Rooting Out Injustices from the Top

The Multispecies Alliance in Morro da Babilônia, Rio de Janeiro

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Morro da Babilônia (Babilonia Hill), a favela near the famous Copacabana Beach in Rio de Janeiro, Brazil, is the site of a successful decadelong project of urban reforestation. The project results from an alliance between community, local government, and a large retail center in the area. After thirty years of active efforts, the results are impressive not only regarding the blossoming of a young forest and the return of native biodiversity but also regarding the pride and the reshaping of identity that took place within the community.

The need for reducing the environmental vulnerability of the area emerged in the 1970s and 1980s when a series of bushfires threatened the residents' homes and economic activities. In 1989 the Cooperativa de Reflorestadores da Babilônia (CoopBabilônia)¹ was established, and since 1994 local officers have implemented and financially and technically supported a reforestation project. Besides bushfires, what really boosted this severe socioecological transformation was the need to prevent soil erosion and the growing of the favela in landslide-prone area.² Soil consumption and informal urbanization of any available space reached their peak in 1980–90—when the overall city growth rate was 7.6 percent while favela populations surged by 40.5 percent—and decreased from 1990 to 2000 when the city's growth rate leveled off at less than 7 percent. Yet favela populations continued to grow by 24 percent.³

A historical interpretation through the lens of climate justice of the favela's transformative process is timely, if we consider that the floods between 1995 and 2004 affected 560,000 people in South America, and between 2005 and 2014 this number increased approximately four times,

rising to 2.2 million.⁴ More specifically, Brazil has become the only Latin American representative among the ten most affected countries in the world by weather- and climate-related disasters, with an absolute number of fifty-one million affected people between 1995 and 2015; Brazil has the second-highest loss potential by flooding in the world ranking of emerging countries.⁵

This has a very concrete meaning for the residents of Morro da Babilônia. While powerful storms and floods are part of the history of Rio de Janeiro, as in most coastal tropical cities, there is a direct connection between the increase of oceanic temperatures and the frequency of coastal rainstorms.⁶ Rio de Janeiro is at least 1.5°C warmer than a hundred years ago, according to climatologist Carlos Nobre, and frequent extreme rainstorms are a new reality, confirmed yearly by record-breaking storms.⁷ More than rainfall values, new extreme rainstorms bring about a fear of loss of lives and livelihoods for the Morro da Babilônia community.

This article explores past and present socionatures of Morro da Babilônia and establishes a connection between community and land-scape transformations. In the first section, our interviews with workers, residents, and public officers who played an important role in the reforestation project, from both the community and the government, propose that the transformation did not bring back a previous landscape. On the contrary, it has rather produced a new patch of Atlantic rainforest in which so-called invasive species (Northern marmosets and Asian jackfruit trees) are part of a single biome together with people, makeshift houses, vultures, *pitangas* (Brazilian cherries), and boa constrictors. At the same time, the oral history project reveals the implications of presenting the current favela as a development of a former *quilombo*, a term that carries memories of slavery, suggests the presence of an original forest, and offers a window of opportunity to legalize the presence of the community in that area.

The second section focuses on how the parallel transformation of community and environment denaturalizes climate and climate change adaptation and mitigation policies. Adaptation to climate change merges with adaptation to political discourse that values climate change—related policies. While the concerns about soil erosion and loss of livelihood are recent and tangible, they evoke older fears of loss and eviction from the area. More importantly, the way in which community leaders chose to confront these new dangers conforms to previous patterns of resistance to older threats. Reforestation, together with its cultural meaning for the community and its relevance for mitigation policies, is the landscape transformation that fixes topsoil to rocks, avoiding landslides, and anchors the community of stable but informal residents to the place.

Finally, in the conclusion of the article, we discuss the relations of

the favela leaders and the research team. Informers, as much as the team, demonstrate a key interest in the research. Far from being passive subjects, they sought to negotiate the design of the research project in order to use it as a tool to support their rights to the city, and their right to that particular place in the city. Creating a forest and developing a narrative are both survival strategies for the community. Just like the narrative of the origins of the favela allows its residents to claim a deep-rooted legitimacy for their residency in that place, the narrative of reforestation supports their claims of it being a *favela ecológica* (an ecological slum), as historian Camila Moraes named the Morro da Babilônia.⁸

Following other recent studies, we problematize the construction of sociopolitical and symbolic marginalization of the dwellers of the favelas in Rio de Janeiro⁹ and, more specifically, we argue for the possibilities that the climate change context offers to redefine social and ecological protagonists. In this perspective, we highlight the relationship between the city and its residents—encompassing both upland and lowland districts and the forest and its nonhuman inhabitants. How ecological elements and human actors merged together in Morro da Babilônia exemplifies the potential of a multispecies alliance in places that carry the scars of centuryold legacies of socioeconomic inequalities. The favela's young forest proves that "these places can be lively despite announcements of their death" and in a state of social precarity and climatic vulnerability, its residents "don't have choices other than looking for life in this ruin." The wooded area, far from being an original forest, can be considered what environmental humanities scholar Anna Tsing has defined as "third nature," namely an unexpected formation characterized by temporal polyphonies, human and nonhuman alliances, assemblages of institutional and grassroots actors, combinations of hope and despair. 11 Indeed, this article shows how the forested favela turned out to be an unexpected habitat for new specimens of native and nonnative plants and animals and for economic activities run by residents. The production of such a third nature represents yet another empowering factor for the community since it calls back indigenous framings of the world as a plural reality where every being is connected to others, in a complex and instigating biotic landscape. 12

This is an orally informed research conducted by Natasha Barbosa, Letícia Batista, and Lise Sedrez that acknowledges history as "a means of addressing issues of social justice by empowering marginalized groups 'without history' both to create a heritage narrative by and for the people and to insert these multiple narratives into mainstream national origin stories and provide them with a role in these." By adopting an oral-and environmental-history approach, this article places the recent climate injustice within a larger context of long-lasting social and spatial differences tracing its origin back to early twentieth-century power relations.

The Past Was Not a Walk in the Park

The Inter-American Development Bank provided \$180 million in funding for the Favela-Bairro (Slum-Neighborhood) project in Rio de Janeiro in 1995. The project sought to integrate existing favelas into the fabric of the city through infrastructure upgrading and service increases. The Favela-Bairro project involves 253,000 residents in 73 communities.¹⁴ Successful aspects of this large project were a committed and flexible city government and the use of intra- and extrainstitutional partnerships with NGOs, the private sector, churches, and the general population. Especially instrumental was the use of grassroots-level infrastructure upgrading experts as project managers who could work easily with both the government and community members.¹⁵ Despite significant improvements in consumption of collective urban services, household goods, schooling, and social mobility, the stigma of place and race, the increase in unemployment, and the inability to translate educational gains into concomitant income or occupational gains remained¹⁶ and coexisted with other forms of development and the risks of social exclusions due to the "touristification" and gentrification.¹⁷ When a similar project, Projeto Mutirão Reflorestamento (Collaborative Reforestation Project), came to Babilônia, the community hoped for income alternatives in an area where dangerous criminal groups preved on local youths. The planting and tending of the seedlings were, after all, paid for by the municipality and were a reliable and steady, if not overgenerous, income. The collaboration with the municipality was intended to transform a long-lasting socionature.¹⁸

The interaction between any favela and the state is always fraught with ambiguities. Land ownership is seldom clear; rents and sales of houses take place as informal transactions with little regulation; bank loans or mortgages are mostly unheard of. Often, favela residents are squatters, and they occupy public land in areas unmarked for urbanization for myriad reasons. Although public housing projects from the late twentieth century share many characteristics with favelas, the classic shantytown is made of makeshift houses, sometimes with multigenerational families, and sometimes with immigrants from poorer regions of the country recently arrived to a city with a large housing deficit and inconsistent housing policies. Urbanization services are irregular and often hard-won conquests after decades-long struggles with public authorities. Frequently, the presence of the state is limited to a repressive apparatus, which aims to contain crime within the favela or to contain the expansion of the favela itself. In fact, most favelas in Rio de Janeiro have unforgiving histories of resisting and experiencing forcible removal. Some were completely erased, such as the Praia do Pinto and the Catacumba, which were once located in the wealthy neighborhoods of Leblon and Ipanema, and were finally removed in the 1960s. Morro da Babilônia is no exception.

Favelas are thus vulnerable spaces—socially, politically, and environmentally. Community survival is as threatened by the ever-present menace of forcible removal as it is by landslides and storms. Ironically, the rationale for removal, as presented by the government institutions, particularly since the 1960s, was based on the danger of landslide and flood hazards to which these communities are exposed. This policy was somehow halted in the 1980s but not terminated. However, as environmental protection gained relevance after the 1992 Earth Summit, the rhetoric of favelas as cradles for petty crime and drug lords and as synonyms for urban expansion at the expense of green areas replaced previous arguments about their susceptibility to hazards. Nurturing and cultivating a forest helped challenge these narratives, so that each new tree planted contributes to securing the community's roots.

Many of those we interviewed were not themselves native to the Morro da Babilônia—nor to the city of Rio de Janeiro. Brazil underwent a powerful urbanization process in the mid-1950s, and by the 1970s more than 50 percent of the Brazilian population lived in cities. Migrant waves of poor, rural workers fed into the large Brazilian cities, including Rio. The hilly area, near the affluent and expanding Copacabana with its strong demand for unskilled labor (maids and construction workers, for instance) was a beacon for the new arrivals. Most of the residents of Morro da Babilônia, including the community leaders, are themselves immigrants or children of immigrants who arrived in the mid-1950, 1960s, or even 1970s. Among all the interviews with residents our group conducted (more than forty people), only two or three claimed to be residents of Morro da Babilônia for generations, and none recalled a forest standing in what is today the reforested area. As children, they used that particular area for running, playing soccer, and flying kites—all activities common for boys in Brazil, but in treeless areas. The women we interviewed, like D. Maria Teresa or D. Maria Elizabete, told us those were areas where they would not go alone as girls, for fear of the very tall grass, where (it was implicit) dangerous men could hide—but none told us of fear of a dark forest or tall trees.¹⁹ It was just not in their memory. But what was their background knowledge of the area? We asked our informers what they knew about the past of the place where they have lived and what they had heard the elderly tell them. It was a quilombo, Palô, a community leader, told us.²⁰

Quilombo is a powerful word in Brazilian history. It refers to a community of runaway enslaved people, at least until 1888, when Brazil abolished slavery, becoming the last country in the Americas to do so. Even after that, quilombo may refer to communities of freedmen who refused to serve their former masters and sought to build relatively autonomous communities. More importantly, the Brazilian constitution of 1988 recognized the right to land ownership by the quilombolas, the descendants

of slaves who live in the communities their ancestors formed, even when there is little legal documentation to back their claim.

Is it true? Is Morro da Babilônia a former quilombo? Palô speaks with firm conviction, but there is no corroborating evidence. He was born in Morro da Babilônia, but his mother, Dona Persília, arrived in Rio de Janeiro as a young bride, probably by the mid-1940s, from Minas Gerais. Dona Persília was herself an important community leader and was several times the president of the neighborhood association. She was also the first person to seek allies in the wealthier neighborhood to document the vulnerable sites of Morro da Babilônia, the rocks that could fall on the top of the houses during a strong rainstorm or a landslide. She knew everybody who lived there over five decades, and we can suppose Palô talked to many of the elderly dwellers of the Morro da Babilônia. Maybe he heard this story from one of them, and perhaps that person was a descendant of former slaves.

Palô's claim that Morro da Babilônia was a former quilombo, however, introduces further implications. First, the term defines the Morro da Babilônia as a Black community, not only for the racial makeup of its current dwellers, but historically so. By evoking a past of Black resistance, it unites part of the community and celebrates its roots. A revigorated Black movement has become more active in the neighborhood association since 2000 and has promoted local heritage through several activities, such as the teaching of African drums to the youth. In the forested area, there is a small grove known as *área da macumba* where Afro-Brazilian religious rites are practiced. This revival has been endangered in recent years by an alliance, in many favelas, between Pentecostal Christian churches and drug dealers, which directly threatened the Afro-Brazilian priests and priestesses, sometimes forcing their eviction. ²² Nevertheless, the quilombo past remains a unifying narrative, even if the religious aspects of the African heritage are shunned by some conservative Christians.

Second, the quilombo draws a claim of continuity of occupation of the area, with legal standing to request proper ownership of the land. This is not a negligible factor, as the history of favelas in Rio in the twentieth century is also a history of attempts by the government to remove poor residents from these areas whenever the interests of the wealthier part of the city demand so. In the absence of proper land titles, community ownership is acceptable under Brazilian law only in certain circumstances, as in the case of former quilombos. There have been no attempts to formally register Morro da Babilônia as a quilombo legacy, but bringing up this aspect in itself leverages considerable political power. At the end, it is one of the above-mentioned strategies of survival, as it can strengthen the aura of legitimacy over the place and stave off potential threats of forcible removal.

Finally, because guilombos are often described as secluded commu-

nities in forested areas,²³ this expression evokes the memory of an original forest, even if neither Palô nor any of his childhood friends and neighbors can actually recall that forest. These features align with the description of the elders of how to build houses in the region. One first finds a place, clears the area, and then uses the trunk of the felled trees to build the structure of the house. The foundations are not very deep—the shallow topsoil covers a granite formation. Mud and grass are then used to fill the gaps. This technique is used all over Brazil, probably even before the arrival of the Europeans. There are few houses like this in Morro da Babilônia today, very likely dated back to the 1950s. The modern dwellings, even the most precarious ones, use concrete and brick—urban materials, bought in stores and produced in factories.

The context can be reconstructed also via two different corroborating sources. The first one is more famous: Marcel Camus's movie *Black Orpheus* (1959) was filmed in Morro da Babilônia and offers a fair overview of its houses, streets, and general surroundings. The gorgeous view that is still a source of pride and pleasure for the residents has also provided them with visual records of their past, when so many other poor communities in Rio de Janeiro cannot boast the same good fortune. Beauty, therefore, is part of the collective memory and the identity.

The second corroborating source emerged from archival collection where we looked for pictures and descriptions of the Morro. One of the first references we found was in the newspaper *Correio da Manhã*. A 1907 news article, illustrated with photographs of the Morro da Babilônia on the front page, describes in detail how the poor were occupying the hills of Rio de Janeiro, and Morro da Babilônia was the chosen example. The makeshift houses, with mud, clay, grass, and the occasional tin roof, were present. The residents had small vegetable patches of land, where they had cleared the forests. They were *caboclos* (a mix of native Brazilians and Europeans) and Blacks; they were former soldiers, living rent-free in the hills, and they would go to "to the city down below" to sell small objects they produced or to hire out for the occasional job.²⁴

In these documents of the early twentieth century, the forest, the same forest Palô and N.,²⁵ another worker in the project, cannot recall, is present. But not in the way the recent reforestation project shaped it. It is there as a "strong," "overwhelming," and "untouched" presence together with informal settlements at least since the early nineteenth century. The forest offered, then, a green barrier that protected the poor residents, in an almost "out of the grid" experience, as described in the *Correio da Manhã*.²⁶

Other articles from the same newspaper were less generous. They depicted how criminals hid in the "glorious greenness" of the area, bringing danger and chaos to a place that was remarkable for its beauty.²⁷ The

beauty of nature was in contrast with the ugliness of the poor residents, who cut trees and built ugly houses. The hill was named probably after the Suspended Gardens of Babilônia, for its beauty, a natural wonder in Rio de Janeiro, and it was threatened by uncivilized thugs. In 1913, the newspaper *O Paiz* celebrated that a "pack of female thieves" who lived in the Morro da Babilônia, under the command of the Black woman Olga, had finally been arrested. ²⁸ In 1915, residents of the distinct neighborhood of Leme begged the police to do something about the "pack of good-fornothing men" who used to meet in the Morro and threaten the "respectable citizens" of Leme. ²⁹ In the past, as in the present, the conflicting portraits of the favela marked its troubled relationship with the state and with its wealthier neighbors—and the ever-present requests for its forcible removal.

By bringing up these memories of ecologies, we are forced to question the concept of reforestation. The original forest has a history of interaction with human societies of the area but a history that has changed over time and that can be evoked but cannot be simply restored. It has continuously been re-created under new parameters of coexistence among the different groups, humans and nonhumans. Certain species, such as tall grass and jararacas (bothrops jararaca, a poisonous viper), increased their presence in the region during most of the twentieth century, when the tree area receded. Later on, in the last thirty years, with the growth of the forestation project, they were replaced by bush and tree vegetation and returning boa constrictors, which are a good indicator of a healthy Atlantic forest. This indigenous species was also joined by nonnative fauna and flora, such as marmosets (originally from the state of Bahia) and jackfruit trees (originally from Asia). The new biome cannot be uprooted.

In its several versions, these ecologies of memories bring up a forest of quilombos, a forest of beauty similar to the wonders of the old world, a forest of thieves and criminals, a forest of protection for poor former soldiers and minorities, a forest that appeared in postcards, a forest that provided materials for houses and small animals for urban hunters, a forest replaced by cleared areas where children play, and where trees were forgotten, a forest that offered hope. The re-created memory of race and nature, of the quilombo and a "pristine" forest, nurtures the modern-day experience of resistance of the mostly Black residents of Babilônia and their role in planting new forests.

It is within this context of memory that we must understand the multispecies coexistence space in Morro da Babilônia in the early twenty-first century.

Beyond Loss and Damage

Recently, climate change is taking us back to the very beginning of the story of this community and place; it is showing us the mud and shallow topsoil covering the hills around the downtown area, and it is putting slums and rich neighborhoods once again in connection, both though disasters and mitigation projects. And yet, climate change is pushing institutions to welcome and support sustainable actions and initiatives.

Since 1986, the Environmental Secretariat of Rio's City Hall (SMAC) has led a community reforestation program, the above mentioned Projeto Mutirão Reflorestamento, and planted more than six million seedlings on 2,200 hectares of land within the city limits. Rio had long suffered from deforestation of its hills as a result of development, causing soil erosion, sediment buildup in waterways, floods, landslides, and pools of water filled with disease-carrying mosquitos.³⁰ After the massive flood that hit Rio in 2010, the municipality, together with the World Bank, started to develop a strategic plan to tackle climate change effects: the Rio de Janeiro Low Carbon City Development Program (LCCDP) sought to help the city government identify and finance climate change mitigation opportunities across a number of urban sectors. Among these actions, Rio's community reforestation program proved so successful that a new urban forestry project called Rio Capital Verde (Rio Green Capital) was launched. Rio Green Capital plants trees in remote areas of Rio, and the project aims to earn carbon credits under the Rio Low Carbon City Development Program (LCCDP).³¹

In addition, climate change is making us historians look at and forward different stories. Interviews with urban disaster victims help us further explore the newly formed forest, which has created a different socionature in the midst of dramatic loss and damage. The so-called traveling soils of Rio de Janeiro hills created risky areas for living, especially as deforestation took place in the city. Floods and landslides have made clear how poor population's social and political vulnerability would be followed by environmental vulnerability as well. It was not only a matter of risks concerning diseases, lack of good sanitary conditions, bad sewage systems, and lack of water supply. Owing to floods and landslides, their immediate present would become uncertain. Survival in their communities, and even physical survival, would not be guaranteed. Those communities were aware of the risk of torrential rains. When floods were reasonably bearable, they would become part of poor people's everyday life. In these cases, torrential rain would be seen as just another occasional providential challenge to be accepted.³² However, torrential rain could often be strong enough to blur the limits of what was bearable and what was not. When that happened, previous social experiences would lose their meaning, and what used to be an invisible everyday precariousness would become an evident crisis.³³

If for some institutional actors the forest represents primarily a means for strengthening urban resilience through nature and an ecosystem-based measure reducing landslide risk in Rio de Janeiro,³⁴ for the residents it represents a complex ecosocial infrastructure. While the forest ultimately protects them from climate extreme events, it also offers visibility and socioeconomic means of survival—and, strategically, political protection against the depiction of the favelas as villains in the Rio Green Capital narrative.³⁵

In many ways, the Morro da Babilônia residents trust their nonhuman partners more than they trust their institutional partners. In our interview with Claudia França and Luiz Lourenço, two public servants at the SMAC who were among the pioneers in the reforestation project, their own skepticism regarding the government's investments in the project was noticeable. Governments, according to França and Lourenço, have a short attention span. The survival of the reforestation project is nothing short of a miracle—and the result of painstaking efforts by SMAC's technical personnel and the residents of the communities. In fact, in other areas with little visibility the project was interrupted, regardless of its positive environmental impact. The Projeto Mutirão Reflorestamento managed to survive different administrations for decades just because it was relatively inexpensive and because it has received many international awards and acknowledgments.³⁶ Mayors saw in the project a way to increase their leverage in international carbon credit negotiations, and a charming billboard to Rio de Janeiro's "green vocation." In addition, no mayor wanted the political costs of shutting down the project. Thus, França and Lourenço encouraged the communities to claim the reforestation project as their own because too much of its success had depended on the executive branch, and mayors change more rapidly than the seedlings grow.

Forest workers such as Palô and N. are perfectly aware of the fickleness of *carioca* politicians. Since the project began in the 1990s, the favela leaders have sought different alliances and partnerships: with the powerful commercial shopping center Rio Sul, with the wealthier neighbor associations of Leme and Copacabana, with ecotourism agencies, and, eventually, with the university—as in embracing our research. They seek to strengthen their networks to make sure that the political costs to shut down the project would be steep for any mayor. As we argue, they saw these alliances as necessary steps to control their own narratives—and as part of a key strategy of community survival.

While we highlight the importance of narrative control, however, we must also examine the less planned consequences of this strategy. In

the process of securing alliances, income and state presence in Morro da Babilônia, the favela dwellers reaffirmed their connection to the place where they live and their nonhuman partners. First, they have invested in knowledge. Palô recalls how little he knew about planting in those early years and how his body hurt after one day planting seedlings under the sun. N. was drafted by Palô to the project when he was fifteen years old, and already with some experience in the few and dangerous job opportunities left for young Black men in favelas, often connected to drug trafficking. Many of his former childhood friends have died violently, while he sees a different path in front of him. He has probably less than four years of formal schooling and is currently responsible for teaching visitors about the impact of the forest on the local microclimate. His eyes shine when he goes on about forest biodiversity and how the experience has changed his life.³⁷

Secondly, they see the nature around them, their environment, as a point of pride and as part of their new identity. D. Maria Elizabeth claims she breathes a different air, "fresher, cleaner, purer," when she returns home from her work downtown.³⁸ Many of our informers invited us to take time to enjoy the magnificent view before starting the interviews. Others pointed out the beauty of the Brazilian cherry trees, the colorful birds, and the exuberance of fruit and green in the heart of the megacity.

Thirdly, the participants in the reforestation project present the forest as a business card to enhance their relationship with the city at large. It is common for any of the workers to pull out their phones when they go out to work with the trees to capture a particularly beautiful flower or to seek out marmosets, anteaters, boas, or other animals common to the Atlantic Rainforest with their cameras. They continuously update portfolios about the project and document the transformation of the area, which are important tools to impress potential partners and sponsors. By recording and protecting their nonhuman partners, Palô and the other community leaders were able to develop connections with local schools, which frequently visit the area for environmental education activities; birdwatcher societies; urban trail hikers; and tourist agencies, which send customers and visitors to the well-marked ecotourist trails.

Environmental tourism and environmental education activities, centered on the new forest area, have helped to achieve a major victory for Morro da Babilônia, in the process redefining its place in the city. By providing visible ecological services, the favela residents reinforce their claim to legitimacy and full citizenship—their right to the city.³⁹ They thus undermine charges that the favelas destroyed the beauty of the forested hills, depreciated valuable real estate nearby, and presented inherent risk to the *favelados* themselves—and therefore must be removed by the state.

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The interviews we conducted are also part of this larger process in which the community is eager to forge alliances but also to retain some control over its own image. When we first contacted the Cooperativa, in early 2018, our research team received a warm welcome but also some mistrust. We were not the first academic researchers to reach out to the community. Some had neglected to give back to the favela the results of their research and left behind a perception of academic extractivism. Our first months in Morro da Babilônia were basically a negotiation of trust, and we decided to remake the original design of the research to include some of the community's concerns. Eight months later, with interviews already concluded, Palô invited us to visit the planting area and meet with the workers on site. It was an entrancing experience, including about two hours climbing up the hill, among colorful flowers, seedlings, lizards. We saw two young boa constrictors, about four feet long, duly documented for PowerPoint presentations—it was a bit unsettling to see them so close to Copacabana beach. We reached a hilltop with sparse tree cover, and many black vultures—the area is in fact named after them, Morro do Urubu (Vulture Hill). For the delight of the research team, a sun-drenched pitanga tree (Eugenia uniflora, Brazilian cherry) was heavy with fruit. A makeshift soccer area, where some children from Morro da Babilônia played, was just beside the most amazing view of Guanabara Bay and the Sugar Loaf. The field trip marked a mutual commitment to work together from both the research team and the participants in the forestation project. In the next meeting, the research leader was encouraged to join the citizen council that advises in the management of the environmental protected area where the new forest is located, and we discussed plans for a future community ecomuseum.

Conclusions

This article demonstrates that environment and climate change can provide marginal groups with unexpected political leverage and can act as spaces of encounters and possibilities beyond the alternatives of degradation-restoration and beyond the ecological realm. Babilônia forest is the space where the downtown and uptown districts meet; where the municipality, grassroots initiatives, and international developmentalist actors collaborate; where legacies of the past, climate injustices, and social problems change trajectories and blend into an open-ended tale.

This unexpected assemblage, this third nature growing from spatial and social injustices is preaching to the choir of the "Multispecies City" in which collaborative practices of "learning with the non-human" provoke "changes in public discourse of who can be seen as part of the city." In the 1990s, Brazil saw a transformation that Henry Acselrad defines as the

"environmentalization of social demands and struggles": favela shanty towns entered the public and governmental agenda as "public problems" and the institutionalization involved also the residents, who started to create associations whose main goal was the reforestation of the slopes. ⁴¹ Whether this is actually enforced or remains in the discursive arena is still debatable, but certainly it depends significantly on how much the favela communities are aware of the high stakes and how much they are able to pursue their own agendas.

Communities incorporate climate change mitigation initiatives in their toolkit of strategies for long-term survival—survival as communities, as much as physical survival. However, in the case of Morro da Babilônia, while we conclude that the opportunities in the forestation project (such as income for local residents or bargaining power with the local authorities) fit within the traditional goals in this repertoire, the interviews also show how the development of the project itself has transformed the land, public servants, and community leaders as well.

Beautiful vistas notwithstanding, life in a favela is not a fairy tale, and climate change comes on top of many risks for vulnerable communities. In April 2019, Rio de Janeiro was hit by yet another extreme climate event: an extraordinary rainstorm—the strongest in the last twentytwo years—caused death and destruction all across the city. Ten people were killed, among them Doralice and Gerlaine Nascimento, buried in their home by a landslide that sank a portion of the favela where they lived, Morro de Babilônia. Climate change challenges do not diminish the magnitude of the other everyday struggles for favela dwellers. Our own research has two terrible bookends. In early 2018, a conflict between two heavily armed drug gangs prevented the research team from accessing the community for more than three months. In 2020, it was the COVID-19 pandemic that interrupted our work. Our research has also highlighted the unbalance of the multiple alliances developed by the community leaders. While most of our academic work has continued via home offices, this is not a viable alternative for those who must plant and tend to seedlings. Even if in better circumstances, favela residents still face rampant structural racism and threats of community removal by the city government. They are easy prey for organized crime and are often treated as secondclass citizens by the police who should protect them from crime. Poverty and lack of economic opportunities combine with the frailty of education and health services, making life for men and women in favelas an everyday struggle. However, the experience of forestation in Morro da Babilônia suggests that confronting climate change may offer possibilities to tackle some of these other questions as well.

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Notes

Support for work on this article was provided by FORMAS (Swedish Research Council for Sustainable Development) under the National Research Programme on Climate (contract 2017-01962_3) and by CNPq (Brazilian National Council for Scientific and Technological Development or Conselho Nacional de Pesquisa e Desenvolvimento Tecnológico).

- 1. CoopBabilonia's webpage is at coopbabilonia.blogspot.com (accessed March 1, 2021).
- 2. Lara, "One Katrina Every Year"; Brum and Lemos, "Urban Projects for Resilience."
- 3. O'Hare and Barke, "The Favelas of Rio de Janeiro;" Roy and Alsayyad, "Urban Informality," 107–108.
 - 4. UNISDR, "The Human Cost of Weather-Related Disasters."
- 5. Gullo Cavalcante, Luz Barcellos, and Cataldi, "Flash Flood in the Mountainous Region of Rio de Janeiro State (Brazil) in 2011."
- 6. Aumann, Behrangi, and Wang, "Increased Frequency of Extreme Tropical Deep Convection."
- 7. Academia Brasileira de Ciências, "Tribunais fazem parte de uma nova realidade."
 - 8. Moraes, "A invenção da favela ecológica," 461-63.
- 9. Perlman, *Favela*; Lannes-Fernandes, "The Construction of Socio-Political and Symbolical Marginalisation in Brazil"; Butler, "Transforming the Imaginary of Marginality."
 - 10. Tsing, The Mushroom at the End of the World, 5-6.
 - 11. Tsing, The Mushroom at the End of the World, vii-viii.
- 12. Viveiros de Castro, Cannibal Metaphysics; Kopenawa and Albert, The Falling Sky.
 - 13. Weisman, "Oral Sources and Oral History," 57.
 - 14. Gomes and Motta, "Empresariamento urbano e direito à cidade."
- 15. Inter-American Development Bank, "Brazil: Rio de Janeiro Urban Upgrading Program"; Inter-American Development Bank. *Programa de Urbanizacao de Assentamentos Populares do Rio de Janeiro*; Segre, "Formal-Informal Connections in the Favelas of Rio de Janeiro," 194–95.
 - 16. Perlman, "The Metamorphosis of Marginality."
- 17. Freire-Medeiros, "A favela que se vê e que se vende"; Griffin, "Olympic Exclusion Zone"; Comelli, Anguelovski, and Chu, "Socio-Spatial Legibility, Discipline, and Gentrification." The Rio de Janeiro administration developed the 2016 strategic plan to ensure the good use of foreign investments coming to the city and to improve its governance. See Carloni, "Rio de Janeiro Low Carbon City Development Program."

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- 18. Sedrez, Barbosa, "Narrativas na Babilônia."
- 19. Six women, collective interview, January 23, 2019. Names were changed as requested.
- 20. Carlos Antonio Pereira, Palô (community leader), interview, October 19, 2019.
- 21. Abílio Valério Tozini (president of the Leme Neighbourhood Association), interview, January 14, 2019. Dona Persilia's complete name was Persilia Pereira. As with Palô, we have opted to keep the names as they are known in the community.
 - 22. Schipani and Leahy, "'Drug Traffickers of Jesus."
- 23. Quilombos were established in many different ecosystems in Brazil: forests, marshes, sandy regions, semiarid landscapes, etc. But the most famous quilombos, such as Palmares, in the eighteenth century, were in fact in forests, and that is how they remain in the Brazilian imagination.
 - 24. Correio da Manhã, "No Morro da Babylonia," 1.
 - 25. N., interview, December 16, 2019. Worker's name removed as requested.
 - 26. Correio da Manhã, "No Morro da Babylonia," 1.
 - 27. Correio da Manhã, "E continúa a derrubada das nossas florestas."
 - 28. O Paiz, "A quadrilha da Babylonia," 6.
 - 29. Correio da Manhã, "E continúa a derrubada das nossas florestas."
 - 30. Braun, "Rio de Janeiro's Reforestation."
- 31. City of Rio de Janeiro, "GRI Report"; City of Rio de Janeiro, *Plano Estratégico da Prefeitura do Rio de Janeiro 2013–2016*; City of Rio de Janeiro and World Bank, "The Rio de Janeiro Low Carbon City Development Program"; Bittencourt et al., "Evaluating Preparedness and Resilience Initiatives."
 - 32. This phenomenon has been analysed in Bankoff, Cultures of Disaster.
 - 33. Maia and Sedrez, "Narrativas de um Dilúvio Carioca."
- $34. \, \text{Lange}$, Sandholz, and Nehren, "Strengthening Urban Resilience through Nature."
 - 35. Lima Gottgtroy de Carvalho, "O turismo no Morro da Babilônia."
 - 36. Claudia França and Luiz Lourenço, interview, February 8, 2019.
 - 37. N., interview, December 16, 2019.
- 38. Six women, collective interview, January 23, 2019. Names were changed as requested.
- 39. For the concept of the Right to the City, as employed by the authors, see Harvey, *Rebel Cities*.
- 40. Ernstson and Sörlin, "Toward Comparative Urban Environmentalism," 14–16; on the same topic, see also Myers, *Rethinking Urbanism*.
 - 41. Acselrad, "Ambientalização das lutas sociais," 104.

References

- Academia Brasileira de Ciências. "Tribunais fazem parte de uma nova realidade, diz climatologista." April 11, 2019. https://www.abc.org.br/2019/04/11/temporais-fazem -parte-de-uma-nova-realidade-diz-climatologista/.
- Acselrad, Henry. "Ambientalização das lutas sociais: o caso do movimento por justiça ambiental." *Estudos avançados* 24, no. 68 (2010): 103–19.
- Aumann, H. Hartmut, Ali Behrangi, and Yuan Wang. "Increased Frequency of Extreme Tropical Deep Convection: AIRS Observations and Climate Model Predictions." *Geophysical Research Letters* 45, no. 24 (2018): 13530–37. https://doi.org/10.1029/2018GL079423.

Social Text 150 · March 2022

- Bankoff, Greg. Cultures of Disaster: Society and Natural Hazards in the Philippines. Richmond, UK: Curzon, 2015.
- Bittencourt, Bernardo K., Marcos P. Cannabrava, Trystyn K. Del Rosario, Michelle C. Hamilton, Molly E. Kampmann, Joseph T. McGrath, Bernardo B. Ribeiro, José Orlando Gomes, and James H. Lambert. "Evaluating Preparedness and Resilience Initiatives for Distressed Populations Vulnerable to Disasters in Rio de Janeiro, Brazil." 2013 IEEE Systems and Information Engineering Design Symposium (2013), 58–63. https://doi.org/10.1109/SIEDS.2013.6549494.
- Braun, Franka. "Rio de Janeiro's Reforestation Changes Life in the Favelas." *World Bank* (blog), September 9, 2013. https://blogs.worldbank.org/latinamerica/rio-de-janeiros-reforestation-changes-life-favelas.
- Brum, Erika, and Maria Fernanda Lemos. "Urban Projects for Resilience in Flooding Areas." In *Rio de Janeiro: Urban Expansion and the Environment*, edited by José L. S. Gámez, Zhongjie Lin, and Jeffrey S. Nesbit, 113–23. New York: Routledge, 2019.
- Butler, Udi Mandel. "Transforming the Imaginary of Marginality: Some Experiences from Rio de Janeiro." *Periferias* 1, no. 1 (2018). https://revistaperiferias.org/en/materia/transforming-the-imaginary-of-marginality-some-experiences-from-rio-de-janeiro/?pdf=311.
- Carloni, Flavia. "Rio de Janeiro Low Carbon City Development Program." GGBP Case Study Series (2014). https://www.greengrowthknowledge.org/sites/default/files/downloads/best-practices/GGBP%20Case%20Study%20Series_Brazil_Low%20Carbon%20City%20Development%20Program%20Rio%20de%20Janeiro.pdf (accessed March 1, 2021).
- Carvalho, Thays Lima Gottgtroy de. "O turismo no Morro da Babilônia (RJ): Do reflorestamento ao ecoturismo." *Revista Brasileira de Ecoturismo* 9, no. 1 (2016): 11–28.
- Centre for Research on Epidemiology of Disaster and United Nations International Strategy for Disaster Reduction. *The Human Cost of Weather-Related Disasters* 1995–2015. Brussels–Geneva, 2015. https://unisdr.org/2015/docs/climatechange/COP21_WeatherDisastersReport_2015_FINAL.pdf.
- City of Rio de Janeiro. GRI Report Sustainability of Rio de Janeiro City Hall. Rio de Janeiro: Rio de Janeiro's City Hall and Keyassociados, 2011.
- City of Rio de Janeiro. *Plano Estratégico da Prefeitura do Rio de Janeiro 2013–2016—Rio mais integrado e competitivo*. Rio de Janeiro: Rio Prefeitura, 2012.
- City of Rio de Janeiro and World Bank. The Rio de Janeiro Low Carbon City Development Program—Program Document. Washington, DC: World Bank, 2012.
- Comelli, Thaisa, Isabelle Anguelovski, and Eric Chu. "Socio-Spatial Legibility, Discipline, and Gentrification through Favela Upgrading in Rio de Janeiro." *City* 22, nos. 5–6 (2018): 633–56.
- Correio da Manhã. "No Morro da Babilônia." June 2, 1907, 1.
- Correio da Manhã. "E continúa a derrubada das nossas florestas—O que se está praticando no morro da Babylonia é inacreditavel." December 29, 1915, 3.
- Ernstson, Henrik, and Sverker Sörlin, "Toward Comparative Urban Environmentalism: Situating Urban Natures in an Emerging 'World of Cities." In *Grounding Urban Natures: Histories and Futures of Urban Ecologies*, edited by Henrik Ernstson and Sverker Sörlin, 3–53. Cambridge, MA: MIT Press, 2019.
- Freire-Medeiros, Bianca. "A favela que se vê e que se vende: reflexões e polêmicas em torno de um destino turístico." *Revista Brasileira de Ciências Sociais* 22, no. 65 (2007): 61–72.

- Gomes, Maria de Fátima Cabral Marques, and Motta Thaiany da Silva. "Empresariamento urbano e direito à cidade: considerações sobre os programas favelabairro e morar carioca no Morro da Providência." *Revista Libertas* 13, no. 2 (2013): 54–79.
- Griffin, Jo. "Olimpic Exclusion Zone: The Gentrification of a Rio Favela." Guardian, June 15, 2016. https://www.theguardian.com/cities/2016/jun/15/rio-olympics -exclusion-zone-gentrification-favela-babilonia.
- Gullo Cavalcante, Marianna Rodrigues, Priscilla da Cunha Luz Barcellos, and Marcio Cataldi. "Flash Flood in the Mountainous Region of Rio de Janeiro State (Brazil) in 2011: Part I—Calibration Watershed through Hydrological SMAP Model." Natural Hazards 102, no. 3 (2020): 1117–34. https://doi.org/10.1007/s11069-020-03948-3.
- Harvey, David. Rebel Cities: From the Right to the City to the Urban Revolution. London: Verso, 2019.
- Inter-American Development Bank. Report of the Favela/Bairro Project "Brazil: Rio de Janeiro Urban Upgrading Program." Operation no. 898/OC-BR. Approved on November 1, 1995. (BR-0182).
- Inter-American Development Bank. Programa de Urbanizacao de Assentamentos Populares do Rio de Janeiro. Washington, DC: Inter-American Development Bank, 1998.
- Kopenawa, Davi, and Bruce Albert. *The Falling Sky. Words of a Yanomami Shaman*. Cambridge, MA: Harvard University Press, 2013.
- Lange, Wolfram, Simone Sandholz, and Udo Nehren. "Strengthening Urban Resilience through Nature: The Potential of Ecosystem-Based Measures for Reduction of Landslide Risk in Rio de Janeiro." Lincoln Institute of Land Policy, June 2018. https://www.lincolninst.edu/sites/default/files/pubfiles/lange_wp18wl1.pdf.
- Lannes-Fernandes, Fernando. "The Construction of Socio-Political and Symbolical Marginalisation in Brazil: Reflecting the Relation between Socio-Spatial Stigma and Responses to Violence in Rio de Janeiro." *International Journal of Humanities and Social Science* 4, no. 2 (2014): 53–67.
- Lara, Fernando. "One Katrina Every Year: The Challenge of Urban Flooding in Tropical Cities." In *Rio de Janeiro: Urban Expansion and the Environment*, edited by José L. S. Gámez, Zhongjie Lin, and Jeffrey S. Nesbit, 18–26. New York: Routledge, 2019.
- Maia, Andréa Casa Nova, and Lise Sedrez. "Narrativas de um Dilúvio Carioca: memória e natureza na Grande Enchente de 1966." *História Oral* 14, no. 2 (2012): 221–54. https://doi.org/10.51880/ho.v14i2.239.
- Moraes, Camila. "A invenção da favela ecológica: Un olhar sobre turismo e meio ambiente no Morro Babilônia." *Revista Estud Sociologia* 18, no. 35 (2013): 459–74.
- Myers, Garth. Rethinking Urbanism. Lessons from Postcolonialism and the Global South. Bristol, UK: Bristol University Press, 2020.
- O'Hare, Greg, and Barke Michael. "The Favelas of Rio de Janeiro: A Temporal and Spatial Analysis." *GeoJournal* 56, no. 3 (2002): 115–240.
- O Paiz. "A quadrilha da Babylonia." April 4, 1913, 6.
- Perlman, Janice. "The Metamorphosis of Marginality: Four Generations in the Favelas of Rio de Janeiro." *Annals of the American Academy of Political and Social Science* 606, no. 1 (2006): 154–77.
- Perlman, Janice. Favela: Four Decades of Living on the Edge in Rio de Janiero. Oxford: Oxford University Press, 2010.

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- Roy, Ananya, and Alsayyad, Nezar, eds. *Urban Informality: Transnational Perspectives* from the Middle East, Latin America, and South Asia. Lanham, MD: Lexington Books, 2004.
- Schipani, Andres, and Joe Leahy. "'Drug Traffickers of Jesus' Drive Brazil Slum Violence." *Financial Times*, October 27, 2017. https://www.ft.com/content/b5096a18-b548-11e7-aa26-bb002965bce8.
- Sedrez, Lise, and Natasha Barbosa. "Narrativas na Babilônia: Uma experiência de história oral, risco climático, reflorestamento e comunidade (1985–2015)." In História oral e direito à cidade: Paisagens urbanas, narrativas e memória social, edited by Andréa Casa Nova Maia, 79–98. Rio de Janeiro: Letra e Voz, 2019.
- Segre, Roberto. "Formal-Informal Connections in the Favelas of Rio de Janeiro: The Favela-Bairro Programme." In *Rethinking the Informal City*, edited by Felipe Hernández, Peter Kellett, and Lea K. Allen, 163–180. New York: Berghahn Books, 2010.
- Tsing, Anna L. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton, NJ: Princeton University Press, 2015.
- Viveiros de Castro, Eduardo. *Cannibal Metaphysics*. Translated and edited by Peter Skafish. Minneapolis: University of Minnesota Press, 2014.
- Weisman, Brent R. "Oral Sources and Oral History." In *Encyclopedia of Global Archaeology*, edited by Claire Smith. New York: Springer, 2014. https://doi.org/10.1007/978-1-4419-0465-2_1401.