTEGRATING WASTE PICKERS: THE BRAZILIAN CASE**

In Brazil, the National Solid Waste Plan (Plano Nacional de Resíduos Sólidos - PNRS), in effect since 2010, establishes the guidelines for waste management in the country. It mentions waste reduction, recycling and the proper disposal as some main practices.<sup>43</sup> In the Brazilian context, recycling is one of the core practices for the sustainable management of discarded materials. According to the Federal Law 12.305, recycling is defined as:

The process of transforming solid waste, which involves changing its physical, physico-chemical or biological properties, in order to transform inputs into new products, observing the conditions and standards set by the responsible institutions.<sup>44</sup>

Teodósio and Dias state that waste pickers, in Portuguese called *catadores*, have been providing selective collection<sup>45</sup> services even before public policies for waste management were clearly defined in the country. Even today *catadores* have a prominent role in waste management. Through the informal system formed by *catadores*, a big part of recyclable materials are retrieved and reinserted in the production process.<sup>46</sup>

There is no precise data for the number of *catadores* who work in Brazil. A report released by the Applied Economics Research Institute (Instituto de Pesquisa Econômica Aplicada - IPEA) in 2012 pulls data from the Brazilian census to estimate that there are 387.910 *catadores* in Brazil.<sup>47</sup> However, this report acknowledges that this might be an underestimate. Teodósio and Dias point out to other sources that present different figures,

such as the Sanitation National Survey (Pesquisa Nacional de Saneamento Básico) which identified 70.449 *catadores* in 2008, and the Waste Pickers National Movement (Movimento Nacional dos Catadores - MNC), which estimates that there are 800 thousand *catadores* in the country.<sup>48</sup>

“*Catador de Materiais Recicláveis*,” or recyclable materials collector, was recognized by the Ministry of Work and Labor as a labor category in 2002.<sup>49</sup> In 2007 the Federal Law nº11.445/2007, which determined the national guidelines for waste management, already waived the bidding process for municipalities to contract with *catadores*’ cooperatives and associations for municipal recyclables collection.<sup>50</sup> The Federal Law n.º 12.305/2010, which marks the ground of the current National Solid Waste Plan, determines that municipal governments should prioritize the partnership with waste pickers as part of the local solid waste management system whenever possible.<sup>51</sup>

Furthermore in 2010 the Inter-ministries Committee for Social and Economic Inclusion of Waste Pickers (Comitê Interministerial para Inclusão Social e Econômica dos Catadores de Materiais Reutilizáveis e Recicláveis – CIISC) was formed, and implemented programs such as Cataforte, which aims to incentivize *catadores* to structure associations and cooperatives.<sup>52</sup>

The process of consolidating the legal recognition of the waste pickers work in Brazil is intrinsically related to the history of struggle and self-organization of this group, which also transformed the activity into a social movement. The first association and cooperatives of *catadores* started to form in the end of the 1980s in São Paulo (Coopamare) and beginning of the 1990s in Minas Gerais (Asmare). In 2001 the Waste Pickers National Movement (Movimento Nacional dos Catadores - MNC) was formed bringing together associations, cooperatives and autonomous waste pickers throughout the country.<sup>53</sup> This process of self-organization took advantage of existing legal frameworks, which allow for the formation of cooperatives and associations – to legitimize their activity, which had been considered as informal and marginal for a long period. Furthermore, this process promoted the self-identification of waste pickers in Brazil as a group and as labor category, contributing to their cohesion and their political representation.

Legal frameworks and governmental programs are crucial to improve the waste pickers’ situation. Besides making the activity legally recognized within the legal system, they promote waste pickers as stakeholders in urban waste management systems. More importantly, they create mechanisms, through the hiring of cooperatives and associations, for waste pickers to be paid by the service they provide, and not only by the volume of material that they collect and sell.

These advancements in the institutional sphere are vital, but they do not necessarily lead to progress in relation to the recognition of waste pickers in the social sphere. When analyzing the experience of *catadores* in cooperatives Belo Horizonte, Pereira and Teixeira affirmed that:

the perspective of struggling for recognition is not limited to making government policies, it goes beyond, and involves other dimensions in a permanent process in which society is transformed reflexively and alters patterns of social relationships.<sup>54</sup>

This state of non-recognition in the social sphere was identified in interviews with waste pickers in São Paulo. Rafael Bahia, which has been a catador for more than 30 years, mentioned that he has been called “garbage eater” when picking up recyclables in the street. Similarly, Alemão, who has been a catador for 5 years, mentioned that one day someone screamed, “get out of the way, garbage!” when he was carrying his cart on the streets. He further expressed that he feels that “some people think we are nobody.” All these statements evidence situations of disrespectful treatment and exclusion that catadores still face in their daily activity.

### *Typologies of initiatives to support waste pickers in Brazil*

As exposed when analyzing this case, the legitimization of waste pickers’ work and their integration happens in different spheres – political, social, economic – in separate but correlated processes. A table was developed to compile the initiatives that were found throughout this research.

INITIATIVE	TYPE	BENEFITS	WHO INITIATES	WHO IS AFFECTED
<b>PROMOTED BY GOVERNMENT</b>				
Recognize waste picker as a profession	legal framework	institutional recognition of activity	federal governments	waste pickers at large
Contracts with waste pickers associations	legal framework	institutional recognition of activity + payment for service	municipal governments	waste pickers in associations
Inter-ministries Committee for Social and Economic Inclusion of Waste Pickers	governmental institution	incentives for organizing	federal government	waste pickers in associations
Cataforte	grant	institutional recognition of activity	federal government	waste pickers in associations
Pro-Catador award	award	incentivize better partnerships with municipalities	federal government	municipalities
Programa Coleta Seletiva Solidaria	educational program	training	federal government	waste pickers in associations
<b>PROMOTED BY WASTE PICKERS</b>				
Informal networks for collection and commercialization	informal working arrangement	income stability + better trade negotiations	waste pickers and middlemen	autonomous waste pickers and middlemen
Associations and cooperatives	formal working arrangement	income stability + better trade negotiations + community	waste pickers	waste pickers in associations
Regional network of cooperatives and associations	trade arrangement	income stability + better trade negotiations + community	waste pickers	waste pickers in associations
Movimento Nacional dos Catadores de Materiais Recicláveis	social movement	rights and better conditions for workers + community	waste pickers	waste pickers at large
<b>PROMOTED BY CIVIL SOCIETY</b>				
Pimp My Carroça	equipment design	health and working conditions + social inclusion	artists and activists	autonomous waste pickers and artists
Catadores Saudáveis	sporadic event	health and working conditions	researcher	autonomous waste pickers
Cavalo de Lata	equipment design	health and working conditions	researcher	autonomous waste pickers
partnerships with academic institutions	research partnership	health and working conditions + social inclusion	academics	waste pickers and scholars
Waste & Citizenship Forums and Festivals	sporadic event	social inclusion	UNICEF, state governments and municipal governments	waste pickers and other citizens

Table 2: overview of initiatives to support waste pickers in Brazil



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Images 5 and 6: photo taken by the author

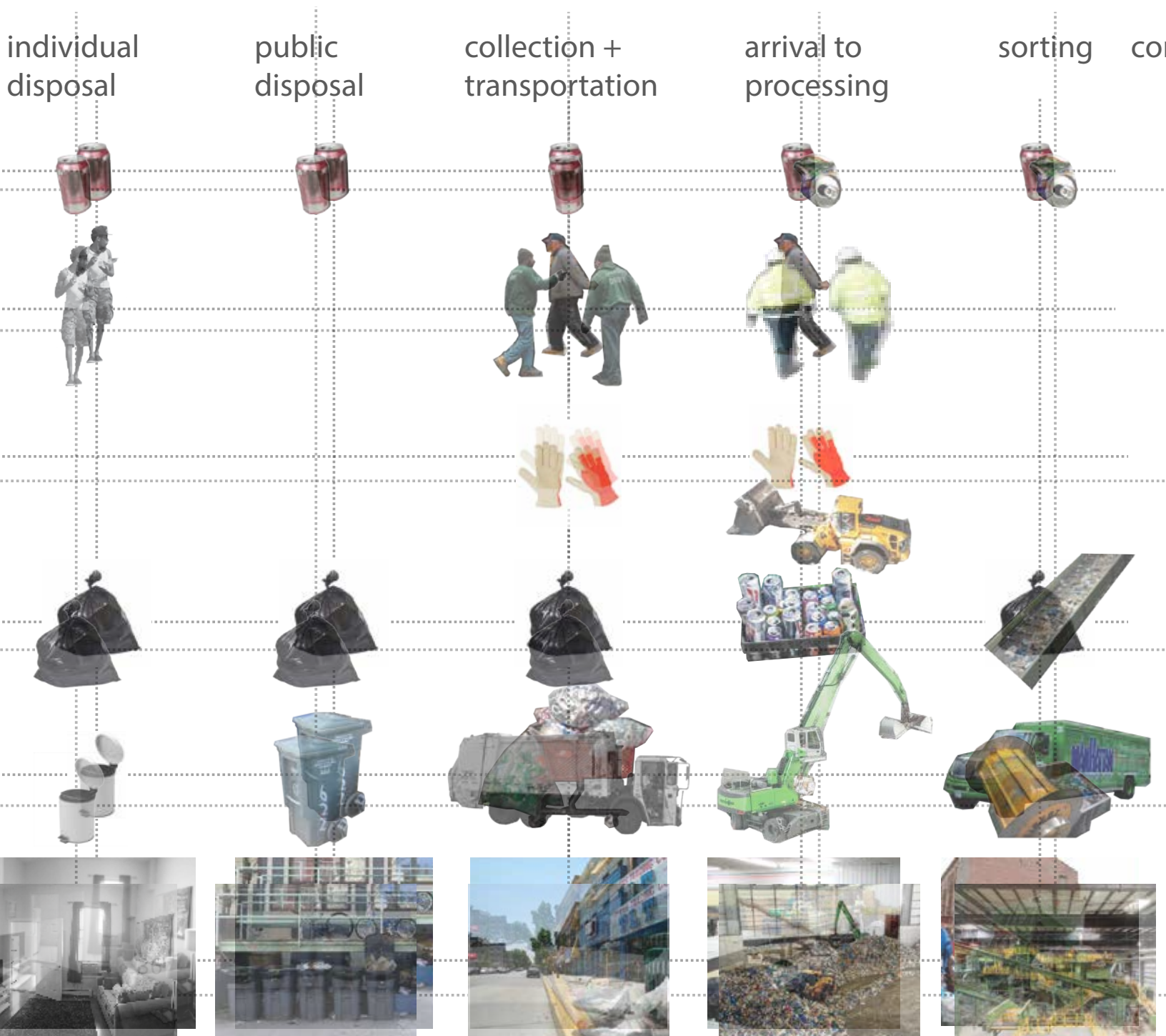
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## *tables and diagrams*

Elaborated by the author

# UNPACKING CANNERS' PRACTICES AND NEGOTIATIONS IN NEW YORK CITY



## **THE CANNERS' ACTIVITY, ACCORDING TO CITY AUTHORITIES**

The perspective of the cities' authorities on 'canning' has been exposed in previous topics through the description of the video that was published by DSNY. This research about the city authorities' view on canners is further supported by the material available in a news article,<sup>1</sup> which features interviews with city's representatives, and by an interview carried out with the coordinator of the Mayor's office for Sustainability, Sarah Currie-Halpern. Two main points that construct the city authorities' narrative about canners were identified.

First, according to the city's perspective, canners are violators of city policies. By determining that DSNY has property over the waste put to curb, the city authorities place the work of waste pickers in the realm of criminal activities. In a New York Time's article, when referring to the video published by DSNY, Nir states: "Some might feel sympathy for these collectors, but the video makes clear that the New York City Sanitation Department, which made the video and posted it online, wanted them to be seen as something else: common criminals."<sup>2</sup>

The second point in the city's narrative is that canners are competitors, who threaten DSNY's recycling program. Here, the argument is twofold. One element refers to DSNY's budget for the recycling program. The affirmation, in this case, is that canners remove valuable materials that would offset DSNY's collection costs, making the recycling program costly and endangering its continuity. As Nir states, "In many instances, by the time sanitation workers get to a trash pile, all that is left is actual garbage, hampering the ability of companies with city recycling contracts to earn their fees."<sup>3</sup>

The other argument refers to the data needed to assess the recycling rate in the city. In this case, it is argued that the volume of materials retrieve by canners is not part of the data collected by the city. Hence, canning makes the calculation of the diversion rate inaccurate and compromises DSNY's ability to assess the success of its recycling program. As stated by Nir "More significantly for the city, the scavenging of recyclables make it difficult to track its own progress."<sup>4</sup>

## **DECONSTRUCTING THE CITY AUTHORITIES' NARRATIVE**

As previously identified, in the New York City authorities' narrative, canners are considered violators of city policies and deemed to be competitors in the recycling system. Nonetheless, by unpacking each argument previously identified, it is possible to find contradictions and to deconstruct this narrative.

First, the characterization of waste pickers as thieves happens because of the determination that DSNY has ownership over the materials put at the curbside for disposal. This notion is widespread and ingrained, as it has been recurrently affirmed by city officials and by the media. For instance, it was mentioned by the coordinator of the Mayor's Office of Sustainability, and it was remarked by Nir, who stated that "The moment refuse hits the curb it becomes the city's property."<sup>5</sup>

However, ownership over waste is an obscure definition and the activity of waste pickers is not inherently harmful. As identified in research about other cities, there are frameworks that enable waste picking to happen legally. In this context, the criminalization of canners is determined primarily by political choice, and is disputable and malleable.

It is disputable because, in fact, throughout the research, it was not possible to find the specific document that determines that DSNY has ownership over the waste placed at the curbside. In the city's Administrative Code there is a definition that makes the collection of curbside recyclable materials as liable to fine, but only if motor vehicle is used. There is no mention to collection by foot as being unlawful. Further, in the document there is no precise definition about the property of discarded materials placed at the curb. As stated in the section 16-461 of the Administrative Code of the City of New York:

Except for an authorized employee or agent of the Department [of Sanitation], it shall be unlawful for any person to remove and transport by motor vehicle recyclable material that has been placed by an owner, tenant or occupant of any residential building, building occupied by city agencies or institutions, or vacant lot, or by their agent, within the stoop area, adjacent to the curb line or otherwise adjacent to such building or lot for collection or removal by the Department.<sup>6</sup>

Furthermore, the city authorities themselves have proven this definition to be malleable, as they have supported a smartphone application that incentivizes individuals to pick up discarded items placed at curb. The application, named "Treasures," was awarded a prize in the BigApps competition, promoted by NYC Department of Environmental Conservation and supported by the mayor.<sup>7</sup> The proposed mobile-based tool enables people who discard usable objects like furniture or books to take pictures when they put the item at the curb and share their images and location through the application. Other users can access this information and, if interested, can go pick up the object.<sup>8</sup> In essence, this activity is the same performed by waste pickers, as individuals autonomously retrieve materials that would otherwise be collected by DSNY. It is an inconsistent position taken by the city authorities, which evidences the flexibility of the criminalization of picking-up from waste placed at the curbside.

Here, the economic factor has a major role in determining this flexibility. Discarded pieces of furniture and books provide no revenues to the city, as they do not have high value in the recycling market. Cans and bottles, on the other hand, are “the most valuable recyclables”<sup>9</sup> that offset DSNY’s collection costs. As previously mentioned, if those items are picked up by entities other than DSNY, the institution will not have the revenue it would otherwise have for the maintenance of its recycling program.

This economic factor is another important argument used in the city authorities’ narrative to state that the activity of waste pickers may threaten the recycling program. In fact, the collection by canners diverts materials that could generate more revenue to DSNY. The argument in itself makes sense, however, it neglects the social aspect of this situation, not accounting for the vulnerable individuals involved.

Waste picking allows marginalized individuals to have an autonomous productive activity while generating income. It is part of the livelihood of many individuals, thus contributing to their health and to their capacity to live in New York City. If analyzed in a broader context, the social benefits generated by the canners’ activity might counterbalance the loss generated by the diversion of bottles and cans from the city’s waste stream. Social indicators, and not only economic ones, should be part of this argument.

Furthermore, another argument used to justify the characterization of waste pickers as a threat to the city’s recycling program, is the notion that canning prevents the city from assessing recycling rates. In fact, the city does not account for the volume of materials retrieved through the Bottle Bill system, but this data exists. The redemption centers and retailers keep records of the economic transactions they make. The city could collaborate with these facilities and with New York State Department of Environmental Conservation to systematically gather this data and incorporate it to the city’s recycling figures.

Finally, there is a sense of centralization and concentration of responsibilities in the city’s discourse. As evidenced by Nir, “sanitation officials say that if the city is going to reach its goals, then it must be the one doing the recycling.”<sup>10</sup> As it has been identified, other frameworks for waste management are possible. For instance, the Integrate Solid Waste Management model promoted by the United Nations Environment Programme (UNEP) proposes the “participation of public, private, and informal sector participants, in roles appropriate for each.”<sup>11</sup> Thus, canners do not necessarily have to be seen as violators and opponents, and the success of the recycling program in New York City does not have to depend only on DSNY. There can be a framework that allows for the contribution of existing actors and systems.

## THE CANNERS' ACTIVITY, ACCORDING TO CANNERS

There is virtually no data about canners in New York City. There are no surveys or research to assess the demographics and the activities of this group. The information for this research comes from the interviews carried out with five canners, two of which were followed during a day of canning. Eugene, Pierre and George were interviewed at Sure We Can, which is a redemption center and community hub in Bushwick, Brooklyn. Jorge and Jose were interviewed in the streets of Washington Heights, Manhattan. Further, this research is complemented by conversations with Ana de Luco, who coordinates Sure We Can.

First, it is important to highlight the fact that New York City canners form a group of diverse individuals. In the field research, the diversity in demographics could be identified: there are many Asians, often non-English speakers; there are many Latin Americans, usually male and female adults; there are many African Americans, mostly male adults. Besides the fact that they collect beverage containers to earn money, these individuals often have no common ground to share the struggles of their activity and their aspirations for better conditions. The diversity of languages, cultural backgrounds and motivations make the category 'canners' a rather disconnected group, which may be one of the reasons why there is no history of self-organization efforts. It was identified that the heterogenic and fragmented nature of 'canners' as a group, or rather, the fact that canners may not see themselves as a group, is a challenge in this effort to have the canners' perspective about their activity. The canners' narrative presented here is built on the views of the canners who were interviewed for the research, all men between 40 and 60 years old, both Latin Americans and African Americans.

From the perspective of the canners interviewed, the narrative for canning in New York City often does not align with the discourse promoted by the city authorities. First, it was identified that the interviewees consider the activity as legitimate work that provides a service to the city. In conversation with Eugene, he affirmed that "this is a job, which I like to do," and expressed his satisfaction for contributing to recycling. Most of the canners interviewed considered it is a worthy activity that contributes to recycling in the city, which they consider to be an environmentally beneficial activity.

The situations that led them to engage in this activity are diverse, but there was one common reason for all the interviewees: the need to earn money, often after unemployment. Further, the motivations for carrying out this activity are diverse. Jorge mentioned that he started canning after he lost his job as the furniture industry he worked for went out of business. He uses the money he gets from canning to pay his rent. He says he only works enough to get \$600 a month. George said he engaged in this activity because he was "broke," and



he realized he could supplement his income with canning. Eugene also mentioned that he started canning because he was unemployed, and he said he could make up to \$100, which means collecting 2000 containers per day.

When asked about the positive aspects of this activity, the most common answers were autonomy for time management, immediate pay, and the possibility of having a productive activity with no formal employment. Pierre was especially emphatic in expressing the feeling of joy and freedom that he often has when walking the streets and collecting the cans and bottles.



Image 10: Pierre Simons



Image 11: George F.



Image 12: Eugene Gadsden



Image 13: Ana de Luco

## *Sure We Can*

Sure We Can (SWC) is a non-for-profit redemption center that provides a safe space for canners. It was funded in 2007, and since then has grown to be not only a place for canners to exchange their bottles for money, but also a space to promote social exchange and provide support for canners. As stated in their web page: “Sure We Can has evolved into a community building and sustainable living hub committed to fostering a resilient urban culture.”<sup>12</sup>

SWC is a crucial part of this counter narrative, as it embodies many of the ideas that were presented in deconstructing the city’s argument. For instance, SWC keeps records of all materials received daily and of the canners who bring the materials, thus creating data for this system. Furthermore, SWC accounts for the social benefits of the recycling system, and promotes not only material and economic exchange, but also social exchanges and the value of individuals. As said in their statement, it is a place “where everyone counts.”<sup>13</sup>



Image 14: Sure We Can webpage





Image 15: students at Sure We Can during Earth Day



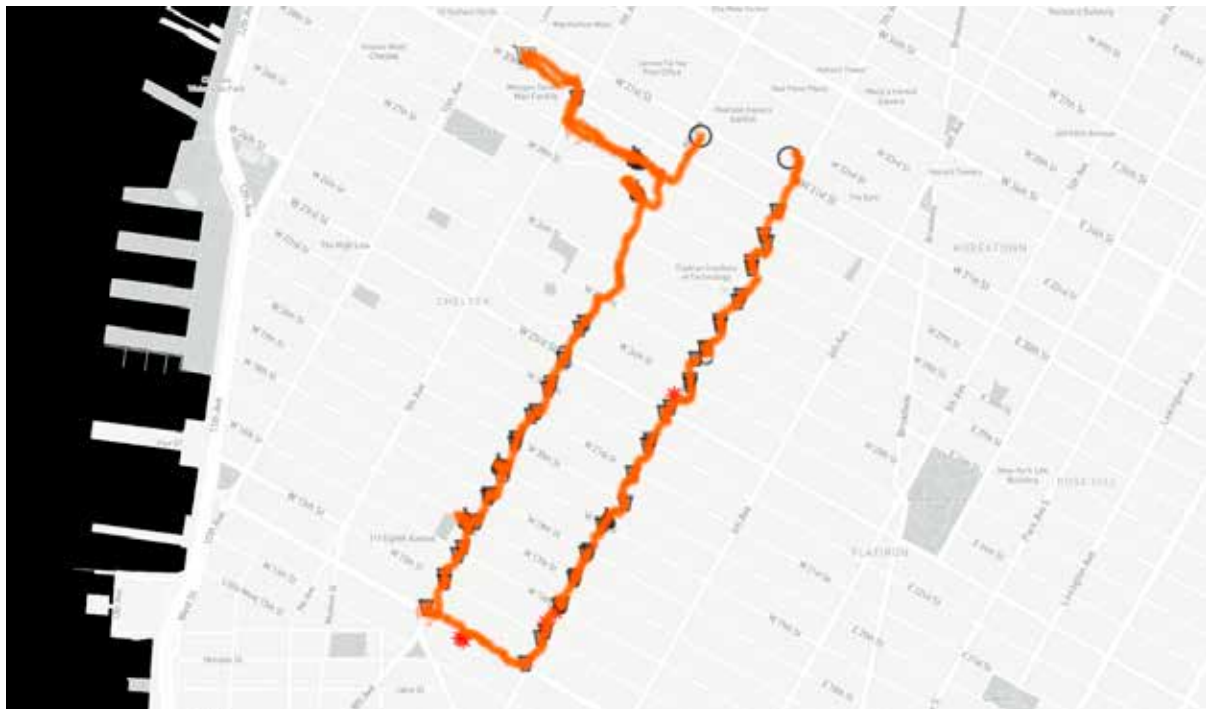
Image 16: a worker sorts plastic containers



Image 17: composting and edible garden

## GEOGRAPHIES AND PRACTICES

By joining canners in their daily activities, it was possible to gather data to spatialize, quantify and qualify some of their practices. For this research, the canning activity of Eugene was observed on April 2016, Sunday, from 4 to 6pm, when we walked around the Hudson Yards area on the west side of Manhattan. On that day, he collected mostly from street bins, eventually picking up containers that were thrown on the street or collecting from bags placed at the curb. In two hours, he collected the equivalent to approximately \$10.



Map 1: Eugene's route



Image 18: Eugene before and after the collection



Pierre's canning activity was observed on May 4, 2016, Wednesday, from 6am to 10am. He walked around the Bushwick area in Brooklyn, collecting mostly from bags that were put at the curb by residents. In four hours of walk, he estimated the collection was worth approximately \$30.

The mapping of their activity is not only a way to create data for this system, but also an effort to make visible and relevant the work of canners. In a similar mapping project, Dietmar Offenhuber and David Lee tracked the routes of waste pickers who work in a cooperative



Map 2: Pierre's route



Image 19: Pierre before and after the collection

in São Paulo. In an article about this project, they stated that by “placing their [the waste pickers] movements ‘on the map,’ it conveyed a sense of identity for the cooperative, providing tangible evidence of their place in the city.”<sup>14</sup> It is believed that the mapping of canners in New York City may have a similar effect, making tangible the presence and the contribution of canners in the city.

By talking to the canners and observing their activity, it was possible to identify some unspoken rules and best practices. Both Pierre and Eugene affirmed that they respect the “first come first serve” principle, so they never dispute the bags if someone is already collecting from a pile. Also, they emphasized the importance of being careful when handling the bags. First, to not get hurt, second, to not spread the content or leave it open. Another practice mentioned by both, is to be consistent about time and routes. They mentioned that there is competition, and if they are not consistently present at the same place at the same time, they may lose the territory as other people will arrive first and collect before them.

Further, different sets of practices were identified related to the collection and to the redemption of the containers. Regarding the collection, there is the option of collecting from street baskets or from the garbage bags put at the curb. Regarding the redemption, it can be done in redemption machines, redemption centers or in a truck. As Manhattan has no redemption centers, some centers located elsewhere send trucks to retrieve the containers collected in the borough. The trucks have defined schedule and locations, so canners can meet them. During my walk with Eugene on a Friday, it was possible to witness many canners using the sidewalks to sort their containers. As Eugene mentioned, the truck was about to arrive.

Canners have detailed knowledge of the products they handle. As they have to sort the containers according to the companies that produce the beverage, they know peculiarities about which brands belong to which companies. They also have comprehensive knowledge of the neighborhoods where they work and the disposal patterns. Both Pierre and Eugene pointed out their ‘hotspots’ for collection, being precise about the time that the garbage bags would be out in that location, and the type of material that would be there. Pierre said that he is able to accurately estimate how many containers he will get in different routes throughout the neighborhood.

Eugene, who has been canning for more than thirty years, commented on how the profile of canners has changed over time, and how the number of people who engage in the activity has grown. He said that when he started collecting there was only a small number of African Americans doing this activity. He said that through time other people realized it was possible to make money with this activity, and now there are many more canners, and many

immigrants. In fact, during the field observation of the activities of Eugene and Pierre, more than ten canners were seen in our way, both in Manhattan and in Brooklyn. In addition, they often identified that someone had already been through the garbage bags that were on their route, as there were no redeemable containers.

Both Eugene and Pierre mentioned that they realize how some people disregard their work. As Pierre said, to carry out this activity, “you have to get over caring about what people think.” They expressed their feeling of being disregarded because of their activity, but they did not report cases of extensively offensive actions by residents or pedestrian, nor of police harassment. During the field observation, in only one occasion police officers prevented Eugene from getting access to the garbage bins in a residential building. The policemen were generally polite, but did not allow Eugene to open the bins and asked him to leave.

On the other hand, there are situations of partnerships with residents or with buildings’ superintendents. During the field observation of Pierre’s activities, he called one of the residents in the neighborhood, who had got in touch with him to schedule the collection of some containers she had separated for him. When leaving her building, a man that was working on a construction site approached Pierre, and granted him access to a pile of containers that were in the trash bin inside the site.

Finally, it was possible to observe that, although the canners’ collection shed may overlap with the city’s collection shed, their systems are very different. The capillarity of the system formed by autonomous canners allows them to collect materials that the city, which works on a large-scale collection scheme covering whole neighborhoods, would not retrieve for recycling. On the other hand, canners have to be highly selective on their collection because not all containers are redeemable and it does not make sense for them to carry materials they cannot exchange for money. They always leave behind materials that, although could be recycled exactly in the same way as other materials they were collecting, had no economic value for them.

## **CHALLENGES FOR LEGITIMIZING THE ACTIVITY**

Through the research, it was observed that there are frameworks that acknowledge the activity of waste pickers as part of the urban waste system. However, there are diverse situations that pose challenges for this recognition. Here, the challenges for recognition are discussed in two groups: those belonging to the institution sphere and those related to the social sphere. By recognition, it is not necessarily meant the regulation of the activity or the consolidation of a partnership of public authorities with waste pickers, which would be a longer and intricate legal process. Rather, the reference is to a more basic recognition, both

by public authorities and by other citizens, of the work of canners as legitimate, respecting their space in the waste system and acknowledging their contribution to this system.

### *Challenges for the recognition of waste pickers in the institutional sphere*

The view of city authorities about canners has been extensively reviewed in previous topics. Three major situations previously identified are part of the challenge for the recognition of waste pickers in the institutional sphere. A first challenge is to have a framework that does not consider canners as violators, shifting the narrative away from criminalization and deconstructing the perception that these individuals are thieves. A second challenge is to collect data for this activity, thus consolidating its contribution to the city's recycling program. A third challenge is to overcome the purely material-economic argument and also consider social factors, when evaluating the recycling program. Overall, a big challenge is to shift the city's narrative in relation to waste, which focuses mostly on the material and economic aspects of the system.

### *Challenges for the recognition of canners in the social sphere*

The negative public perception about canners poses another set of challenges. For this analysis, the main aspects of the current public view about canners and the challenges for recognition of these individuals in the social sphere are identified. Three main sources are used: the theoretical references from the literature review; the interviews carried out during the field research; and the readers' comments posted in response to a New York Times Magazine article<sup>15</sup> about canners.

The first aspect identified in this research is the variety of opinions about canners. Tedosio and Santos state that "the public look at the pickers' presence is variable. Often it mobilizes humanitarian sentiments, at other times feelings of repulsion and indignation."<sup>16</sup> The variability in public opinion about New York City canners is clear in the range of comments posted in response to the New York Times Magazine article. Amongst the forty-seven comments, nine were supportive of waste pickers, affirming, for example, that "canners are performing a noble service by keeping this material out of landfills."<sup>17</sup> On the other hand, eleven comments condemned canners' activity, affirming, for example, that "When someone finds bottle & can scavenging a productive work, something is wrong with his mind,"<sup>18</sup> or that "Pickers represent an unnecessary and unwanted blight."<sup>19</sup>

A first challenge to change the negative perception that some people have about canners is, again, to reframe the discourse that criminalizes the activity. The fact that city authorities define canners as violators is a burden and incites discrimination. Most comments that despised waste pickers referred to this definition, for instance: "This is not so simply 'honest



work.' It is, as others have pointed out, stealing from that city";<sup>20</sup> "Is it, strictly speaking, honest work, as Mr. Gadsden says? (...) Doesn't canning involve taking that property from the city?";<sup>21</sup> "It's against the law."<sup>22</sup> When this legal argument is used, the conversation does not go beyond it, making it difficult to consider other possible definitions and the potential benefits of this activity. Therefore, to dissolve the notion that canners are criminals is a crucial step in changing public perception about canners.

A second obstacle for the social recognition of canners relates to the fact that they are dealing directly with the materials we discard. Generally, in the western culture, we associate waste to ideas of loss, impurity, repulsiveness, danger and contamination; we consider it to be undesirable and we prefer to keep it away from us.<sup>23</sup> These negative feelings affect our perception of the people who deal with the discarded materials. As pointed out by Wilson, "one constraint here can be cultural: if waste is viewed in some way as 'dirty', then waste management will be viewed as 'not an honorable profession'." <sup>24</sup> In fact, in an interview with a canner, he mentioned how, at times, people turn away or neglect his presence when passing by him. This situation illustrates how the negative perception we have about waste affects our judgment of the individuals who deal with it, and may lead to interactions that are disrespectful and sometimes offensive. In this sense, our current perceptions and behaviors in relation to waste may be obstacles to the recognition of canning as a legitimate and worthy activity. Thus, the revision of our preconceived judgement about waste and about the people who deal with it is part of the path for the social recognition of canners.

A third challenge identified for the social integration of canners in New York City refers to the situation of class segregation and prejudice engrained in society. Canners are usually low income individuals, immigrants or part of minority groups. The individuals are often marginalized, considered outcasts. Some comments in The New York Times Magazine article allude to this situation. In a statement that alludes to social status and class segregation, one of the commenters mentioned: "Interesting that New York Times editors think individual scavenging, stealing, actually, garbage from private residential and business bins is a suitable topic of interest to its readers, the kind who can afford to pay a king's ransom for the Sunday edition."<sup>25</sup> As Pereira and Teixeira point out,

waste pickers are "inserted into social relations in which social inequality is daily naturalized by symbolic mechanisms that legitimize their reproduction so that they constitute "a class excluded from all material and symbolic opportunities of social recognition."<sup>26</sup>

Hence, challenging the systemic exclusion and discrimination of minorities and low income individuals is also part of the effort to reach recognition for canners in the social sphere.

# How to Make Money Collecting Bottles and Cans

**Tip**

By MALIA WOLLAN APRIL 8, 2016



Illustration by Radio

“Kick the bag first so the rats run out,” says Eugene Gadsden, a self-described canner. After that, dig carefully: You might encounter shards of glass, dog feces or worse. The revulsion is the cost of independence. “In canning, you go where you want and do what you want,” Gadsden says. “You’re your own boss.”

Gadsden began gathering cans and bottles in his 20s, after moving to New York from Charleston, S.C., to be near his baby son. In the 30 some years since, he has mostly subsisted on New York’s 5-cent container deposits. Along the way, he has taught dozens of new

canners, including a Catholic nun with whom he founded Sure We Can, a recycling-redemption center in Brooklyn. Gadsden encourages fellow scavengers to tidy up. If you open someone’s bags, retie them. “Leave it the way you found it,” he says.

Target a neighborhood and get to know the terrain. Research the city’s recycling-collection days. Be on the street soon after people roll out their refuse for pickup. “Being consistent at the same spot means you know where the cans are,” says Gadsden, who learned his trade in Midtown Manhattan and has considered it his territory ever since. First come first served is a basic canner tenet. Gadsden usually starts at 1 a.m. and works until about 7 a.m. In that time, he’ll collect 1,000 or more containers, worth \$50 or so.

Image 20: Part of New York Times Magazine article

## 47 COMMENTS

Readers shared their thoughts on this article.

The comments section is closed. To submit a letter to the editor for publication, write to [letters@nytimes.com](mailto:letters@nytimes.com).

All 47

Readers' Picks 28

Newest ▾

### Dusty Chaps Tombstone, Arizona • April 10, 2016

Interesting that New York Times editors think individual scavenging, stealing, actually, garbage from private residential and business bins is a suitable topic of interest to its readers, the kind who can afford to pay a king's ransom for the Sunday edition. In the wealthiest nation on the planet, it's telling that opportunity has become the collection of rubbish in lieu of social assistance. Municipalities pick up garbage on a timely basis and recycle and resell bottles, cans, and paper products in the community's interest. Pickers represent an unnecessary and unwanted blight.

👍 5 Recommend • [f](#) [t](#)

🚩 Flag

### nyc2cents nyc • April 9, 2016

There was a wonderful HBO documentary, Redemption, about NYC collectors of the 5 cents recyclables. It's a tough life, but many immigrants without language skills rely on the income to get by. About the article, the last sentences, "You're not hurting anybody. It's honest work." fall short. Actually "canners" are helping all of us both by bringing those recyclables into the system and by being self-supporting members of society.

In my neighborhood I see a few who have regular territories. And to them, my heartfelt admiration for their persistence to help themselves --fending obstacles including the rats, the harassment and the often inhospitable weather.

👍 10 Recommend • [f](#) [t](#)

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Image 21: Some of the readers' comments

## ***chapter endnotes***

1 The article, entitled “New York Fights Scavengers Over a Treasure: Trash,” was written by Sarah Maslin Nir, and published by The New York Times on March 20, 2016. It is available at: [http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?\\_r=2](http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?_r=2)

2 Sarah Maslin Nir, “New York Fights Scavengers Over a Treasure: Trash,” The New York Times, , accessed May 8, 2016, [http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?\\_r=2](http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?_r=2)

3 Ibid.

4 Ibid.

5 Ibid.

6 “Local Law 56 of 2013 (Administrative Code of The City of New York, § 16-118 and 16-464),” Administrative Code of The City of New York, 2013, <https://rules.cityofnewyork.us/tags/local-law-56-2013>

7 “Mayor De Blasio and New York CityEDC President Torres-Springer Announce Winners Of New York City BigApps 2015,” New York CityEDC, accessed April 18, 2016, <https://www.nycedc.com/press-release/mayor-de-blasio-and-nycedc-president-torres-springer-announce-winners-nyc-bigapps-2015>.

8 “Treasures, Don’t throw it away, give it away,” BIGAPPS New York City2015, accessed May 8 2016, <http://bigapps.nyc/project/1416/treasures-don%E2%80%99t-throw-it-away-give-it-away>.

9 NYC Department of Sanitation , Stealing Recycling’s Future, 2012, accessed January 8, 2016, <https://www.youtube.com/watch?v=hAM-tW-uulU>

10 Sarah Maslin Nir, “New York Fights Scavengers Over a Treasure: Trash,” The New York Times, , accessed May 8, 2016, [http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?\\_r=2](http://www.nytimes.com/2016/03/21/nyregion/new-york-city-fights-scavengers-over-a-treasure-trash.html?_r=2)

11 UNEP, Solid Waste Management, 2005, <http://www.unep.org/ietc/Portals/136/SWM-Vol1-Part1-Chapters1to3.pdf>

12 “Sure We Can,” Sure We Can, accessed April 21, 2016, <http://www.surewecan.org/>

13 Ibid.

14 Dietmar Offenhuber and David Lee, “Putting the Informal on the Map: Tools for Participatory Waste Management,” in Proceedings of the 12th Participatory Design Conference: Exploratory Papers, Workshop Descriptions, Industry Cases- Volume 2, (New York, NY, USA: ACM, 2012): 16

15 Malia Wollan, “How to make money collecting bottles and cans,” The New York Times Magazine, April 8, 2016, <http://www.nytimes.com/2016/04/10/magazine/how-to-make-money-collecting-bottles-and-cans.html?emc=eta1>

16 Armindo dos Santos de Sousa Teodósio and Sylmara Lopes Francelino Gonçalves Dias, “Recycling at the Interstice of Intersectorial Relations: the National Policy of Solid Wastes and challenges for the social, productive inclusion of pickers,” in Design, Waste & Dignity, coord. Maria Cecilia Loschiavo dos Santos (São Paulo: Editora Olhares, 2014), 234.

17 Doug comment on Malia Wollan, “How to make money collecting bottles and cans,” The New York Times Magazine, April 8, 2016, <http://www.nytimes.com/2016/04/10/magazine/how-to-make-money-collecting-bottles-and-cans.html?emc=eta1>

18 Ray comment Ibid.

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26 Maria Cecília Gomes Pereira and Marco Antonio Carvalho Teixeira, "Struggle for recognition and public policies: An analysis of the experience of pickers belonging to Asmare in Belo Horizonte (state of Minas Gerais) 1987-2010," in Design, Waste & Dignity, coord. Maria Cecilia Loschiavo dos Santos (São Paulo: Editora Olhares, 2014), 366.

## *images*

Images 10 to 13: photos taken by Adan Aliaga

Images 14: Sure We Can webpage, available at <http://www.surewecan.org/>

Images 15 to 19: photos taken by the author

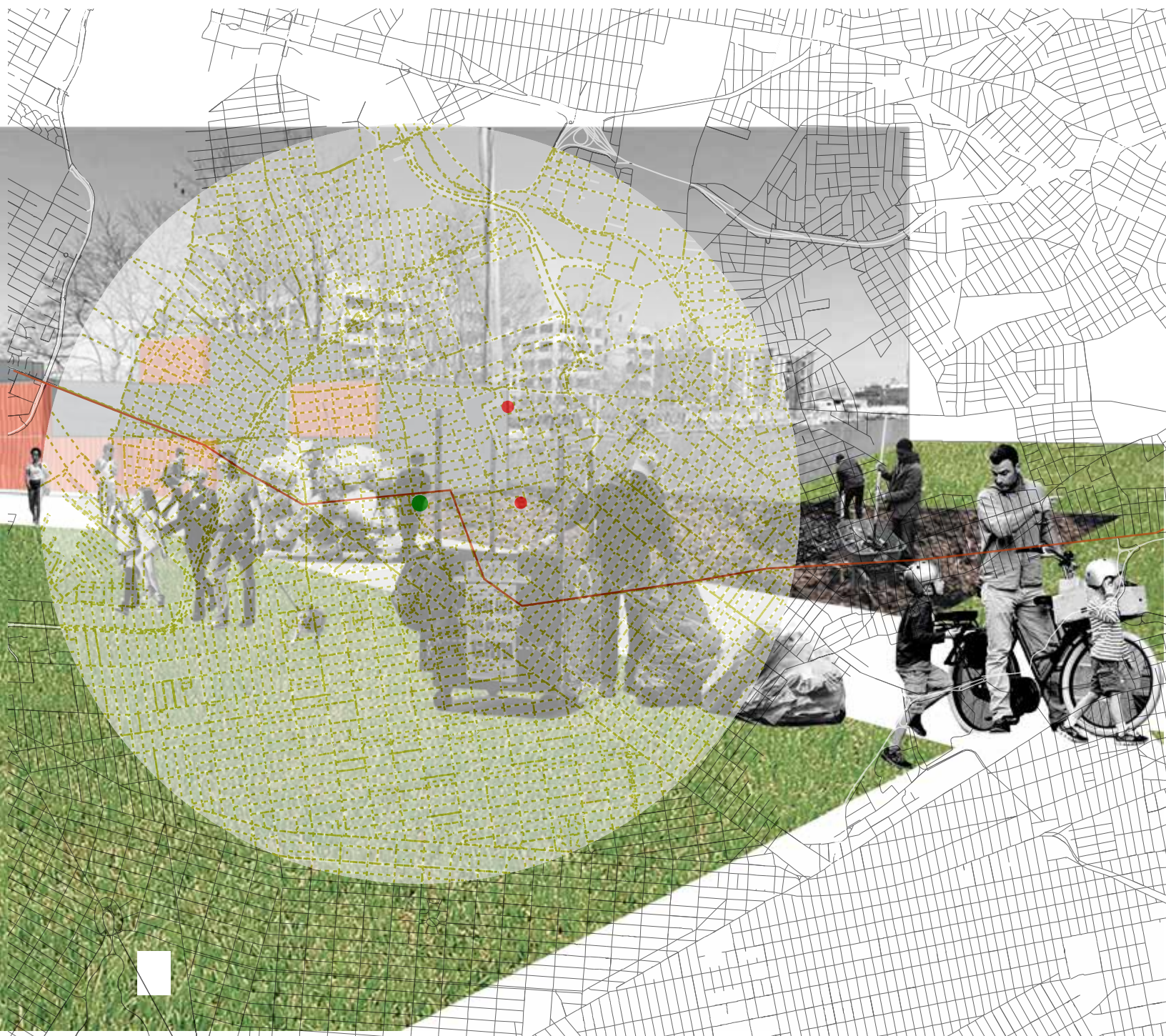
Images 20 and 21: New York Times Magazine webpage, available at [http://www.nytimes.com/2016/04/10/magazine/how-to-make-money-collecting-bottles-and-cans.html?emc=eta1&\\_r=0](http://www.nytimes.com/2016/04/10/magazine/how-to-make-money-collecting-bottles-and-cans.html?emc=eta1&_r=0)

## *maps*

Elaborated by the author



# REIMAGINING THE SPACE OF CANNERS IN NEW YORK CITY WASTE SYSTEM



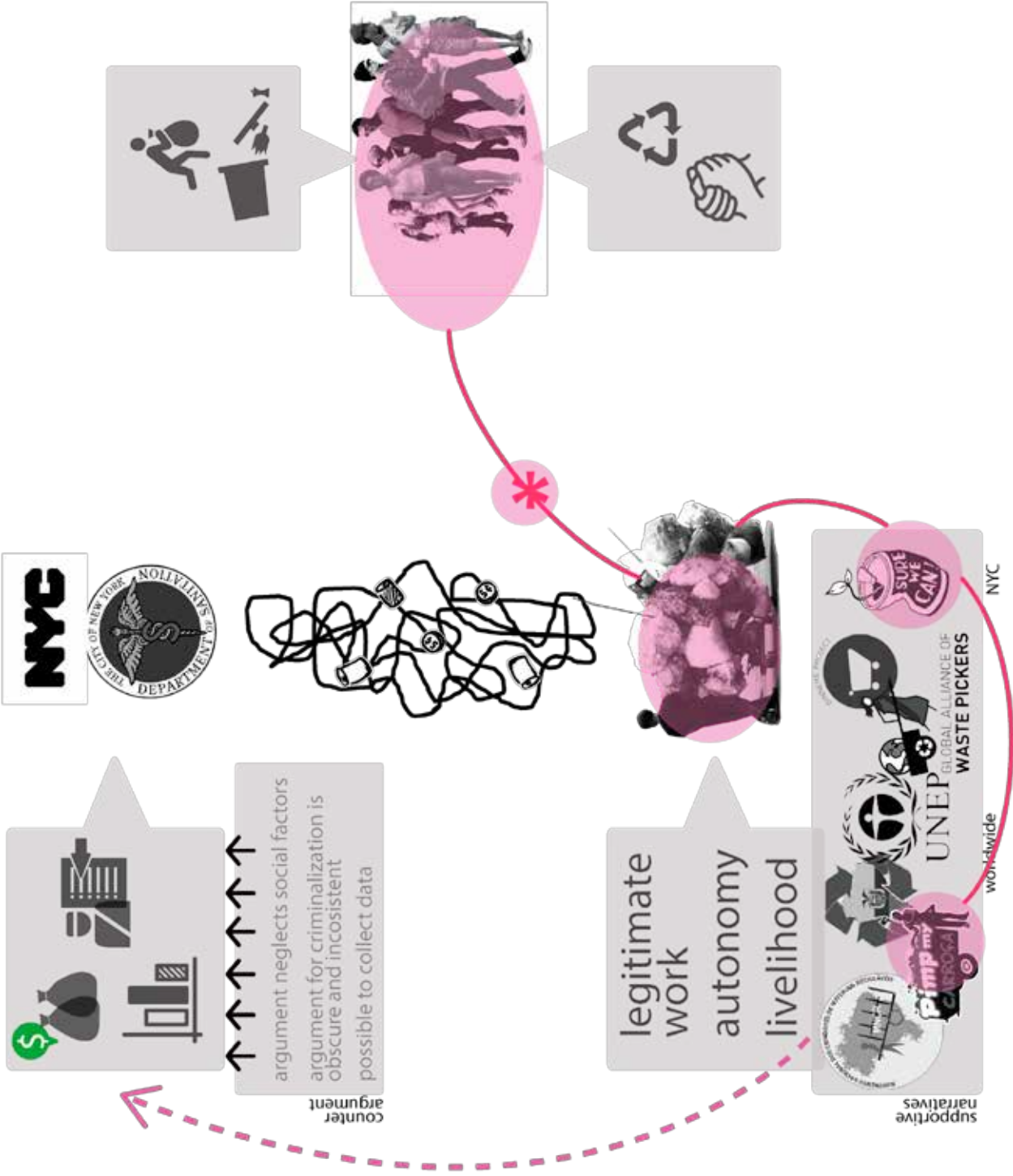
## FROM RESEARCH REFLECTIONS TO A PROPOSAL FOR INTERVENTION

In this research and practice study, a latent tension within NYC's waste systems was the starting point for an investigation about the situation of waste pickers in the local and global contexts. Throughout the research phase, I described the incongruences in the city authorities' discourse about canners in New York City, I identified different frameworks and narratives for the role of waste pickers, I highlighted initiatives for legitimizing the activity, and I analyzed the challenges to reach this legitimization in New York City. Drawing from the analysis of the research phase, I believe that the non-recognition of waste picking as a legitimate activity is a gap in NYC's waste system, which I intend to address in the practice phase of this study.

I had previously identified the challenges for the recognition of canners in the institutional and in the social sphere. Further, I studied the case of integration of waste pickers in Brazil. From these analyses, I highlight two important insights that guide my proposal for intervention:

- i. the institutional recognition of waste pickers is important, but it is usually preceded by a grassroots legitimization of the activity, which creates pressure to push the public authorities to also recognize the activity. In the Brazilian case, this grassroots legitimization of the activity happened through self-organization (i.e. the formation of cooperatives and associations), which empowered the individuals to see themselves as a legitimate working class and to fight for institutional recognition.
- ii. although very important to legitimize the activity, the institutional recognition of the activity does not imply the social recognition of the activity. Hence, waste pickers often face prejudice and social exclusion while performing their everyday activities, even when operating under legal frameworks that recognize their work, as it is the case in Brazil.

Therefore, I decided to guide my intervention towards ways to promote the legitimization of the activity in the social sphere. I believe that instigating change in the public perception about waste pickers is a powerful way to create new relationships and open an inclusionary conversation to review the role of canners in New York City. My practice engages with existing initiatives in order to shift this narrative. By coordinating a collaborative action, which engages artists and designers to provide canners with enhanced equipment and reshaped carts, I aim to achieve three main goals. First, to improve the canners' working conditions and to increase their self-esteem and pride. Second, to trigger changes in the relationship between canners and other citizens in the streets, dissolving social barriers and promoting approximation. Third, to consolidate an international collaboration and experience exchange between the waste pickers, artists and activists in São Paulo and in New York. The following diagram illustrates the proposal for intervention.





## THE DYNAMICS OF THE INTERVENTION

The intervention I carried out consisted of a collaborative action to support canners in New York City. For this intervention, I aligned the structure of Sure We Can, a New York based community hub previously presented in this study, and the methodology of the Pimp My Carroça project, a Brazilian initiative to support waste pickers, which was identified in the research about the initiatives for integration in Brazil.

### *The methodology*

The Pimp My Carroça project is defined by its members as a social, artistic and cultural movement. The activities that are part of this project aim to promote civic and political awareness about the situation of waste pickers in Brazil. Amongst other activist actions, one of the main activities is to reform and artistically paint waste pickers' carts and to donate safety equipment to the workers. The project was initiated in 2012 in São Paulo, by Brazilian artist Thiago Mundano. Since then, the project has reached 496 waste pickers, who had their carts reformed and painted, in more than 20 cities in Brazil, Bolivia and Peru.

Thiago Mundano says that a fundamental step for the creation of the Pimp My Carroça project was to have constant conversations with waste pickers, which enabled the artist to review his own understanding of what waste is, and lead him to the idea that “there is no such thing as waste.”<sup>1</sup> Another important component in this project is the possibility for waste pickers to communicate in the urban environment. Through the images and phrases painted in the carts, the artist aims to voice the waste pickers' thoughts and messages.



Image 22: previous Pimp My Carroça events

## *The collaborative action*

In practice, the collaborative action happened in the course of 9 weeks, and culminated with the realization of the Pimpex NY on 9 April 2016. During the Pimpex NY event, we reformed and painted four carts, and provided equipment to four canners. Throughout this process, members of Pimp My Carroça in São Paulo and from Sure We Can in New York were involved, playing different roles in the realization of this action. The activities carried out in this period are summarized as follows.

PHASE	WHO	PERIOD (mon - sun)	Feb22 - 28	Feb29 - Mar6	Mar7 - 13	Mar14 - 20	Mar21 - 27	Mar28 - Apr3	Apr4 - 10	Apr11 - 17
PRE -	Silvia	Confirm involvement of all members								
CAMPAIGN	SWC + Silvia	Invite canners and artists								
	Canners + Silvia	Evaluate the carts and list the needs								
	SWC + PmC + Silvia	Define budget								
	SWC + PmC + Silvia	Prepare campaign (text, video, photos)								
	Silvia	Prepare crowdfunding page								
CAMPAIGN	Silvia	Launch crowdfunding campaign				sun 12/6				
	SWC + PmC + Silvia	Outreach for donations								
	Silvia	Reach out to media								
	-	Campaign ends					sun 3/27			
ORGANIZING	PmC	Receive packages from Brazil								
	Artists + Silvia	Buy supplies								
	SWC + Silvia	Organize event								
EVENT	SWC + PmC + Silvia	Pimpex NY event day							sat 4/9	
POST EVENT	SWC + PmC + Silvia	Publish results								

Throughout February and March, we were able to structure the costs and activities, to recruit the canners and artists who would participate, to create the narrative for the event through text and video, and to promote a successful crowdfunding campaign to raise the money necessary for this realization. The campaign video and the crowdfunding page are results of the planning phase, which are available online.

Also, the involvement of all participants from Sure We Can and from Pimp My Carroça was crucial. Through meetings with the team in New York and the exchange of emails with the team in São Paulo, I was able to articulate the connection of the two groups. In this sense, my role as an urban practioner was to be a pivot in the connection between two related realities, promoting the exchange of experience and approximation of these two like-minded groups. The involvement of the artists and canners allowed for a fruitful interaction and participation in the redesign of the cart according to the user needs.

Finally, the realization of the Pimpex NY, was successfully carried out on 9 April. Nearly 30 people were present throughout the day at Sure We Can to watch the action or to help as volunteers. Six artists were involved in reforming and painting the carts. The canners – Eugene, Pierre and George – participated in part of the reform and received the package with safety equipment. The event was captured in pictures and video, which are available online and are being using to publicize the action in various media channels.

PIMPEX and SURE WE CAN: visibility for NYC canners **Ended**

View Campaign

Edit Campaign

View Dashboard



Closed

## PIMPEX and SURE WE CAN: visibility for NYC canners

Join us to promote recognition for canners' activity through art and participatory action!

**PIMPEX NY SWC**  
New York, United States  
[About](#) | [Ask a question](#)

**\$980** USD raised by 19 backers

109% of \$900 [flexible goal](#)



**STORY** [UPDATES](#) [COMMENTS](#) [BACKERS \(19\)](#)

### WHO ARE THE CANNERS

The canners of NYC are autonomous workers who earn a living by collecting cans and bottles to be recycled. Through their selective collection activity they greatly contribute to recycling in the city. "Canning" is also crucial for their livelihoods. However, they are not officially recognized as workers, which puts them in a vulnerable and marginalized situation.

### WHAT IS THIS PROJECT



> **SURE WE CAN** is the only non-for-profit redemption center in NYC. It provides a safe space for canners to redeem cans and bottles for 5cents each. SWC is collaborating with Pimp My Carroça to promote this Pimpex NY edition.

> **PIMP MY CARROÇA** is a social, cultural and environmental project to promote visibility, respect and security for waste pickers/canners/recyclers. It started in Brazil where artist Thiago Mundano promoted a **collective action** to reform and paint the waste pickers' carts and provide equipment to the workers.

> PIMPEX is a micro version of this project that can be adapted and situated in different contexts. We want to bring this action to support canners in New York City!

### WHAT WE PROPOSE

For this Pimpex NY edition we will **reform the carts of 3 canners and provide them with safety equipment**

PERKS

**\$10** USD

#### Pimp My Carroça Sticker

For your contribution of \$10 or more, we will send you the awesome Pimp My Carroça sticker.

1 claimed  
Ships Worldwide

ESTIMATED JUNE 2016

**\$35** USD

#### Pimp My Carroça t-shirt

For a contribution of \$35 or more, you'll receive the amazing Pimp My Carroça t-shirt.

1 claimed  
Ships Worldwide

ESTIMATED JUNE 2016

**\$300** USD

#### Mundano's artwork!

For a contribution of \$300 or more, you'll be able to choose one of Mundano's artworks!

1 out of 3 claimed  
Ships Worldwide

ESTIMATED JUNE 2016

Image 23: Campaign page to crowdfund the project









Images 24, 25, 26, 27 and 28: Activities happening during the Pimpex NY action





Images 29, 30, 31 and 32: Activities happening during the Pimpex NY action



Images 33 and 34: Reformed carts used for canning





Image 35: Eugene after an afternoon of collection with the reformed cart



## IMMEDIATE RESULTS

The collaborative action was successful, as it enabled the reform of four carts and the gathering of people at Sure We Can to contribute to the action. In practice, the event resulted in the donation of equipment to canners and the makeover of four carts, which are now being used for the collection of beverage containers or organic material.

From these concrete actions, the donation of equipment and the reform of the cart, a series of situations may unfold, which can positively affect the canners' activity and instigate changes in their relationship with other citizens and the urban environment.

Frist, the carts are more efficient, as there is more space to carry materials, there are sticks to hang items, and there is a compartment for personal objects. Moreover, there is an immaterial result that comes with these changes, which is the appropriation of the carts by the canners. The carts that they use hold the names of the stores where they were once used for shopping. In one occasion, Eugene mentioned that he had his cart taken when he was passing in front of the store and because they reclaimed the vehicle. In this sense, the makeover of this object is a powerful means to foster identity and empower the canners to actively take possession of the vehicle they use.

Furthermore, the feeling of identity was expressed by Eugene, who said he felt happy to have a cart that was made especially for his use. The cart is a tool the canner has to negotiate his or her participation in the public sphere. Often the canners divide the space of streets and sidewalks with other individuals and other vehicles, and they should be seen and respected. Usually, the carts define which spaces are accessible or not for canners. In an analogous situation, Smith analyses the results of the Homeless Vehicle project, which proposes the redesign of shopping carts to adapt them to the needs of homeless persons. Regarding the struggle for space and access in the urban environment, Smith states that the Homeless Vehicle "is a means to carve a more sympathetic geographical politics in a city of exclusionary spaces."<sup>2</sup> This relates to the identity building and appropriation aspects previously mentioned. As he states:

The Homeless Vehicle is an impertinent invention that empowers the evicted to erase their own erasure. It "retaliates" by making homeless people visible and enhancing their identities, and it "dramatizes the right of the poor not to be isolated and excluded." Disrupting the ruling coherence of the urban landscape, (...) it becomes "a vehicle for organizing the interests of the dominated classes into a group expression, employs design to illuminate social reality, supporting the right of these groups to refuse marginalization."<sup>3</sup>

In a similar way, the refurbished and artistically painted cart functions as a mediator for relations and negotiations in the urban environment, enabling the canners, to “erase their own erasure.”

<sup>4</sup> The artistically painted cart has a singular presence in the public space where it, at the same time, matches the urban graffiti language, and stands out for being a mobile and practical artifact. Further, it serves as catalyzer for interactions between canners and other citizens.

During the field observation of Pierre’s for canning activity with the new cart, it was possible to witness a woman taking pictures of the vehicle, which was left unattended while Pierre was collecting. He also reported that a person stopped him in the street the day before to ask about the cart. Pierre was happy not only because of the conversation, but also because the person got interested in the work of Sure We Can and went to visit the space the next day.

This approximation between canners and other citizens is important because it dissolves social barriers, creates proximity and encourages dialog between canners and other citizens. Further, it triggers changes in public perception about waste picking, and arouses the canners’ feelings of pride and worthiness. This contribution to the canners’ self-esteem and to the development of new social connections is one of the intangible results of the action, but it has a direct influence also on the health of the individuals. Newman states that, since the late 1960s, there are studies proving social status as a key factor in physical health.<sup>5</sup> According to Newman, that was an important study proving that:

stress associated with lower-class positions (including, but not limited to, garbage collection) caused more frequent illnesses. Further studies have correlated lower work status to higher stress, as measured by cortisol, a hormone the body emits when stressed. Given that, an environment that promotes human dignity, inclusion and respect itself might be the best health innovation of all. <sup>6</sup>

The collaborative action, in itself, creates a situation that promotes respect and dignity for the workers. Further, the social interactions and the contribution to the canners’ self-esteem amplify this sense of respect over space and time. Newman affirms that, although this type of approach might not protect the workers from health risks like exposures or injuries, it can be a protective action as it “elevates the respect that workers often want.” <sup>7</sup>

Furthermore, the action attracted media attention, and the project has been portrayed in diverse media channels. It has been featured in the local web based papers DNAinfo<sup>8</sup>, Brooklyn Paper<sup>9</sup>, Brooklyn Daily<sup>10</sup>; in an international platform, the Global Alliance of Waste pickers<sup>11</sup>; and reach the Portuguese speaking audience through the Pimp My Carroça blog<sup>12</sup>. The project was also selected to be presented at the Sustainapalooza 2016 event, hosted by The New School, and many attendees expressed their support for the project. This was

an opportunity to further spread awareness about the canners' situation in an academic environment. The collaboration with academia is also crucial, as this is an important ally in contributing to change public perception and to foster legitimization of the waste picking activity.

## **EXPECTED LONG-TERM RESULTS**

The carts, and the collaborative action that generated them, are mechanisms to trigger change in public perception about waste pickers, contributing to the reconceptualization the activity, which is a long-term process. Both the carts and the collaborative action are means to amplify the message and the social network to support canners. As mobile artifacts, the carts carry a message throughout the city, reaching an unpredictable audience. As a celebrative and unexpected situation, the collaborative action to reform the carts gain media attention, spreading a positive counter story to the city's discourse. In this way, this intervention is intended to interfere in the current discourse about canners, contributing to involve diverse interested parties such as artists, university, and the general public, who are agents in legitimizing the activity and shifting the city's narrative over time. Further, it is expected that the collaboration between Sure We Can and Pimp My Carroça will consolidate over time, contributing to the exchange of experiences between these two entities, and to expand and connect the waste pickers' stories to other realities.

## **REFLECTIONS ABOUT THE INTERVENTION**

I consider the intervention to be successful, as it has demonstrated in the description of the results, it reached the main goals that were established for this project: i. to improve canners' working conditions, ii. to instigate change in existing relationships between canners and other citizens, iii. to contribute to open the conversation about an inclusionary waste system, shifting the current mainstream narrative about canners in New York City to a dialogue about participation and integrated management.

I believe that the action will continue to resonate, as the carts are on the streets, constantly sending the message and calling for conversation. The action was also successful in strengthening the connection between Sure We Can and Pimp My Carroça. The groups have now a precedent of a successful common project, and demonstrated interest in continuing the collaboration.

Taking a step back to have a critical perspective on the action and the results, it is important to discuss the limitations and adequacy of approaches like the one proposed by Pimp My

Carroça to the reality of waste pickers in New York City. In Brazil, one of the main goals of the Pimp My Carroça actions is to make the work of waste pickers visible. Through the artistically painted carts, they aim to make the workers stand out in the urban environment, drawing attention to them.

However, in the context of New York City, where many of the canners are foreigners who may have obscure immigration status, the focus on visibility is not appealing to the entire group. This is reflected on the range of canners who agreed to participate in the action. Although I invited canners from different nationalities, only United States citizens were willing to participate. I believe the intervention is still effective in reaching its goals, as the canners who participated can take advantage of their citizenship status to stand for the canners' cause, bringing attention to this activity and representing the group. However, for further actions, it would be important to consider other approaches, which could be appealing also to immigrants.

Finally, I believe it is crucial to address the loopholes that affect the recognition of canners in the institutional sphere. My practice initiates a collaborative process that aims to legitimize the canners' activity through community based social recognition. The collaboration is a means to create a space to amplify the discussions about the waste pickers' participation in the waste system and to build solidarity across citizens.

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2 Neil Smith, “Contours of a Spatialized Politics: Homeless Vehicles and the Production of Geographical Scale,” *Social Text*, no. 33 (1992): 54-81.

3 Ibid.

4 Ibid.

5 M. Sophia Newman, “For trash-pickers, respect is a strong medicine,” *Next City*, accessed May 8, 2016, available at: <https://nextcity.org/daily/entry/for-trash-pickers-respect-is-a-strong-medicine>

6 Ibid.

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12 Pimpex chega a Nova Iorque! On March 24, 2016. Available at: <http://pimpmycarroca.com/pimpex-chega-nova-iorque/>; and Pimpex NY! on April 25, 2016. Available at: <http://pimpmycarroca.com/pimpex-ny/>

## ***images***

Image 22: Pimp My Carroça Flickr page, available at <https://www.flickr.com/photos/pimpmycarroca/>

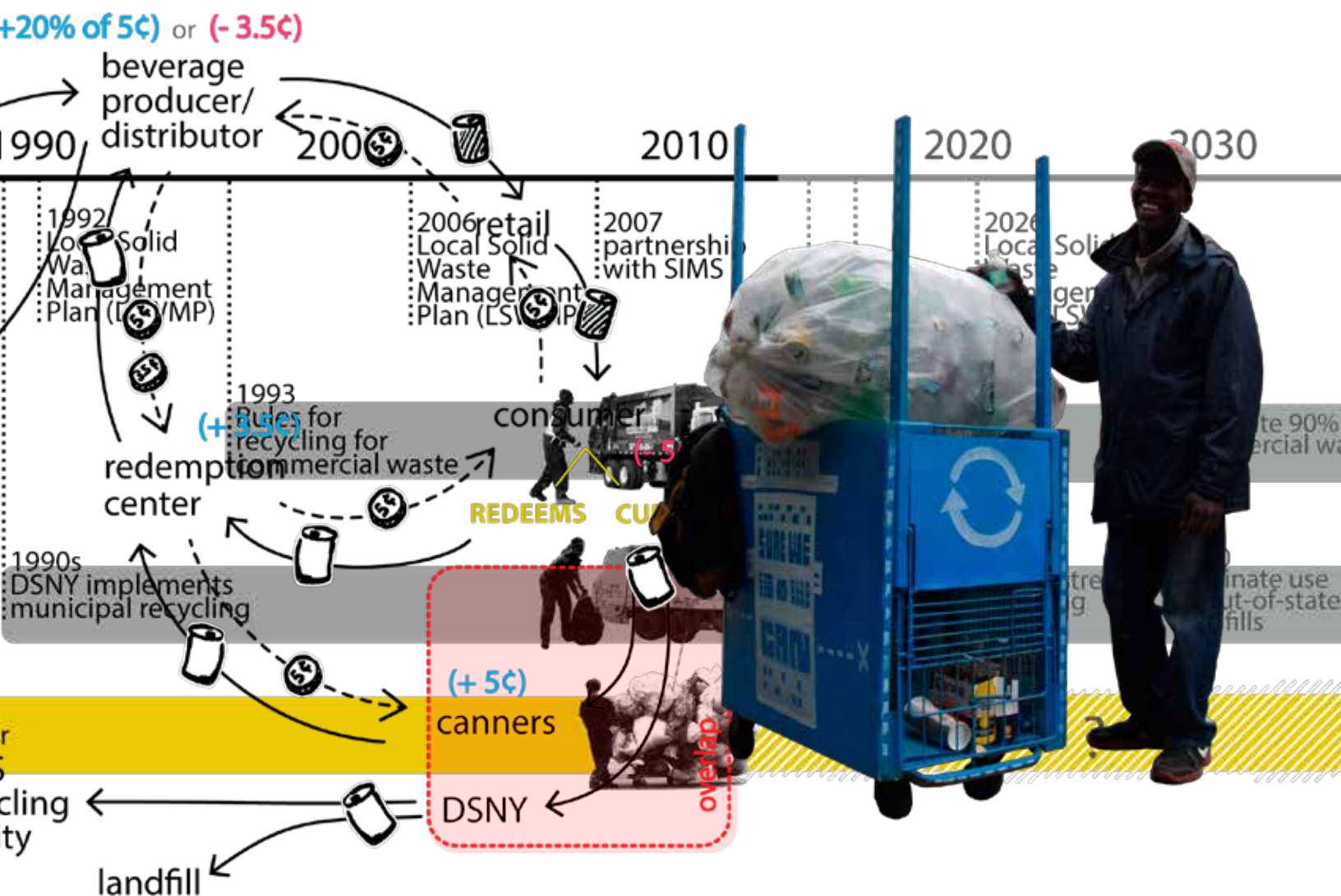
Image 23: Indiegogo campaign page, available at <https://www.indiegogo.com/projects/pimpex-and-sure-we-can-visibility-for-nyc-canners/x/13524649#/>

Images 24 to 35: pictures by Mariana Bomtempo, Shibani Jadhav and the author

## ***tables and diagrams***

Elaborated by the author

# CONCLUSIONS



The dispute between New York City authorities and autonomous waste pickers over valuable discarded materials was the starting point of this research-and-practice-based study. Through the analysis of theoretical concepts and the experience of immersive field research, it was possible to unpack various facets of this tension in NYC's waste systems.

This study exposes the fact that the dispute for recyclables is defined only in economic terms in the city's discourse, but has important social implications that were left out of the debate. It highlights the incongruences of the current discourse, and brings other perspectives to the discussion. Further, it exposes the challenges that exist in the pursuit of a more inclusive and participative waste system. My practice aims to promote a shift in this situation, not only improving the working conditions of canners, but also instigating new relationships and connections. Triggering the approximation between canners and other citizens, it dissolves social barriers and creates new narratives for the legitimization of waste picking in New York City.

This study contributes to discussions about the informal sector in NYC's waste management as it generates data for a system that is currently marginal and neglected. By engaging directly with individuals on the ground, it was possible to document practices, actors and relevant stories that can be used for further research, and for amplifying and pluralizing the conversation about canners' participation in NYC's waste system. In advancing with this research, it is crucial to continue the effort of data collection and documentation of this system, and to continue to engage with canners to understand their lives and struggles.

The city has ambitious goals for the management of discarded materials. I believe that, for the achievement of a sustainable, Zero Waste future in this system, social factors must be considered in the equation, and the individuals who are currently contributing to retrieve materials in the city should not go to waste.

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2. Pierre Simons (canner) in discussion with the author, April 2016.
3. George F. (canner) in discussion with the author, April 2016.
4. Ana de Luco (coordinator at Sure We Can) in discussion with the author, April 2016.
5. Jose (canner) in discussion with the author, March 2016.
6. Jorge (canner) in discussion with the author, March 2016.
7. Rafael dos Santos (catador) in discussion with the author, January 2016.
8. Raimundo (catador) in discussion with the author, January 2016.
9. Alemao (catador) in discussion with the author, January 2016.
10. Sarah Currie-Halpern (Senior Policy Advisor, Zero Waste Program) in discussion with the author, March 2016.
11. Lucia Fernandez (Waste pickers Sector Advisor, Women in Informal Employment: Globalizing and Organizing) in discussion with the author, March 2016.
12. Mariana Moscoso (scholar) in discussion with the author, February 2016.