# Caring for others, taking care of water: gender and race in the production of the city<sup>1</sup>

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# Introduction

N OUR RESEARCH in the Morro da Mineira favela<sup>2</sup> and the Nelson Mandela Occupation<sup>3</sup> we witnessed a diverse range of situations in which managing water constitutes an everyday problem in the life of the women inhabiting these different housing modalities used by low-income families. The preoccupation with storing containers of water at home, making sure the water bill is paid, sharing water with neighbors, negotiating water with drug traffickers or militia members, and pressurizing State bodies to provide access to water are all part of the routine of the women we got to know. In this text, we discuss the importance of water in the course of life in connection with the processes of making the city, the dynamics of care and the relations with neighbors and local powers. We analyze the place of women in the liminal zone between too little and too much water through the management of the buckets, containers, pipes, hoses and water pumps employed to supply their homes.

Water is one of the objects of study that connect intimate and domestic life with the public and political life of the city (Anand, 2017a; von Schnitzler, 2016). The supply of water varies between absence and excess, prompting women to construct constant relations between different homes (Motta, 2014; Araújo, 2017), between neighboring homes (Fernandes, 2017) and between homes and the public or private bodies that administer the distribution of the city's infrastructures. The paths implemented by women to manage water reveal gendered experiences in the production of shared life in the city (Centelhas, 2019; Birman & Pierobon, 2021; Pierobon, 2021; Correa, 2021).

At the start of 2020, as the Covid-19 pandemic arrived in Brazil, the inhabitants of urban peripheries from the north to the south of the country, from metropolises to mid-sized cities, depended on a regular supply of potable water as a minimal condition for confronting locally a health problem global in scale (Rodrigues, 2021). In Rio de Janeiro, however, the beginning of the pandemic coincided with the rainy season and the contamination of water from the Guandu River by raw sewage, which, after treatment, produced geosmin al-

gae.<sup>4</sup> This musty-smelling water with an unpleasant earthy taste was distributed throughout the city and this time even reached the taps of wealthier homes. The largely white middle and upper classes began to buy – via telephone or mobile app – bottles and plastic containers of mineral water to drink and cook with, taken to these homes by black or migrant deliverers, most of them originating from cities in Brazil's North and Northeast. The price of this vital commodity and all the objects involved in its distribution, like the containers and water pumps, rose by almost 100% in these districts. But, despite its poor quality, the water still reached the apartments and people could shower and follow the he-alth recommendation at the time to wash their hands and any purchased goods.

Meanwhile, in the mostly black and migrant regions of the city, residents confronted the problem either of a lack of water in their homes, or a supply of muddy water. Without the money to buy large amounts of mineral water, the residents of these localities sought out strategies that would enable potable water to reach their homes. It is worth emphasizing that the water-related problems faced by impoverished populations are not limited to the oscillation between absence and supply. The summer rainstorms place the residents of peripheries at constant risk of infiltrations, floods and landslides and, with them, the possibility of losing their furnishings, their homes and even their lives. In March 2020, four people died and hundreds of people lost their homes after torrential rains flooded the city. This episode was not exceptional.<sup>5</sup>

At the peak of the pandemic, when water appeared as a major problem of social and racial inequality in Brazilian cities, Nathalie Blanc, Sandra Laugier and Pascale Molinier (2020) published the text "The invisible price: women in the pandemic." In their article, the authors discuss how the pandemic operated as a "visibility device for generally discrete practices, promoting an awareness of the importance of care, the work of women and of other 'helping hands' in the everyday, constantly screened behind the walls of domestic life" (Blanc et al., 2020, p.1). Inspired by Joan Tronto's reflections (2009) on care and democracy, the authors do not limit care to work with elderly people and children but broaden the discussion beyond this sphere to encompass all the activities required to maintain social life, which includes caring for others, self-care and also care for the environment.

In discussing the work performed by women in the pandemic, the authors tell us about two forms of rendering invisible the activities responsible for ensuring social and biological life, human routines and the rhythms of cities. The first concerns the activities undertaken in the home or in the sphere of public life, analyzed by a substantial literature on care work (Mol, Moser & Pols, 2010; Guimarães & Hirata, 2020; Hirata & Debert, 2016; Bellacasa, 2017; Fernandes, Fonseca & Fietz, 2018). The second form of invizibilization relates to the ordinary work of maintaining life through water management in which women, once again, are responsible for leading what we call the frontline of this task (Laurie, 2011; Truelove, 2011, 2019; Lahiri-Dut, 2015a, 2015b; Anand, 2017a; Centelhas, 2019; Pierobon, 2021). It is mostly black, poor and/ or migrant women who care for children, the elderly and sick people in their own homes, as well as in middle and upper-class households. And it is the same women who have to deal with the precarious water supply in their homes at the same time as, in the public sphere, they campaign for access to water as a collective right. For this reason, it is important that we think about how water both produces social life and is produced by and through it. We argue that care – understood as ensuring that life continues – is a constitutive part of the process of making the city and must be included in any discussion of the urban.

The pandemic exposed the fact that access to drinkable water is not guaranteed to black and migrant populations of the city. Hence, we treat potable water as a vital commodity, access to which is not self-evident. On the contrary, water is subject to all kinds of disputes. The forms of managing water include coping with both its absence and its excess, making it an element of conflict in everyday life, capable of making and unmaking family, neighborhood and power relations. A huge individual and collective effort is undertaken by women to manage the water in their homes, which includes dealing with clean and dirty water. The fluctuation in the water supply operates as a good distinguishing between people who are abastecidas (wealthy/well-equipped) and have water and those who do not. Water is also a topic of moral accusations aimed at women and children who face harsh experiences of violence. It is through the access to, lack of, or excessive use of water that women are classified as 'clean' or 'dirty,' praised for taking good care of their homes and their children, or accused of taking bad care. The place of women in the liminal zone between lack and excess makes water an incessant instrument of 'quasi-events' (Das, 2015), which, though not producing ruptures in daily life, generate an atmosphere of uncertainty (Das, 2007, 2020).

In her book *Affliction: Health, Disease, Poverty*, Veena Das (2015) analyses how residents of low-income districts in New Delhi experience the process of falling ill in their everyday lives. To explore this topic, Das asks the following question: "What do people say when they talk about health and sickness?" Through her work, the author shows us that when people talk about health and sickness, these narratives are entangled in family, neighborhood, power and gender relations that interweave with the assistance or neglect of health institutions over time. Inspired by Das's inquiry, we turn the question to the specific topic of interest to us here: "What do women say when they talk about water?" By asking this question, we propose to think about the social life of water as a chance to explore various social problems from another angle. Through small domestic events, dialogues that we had with our interlocutors, or lengthier ethnographic descriptions, we shall see how water carries the force of the ordinary and is one of the objects that enable us to discern the potency and the vulnerability that life contains in terms of gender, class and race. We comprehend the actions put into practice by women in the management of water not as a grand counter-narrative of resistance to the social processes responsible for producing inequality, but as numerous 'helping hands' that work daily to guarantee social life and, with it, the possibility of inhabiting the world (Das, 2007, 2020).

This text is an attempt to establish a dialogue between at least two fields of debate – care and urban infrastructure. Together they set us the challenge of re-examining our own fieldwork in order to analyze those moments when water appears as a problem in relation to care and urban life. Although we pursued distinct research and reading trajectories, what we share is the desire to make appear the thousands of small actions at the hands of women that produce and interweave domestic life with the public life of cities through the ordinary management of water.

#### Yesterday and today

The public policies that led to the installation of formal water supply systems in Rio de Janeiro's favelas date back to the 1980s. Before then, the local residents themselves were responsible for constructing informal infrastructures and managing the objects that transported water to their homes, receiving varying levels of support from social movements or specific individuals within the State. For this reason, the narratives of residents of the favelas and other peripheries often include memories of the water fountains and the treks up and down the hillside made by black women and child carrying cans and basins to supply their houses with water. These female actions are recorded in popular songs, including the samba 'Lata d'água' (Water Can) by Jota Jr. and Luís Antônio, immortalized in the voice of Marlene for the 1952 carnival, a song omnipresent in the city's samba repertoire even today. The music tells of the paths taken by Maria who each day walks up and down the hill with the water can on her head and a child holding her hand, her work washing clothes for residents of the asfalto (formal city) earning the money for the upkeep of her house and for her dream of another life.

The work of managing water on a quotidian basis is a long-term issue in the city of Rio de Janeiro, running from the colonial period to the dictatorship and continuing into the present (Leeds & Leeds, 1978; Costa da Silva et al., 2018). The experiences that shaped the differential forms of living in the city span the centuries with generations of black women carrying in their bodies and memories the effects of their work ensuring access to water. Men were also involved in the work of making water reach the favela houses: they were responsible for the system of collective work rallies (*mutirões*) that built the informal infrastructures and ensured some access to water. When a mains water supply was formally installed in the 1980s, the local workforce and the collective experience of the mutirões were officially mobilized to construct the water supply infrastructure (Rodrigues, 2021, 2016; Viana, 2021).

The most recent data on the water supply in the city of Rio de Janeiro dates from 2010 and shows that more than 90% of the city, including the favelas, are formally provided with water (IBGE, 2012). However, stating that almost all of Rio's favelas receive mains water conceals the serious problems in the varying supply of water to these dwellings, as well as the unequal distribution of water in the towns and cities within the wider metropolitan region (Quintslr, 2018). To these issues we can add the problems relating to maintenance of the water supply system, whose wear and tear is an inherent aspect of the infrastructures in any part of the city. Yet it is the black and migrant regions that receive no - or little - maintenance (Rodrigues, 2021). As Anand, Gupta and Appel (2018) highlight, the paradox of the infrastructures is that they are simultaneously structured and always in a process of falling apart. Consequently, maintenance, small repairs, large reforms or even the replacement of entire infrastructures are intrinsic to urban planning, but their differential distribution recreates racialized and gendered experiences of the city (Anand, 2017a, 2017b; Ranganathan, 2016).

The quotidian effects of the unequal supply of water and the differential distribution of infrastructural maintenance and repairs means that the everyday management of water in the favelas continues to be in the hands of women – although we know that there is an important transformation in their situation compared to not having any mains water supply. We emphasize that this supply exists but there is also both an absence and an excess of water. Even though such events do not occur everyday, this oscillation is part of life and demands that people adopt anticipatory strategies to avoid being caught by surprise. Thus, the female work in the ordinary management of water shows us the slow dimension of the structural violence that constitutes the history of Rio de Janeiro city, a dimension actualized in the day-to-day life of racialized women in both domestic and public terms.

#### Water cisterns, pipes and hoses

Morro da Mineira is part of a complex of favelas situated in Rio de Janeiro's North Zone, its territory falling within the districts of Catumbi, Estácio and Centro. When entering this and so many other favelas in the city, the thousands of blue water cisterns on the flat roofs form a familiar urban landscape. This scene gives the impression that the supply of water is a resolved issue, naturalizing the idea that the houses are connected to the mains water supply and that they are provided with water on a stable basis. However, the outside view fails to match day-to-day life. The water cistern is a central item in the construction and functioning of the houses and forms part of the financial investment made by the families inhabiting these localities.

Adilson, one of the residents of the Mineira favela, showed the extra water cistern that he bought to be used as a reservoir to cope with periods of water scarcity. According to Adilson, it is impossible to guarantee the weekly volume of water without a reserve water cistern, which poses us questions about the management of this far from discrete object and the organization of the internal and external spaces composing the houses. The question becomes even more complicated when different family groups live in the same household, very often connected by kinship ties. Accusations of who spent a long time in the shower, the arranging of time to wash one's hair, the work needed to avoid wasting water when washing clothes, the decision on whether to fill paddling pools for the children to play in, among many other experiences, make water a necessarily relational object active in the production of family and neighborhood and also connected to the public management of water. We should not forget that these cisterns can be filled by water trucks, generating a busy trade in this vital commodity, control of which has become increasingly appropriated by paramilitary groups (Manso, 2020).

In Mineira, some parts of the favela receive more water than others, some have low/weak or high/strong water pressure, and some receive no water at all, meaning it is up to the residents to find solutions to the supply problem, which include demanding that public bodies provide a water supply. These residents arrange access to water by allocating their own resources and labour to infrastructural projects involving cement, tubing and water pumps. But there is also some degree of solidarity among neighbors since these projects are frequently designed to 'take the street water' to various houses. Individual works are also undertaken, such as that of Paula, a resident of the initial part of the favela, considered "the morro's best area." On the way back home, Paula shows in detail the connections made by her using PVC tubes for the 'street water' to reach her house. These connections, made with tubing that involve Paula's labour and use of the 'house money' (Motta, 2014) to buy the materials, shows us the energy mobilized by people along with the fragility of these objects, which demand constant repairs. The tubes can come loose, spring leaks or be stolen. The constant observation of the material condition of these tubes is essential to make sure that there is no accumulation of unwashed dishes or clothing. Taking care to make sure the home is supplied with water is a daily job that constructs the city, domesticity and the neighborhood.

In the houses that 'look after' children in the Mineira favela (Fernandes, 2017, 2020), the supply of water is a source of concern for the women responsible for these spaces due to the intermittence of the water supply. Joana explains that she worries about possible official inspections of the space given the physical aspect and structure of her house. Elements like plasterwork flaking due to damp and infiltrations, poor lighting, an intermittent supply of mains water, small rooms, the mixture of domestic appliances in the same space (a fridge or microwave in the living room, for example) might be questioned by government bodies. While earlier we emphasized that the public water supply infrastructure needs constant maintenance, these actions are also necessary in the

casas de tomar conta (child care houses). The biggest complaints of the owners of these houses revolve around the need for renovations to their residences. The conditions of poverty and economic vulnerability make infrastructural reforms of these spaces impossible, however, even when the families identify the problems that need addressing. Nonetheless, the poverty and material precariousness of these environments contrast strongly with the intense everyday work invested in the creation of generations of people.

It was during her period of research dedicated to the 'Casa da Vó' (Granny's House), that Fernandes began to understand how the space was also constituted vis-à-vis the supply of water in the favela. One hot summer day, we were in the living room while the children were running about in the small space in front of the door to the house, a veranda where the laundry sink used to wash clothes is also located. Attached to the sink's outlet pipe is a hose that runs to the neighbor's house, located directly below and to the side of Granny's House, since the house plots are not situated side-by-side on level terrain. The house is used to share water between the two women since the supply of water is difficult in the summer months, making this measure a necessity. Although Granny's neighbour has a water cistern, this is not large enough to ensure a supply of water during the weeks when the supply is meagre. However, the veranda, the place where the sink, tap and hose are located, is also a space used by the children to run around in. Consequently, the children frequently trip over the hose attached to the tap, causing it to come loose and fall on the ground. The water splashes everywhere and soaks the shoes, sandals and clothes hung up to dry. Very often the children ignore the fallen hose, playing and stomping in the puddles of water that form, irresistible for cooling down. The constant bumping and detaching of the hose means that Granny (and whoever else is present) is called on to reconnect it. This procedure, considered a task for everyone, is extremely exhausting: it may be repeated literally twenty times over the same day.

As time passed, the children and Granny explained that the relationship between the two women who share the water "isn't that good." The two "aren't even that friendly." The neighbor seems to be 'jealous' of Granny's House and the work she does. Because her home is always full of children, many people in the favela comment and imagine that Granny "earns a lot of money from children." The 'jealousy' between the two women exposes the processes of rivalry deriving from the dispute over a vital resource, as well as highlighting the coalitions and solidarities between the two neighbors. The feeling of 'jealousy' is a result of the public projection of Granny as someone abastecida, 'well-supplied,' whether with children or with water. As a scarce commodity in the favela, water constitutes an element of distinction with only a few people able to use it in their residences. The bustling movement of Granny's House and its stability in 'looking after' children provoke gossip, usually from the mouths of other women. However, although Granny and her neighbor have their differences, the water sharing occurs despite the exhaustion caused by the children running about and disconnecting the hose, making it necessary to refit it constantly. Reattaching the hose on hot days does not fail to generate a degree of anxiety and nervoso (irritation). But even so, the concern with others remains, the water is shared and the partnership is sustained.

Hence, these houses are pervaded by significant 'lacks' – for example, the 'lack of water' in the favela, a responsibility of the State that is not met. The 'lack of water' is a special agent in the relationship between women who share this resource for their homes. Sharing water is an element that speaks of other adversities experienced by women and of the art of sharing resources in situations of scarcity. Domesticity and the relations between neighbors are produced by a series of exchanges and forms of assistance, but also by suspicions and accusations in which water is a central object. We can see, therefore, that the connections do not just pertain to the yards, hoses and pipes, but also to the neighborhood and relations of habitation that are produced together.

## A simple shower

Bathing is an apparently simple everyday 'act of care' (Kleinman, 2015) yet the fact that it is not guaranteed reveals the intimate side of the social inequality that we live on a quotidian basis. Leonor, one of Camila Pierobon's interlocutors, often expressed her desire to have a shower fitted at home so she could bathe in hot water. When the shower was installed, it was the lack of water that prevented her from doing so. At other times there was water, but the pressure was too low. At these moments, turning on the shower, bought at much cost, was impossible as the shower's element could burn out due to the low volume of water. Leonor tends to forget about taking hot showers during the summer, but maintains the strategy that she had developed on cold days to give a hot bath to her sick elderly mother. In winter, the alternative she encountered was to heat buckets of water, which she arranged to keep full at home, using electric heaters. Gas was expensive and so was never an option. Electricity was chosen as Leonor did not pay to use this resource (Pierobon, 2021). But heating liters of water with an electric heater required Leonor to carefully manage her time, anticipating at least two domestic activities: the first was to fill the various buckets she kept at home when the water cisterns of the building where she lived were full. The second, at the actual bath time, involved setting aside around an hour for each of the buckets to reach the ideal temperature for bathing. Heating water for two people meant assigning two hours of her day to this task.

Here we can turn to the story of Francine, a resident of Morro da Mineira. As she narrated to Camila Fernandes, Francine dated an 'old man' who helped her with 'things.' Like other women, to get by in her day-to-day life, she counted on the 'help' of various 'old men' living in the favela. Though married, Francine had sexual relations with this man and justified the fact by referring to the violent relationship in which she lived with her partner who, as well as the constant fights, "gives [her] nothing." After spending some time with Francine, she explained that, "in fact," she frequented the home of one of these old men "more to take a bath." Francine's home does not have a water cistern. Consequently, she is vulnerable to the oscillation between too little and too much water in the favela. Francine explains:

FR: This [man] who I go out with, he gave me 100 reais on Thursday. Sometimes, I go there and I don't do anything. I just stay there [in his house]. On that day I didn't do anything. So, when I go there, he talks a lot. It's a kind of amizade colorida ['colorful friendship,' friends-with-benefits].

CF: Does he respect you?

FR: Yes... I go there more to have a shower.

CF: Seriously?

FR: Yes, because at home there isn't much running water, you know? So I go there more to have a shower.

CF: So you go all the time, right?

FR: Yes, of course, you have to shower!

When Francine told Camila about the 'help' she received, Camila felt sad and angry about the fact that her interlocutor needed to trade sex for an absolutely vital resource like water and also to visit the supermarket to buy food and other goods. The idea that she needed to swap sex for a shower saddened Camila, not because of the sexual activity in itself but because it was performed in exchange for a shower in a context of precariousness.

Here, as Adriana Piscitelli (2008) and Guilherme Passamani (2017) have shown, the category 'help' speaks of care relations, nuanced by respect, affection and consideration. The authors point out that the term prostitution can erase situations that do not necessarily involve remunerated sex work. In this sense, Francine's relation with the "old man who helps" tells us about negotiations that articulate self-care and economic survival in a context of numerous inequalities. We highlight the fact that would typically highlighted here is the sex in exchange for 'help,' in contrast to the scant attention given to the lack of water in her home, a situation that, as she puts it, is one of the central reasons why she maintains relations of 'help' with the 'old man.' Sharing water to wash clothes or even to bathe is presented as one of the essential factors for thinking about the production of reputations, as well as the social and economic differences between the residents and the impacts on their quality of life.

## Abuse and water

While undertaking our respective fieldwork, we perceived that water is an agent that communicates forms of violence. In this section of the article, we discuss the moment when the lack of water appears amid an attempted intrafamilial rape. Rafaela is a nine-year-old girl, the daughter of Paula, an interlocutor of Camila Fernandes since 2014. The girl often takes and fetches her younger brother to and from other parts of the favela, including the creche or the homes of relatives. That Saturday morning, Paula's washing machine had broken and, compounding the problem, the water supply to her house was intermittent. She therefore decided that she would have to go to her mother Cris's house (Rafaela's grandmother) to wash her family's clothes.

On that day, Rafa left home begrudgingly, after various complaints from her mother, who had given her an order: take Hugo, her 4-year-old brother, to his father's house. Arriving at Elias's house, Rafa shouts the name of her brother's father at the door, which he opens and the two children enter. After chatting for a while, Elias calls Rafa to the bedroom, saying that he wanted to show her something. Hugo stays in the living room watching TV. In the bedroom, Elias tells Rafa that she is a very beautiful girl and, complementing her some more, asks her to let him fondle her. Rafa moves away, her body curls up. Elias continues, going over to the wooden cupboard and opening some kind of jewelry box from which he takes a 5-real banknote and offers it to Rafa. In so doing, he indicates that if she lets him touch her, she will get the money to spend on whatever she wants. Rafa is terrified. Elias is her brother's father and he is about to molest her.

Rafa immediately stands up, rushes to the bedroom door and then runs to the front door and outside, not stopping until she reaches her own home. Scared, she arrives out of breath, where her mother, seeing her abnormal state, asks her what has happened. Rafa blurts it out there and then.

Paula becomes disoriented, her legs tremble and her body freezes. She asks again whether what she said had actually happened, "really? Paula does not want to believe that it may be true. Coincidence or not, Cris, Rafa's grandmother and Paula's mother, arrives at her daughter's home to return the washed clothes. The grandmother hears the news and learns about the incident. Cris says that she will "sort it out with the drug gang" (*resolver na boca*). Her daughter protests, she is confused and questions her mother on whether that is best way to deal with the situation. Cris listens to her daughter for a second and then leaves the house, closing the door, leaving the mother and child at home stunned.

Rafa's grandmother arrives at her destination and demands that the abuse is resolved: "my grandson's father wanted to abuse my granddaughter!" The *meninos da boca* (drug gang members) say that they will resolve the situation. Within half-an-hour, Elias is expelled from his house, warned that he will be killed should he come back, though not without first being struck in the face, on the head and on the body with rifle butts. The residence is covered in blood. Elias leaves never to return.

Days later, Rafa, according to her mother, felt "guilty" because, from her perspective, it was after denouncing the abuse that a paternal figure was eliminated from the family's circuit of care. However, some days later, the abuse perpetrated by her brother's father was narrated in relation to the lack of water and the broken washing machine: "if I had water at home, that would never have happened," "I asked her to take him while I went to wash the clothes," Paula said, making a strong association between material precariousness, the lack of water and the attribution of female responsibilities and duties for care.

This episode enables us to reflect on the way in which a lack of water and all its objects correlated with care (machines, infrastructures) appear through scarcity and are entangled in everyday situations that articulate violence, precariousness and gender. Cris narrates the rape situation via the issue of a lack of water, something that relates to a series of vulnerabilities erased in the face of other more visible forms of violence, such as abuse by a male family figure.

## Care and contamination

Leonor and her mother, Dona Carmem, are the only white people presented in this text. Both women live in the Nelson Mandela Occupation, a 13-story building located in Central do Brasil, a historic district of Rio de Janeiro city, markedly black and a point of entry for national and international migrants. The region's history of water supply differs from the favelas. A nodal point of the city and the country for centuries, the formal water distribution infrastructures in this locality have a long and complex history, impossible to reconstruct in this text (Quintslr, 2018). Our idea in introducing another form of habitation is to show that the water problem faced by poor populations is reproduced even in localities where mains water is supposedly guaranteed. Put succinctly, living in a central area with a centuries-old water distribution infrastructure does not prevent the water from being supplied in a precarious form.

When Camila Pierobon began to frequent Leonor's house, she was puzzled by the large number of cans, buckets and water bottles under the sink - sometimes empty, sometimes full. It was difficult to perceive that these cans and bottles ensured the supply to Leonor's house when the public water supply was interrupted or when the building's pump that transported water from the squat's main cistern to her own broke down. Time was needed to comprehend how the intermittent water supply was essential to forming the textures of her everyday life. Not because Leonor did not talk frequently about her water problems. But, as a middle-class researcher who lives in areas of the same city with regular access to water, hearing and understanding that this was a central problem in Leonor's life required much repetition. One of the times when water drew Camila's attention was when Leonor's building went days without being supplied. Leonor took care of her elderly mother who, due to chronic health problems, needed to use diapers constantly. Without the money to buy disposable geriatric diapers, Leonor dressed her mother in cloth diapers. That meant between three and five adult diapers to wash daily. That week, the lack of water lasted to the point that all the containers used to store water for moments of scarcity were emptied. As Leonor narrated, the diapers mounted up and the smell of urine and feces spread through the small apartment. The dirty dishes

also accumulated along with the piles of dirty sheets, while taking a shower was impossible.

The situation described above occurred in 2015, a year in which Leonor's home was supplied continually with water unfit for consumption. The street in which Leonor lived was undergoing large-scale renovation of its water and sewage pipes, work related to the urban reform project called 'Porto Maravilha' (Marvellous Port), locally renamed 'Porto Armadilha' (Pitfall Port). As a result of this intervention, interruptions to the water supply became commonplace, along with the mixing of potable water with sewage and rainwater, which subsequently reached the taps of the region's buildings and houses. As Leonor narrated at the time, it was 'impossible' to use water from the building. Her mother had recently completed radiotherapy sessions for mouth cancer. Due to Dona Carmem's fragile health, Leonor imagined that using the 'filthy water' would 'contaminate' and 'sicken' her mother and herself. We can note that Leonor was worried about becoming sick since she was the only person responsible for the daily care of her mother who also displayed symptoms of advanced Alzheimer's disease.

To supply her home, Leonor developed various methods. First, she reorganized her domestic budget, based on one minimum wage, and began to buy mineral water in the region's depots to drink and use for cooking and to bathe Dona Carmem. The quantity of mineral water purchased by Leonor varied according to the temperature in the city and the possibility of receiving day-to-day visits or a get-together like birthday parties. The expenditure on water varied and Leonor began to manage the purchase of containers of water in relation to hot days and these potential visits. The hotter the day, the more water she and her mother drank and the fewer visits they might receive. As people knew that Leonor offered mineral water to visitors, some neighbors began to visit her more often. At one point during the year, Leonor decided to stop receiving these neighbors since "visitors drink water" and she did not have enough money to offer drinking water to everyone, as well as believing that the neighbors were "taking advantage." So she could visit Leonor without increasing her domestic expenses, Camila began to take her own water during this period, a tacit agreement between the two women whose relationship, at that time, was already three years old. Even so, taking her own water required sensitivity since under no circumstances could Camila appear to feel uncomfortable about the water offered by Leonor, nor imply that Leonor did not have the resources to offer potable water to Camila.

Supplying the home exclusively with mineral water was not sustainable for lengthy periods. Leonor therefore obtained water for her home from other sources. One of these was the water from Casarão, a building located in the block opposite the squat, which was supplied by a different water network. As a surveyor who worked on the reform of the pipe network explained, the water supplying the squat came from piping connected to the Gamboa district, while the water supplying Casarão arrived from Presidente Vargas Avenue. The difference in the sources of water meant that the supply differed within the same neighborhood. The pipes providing water to Casarão were not being reformed and so the building received a more stable supply. Furthermore, the drug gang's workers had made a clandestine connection between Casarão's tap and another distribution point. Casarão was one of the largest illegal drugs sales points in Central do Brasil and also a place where local traffickers or military police would take people to be tortured or the bodies of those already dead. Leonor's own daughter had been tortured by the police at this site years earlier. Fetching water from Casarão thus entailed a huge emotional effort for Leonor, compounded by the physical effort of carrying five to ten liters containers of water, returning to climb four flights of stairs to her own apartment. As one of the few sources of free water in the district, queues of women formed in front of Casarão, laden with buckets and containers to take water from the unmetered tap. In Casarão, Leonor also had to deal with the 'jokes' of the drug gang workers, "don't you have any water at home?" which she found humiliating. For all these motives, although Casarão was the source of water closest to her home, this was only an option Leonor used when she was really exhausted.

A third source of water was her friend's hairdressing salon. However, the commercial establishment was located three blocks from Leonor's apartment. This meant carrying heavy containers of water further, which caused her various types of physical aches and ailments (see Pierobon, 2022). To supply her home with water for one day, Leonor needed to make three trips and so she would divide the sources between her friend's salon and Casarão. When Leonor was feeling well and in a good mood, she would collect "a good reserve of water at home" in the anticipation of bad days. And these arrived. When the days were very hot or when she was exhausted and her water reserves had finished, she bought more mineral water at the region's depots and paid two reais for the lads to climb the stairs and deliver the containers to her apartment.

The diverse sources of clean water and water mixed with sewage meant that Leonor managed the water at home in different ways. She used the mineral water to make coffee, drink, and wash the vegetables. She cooked food and brushed her teeth with the water from Casarão and her friend's salon. To bathe, wash the dishes and wash clothes, she used water from the cistern, as she "had no choice." As the months passed, it became financially unviable to bathe Dona Carmem with mineral water. Leonor thus developed techniques to wash her mother that prevented her from swallowing contaminated water. In Leonor's words:

For heaven's sake, Camila, if I were better off, I would buy mineral water even to use for baths. I don't even bathe with this water. I don't wash my mouth out with this water. I use it to wash dishes because I have no choice, you understand. I think it's disgusting. I take a bath with a feeling of disgust, because I don't have any option. Sometimes I'm giving my mother a bath and I tell her 'close your mouth,' because I have no choice. If I had a choice, my daughter, I doubt I would use this disgusting water.

This latter ethnographic description of Leonor's work carrying containers of water through the streets of Central do Brasil, climbing up and down the squat's flights of stairs, allows us to return to the image of Maria, the character from the samba song "Lata d'água" (Water Can), who, as she washed the clothes of the city's wealthy residents, dreamed of a better life. With the phrase "if I had a choice," Leonor makes clear her desire for another kind of life. Her trajectory presents the processes of racialization that tells us about the difficulties that mostly black women confront in accessing water. The work of women carrying water through the city occurs in parallel with the unequal distribution of infrastructures in the city, whose bodily, emotional and social effects are more acutely felt by the residents of low-income districts (Quintslr, 2018).

The devastating impacts of social inequality are present in these apparently small daily actions such as bathing. The difficulties of caring for oneself and for others show us the harsh living conditions of the city's racialized populations, who, ultimately, are judged for failing to meet the ideals of bodily and spatial cleanliness. The democratization of access to water needs to be included in our discussions of urban living, especially at this moment when Brazil is undergoing water privatization processes at the same time as environmentalists predict future water shortages. We are faced with a scenario of slow violence. Nor can we ignore the fact that those areas of Rio de Janeiro city with mostly black populations are marked by military operations that directly set out to cause deaths. Enabling women to ensure a supply of water to their homes also means managing a certain risk of moving about in regions occupied by military operations, shootouts and massacres.

## Women as infrastructure:

# "what do women say when they talk about water?"

In his article on studies of urban infrastructure, "People as infrastructure: intersecting fragments in Johannesburg," AbdouMaliq Simone (2004) engages in an important discussion with social theories that read the cities of the Global South, focusing on Johannesburg, as an incessant production of ruins and wreckage. In contrast to these perspectives, his argument turns from 'absences' to an exploration of the complex relations that produce a rich social infrastructure in the South African city. Simone shows us the ceaseless economic collaboration between residents of areas of the city classified as marginalized but which are fundamental to the production of urban life in its central areas. The author expands the idea of infrastructural connections beyond material artifacts like highways, pipe systems, wiring and cables, situating people as the principle connectors in this continuous process of 'city making.'

The context analyzed by Simone refers to male interlocutors who move the city. In our case, the analyzed infrastructures are operated by women, mediators in the *frontline* of the ordinary management of water. These challenges connect the responsibility for providing water to the provision of care for homes and people. The shortage of water in Rio de Janeiro's communities is a problem with a long history. This problem exposes processes that reproduce poverty through the social markers of class, race and gender. Infrastructural precariousness is managed by residents through everyday gestures of care. Paradoxically, through the shared administration of infrastructural problems, there is a production of the common that involves persons, resources and spaces. However, this production of the common is not only made through actions of solidarity but also through conflicts, violence and scarcity.

Based on the stories mobilized here, we return to our original question: "what do women say when they talk about water?" They show situations of profound exhaustion and vulnerability through the duty of providing access to water. The stories talk about 'help' and negotiations involving affect, sex and care, made out of the necessity to take a shower, a very basic moment of self-care. We have also seen that diseases can be alleviated or rendered more acute by the supply or the lack of potable water or the availability only of a contaminated supply, as made evident in Leonor's concerns about her mother ingesting dirty water, despite being a cancer patient in recovery. In this dialectic of presences and absences, the action of the state authorities and the local armed power also appear through the intermittent flow of water. These are processes that reflect deep structural forms of violence while showing the intense work involved in sustaining the continuity of human life.

Bell Hooks (2019) underlines the importance of the place of the home for the social reproduction of black families. In this sense, the state's production of instability in the life of residents of peripheries amounts to a project of power, since it is in the vitality of the home that ensuring survival is made possible. The unequal supply of water also speaks of the differential distribution of other infrastructures, all of them focused on the care of persons – namely electricity, basic sanitation, housing, education, transport, social welfare and healthcare. Consequently, we argue for the discussion of care on the contemporary political agenda from a feminist and anti-racist viewpoint that includes the flows of water and all other basic services supporting the everyday life of women and families living in the peripheries. The social sciences must work to ensure that essential moments like taking a shower or drinking potable water do not remain naturalized privileges of the middle and wealthy classes in our society. The murky, chaotic and richly complex routes taken by water show that this is both a possible and an unavoidable path.

# Notes

- 1 This work was produced in dialogue with members of the Urban Infrastructure Study Group, linked to the Casa (IESP/UERJ), Urbano – Laboratory of City Studies (UFRJ) and ResiduaLab – Laboratory of Social Studies of Waste (UERJ) research groups. For reading the text and their comments, we thank Ana Clara Chequetti, Daniela Petti, Diego Francisco, Júlia Kovac, Julia O'Donnell, Marcella Araujo, Marcos Campos, Maria Raquel Passos Lima, Mariana Cavalcanti, Michel Misse Jr., Mayra Luiza, Perry Maddox, Rodrigo Agueda and Thomas Cortado, who added considerably to the text. We especially thank Júlia Kovac for organizing the comments received, essential to writing the article's conclusion. The names of the people present in the text are fictitious in order to guarantee their anonymity.
- 2 The fieldwork was part of the doctoral thesis completed at PPGAS/MN/UFRJ under the supervision of Professor Adriana de Resende B. Vianna. The ethnography was conducted over a two-year period between 2014 and 2016.
- 3 Since 2010, Camila Pierobon has dedicated her work to studying the quotidian life of residents of the Nelson Mandela Occupation, located in the centre of Rio de Janeiro city. The reflections develop ideas from her doctoral thesis presented at PPCIS/UERJ under the supervision of Patrícia Birman. I thank FAPESP for the support: 2018/15928-2; 19/25691-2 and NSF Award #2127357.
- 4 In her thesis, Suyá Quintslr (2018) analyses the water supply macrosystem in Rio de Janeiro city (Guandu-Lages-Acari) and its differential distribution in social, racial and spatial terms. The author shows how the sewage produced by the towns and cities along the shore of the Guandu River is dumped *in natura*, leading the companies responsible for treating the water to employ a series of chemical products to make the river water adequate for human consumption. During the rainy season, the volume of water and sewage change and the treatment leads to the production of geosmin algae, which produces an unpleasant musty taste. Quintslr's work shows that the water within the formal supply structure can become contaminated and that this water is distributed unevenly through the city.
- 5 An important debate on climate change and its relation to the issue of environmental racism has been developed nationally and internationally. For reasons of space and the focus of the text, we cannot expand on this topic here.
- 6 Although the notion of 'quasi-events' is explored by Veena Das (2015), it was the work of Marcos Campos (2021) that showed us the potential of thinking about the relationship with water as something ordinary that does not rupture the everyday but nonetheless constitutes an atmosphere of uncertainty.

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*ABSTRACT* – This article discusses the importance of water in the daily lives of women living in favelas and squatter settlements in the city of Rio de Janeiro, articulating the debates on urban infrastructure and careful thinking about the gendered and racialized ways of making cities. Through small domestic events, dialogues between the authors and their interlocutors, and more extensive ethnographic descriptions, the article shows how water bears the power of the ordinary and is one of the objects that allow us to see the potency and vulnerability of daily life in terms of gender, class, and race. It describes women's work in the processes of city-making by relating the precarious access to water with the subordination of care as coexisting aspects that make visible the conditions of profound inequality of the residents of peripheries.

KEYWORDS: Water, Infrastructure, Care, Gender, Race, City.

*RESUMO* – Este artigo discute a importância da água na vida cotidiana de mulheres que vivem em favelas e ocupações da cidade do Rio de Janeiro, pensando a água como bem vital, imprescindível para as relações de cuidados. O texto articula o debate sobre infraestrutura urbana com o de cuidado para pensarmos sobre os modos generificados e racializados de fazer cidade. Por meio de pequenos eventos domésticos, de diálogos que as autoras tiveram com suas interlocutoras ou de descrições etnográficas mais longas, o trabalho mostra como a água carrega a força do ordinário e é um dos objetos que permite ver a potência e a vulnerabilidade que a vida diária carrega em termos de gênero, classe e raça. Descreve-se o trabalho das mulheres nos processos de fazer cidade ao relacionar a precariedade de acesso à água com a subalternidade do trabalho do cuidado como aspectos coexistentes que visibilizam as condições de profunda desigualdade dos moradores de periferias.

PALAVRAS-CHAVE: Água, Infraestrutura, Cuidado, Gênero, Raça, Cidade.

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