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Forte, Giuseppina

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Climate Turn

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‘Uninhabitable’ Spaces of Flooding in an Urban South

Giuseppina Forte

Interrogating the uneven impact of climate collapse on the “urban” and “more-than urban” has become urgent in discourses on environmental justice.¹ ² Climate change has increasingly affected urban areas at risk of flooding and landslides, where the marginalized live (Pelling, 1999; Roberts, 2001; Baker, 2012; [Revi et al., 2014](#)). This is the case for the peripheries of São Paulo, where people continue to settle along rivers and on top of hills despite the recently intensified flash floods and landslides caused by climate change.³ Now, they face evictions.

This pattern has risen over the last two decades due to a dearth of low-income housing policies, low-cost land for housing, and a rampant rental market.⁴ What Brazilian authorities might consider unfit for human habitation were in 2018 home to 674,000 inhabitants, 6% of São Paulo’s total population ([IPT, 2010](#)): like Silvana, Adriana, and Juliana, who migrated from rural Brazil, faced eviction for late rent, and settled with their children in a squatter camp along the Tremembé river, in the northern periphery of the Southern metropolis.⁵

Giuseppina Forte is a critical urbanist and urban historian. As a scholar and design practitioner, she has worked closely with historically underrepresented populations in São Paulo, Mexico City, Ouagadougou, Paris, and San Francisco. During her doctoral studies at the University of California Berkeley, she researched and lived in Brazilian favelas in the northern periphery of São Paulo. Giuseppina sits on the executive board of the Italian Association for Women in Development (AIDOS), an NGO supporting gender’s rights worldwide.

pinaforte@berkeley.edu

1 I consider the urban and more-than-urban (Tzaninis et al., 2021) as simultaneously human and non-human (Swynge-douw and Heynen, 2003; Gandy, 2006; Heynen et al., 2006; Hodson and Marvin, 2009).

2 Although already present in the environmental justice movement, these concerns have increased after Hurricane Katrina in 2005, solidifying climate justice as a critical aspect of environmental justice (Schlosberg and Collins, 2014).

3 Among the modifications in weather systems leading to changes in extremes (Giorgi et al., 2014; Diffenbaugh et al., 2017), the South Atlantic Convergence Zone—an elongated axis of clouds, precipitations, and winds extending toward southeast Brazil and protruding into the southeastern subtropical Atlantic Ocean—has intensified over the last sixty years and impacted Latin American megacities (cf. Carvalho, L.M., et al., 2004. The South Atlantic convergence zone: Intensity, form, persistence, and relationships with intraseasonal to interannual activity and extreme rainfall. *Journal of Climate*, 17(1), pp.88-108; Marengo, J.A., et al., 2020. Trends in extreme rainfall and hydrogeometeorological disasters in the Metropolitan Area of São Paulo: a review. *Annals of the New York Academy of Sciences*, 1472(1), pp.5-20). In 2020, the combined effect of this monsoon trough and the Kurumí subtropical cyclone hit Brazil’s Southeast region, led to heavy floods and landslides, causing the death of more than 50 people and the displacement of thousands ([Andreoni and Casado 2020](#)). These weather dynamics have increased the frequency of flash floods in São Paulo, exacerbated by the rise in urban temperature due to the Urban Heat Island effect (cf. Vemado, F. and Pereira Filho, A.J., 2016. Severe weather caused by heat island and sea breeze effects in the metropolitan area of São Paulo, Brazil. *Advances in Meteorology*, 2016; Zilli, M.T., et al., 2017. A comprehensive analysis of trends in extreme precipitation over southeastern coast of Brazil. *International Journal of Climatology*, 37(5), pp.2269-2279). Between 2000 and 2018, the number of days with heavy rainfall exceeding 100 mm in the Brazilian megapolopolis was four times higher than in the 1940s or 1960s (records from the University of São Paulo’s Institute of Astronomy, Geophysics and Atmospheric Sciences and the Mirante de Santana in the northern region of São Paulo). In March 2019, the monthly rainfall accumulation was about 240 mm and totaled about 40% of the expected monthly precipitation on the night of March 10 (Marengo et al., 2020).

4 According to [Brazil UN-Habitat](#) (2010), 8.27 million Brazilians live in risk areas (9% of the total population), concentrating in the country’s poorest northeastern regions.

5 As of 2021, the number of people living in risk areas in São Paulo might have increased due to COVID-19, the subsequent

In 2019, I conducted ethnographic fieldwork in the camp, where most inhabitants are Black and Brown women in their thirties and forties with children.⁶ Due to the risk of flooding, the authorities may soon evict them without compensation.⁷ Approaching this area exclusively through the concerns of “urban ecological security” (Hodson and Marvin, 2009, p. 195) and climate change adaptation might distance us from the people and spaces on the ground. If geographers and political ecologists asked, “Ecological security for whom?” (Leitner et al., 2017), social anthropologists showed that adaptation actions in risk areas, like evictions, can destroy existing livelihoods and exacerbate the precariousness of those at risk (Van Voorst and Hellman, 2015).

This essay centers on those livelihoods that enabled the squatters along the Tremembé river to improve their lives despite the constant threats of floods and evictions. I focus on the networks and spaces of the domestic reconstruction of Silvana, Adriana, and Juliana, by engaging with the “uninhabitable”, as framed by urbanist and sociologist AbdouMaliq Simone (2016, 2018). Simone interrogated how imaginations and policies about what is considered habitable and uninhabitable have long shaped urban governance in African and Asian cities. Building on the case of risk areas in Bogotá (Zeiderman, 2016), he joined scholars of the global South who analyzed how specific regimes of government have produced hazardous spaces (Mustafa, 2005; Hardoy and Pandiella, 2009;

Gould et al., 2016; Coates and Nygren, 2020). I add that these include “uninhabitable” areas due to climate-related disasters, for which 18 million refugees were displaced in 2017 alone (IDMC, 2018).

I, like Simone, ask: “What if the uninhabitable enabled a kind of thinking that challenged or refused what it means to viably inhabit a place?” (Simone, 2018, p. 13). In the uninhab-

Understanding the distributional injustice of flooding under climate collapse means going beyond hydro-geological algorithms. It calls for a thorough investigation of intersectional ecologies involving human and more-than-human actors where new forms of environmental citizenship emerge.

itable spaces of flooding in São Paulo, economies and networks of subsistence can emerge. Mainly assembled by and around women, these economies include food selling, scavenging, and the reuse of furniture and appliances. Their spatial networks encompass domestic kitchens, open dumps, and improvised street stalls. They also involve the circuits of family allowances provided by different systems of power, like the state, the church, and drug trafficking. These everyday scenes are critical to understanding dwelling in flood-risk areas resulting from climate change. The uninhabitable becomes a political space where “various entanglements of provisioning and compliance” (Simone, 2016, p. 139) reinforce neoliberal governance and, at the same time, new forms of collective life unfold (Bhan, Caldeira, Gillespie, and Simone, 2020).

Spaces and Networks of Subsistence

Adriana was born in the hinterland of Bahia, one of the most impoverished areas of Northeastern Brazil and which has historically endured extreme droughts. She moved to São Paulo with her family when she was fourteen. Before settling in the Tremembé camp, she lived with her new family as a housewife in a rented apartment. In 2016, her husband lost his job, and they could no longer afford rent. They bought a shack along the Tremembé river for R\$330 (\$77), becoming “homeowners”, the

financial crisis, and rent evictions. During the pandemic, 4,622 families were evicted from their rented homes in São Paulo (Despejo Zero, 2021).

⁶ Both Black and Brown Brazilians are African descents.

⁷ People evicted from risk areas are entitled to an *auxílio aluguel* (monthly subsidy) of R\$400 (\$94) for 24 months (R\$600 for 18 months as of October 25, 2021). In this case, the Subprefecture might evict the squatters without compensation: they are thought to have already received the subsidy from a previous landslide in the area. From the interviews I conducted in the camp, I believe this assumption might not be based on actual censuses.

dream of low-income people fostered since the populist regime of Getúlio Vargas (1930-1954). Indeed, a dream was all it was, as they bought the ready-made shack from a land-grabber who seized public land.

Adriana slept with her husband and two of her three kids (two and six years old) in a queen bed; the other child (eight years old) slept on a small mattress nearby. The family paid for water but not for electricity. All squatters in the camp got power from the utility poles in the nearby favela Alfredo Avila through *gatos*, illegal connections to the distribution network.

I asked Adriana what her memories of the camp were. She started with the lack of privacy and noise pollution and ended with police raids and drug dealers' activities. "In the beginning, I loved living there. It was quiet, and people didn't bother me. There were no policemen. Then everyone came, and only God knows what has happened since." In her depiction, there is no mention of the risk of flooding and evictions.

Adriana attended a baking course funded by *Bolsa Família*, a federal program targeting the poor, from which she also received R\$258 (\$60) a month. Beyond the government subsidy, her family lived off church donations, scraps from the Sunday market, and sometimes the *cesta básica* (literally, basic basket)—a bundle of staple foods such as rice and beans, noodles, sugar, and salt provided by the evangelical church nearby. Adriana had been trying to sell her homemade cakes, pastries, bread, and *pastel caseiro* (homemade savory pies) to the community, but people ended up taking the items on credit and never paying.

Two months after my first encounter with Adriana, she sent me a text message with pictures of her cakes and bread loaves. She said, "I am selling *pastel caseiro* for R\$2 (\$0.5) and cake at R\$35 (\$8.2) a kilo. I am working a lot, thank God! And I sell soft drinks, like Guaraná." She had also improvised a street stall. In a video message, her kids watched football on television while she put icing on a cake, wearing a hairnet. The elaborateness of the toppings contrasted with the bare, rotten panels of her kitchen's walls.

If Adriana's shack was deteriorating, the kitchen was relatively well furnished. She had a new refrigerator, a microwave, and a large stove, which her husband had taken from a building site where he had worked. Their TV was a gift, and all the furniture came second-hand from relatives and friends. She had organized everything in a way for her shack to function as a home and workspace. Between one flood and another, Adriana endured an oppressive everyday life and an uncertain future while becoming her family's financial provider. Despite inhabiting the uninhabitable, she was an entrepreneur, albeit through an informal, feminized livelihood.⁸

Spaces of Reconstruction

In front of Silvana's house, three washing machines taken from the dump were spinning in the communal "laundry". This shared alley between the shacks seemed a good and safe place to hang out with the community. Silvana had salvaged a Christmas tree from the trash and decorated it with discarded ornaments. It created a warm holiday atmosphere. "What rich people throw away, we take and use," she said. Then she looked at my photography assistant and said: "If you ever throw him away, we will be happy to pick him up too!" As Donna Goldstein would say, this joke might be part of an emotional aesthetic—one that expresses frustration amid daily conditions of humiliation, anger, and despair experienced by people "at the bottom of a number of complex and interacting hierarchies" and who are "almost wholly devoted to surviving" (2013, p. 15).

⁸ Ananya Roy's ethnography of squatting - described in *City requiem, Calcutta: Gender and the politics of poverty* (U of Minnesota Press, 2003) - revealed feminized livelihoods as a critical aspect of persistent poverty, for which women as primary earners work in the informal economy.

Despite her joke, it took a while for Silvana to become comfortable with me. After a month of visits to the camp, I discovered that she and the other women were afraid I would take their children away. She only told me this after I said that her younger child was handsome. Silvana had seen a TV documentary on human trafficking, showing how U.S. couples unable to have children were going to Brazil to get their “strong” and “healthy” kids. Children were an asset in the camp, and Silvana had nine from three different men. She had her first child at thirteen after being raped. Her mother raised him. One of her kids died of a drug overdose at twenty, while another was heading towards a similar predicament.

“Drugs are everywhere,” she said, “but drug dealers also give money to the kids. If you need R\$7, R\$10, (\$1.6, \$3.4) they help. But it’s the government that is responsible for our situation,” she added, “together with the corrupt and opportunist politicians who show up at election time. I stopped voting for them since they promise everything and deliver nothing”. Instead, Silvana said she trusted her psychologist at one of the Basic Health Units in Tremembé: “My psychologist told me that I am not a ‘favelada’ but part of a community!” Unlike them, the squatters maintained that the favelados were delinquents, an argument also propagated by social workers and psychologists.

Having acquired the status of community member, Silvana did not want to talk about the conditions of extreme poverty in which she was born. When I asked her about the past, she said she did not remember and drew my attention to the shower: “See how great the shower head is? We even have hot water!” The shower head was big, and the floor and walls of the large walk-in shower stall were finished with reused tiles. Silvana wanted me to focus on the present reconstructed domesticity within the comfort of her reused finishes and appliances, including the TV, the fans, and the fridge, not the destitution of her past. Her house was not made of wood but bricks and mortar. Despite her illegal deed, Silvana believed that, in the end, the government would let her keep her home or give her an apartment in a social housing block to be built in the same place.

Her sister Juliana, on the other hand, wanted to talk about the past. She pointed to a bag of oranges on the floor, and her eyes brimmed with tears. “See that bag of oranges? I used to eat peels of oranges from the trash cans or from unsold rotten oranges that my grandfather gave me from his market inventory.” Juliana recalled the poverty of her childhood in the interior of Minas Gerais: “I was hungry and picked anything from the garbage. My mother used to give me lemon with salt. It was excruciating for my empty stomach. She often asked me to look for food for Silvana. I would pick pieces of bread, cake, and fruit from the garbage and eat them. I would feel guilty because I was taking food from my baby sister. Hence, I would go and look for other food all day long and cry.” Juliana had her first child when she was fifteen; as with Silvana’s first, her mother raised him. She left home, wandering cities in search of help. Truck drivers frequently raped her. “Thank God those days are gone!” She dried her tears, took an orange, and peeled it. “Now, I can eat the pulp and throw the peel,” she said proudly and laughed.

Silvana and Juliana moved from what they considered a depleted form of urban life to one others consider uninhabitable because of hydrological risk. Yet, the likely-to-become amphibious space they inhabited did not worry them. What they feared was losing their children, being considered faveladas, or falling back into extreme poverty.

Conclusion

February 12, 2020. It is the rainy season in São Paulo. I send a text message to Adriana to ask whether the riverbanks are holding. Calm and chatty, she shares some photos of the river at the edge of the pathway. The water may soon flood her shack. She also sends me a video of her husband joking with their children about the torrent coming down from the nearby hill. In the meantime, I receive a message from the Civil Defense of the Tremembé/Jaçanã districts: the situation is of high risk, and

they are ready to deploy safety measures in the camp. The contrast between Adriana and her family's perception of flood risk and the officers' criteria is striking.

Squatters along the Tremembé river have accepted the floods as a part of life and, in the meantime, have organized their lives in unpredictable ways. Amidst risky conditions, Black and Brown women in the Tremembé camp have crafted a new sense of domesticity for themselves and their children. They have done so through “rhythms of endurance” (Simone, 2018, p.13) and the material reconstruction of their domestic environments, be they shacks, home appliances, or food. “No matter how improvised, lives need to be held, supported” (Ibid., p. 9), even if they occur under systems of oppression and are under strict survival conditions.

Since people living in risk areas engage in the “normalization of threat” (Bankoff, 2004, pp. 102, 109; Van Voorst 2014, p. 29), it is critical to analyze their everyday spaces and practices of survival, to realize that the impact of climate collapse recedes into the background. My fieldwork shows that the squatters threatened with flooding and evictions have escaped more impelling dangers, like economic breakdown and lack of shelter. They feared police violence and social stigma more than flooding. They ignored the consequences of climate change and focused on their rebuilt livelihoods. Evicting them to avoid flood-related accidents without preserving their livelihoods would destroy years of assiduous reconstruction. It would sustain a path of continuous displacement (by immigration, rent eviction, and climate change) and socially assigned disposability (Butler and Athanasiou, 2013; Nygren and Wayessa, 2018).

Understanding the distributional injustice of flooding under climate collapse means going beyond hydro-geological algorithms that objectivize individuals as lives at risk to be evicted. It calls for a thorough investigation of intersectional ecologies involving human and more-than-human actors where new forms of environmental citizenship emerge (Latta, 2013; Coates, 2019).⁹ It implies seeing the home in risk areas—a crisis-prone space due to climate change—not as the uninhabitable but as the familiar and intimate.

The disconnection between what governments and climate displaced people consider habitable is dramatic, especially when the displaced are forced to leave their homes for more precarious relocations and lives. As I argue in other writings, the disproportionate harm of climate collapse on specific populations living in risk areas derives from specific regimes of government and structures of coloniality, including racism, heteropatriarchy, and ecocidal forms of oppression.¹⁰

⁹ We address these themes in the working group and forthcoming e-journal *Intersectional Ecologies*, funded by the Center for Race and Gender at UC Berkeley.

¹⁰ I presented the paper “Racial and Gendered Ecologies of Risk in São Paulo” at the 2021 Latin American Studies Association Congress. I will share an updated version of the essay at the Annual Meeting of the American Association of Geographers in February 2022. This research, part of my dissertation and anticipated book, was funded by the Fulbright–Hays Doctoral Dissertation Research Abroad fellowship. To guarantee the anonymity of my interviewees, I substituted their real names with fictional ones. All transcriptions and translations from Portuguese are my own. For currency conversion, I adopted the Brazilian Real/USD average rate for November 2019 (1\$= R\$4.264).

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Guest Artist // Michele Tombolini



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Online at www.losquademo.net
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