ARTICLES
ENIRONMENT, GOVERNANCE AND DEVELOPMENT

INTERSECTIONALITY IN A SACRIFICE ZONE OF CAPITAL: THE EXPERIENCE OF BLACK WOMEN, QUILOMBOLAS AND GLEANERS, ON ILHA DE MARÉ, IN TODOS OS SANTOS BAY (BAHIA, BRAZIL)

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Abstract
This article, based on an empirical research project, aims to analyze, from an intersectional perspective, how Black women, quilombolas and gleaners, from two communities on Ilha de Maré (in Todos os Santos Bay, Salvador, Bahia) have been affected with the occupation of their territory by a petroleum supply chain. Understanding the complexity of the experience that these women have come up against in the territory where they live, due to a context of environmental conflict, may only be achieved by considering the intersectionality of race, gender, and class, and through what we have termed as a way of life linked to the environment.

Keywords
Intersectionality; Gender; Gleaners; Environmental conflict; Petroleum supply chain; Racism; Ilha de Maré.
ARTIGOS
AMBIENTE, GESTÃO E DESENVOLVIMENTO

INTERSECCIONALIDADE EM UMA ZONA DE SACRIFICÍO DO CAPITAL: A EXPERIÊNCIA DE MULHERES NEGRAS, QUILOMBOLAS E MARISQUEIRAS DA ILHA DE MARÉ, BAÍA DE TODOS OS SANTOS (BAHIA, BRASIL)

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Resumo
Este artigo se baseia em uma pesquisa empírica cujo objetivo é analisar, a partir de uma perspectiva interseccional, como as mulheres negras, quilombolas e marisqueiras de duas comunidades da Ilha de Maré (Baía de Todos os Santos, Salvador, Bahia) são afetadas pela ocupação de seu território pela cadeia petrolífera. A compreensão da complexidade da experiência que essas mulheres vivenciam em seu território de vida, no atual contexto de conflito ambiental, só pode ser alcançada considerando a intersecção dos marcadores de raça, gênero, classe e o que aqui denominamos de modo de vida ligado ao meio ambiente.

Palavras-chave
Interseccionalidade; Gênero; Marisqueiras; Conflito ambiental; Cadeia petrolífera; Racismo; Ilha de Maré.
INTERSECTIONALITY IN A SACRIFICE ZONE OF CAPITAL: THE EXPERIENCE OF BLACK WOMEN, QUILOMBOLAS AND GLEANERS, ON ILHA DE MARÉ, IN TODOS OS SANTOS BAY, SALVADOR, BAHIA, BRAZIL

Patricia Rodin

1. Introduction

The aim of this article is to analyze, from an intersectional perspective, how Black women, quilombolas and gleaners, from two communities on Ilha de Maré (in the Todos os Santos Bay, Salvador, Bahia) – Porto dos Cavalos and Martelo – have been affected with the occupation of their territory by a petroleum supply chain. The aim of this empirical research, based on immersion fieldwork in the locality, is to help understand how the different dimensions of the lives of women belonging to traditional communities, more specifically, artisanal fishing, have been affected by environmental conflicts. Herein we focus on the implications of petroleum both on the women’s bodies and on the territories in which they live and work, both of which are inseparable.

1. I would like thank the women of Porto dos Cavalos and Martelo for the welcome they gave me and my research project, especially Eliete Paraguassu, who invited me into her home for my stay in the community, among many other exchanges. I would also like to thank my supervisor, Cecilia Campello do Amaral Mello, for her supervision and review when writing this article, as well as the RBEUR reviewers, and IBAMA, for having granted me a license to pursue my doctorate.

2. Afro-Brazilian residents of a Quilombo – the denomination for black communities that have a common historical trajectory of enslavement and collective resistance to the historical oppression they have suffered, with a community way of life and a specific sense of territorial belonging.

3. Gleaning is a fishing method used in shallow coastal and estuarine waters and freshwaters or in habitats exposed during low tide.

4. Tide Island.

5. All Saints Bay.
Our understanding of environmental conflicts is in accordance with Acselrad (2004, p. 26), as being:

Those [conflicts] that involve social groups with different modes of appropriation, use and signification of territory, and originate when the continuity of social forms of appropriating the environment of at least one of the groups is threatened by undesirable impacts - transmitted either by soil, water, air or living systems – resulting from practices exercised by other groups.

A large number of artisanal fishing communities are currently involved in environmental conflicts, as revealed in the report Conflitos Socioambientais e Violações de Direitos Humanos em Comunidades Tradicionais Pesqueiras no Brasil [Socio-environmental Conflicts and Human Rights Violations in Traditional Fisheries Communities in Brazil], drawn up by the Comissão Pastoral da Pesca [Pastoral Fisheries Commission] (2016) and an analysis by Walter et al. (2019) through the Mapa da Injustiça Ambiental e Saúde no Brasil [Map of Environmental Injustice and Health in Brazil], produced by Fiocruz. It should be noted that from the set of environmental conflicts identified at a national level by the abovementioned map, only 0.34% make an explicit reference to women (PACHECO; FAUSTINO, 2013 apud WALTER et. al., 2019).

Thus, there is a pressing need to seek an understanding of how Black women, especially those from artisanal fishing communities – a significant political subject along the entire Brazilian coastline – experience these scenarios of environmental conflicts. For this, we have used the analytical approach of intersectionality, for which the life experience of social groups is inseparable from the intersection of different axes of oppression, which, in turn, cannot be understood in isolation, namely: race, class, gender and nationality. In other words, this analytical perspective sheds light onto the fact that positioning social groups within the matrix of power relations in society is defined by the point at which these axes cross, and not by just one of them, nor simply by their sum, as though they acted independently (COLLINS, 2000; CRENSHAW, 2002). Thus, the reality experienced by each group is due to the complex intertwining of such axes, which, depending on the context, present different possibilities of combinations.

It is important to highlight that, although the North American Black jurist, Kimberlé Crenshaw played a fundamental role in the theoretical formulation of this concept and analytical paradigm, and coined the term intersectionality,

6. This and all non-English citations hereafter have been translated by the author.
Brazilian intellectuals such as Lélia Gonzalez (1984) and Luiza Bairros (1995), in their analyses, had already linked sexism, racism and capitalist exploitation to give intelligibility to the experience of Black Brazilian women, without, however, making use of such theoretical vocabulary. Therefore, intersectional analysis is configured as an historical manner for Black women to locate their experience in the matrix of power relations in society.

Here, we consider that the experience of the women on Ilha de Maré may only be understood by bearing in mind the intersection between gender, race and class – structural axes of oppression –, together with a specific marker that conforms the reality in which they live: their way of life linked to the environment.

This study creates a dialogue with the broader fields of feminist and intersectional studies, gender and fisheries, and environmental conflicts. Hence, it sets out to contribute, on the one hand, towards including the universe of artisanal fisherwomen in the field of feminist and intersectional research, which, historically, has tended towards the universe of women in an urban way of life, and, on the other, to inserting the paradigm of intersectionality into the scope of studies on gender and fishing and environmental conflicts, a perspective, which thus far has not been properly represented in these areas.

Although investigations on gender and fishing have occupied a marginal position in the field of fishing research, since the 2000s, there has been an increase in their production (MANESCHY et al., 2012). The main focus has been on analyzing the sexual and spatial division of labor and its consequences, such as the lack of recognizing women as fishery workers and, at the same time, their fundamental role in preserving traditional knowledge and maintaining the way of life within the communities (SOUZA; RIBEIRO; MARTINEZ, 2019).

On the other hand, in one sense, studies on environmental conflicts have aimed to clarify that the society-nature relationship is informed by asymmetrical power relations, empirically demonstrating that environmental inequalities are a correlate of social inequalities – thus politicizing the environmental debate. In another sense, their intention has also been to help understand the logic that underlies environmental conflicts and how communities and groups affected by activities that cause social and environmental damage are positioned within them.

However, in Brazil, analyzes conducted in this field have conferred upon the variable “class” an almost exclusive explanatory nature regarding the identified environmental inequalities. It is of note that the explanatory categories of race and gender have been under-represented, particularly the intersectional approach. Of those who have incorporated it into their work, we make special mention of the contributions by Maia (2021), Furtado (2018) and Barcellos (2008). It should also be further noted that, more recently, the *Investigação e Incidência da Relatoria*
do Direito Humano ao Meio Ambiente da Plataforma Dhesca [Investigation and Incidence Missions of the Human Right to the Environment Rapporteur of the Dhesca Platform], together with the Rede Brasileira de Justiça Ambiental [Brazilian Network for Environmental Justice] (FAUSTINO; FURTADO, 2013a; 2013b) and organizations that work directly with communities affected by large projects have taken an important step towards highlighting the different impacts of these actions on the lives and bodies of racialized women, belonging to traditional, indigenous, peasant and peripheral communities (MAB, 2011; PACS, 2017; INESC, 2020).

Currently, albeit in a somewhat embryonic manner, the construction of the field of feminist political ecology (FPE) in Latin America has been placed under debate (GARCIA; CUEVAS, 2017; OYARZÚN; ALVAREZ, 2019), creating a dialogue with environmental conflicts. Feminist political ecology was initially developed in the Global North, drawing on different currents and theories of feminism and social sciences to address the relationships that involve gender and the environment (OYARZÚN; ALVAREZ, 2019). It is characterized by being an open, expanding field, encompassing different theoretical-methodological lines. However, most of its studies have sought to understand how power relations, with regard to access, control and appropriation of environmental resources, are linked with gender, and how anthropic interventions, which cause environmental conflicts, intersect with the gender hierarchies of the affected communities (ELMHIRST, 2015; 2018). To this end, they begin by investigating the construction of gender in its relationship with the environment, encompassing closer scales within the communities and/or families.

This article is affiliated to the line of the abovementioned FPE. However, as it has been developed in Brazil, a country with a colonial heritage forged in slavery, the category of race assumes a central position, since it takes part in configuring the structure, organization and dynamics of social relations and, therefore, in the definition of access, use and appropriation of environmental resources by women, a variable that FPE studies in the Global North have not considered (MOLLET; FARIA, 2013). Hence, it is a study that adds to the emerging field of Latin American FPE.

It should be noted that quilombola women from Ilha de Maré have repeatedly denounced in the public arena that since the 1950s they have been subjected to a process of environmental racism7. We understand that the claim to use this concept in order to characterize the environmental injustice to which they have

7. A concept that was developed during the 1980s through the North American Black Movement, which at the time was also involved in the struggle for civil rights, to describe the phenomenon in which racialized groups in the United States were disproportionately subjected to impacts and risks of polluting activities.
been subjected aims to shed light on the centrality of race and structural racism historically constituted within Brazilian society, which, according to these women’s reading of the world, are configured as determining factors for shaping the lived reality, including environmental inequality.

In the same direction, the few studies, which to date have incorporated the category “race” into analyzing environmental conflicts in Brazil, such as PoEMAS (2015) and Mello (2015), have drawn attention to the fact that populations directly affected by the Samarco/Vale/BHP environmental crime were mostly Black – such as those in the Bento Rodrigues community, which was made up of 84.5% Black people and was completely destroyed. Thus, they point to the centrality of racial inequalities in the distribution and intensity of identified environmental impacts. Considering that race relations are constituted as power relations that structure and mediate social relations in Brazil and that environmental conflicts emerge in situations of asymmetrical power relations, we argue that it is impossible to address environmental inequality produced by conflicts as being dissociated from the racial inequality present in Brazil, particularly in Todos os Santos Bay.

Lastly, we emphasize that the confrontation, led by female gleaners on Ilha de Maré, with companies that dump contaminated waste on their territory of life, and with the State, which fails to exercise its regulatory role, by drawing attention to the environmental racism that acutely affects their bodies and their lives, has given new contours to political action, thereby associating the struggle for environmental justice with the feminist and anti-racist struggle. These gleaners are part of a larger movement that has developed over recent decades in Latin America, where a significant number of Black, indigenous and peasant women, who belong to traditional and peripheral urban communities, have played leading roles in the confrontation and struggle against the model of hegemonic development, in defense of their territories and communities (SVAMPA, 2019). Hence, although this movement reveals that the intersectionality of markers such as race, gender and class have made the abovementioned women more vulnerable, it has also enhanced their agency.

2. Ilha de Maré: quilombola territory, artisanal fishing and the sacrifice zone of the petroleum supply chain

Ilha de Maré is part of the Recôncavo Baiano, a region formed by municipalities in the interior and surrounding Todos os Santos Bay (BTS), excluding the capital Salvador. It is located in the northwest portion of the Bay, in front of Aratu Bay (Figure 1); the communities of Porto dos Cavalos and Martelo are located towards the north of the island. Despite the distance, Ilha de Maré belongs to the city of Salvador. According to data from the last census (IBGE, 2010), it has a population of 6,434,
and is a neighborhood with the highest Black population in the city - 93% of local residents described themselves as being black or brown -, and has one of the poorest Human Development Indices (HDI).

Figure 1. Map showing the locality of Ilha de Maré

The island is made up of 10 communities, six of which, including Porto dos Cavalos and Martelo, between 2004 and 2005, were recognized by the Palmares Cultural Foundation (FCP) as quilombola communities. Based on this recognition, they filed a request for the quilombola territory on Ilha de Maré to be regularized at the National Institute of Colonization and Agrarian Reform (INCRA), which, until the publication date of this article, had not yet been finalized. The certified communities live off artisanal fishing, family farming and handicrafts, with Porto dos Cavalos and Martelo living exclusively from fishing.

According to a report by Djalma, an elder and local leader, and information from the Relatório Técnico de Identificação e Delimitação da Comunidade Quilombola de Ilha de Maré [Technical Report on Identification and Delimitation of the Quilombola Community of Ilha de Maré] (INCRA, 2016), the quilombola communities were formed by enslaved Africans who had fled from sugar plantations in other regions, and from ships that sank in its vicinity, as well as those who had been enslaved on the plantations located on the island itself, and who remained there after abolition.

The territory of Ilha de Maré, like the Recôncavo as a whole, was occupied from the mid-sixteenth to the eighteenth century, by a profitable sugar economy
based on slave labor. Even when its importance diminished in the broader economic scenario, this production model remained practically unchanged in the territory until abolition, in 1888 (BARICKMAN, 1999). Thus, in the post-abolition period, the Recôncavo was predominantly occupied by Black communities that lived on family farming and/or artisanal fishing (FRAGA FILHO, 2004), so that, in contemporary times, they were recognized as established quilombola communities, by the 1988 Constitution.\(^8\)

However, from the 1950s onwards, an abrupt change took place in the form of occupation and appropriation of the Recôncavo territory, due to the discovery of oil, followed by the establishment of the first petroleum supply chain in the country, which directly affected - and increasingly continues to affect – the reality of the communities established there. Oil production in the onshore fields of the Recôncavo favored the installation of the Landulpho Alves Refinery and the Madre de Deus Maritime Terminal, for loading and unloading oil and its derivatives, in 1950, the Aratu Industrial Center in 1967, the Port of Aratu in 1975 and the Camaçari Petrochemical Complex in 1978, in addition to smaller but rather impactful structures (such as pipelines and reservoirs) to serve the industry.

The scenario currently encountered in the Recôncavo is one of occupation and appropriation, mainly on the banks of the BTS, by an industrial complex primarily related to activities in the petroleum supply chain, interconnected by a network of oil and gas pipelines that cross the bay. As from approximately 1955, Ilha de Maré – particularly the community of Martelo – became one of those occupied territories. Onshore oil wells were installed there, connected to surface laid pipelines, which crossed the community, taking the extracted gas and oil to storage stations located off the island.

Besides this occupation, there is also the daily chemical contamination inherent to the activities of the petroleum supply chain as well as the recurring “accidents”, a term used by the industry in reference to environmental crimes in areas of common use involving the spillage of oil, its derivatives and other chemical substances. Despite the frequency and magnitude of these environmental crimes, compensation processes have not as yet been generated for the affected communities, nor is there any minimally active environmental inspection by environmental agencies, in order to deter the repetition of such events. Faced with this disproportionate injunction of environmental damage on a social group, the fishing communities and quilombolas of the Recôncavo, particularly the women

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8. In order to obtain an idea of the expressive occupation of this territory by artisanal fishing communities, we emphasize that there are currently 241 fishing communities in the Recôncavo, of which 54 are identified as quilombolas, 46 of which are certified by the FCP (RIOS, 2017).
of Ilha de Maré, have recognized that not only their living territories, but also their bodies have been transformed into a large sacrifice zone of the hegemonic development model, based on an energy matrix centered on the use of fossil fuels.

In dialogue both with this perception of the women on Ilha de Maré, and with the concept proposed by Mbembe (2016), it may be stated that, today, a system of necropolitics reigns across this territory - a death policy that focuses on certain groups or entire populations based on the acceptability of taking life or being “left to die”, based on race and racism. Similarly, Zagatto and Souza (2020, p. 264), when addressing the situation on Ilha de Maré, proposed the concept of “environmental necropolitics”, since the development model installed there has been “forcing [the communities] to live together in a perversely sui generis way with the inexorable experience of death”.

3. The gleaners of Ilha de Maré: the construction of gender in its relationship with the environment

The field of research on gender shares an understanding that the sexual division of labor is a structural dimension that permeates social relations, organizing them through gender hierarchy, which takes on different forms, depending on the class and race of the women (SAFFIOTI, 2013; BIROLI, 2018).

In artisanal fishing, following the dominant pattern of the sexual division of labor, it is women who are responsible for all the work related to social reproduction – domestic activities, taking care of the children and older people, and providing emotional support for the whole family. More specifically, in artisanal fishing, the sexual division of work is associated with a spatial division, both strongly demarcated and co-produced by the bipolarity of sea and land – whereby in the latter, transitional environments between sea and land are also included.

Within this universe, in addition to the sea and land representing distinct physical spaces, they are endowed with an enormous cultural symbology, in which masculinity is linked to the first and femininity to the second. It is this spatial bipolarity that generally defines the sexual division of labor in artisanal fisheries, both in Brazil (ALENCAR, 1993) and on a global scale (ALONSO-POBLACIÓN; NIEHOF, 2019).

From the collection of primary data, by directly observing the daily lives of gleaners and through semi-structured interviews conducted with 10 women from the communities of Porto dos Cavalos and Martelo, in August 2018, we identified

9. Exceptions to this dominant pattern have been observed in some communities in Brazil. In Recôncavo, São Braz (MAIA, 2021) and Ilha de Maré (RIOS, 2017), for example, some men also glean. However, gleanin is mostly carried out by women, following the typical gender performance of fishing.
the dynamics of daily life, with regard to the sexual and spatial division of work and the access and control of certain spaces and resources within the environment. In such communities, as in others on Ilha de Maré itself (RIOS, 2017), we observed the spatial bipolarity linked to the sexual division of labor, although with certain particularities, as described below. Here, the productive activity of women is restricted to the transitional environments between the sea and land, sandbanks and mangroves, and to the land itself – an environment where they also carry out reproductive activities, guaranteeing the maintenance of the lives of their families.

The lives of the gleaners are cadenced by the phenomenon of the tides: each 15 days, a *maré* (tide) begins, also called *maré grande* (high tide), which lasts around a week, when it is possible to glean on the sandbanks – rocky and/or sandy banks that emerge during the ebb tide inside the BTS (Figure 2). They glean on the sandbanks located to the north of the community, with the help of small, motorized fiber canoes or rowing canoes. During the maré, many of them go to the sandbanks both in the morning and in the evening. This is because the tides are semidiurnal on the BTS continental shelf, i.e., there are two tidal cycles of similar amplitude per day, with an interval of around 12 hours between them. The following week, after *maré grande*, there is no significant variation in the water height inside the BTS, hence, the sandbanks remain constantly submerged (LESSA et al., 2009).

Figure 2. Sandbanks in BTS
Source: Author’s personal collection, 2018.

10. The period that the gleaners call the Maré or Maré Grande is when the syzygy tide occurs, characterized by greater tidal ranges during the day, i.e., the sea advances and retreats more in relation to the strip of sand; there is also a greater amplitude in the height of the water, enabling the sandbanks to appear.
From what may be observed, the maritime landscape found inside the BTS is fairly fluid, whereby its dynamics are produced by the tidal cycles: sometimes the sandbanks become exposed, thereby creating a territoriality of gleaning, while at other times they remain submerged, making up a territory of artisanal fisherfolk with their canoes and nets. Considering this, it may be stated that, although the communities of Ilha de Maré organize themselves through the sexual and spatial division of labor, the same place, depending on the tides, may be accessed and used by women or men, which, to a certain extent, blurs the typical spatial bipolarity found in artisanal fishing communities.

During the periods when the sandbanks are submerged, the gleaners, according to the frequency that suits each of them best, resort to the mangroves to glean. In the mangrove however, gleaning requires greater physical effort: it is necessary to insert an entire arm down into the mud looking for siri (small crabs) in their burrows below the surface. As they walk through the mangroves, their legs sink into the mud, so much so that the activity ultimately requires the entire body to become immersed. Hence, gleaning on the sandbanks, when they are exposed, is a priority.

On the sandbanks, most of the interviewed gleaners focus on catching siri (Figure 3), since the financial returns are much greater – R$25 to R$30.00/kg, in August 2018. On each trip to glean on the sandbank, which lasts around four hours, an average of 2kg of siri are caught, which is equivalent to 100 crabs. The financial return on oysters is similar to that of siri, but, since it is a more labor-intensive type
of fishing (Figure 4), women dedicate themselves less to this activity. *Sarnambi* (a small clam) has a lower financial return – R$20.00/kg, in 2018 – and requires less technical mastery, because of this, younger people and children tend to engage in this type of fishing. However, when the conjuncture is one of scarcity (or as they say, when *crab is weak*), the women also go gleaning for sarnambi (Figure 5).

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**Figure 4. Gleaning for oysters**  
*Source: Author’s personal collection, 2018.*

**Figure 5. Gleaning for sarnambi**  
*Source: Author’s personal collection, 2018.*

Upon returning from the sandbanks or the mangroves, the women begin the second stage of activities: the processing, carried out in the backyard of their
homes. Using a wood fire and a pan, they cook the shellfish and then start what they refer to as the *catação*, i.e., removing the crabmeat from inside the siris and the flesh from inside the shells – sarnambi, oyster, *sururu* (charru mussels), *tapu* (Figure 6) –, and placing the material collected into the freezer in 1kg bags. The *catação* stage of production is that which women devote more time to during the day. For each kilo of crabmeat collected (on average, 50 siris), the women take at least two hours to process. In addition, the married gleaners or mothers of young fishermen also remove the crabmeat from the siris that their husbands and sons catch with a *manzuá* (a type of trap) in the mangroves and estuaries, since, in the sexual division of labor in fishing, men do not carry out this activity. Thus, even when women do not go to the sandbank themselves, they are involved in the activity of removing crabmeat.

![Figure 6. Gleaner removing crabmeat from the siris](source: Author’s personal collection, 2018.)

Some women also become involved with the marketing step. Thus, given the huge number of daily tasks, they seek to organize themselves in order to carry out household activities between the stages of processing. However, during the fieldwork, we observed that these activities often take place concomitantly: while the food is cooking on the stove, the woman removes the crabmeat from the siris out in the backyard and keeps an eye on the pot on the stove.

The women organize their daily lives as follows: they wake up at around five-thirty in the morning; those with young children get them ready for school; they make breakfast, and sometimes, when there is time, they also prepare lunch;
then they go to the maré, if it is the maré week. This last task takes between four and six hours, including the journey there and back. They then return home, cook the seafood, have lunch and begin removing the crabmeat. When they do not go to the maré, they spend the whole day removing crabmeat. They end the day’s activities between 8 pm and 9 pm, depending on the amount of crabmeat there is to remove. Indeed, women work in productive or reproductive activities for between twelve and sixteen uninterrupted hours per day. Veronica, for example, describes her routine as follows:

I usually get up before 6 o’clock. I get the boy ready for school and start doing some housework. I start cooking the siri, make lunch and then start removing the crabmeat or I go to the maré. [...] when I get home from the maré, I start the preparation for removing the crabmeat, both the ones that I caught and those that my husband caught with the manzuá. I leave the oysters and sarnambi for another day. The next day, early, I cook what I picked the day before (siri, oyster, sarnambi), leave that at home and go off again to the maré. When I come back home, I remove the crabmeat from what I’d already cooked and leave today’s for the next day. I sometimes go on removing crabmeat until 9:30-10:00 at night. But usually, I just go on until around 7:30.

4. The implications of petroleum on the territory and bodies of gleaners

As previously mentioned, both the territory on land, the living space of the communities, and the maritime territory have been occupied by the petroleum supply chain, among other industries. Although the Petrobras onshore oil exploration wells (Figure 7) have been temporarily abandoned or plugged (i.e., dry, with no presence of oil and/or gas), and therefore, there has been no oil or gas exploration and production for some years on Ilha de Maré, its structures have remained on the territory, disturbing the landscape and the life of the community and the biome.

11. A state-owned Brazilian multinational petroleum corporation.
12. Terminology used by Petrobras to characterize the current situation of the wells.
The women of Martelo and Porto dos Cavalos report that the presence of these “petroleum infrastructures” (BUTI, 2020) generates a strong feeling of insecurity and fear, especially in relation to the well-being of their children. Until a few years ago, the wells had not been fenced off, and as there were no leisure facilities within the community, they became transformed into children’s play areas. Today, as a result of the population’s strong mobilization, they have been surrounded by fencing. However, the gate that leads to the area is often left open and children are ultimately able to access such structures. The mere presence of these petroleum infrastructures on the quilombola territory affects the peace of mind and mental health of those women who are mothers, as reported by Veronica, who at the time was the mother of a 10-year-old boy:

When the boy goes out to play, I become apprehensive, knowing that he could suddenly be somewhere that he shouldn’t, but there are children who, no matter how much we talk to or control, go to that place. Because even though it’s now fenced off, some children still go there, so I’m always afraid, wondering if he’s going up there, especially because there are places with puddles, so we don’t know if he’s being exposed to any kind of illness.

The women also highlight the insecurity of gleaning in the areas of mangrove located in the vicinity of these wells, given their history of crude oil spills and Petrobras dumping waste. As Jassiara denounced:
Petrobras has been very neglectful of the wells. When they come to carry out maintenance, they don’t take the waste away, they leave it in the mangrove [...] so when we walk there, oil seeps up... it must be from old spills. So I’m afraid to go gleaning there. Both we and the shellfish get contaminated, especially since our whole body goes into the mud.

Zenilda, who was already a young gleaner when Petrobras first arrived in the territory, recounted the following story:

When Petrobras first arrived, it destroyed a lot of the mangroves, the oil began to kill the shellfish, we found open oysters and clams... at the time of the construction, the oil spillages were constant. In Martelo, there was a fish nursery [in the mangrove] that produced a lot of fish and siri, Petrobras killed it ... A lot of mangroves died, and it was only after many years that it managed to recover, but it was never the same as it used to be.

These reports demonstrate that the areas of mangrove located in the community itself, and historically used by women for gleaning between the tides, have become transformed into occupied, disturbed environments by petroleum. Therefore, areas that were considered to be of easy access for the gleaners in Porto dos Cavalos and Martelo have become contaminated and inappropriate for the characteristic productive activity of the place. The direct effect for these women was a territorial reduction of gleaning, as well as the imposition of having to go to other mangrove areas further away from their homes, thus increasing the time spent on this activity. Some women, however, still glean in these areas, thereby directly placing their health at risk.

Jassiara’s account regarding the presence of oil in the mangroves resulting from old oil spills coincides with an episode that occurred in the quilombola community of Dom João, also located in the Recôncavo and occupied by the petroleum supply chain. Buti (2020) recalls an encounter by a fisherman in the mangrove with what he called an “oil tanker guaiamum”13: “a black guaiamum, with an oleaginous consistency and a very strong smell, the result of oil contamination in the area at the bottom of the hole where the animal lived, at a depth of around 2 meters” (BUTI, 2020, p. 285). According to the fisherman, the oil at the bottom of the hole where the “oil tanker guaiamum” lived came from an oil spillage that had occurred decades before. This highlights the long duration of oil disturbance in the

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living territory of these communities and its effects on the bodies of animals and, eventually, on the bodies of women.

In addition to contaminating the space and resources, on which the communities depend for their material reproduction, there is an entire cosmological universe in the deep relationship that women, and their bodies, establish with the mangroves, sandbanks and waters disturbed by the petroleum supply chain. A speech by Eliete Paraguassu, one of the community leaders on Ilha de Maré, and a resident of Porto dos Cavalos, perfectly expresses the violence that the logic of development exerts onto the cosmic and spiritual universe of women:

They destroy the mangrove, which is a sacred space for us, in addition to being the space from which we obtain food for our children. We have a deep relationship with the mangrove, of respect and love... it is the home of Nanã [...]. It is extremely painful to see the mangroves and the sandbanks covered in oil or destroyed. It’s as if they have taken away a piece of us.

The mangrove located in the community of Martelo is not the only area disturbed by oil, nor is it only this that endangers the livelihood and health of gleaners. As previously described, the BTS became a territory widely occupied and appropriated by the petroleum supply chain, which produced a scenario of intense chemical contamination of the air, sediments and of water, accumulating throughout the marine food chain (HATJE et al., 2009). Here, the marker for the way of life linked to the environment is extremely relevant to the experience lived by these women, since their way of living and producing is inseparable from their relationship with the environment. The harmful effects brought by the degradation of their living and working territories are felt directly on their bodies and in their health. Furthermore, since they spend so many hours in direct contact with the sediment when gleaning on the sandbanks and mangroves, contamination by dermal exposure is much greater in women than in men, who go fishing in their boats, although they are also contaminated by the air, through contact with water and from their food. Eliete Paraguassu’s speech is categorical with regard to this: “We are the most contaminated, it’s our bodies that are in the mud”.

Therefore, in the perception of these women, due to the sexual and spatial division of labor, in the current scenario of contamination, their physical health is more affected than that of men, especially their reproductive health. As Veronica observes:

What I know about health problems is that most women, when they do a smear test, the doctor identifies that we have inflammation, and tells us to stay away from the mud. We know about this because we do the tests, but there must also be other things that we don’t know about, because we don’t do more in-depth blood or skin tests.

The perception and fear of contamination of the environment, animals and, consequently, the bodies of quilombola men, women and children became an even more tangible reality for gleaners on Ilha de Maré after an investigation conducted by Professor Neuza Maria Miranda dos Santos, from the School of Nutrition at the Universidade Federal da Bahia (UFBA). The research, undertaken in 2005, aimed to verify the level of contamination by cadmium and lead in 117 children aged up to 6 years, from Ilha de Maré, which at the time, was a universe of 50% of the local children (ZAGATTO; SOUZA, 2020). The results were alarming, as Neuza Miranda reported to Mídia Ninja (ASSASSINO INVISÍVEL, 2019): “90% of the children are contaminated with more than 10 micrograms of lead per deciliter of blood, higher than recommended by the World Health Organization”. She continued: “in Bananeiras I found high blood levels of cadmium [sic] a metal considered carcinogenic to humans, and I also found contaminated seafood, shellfish and fish, with the same metals - lead and cadmium”.

The result of this study may be considered a turning point in the life and struggle of the women on Ilha de Maré. It was with this that they partly understood the level of seriousness regarding the chemical contamination to which they and their children were subjected – we say “partly” because other contaminants, such as hydrocarbons, were not studied. This result, coupled with a full awareness of the difficulty involved in reversing this devastating scenario, which only deepens with the permanence of oil and industrial activities in the surroundings of the territory, has since generated great social and psychological suffering for the women of Ilha de Maré: the fear that their children will develop a fatal disease such as cancer is increasingly on their minds.

On Ilha de Maré, there are numerous reports concerning the incidence of cancer in children and young people. One mother, when telling us about losing her 13-year-old daughter, Adriane, to cancer, stated: “Cancer used to be rare, we hadn’t even heard of it, now we know about more and more young people with cancer, that’s how I lost my little girl”. On this, Marizélha Lopes, gleaner and one of the leaders on Ilha de Maré, in the report Assassino Invisível [Invisible Assassin] (2019), produced by Mídia Ninja, stated that:

[...] losing Adriane guaranteed that our hope for future generations had faded away [...]
We, for example, had never heard of cadmium, lead, mercury; we’d never heard of propylene, butyene [sic], acetone... we’d never heard of it. So these things are not [sic] ours. Dad says that my great-grandfather, Grandpa Candido, when he saw the beginnings of the Port of Aratu, he said “our lives have now ended, our health has gone”. And Grandpa Candido was right, because it has reduced our lives a lot, our life span.

The high incidence of cancer in young people is explained by the fact that children are more vulnerable to exposure of chemical substances present in the environment than adults, as they have greater difficulty in metabolizing them. In cases of continuous or chronic exposure, there is an accumulation of these substances in the organs, bones and fat cells, which may lead, years later, to the development of cancer, among other health problems (MELLO-DA-SILVA; FRUCHTENGARTEN, 2005).

Such suffering, paradoxically, has both driven and strengthened the struggle of these women against environmental racism. According to Eliete Paraguassu, many women, including herself, whose daughter was one of the children who participated in Neuza Miranda’s studies, became more effectively involved in the struggle after the research, which reveals how motherhood can become a potent force toward confronting environmental injustices when the health and well-being of their children are at risk.

Although the study has not yet been published, the female leaders from Ilha de Maré have appropriated the results, as indicated by Zagato and Souza (2020). They have begun to divulge them in the public spaces they occupy and to demand improvements from the public authorities regarding health policies and extending investigations into the adult population, with the inclusion of other contaminants. These are the repeated demands of the women, revealing how the occupation of the petroleum supply chain on this territory has kept them in a constant state of alert and concern, something that has generated considerable anxiety, anguish and suffering. They are fully aware that they have been contaminated, but they do not know by which chemicals, the level of contamination, the illnesses they may develop, or what they should do to minimize the contamination of their own bodies and those of their children. It is a state of uncertainty and daily concern that profoundly affects the mental health of these women.

5. Intersectionality at the interface with an environmentally degraded territory

As has been demonstrated, the territory of life and of the social and material reproduction of the women on Ilha de Maré has been transformed into
an environmentally degraded territory. What is of interest here is to understand how the interaction takes place between this territory – an environmental conflict zone between the affected communities and the activities of the petroleum supply chain – and the multiple patterns of oppression to which the women are subjected, thereby affecting and transforming their life experience.

The scenario described above is even further aggravated when crossed-referenced with the precarious conditions of the public services present across the territory, including the problems of sewage and the difficulty of accessing healthcare services. Given that Ilha de Maré is a neighborhood in the city of Salvador with the highest number of Black residents, and that it is also a low-income neighborhood, following the pattern of association between race and class throughout the rest of the country, we argue that a link between the category race and that of class is a determining factor for such precariousness across the territory. This, in turn, reveals the institutional racism\(^{15}\) that permeates the ways in which federative entities implement policies for the country’s Brazilian Unified Health System (SUS) – more pronounced in remote territories, such as Ilha de Maré.

The lack of a sewage system on Ilha de Maré\(^{16}\) is not a reality exclusive to these communities. A considerable portion of the Brazilian Black population lives with the precariousness of environmental sanitation, particularly sewage systems. This has produced disproportionately high rates of illness and mortality among Black children and older people from diseases related to inadequate environmental sanitation (JESUS, 2020). Rios (2017) reported that on Ilha de Maré

Open sewers attract insects and cause illness in many children and adults. In addition to the bad smell, the dumping of waste has contaminated the mangroves and waters and caused skin problems and other diseases in the fishermen and gleaners (RIOS, 2017, p. 303).

With regard to healthcare services, Ilha de Maré has only one health center, built in 2009, after mass mobilization by the population. It is located in the Praia Grande community, more than an hour’s walk from the communities of Porto dos Cavalos and Martelo. It does not operate 24 hours a day and only provides outpatient care, with no hospital facilities. In addition, women complain that there

15. Institutional racism results from the way in which institutions function, by operating within a dynamic that confers, albeit indirectly and unintentionally, disadvantages and privileges onto individuals and communities, according to their racial backgrounds. Cf. ALMEIDA, S.L. de. O que é racismo estrutural? [What is structural racism?] Belo Horizonte: Literacy, 2018.

16. Although the water supply serves 95% of households, only 4.2% of them are connected to a sewage system, the others dump their waste directly into the mangroves, rivers or sea (IBGE, 2010).
is no type of preventive care for diseases related to chemical contamination in the territory, of for genetic factors of the Black population such as sickle cell anemia, high blood pressure and diabetes mellitus, nor any physiotherapy treatment. Given the characteristics of the women’s work, providing this treatment would be of fundamental importance for their health and quality of life.

The precarious access that the Black population encounters to healthcare services has also been documented, and makes part of a set of what has been called racial inequities in health (FAUSTINO, 2012; WERNECK, 2016). In relation to women, racial inequities are present due to the lack of a specific area of knowledge and scientific production regarding the health of Black women – even though it is a known fact that this group has its own particular health issues –, through poor access to the SUS, both in the prevention and treatment stages, as is the case on Ilha de Maré. Moreover, when access to SUS is eventually obtained, it is permeated by racial discrimination (WERNECK, 2016). Thus, discrimination based on gender and race act hand in hand.

With regard to the work undertaken by the female gleaners, there is a large gap in the production of knowledge regarding occupational diseases associated with gleaning. According to their reports, the National Social Security Institute (INSS) often offers them discriminatory treatment, and frequently denies them the right to sick leave, requested due to work injuries, which affect a large part of the workers on Ilha de Maré, as this investigation has verified. All interviewees reported that they suffer severe pain in the spine and/or upper limbs, with cases of younger gleaners unable to glean, given the seriousness of their injuries.

In a pioneering manner, Paulo Pena and Vera Martins coordinated a research project on work-related illnesses and accidents in gleaning on Ilha de Maré, which was extended to other fishing communities throughout the state of Bahia. The results were overwhelming. As they state:

In 2007, the research report released was blunt with regard to the diversity and seriousness of occupational hazards present in the daily work of gleaners. In addition to being exposed to the known risks, attention was also drawn to the accelerated pace of work with an excessive number of movements with repetitive efforts associated with developing repetitive strain injuries, or RSI. From the ergonomic analysis performed, in addition to other conditions, it was found that there were hellish cadences throughout various activities of gleaning, with the number of movements in the extremities of the upper limbs reaching an average of 10 thousand movements per hour, equivalent to that found in the typing functions of modern services. Gleaning for certain types of shellfish, the traditional postures, the removal
of shells, among other activities, were associated with common complaints of often unbearable pain, edema, deformities, numbness and the loss of functional capacity in the upper limbs. (PENA; MARTINS, 2014, p. 20)

That said, it is our understanding that, in the specific context of the communities studied herein, the interaction between the intersectionality of the categories of gender, class, race and way of life linked to the environment and a territory degraded, appropriated and contaminated by the petroleum supply chain confers a work overload onto female gleaners as well as a scenario involving severe physical and mental illness.

The intersectionality between the axes of oppression of gender, class and race takes place as follows: the relationship and hierarchy of gender, through the sexual and spatial division of labor, defining the spaces and resources of the environment that may be accessed by gleaners, as well as conferring upon them the full responsibility for the reproductive work and for the most painful part of the productive work performed by themselves and their spouses. This last item, when linked with the low exchange value attributed to the seafood product, i.e., the low financial return that women obtain as a result of their socially devalued occupation, imposes upon them many uninterrupted hours of daily work in order to obtain a greater return, based on the volume produced. This process has generated the reported scenario of severe illness (PENA; MARTINS, 2014), a situation aggravated by the precariousness of access to SUS and to the treatments offered, in association with institutional racism and the discriminatory conduct by the INSS towards gleaners. Another crossing of these axes takes place through institutional racism, which has enabled the lack of a sewage system on the island by the water and sewage agencies to become an accepted fact. This increases illness and the morbidity and mortality of children and older people, something that, given the gender hierarchy, is an even greater burden on women, due to the care they need to provide for sick people in the family and community.

Furthermore, the marker for the way of life linked to the environment imposes greater body contact of the artisanal fishing communities with the contaminated environment - an aspect which, added to a diet based on products from extractive activities that may also be contaminated, may have serious health effects. However, this painful reality of chemical contamination and illness, even though it affects the entire community, affects certain people differently, according to gender and age. As has been indicated, as a result of their productive activity, women are more affected than men, in addition to the exclusive responsibility they have in caring
for sick youngsters and children. Lastly, chemical contamination has generated a destabilizing effect on the mental health of women, since they are fully aware of how their living territory has been transformed into a contaminated territory, a sacrifice zone of capital, which causes their children to become ill and leads to death. At the same time, women find it very difficult to reverse this situation in which their rights are violated.

However, it is important not to lose sight of the fact that the same intersectionality responsible for imposing greater social vulnerability on Black women, from socially disadvantaged classes and belonging to communities with a way of life linked to the environment, also has a mobilizing effect, thereby potentializing their agency and resistance throughout the territory of Latin America (SVAMPA, 2019). On Ilha de Maré, women have occupied the public space and are at the forefront of the fight against companies, and omission by the State, leading the resistance in the fight for the right to territory and life, both for themselves and for their children, companions and the community as a whole. For these women, the alternative that presents itself is the fight against the development model, racism and necropolitics, in defense of their way of life. In the words of Eliete Paraguassu:

> We live a silent war against an invisible monster, which is chemical contamination, imposed by this development model that is perverse and murderous... it is against this environmental racism, which makes us sick, which contaminates our bodies, especially those of women, that we struggle [...] [the struggle] is to guarantee our rights and defend our territory.

It may therefore be stated that the present work is configured as an exercise that has sought to understand how a development model, anchored in an energy matrix, highly dependent on fossil fuels, and that has generated a series of environmental conflicts, has profoundly affected and endangered the lives of Black women with a way of life linked to the environment, such as the gleaning on Ilha de Maré.

We trust that this will encourage future research in the field of environmental conflicts in Brazil in order to place gender and race at the center of its analysis through an intersectional approach – as the bodies most affected by this development model have gender, color, and class –, thus contributing to the growth of the incipient field of Latin American Feminist Political Ecology.
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