CONFRONTING LEGACIES OF LOSS: NEGOTIATING INTERGENERATIONAL INEQUALITIES IN AFRO-BRAZILIAN 'TRADITIONAL' COMMUNITIES

by

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(Under the Direction of DONALD R. NELSON and NIK HEYNEN)

ABSTRACT

Despite decades of academic critique, economic development remains a perpetual feature of everyday life and central to the organization of nation-states. However, economic development's benefits and risks are often not equitably distributed. This ethnographic and historic-archival study investigates how Brazil's recent national infrastructure development program—The Growth Acceleration Program (Programa de Aceleração do Crescimento or PAC)—has contributed to widespread dispossession, environmental devastation, and depression in Afro-descendent coastal communities in Pernambuco, Brazil. State-designated "povos tradicionais," or traditional communities, have lived off the land, mangroves, and oceans for generations. However, without formal land rights, these communities are regularly expropriated for development initiatives. In the early 2000s, PAC funds transformed a small public utility port between the traditional fishing communities of Cabo de Santo Agostinho and Ipojuca into the sprawling Suape Port Industrial Complex (Complexo Industrial Portuário de Suape or CIPS) that today occupies over 13,500 hectares of territory. This research illuminates how the CIPS's violent expulsion of over 26,000 Cabo and Ipojuans is linked to centuries of racial land tenure arrangements that systematically exclude Afro-descendant communities from land use and ownership. Furthermore, the study analyzes how Afro-descendent residents, especially women, disproportionately experience environmental degradation, including pollution, deforestation, and dredging of the ocean and rivers. Environmental change and dispossession from ancestral territories have contributed to the loss of livelihoods, ecological knowledge, and more-than-human kinship traditional communities depend on for financial and emotional well-being. Despite obstacles, many Cabo and Ipojucans maintain an extraordinary capacity for resilience and strength. Some devote themselves to community organizing, while others draw upon regional identity and cultural traditions to carve out personal moments of joy amidst overwhelming structural hardship. Syncretic Afro-Brazilian spiritual cosmologies emphasizing dance, music, and more-than-human sociality provide vital moments of autonomy and relationships of tenderness and care. Thus, through personal and communal, affective, and joy-making practices, Afro-Brazilians in Cabo and Ipojuca strengthen themselves to confront the structural oppression and uncertainty of state-sponsored socio-political and environmental

injustices. These findings indicate that to understand economic development's profoundly uneven consequences, we must consider how development programs articulate with colonial histories, intersectional inequalities, and socio-ecological relations, especially in marginalized communities.

INDEX WORDS: Brazil, environmental anthropology, political ecology, gender studies, African diaspora, Pernambuco

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DEDICATION

This dissertation is dedicated to loved ones gone too soon: Dad, Douglas, Hermina, Greg, Connie, Chris, Claudia, Donnie, Ashley, and Stevo.

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CHAPTER 1

INTRODUCTION

Sitting in an open garage in the Gaibu neighborhood of Cabo de Santo Agostinho, Pernambuco, Sofia[1]—a middle-aged Afro-Brazilian artisanal fisher—shared a story about her friend and former fishing partner, nicknamed Biu. Biu was mute but over time developed the ability to communicate some words and phrases. He would take Sofia and his sister on his handmade raft (jangada) to collect crab on the Island of Tatuoca in the neighboring municipality of Ipojuca where he lived with his mother. Sofia remembered the abundant fish and shellfish on Tatuoca, proudly stating that the three of them always came home with "bucketfuls of crabs." However, when asked whether she still fishes or collects on Tatuoca, Sofia became solemn.

> In that time there was a lot of abundance there that today there's not. Port Suape ended everything…[Biu's] sister lived there, and a bunch of others [lived there], but then they built this shipyard, the shipyard with boats and things, where they moor the ships and stuff.. but that part of the forest where people lived, and where my mute friend lived, when they built this part of the shipyard to have ships, these things, they began indemnifying every person there [in Tatuoca]. The people moved to Vila Claudete, Garapu, where they made housing complexes, and they put everyone there, you understand? And there were houses that were there [in Tatuoca] long before the beginning of Suape, if you go around there, there's Vila Tatuoca where people used to live and where Biu lived and resisted the most because he lived there...And there they made this new part of the shipyard to fabricate a ship, and quickly began cutting down forests all through there, destroying the mangroves, destroying everything [Sofia, interview, 02/22/2021].

Sofia continued to reminisce about how the Suape Port Industrial Complex (Complexo Portuário de Suape, or CIPS) changed the course of Biu's life and ultimately, his death.

[1] All interlocuters have been given pseudonyms

> …Biu had a bar, his mom's house, his siblings houses, there was everyone living there and he sold [fish] for his own sustenance there, catching fish, collecting shellfish, catching aratu, all to process and sell to make money. And his mom, today his mom is still alive and more than 80 years old and resisting there, but there were lots of people leaving, these people from the neighborhood Tatuoca, and many people left before him (Biu) and he said "no, I'm not going to leave. I was born here, my mom is more than 80 years old, gave birth to me and raise me here and sustained me." And Suape offered more and more money, more and more money. I know that in the end, Suape went with weapons, with everything, and he resisted. I did not go, but there were people who gave a testimony for him saying that they arrived with guns to scare him, for him to accept their proposal and he resisted not wanting to leave. And what happened? It ended with them forcing him to leave… and he became sick because of this, he became ill, he was admitted [into a psychiatric facility] and ended up dying with depression and his mom is 88 years old. [Sofia, interview, 02/22/2021]

Sofia's haunting remembrance of the forced removal of Afro-Brazilian residents from Cabo de Santo Agostinho and Ipojuca reflects wider tensions, anxieties, and fears people feel about Brazil's large national infrastructure development program known as the Growth Acceleration Program (Programa de Aceleração do Crescimento) or PAC. Implemented during Worker's Party (Partido das Trabalhadores or PT) presidencies between 2003 and 2016, the program directed hundreds of billions of reais into development projects to amplify external commerce and trade (Pereira 2013; Saad-Filho 2020; Welch 2011). Billions of PAC funds were directed toward the Marine Merchant Fund (O Fundo da Marinha Mercante—FMM) for the growth, expansion, and updating of Brazil's commercial ships and ports (Amato 2012; Ministério da Infraestrutura 2022a) [2]

In the PT era in Pernambuco, PAC funds went toward transforming a small public port between the neighboring communities of Cabo de Santo Agostinho ("Cabo") and Ipojuca into a mega 33,359-acre industrial complex that includes a hub for the shipbuilding sector. The South

[2] The Merchant Marine Fund (FMM) is renewed annually by the Ministry of Infrastructure, and in 2022 year received over 1 billion in state funds for the continued expansion of Brazil's maritime commercial sector (Ministério da Infraestrutura 2022b).

Atlantic Shipyard (Estaleiro Atlântico Sul) opened in the mid-2000s and forcibly removed Ipojucan fishing communities from the Island of Tatuoca. Yet the naval shipyard is only one of over 100 heavy industries operating within the complex. Today CIPS houses national companies like the state-oil and gas company PETROBRAS which installed the Abreu and Lima oil and gas refinery in 2014. Numerous other private global enterprises reside in the complex, including Toyota, Coca-Cola, Unilever, Bunge, Shineray, among other petrochemical, construction, thermoelectric energy, preform plastic, and pharmaceutical plants (SUAPE 2020a). CIPS's expansion in the past two decades has forced an estimated 26,000 Afro-Brazilian farmers, fishers, and shellfish collectors from a region marked by centuries of sugarcane-based extraction (DHESCA 2018).

The neighboring coastal municipalities of Cabo and Ipojuca are nestled between what remains of Pernambuco's mangrove forests (*manguezais*) and endless fields of sugarcane: the state's most persistent export commodity (Andrade 2011). Pernambuco is infamous for its sugarcane production that began in the 16th century a few decades after Cabral landed in 1500. Everything from architecture, to street names, to the neighborhoods still designated "engenhos" (or plantations) illustrates how Pernambuco's long history of sugar production persists. Over the centuries, the booms and busts of the sugarcane economy created opportunities for Afro-Brazilian descendant communities—whose ancestors endured brutal plantation slavery—to cultivate abandoned plantation lands (*terras do engenho*) and use them as commons for small-scale agriculture. The coastal forests (*mata atlântica*) provided essential resources like seeds, nuts, wild fruits, and building materials. Furthermore, the oceans and mangroves generated rich fishing and shellfish collecting traditions that today are considered 'artisanal fishing' practices. For generations, these communities lived relatively peaceful lives in these environs.

However, when the Suape Port Industrial Complex (hereafter CIPS) arrived on the scene, it began to threaten Afro-Brazilian communities' livelihood practices. In the 1970s, Pernambuco's Governor Eraldo Gueiros Leite demarcated land for developing a 'mega port' that would fulfill the modernization dictates of the Brazilian military dictatorship (SUAPE 2020b). Nevertheless, the necessary funds to realize the port industrial complex did not occur until the presidency of Luis Inácio Lula da Silva or "Lula" (2003-2011) whose development ambition was to make Brazil a global leader in commercial export of agricultural commodities and raw materials to pay Brazil's foreign debts and invest in ambitious social programs (Pereira 2013; Saad-Filho 2020; Welch 2011). Lula created alliances with agribusiness to realize these goals and heavily invested in mega-infrastructure projects like CIPS through PAC (Welch 2011). Lula's successor Dilma Rouseff (2011-2016), would continue this program with PAC-2. Today, CIPS is only one of 35 Brazilian public ports (portos públicos) that are managed by state (Ministério da Infraestrutura 2022a). Through removing people from their ancestral territories, deforesting and fragmenting local mangroves, dredging the ocean for industrial container ships, and polluting the air, water, and soil with noxious effluents, CIPS has drastically altered cultural practices, local ecologies, and land tenure arrangements for coastal fishing and farming communities whose livelihoods depend on functioning ecosystems (DHESCA 2018; Santos et al. 2019).

Despite decades of academic critiques of economic development, development remains a perpetual feature of everyday life. Development is a controversial concept that often reflects a desire for economic growth and the improvement of social conditions, especially health, education, safety, and dignity (Crewe and Axelby 2013; Sen 1999). Development occurs when governmental and non-governmental actors, agencies, institutions, or corporations implement

targeted strategies to achieve "economic, social and political goals through planned intervention" (Crewe and Axelby 2013, 3). Lula's brand of development has been labeled *new* or *social developmentalism*: the idea that state investment in foreign commerce and trade could fund social programs to reduce poverty[3] (Marquetti et al. 2019; Paula et al. 2020; Saad-Filho 2020). While developmentalism comes in many shapes and sizes, it is premised on the core belief that development promises individuals self-realization through freedom from poverty and other societal constraints (Sen 1999). This is rooted in *modernist philosophy*: the belief that economic growth, democracy, science and technology, and rational planning can create a 'better world for all people' (Peet and Hartwick 2015,2; Sen 1999). Historically, however, development policies and programs often reflect the values and desires of the actors who orchestrate development interventions (Mosse 2005; Visvanathan 2011). Therefore development programs can fail to achieve the social and economic conditions they set out to improve (Mosse 2013).

This research addresses a practical problem posed by community partners in Cabo and Ipojuca: why are poor, Afro-Brazilian communities consistently displaced, harmed, or neglected by CIPS, while others gain economic opportunities from the complex? Upon further reflection, this question gets at a major conceptual dilemma at the root of capitalism and development studies: why does economic development benefit some and harm others? Using political ecology, feminist, and post and decolonial conceptual frameworks, this project investigates the central question of why Pernambuco's state economic development initiatives have differential outcomes for different people. Specifically, this research explores the following questions: how does state-sponsored marine commercial development articulate with entangled histories of plantation agriculture and slavery in Cabo and Ipojuca? How do historic, intersectional

[3] Bolsa Família, the social program that gives transfer payments to Brazil's poorest families, is one of the many social programs Lula implemented.

inequalities influence the social and ecological experiences of the port development complex? And finally, how do communities resist, negotiate, or heal from the port development complex's negative socio-ecological impacts?

In a moment where many countries are in states of perpetual development, there's a need to understand how the social and ecological risks and benefits of development are unevenly distributed. By providing ethnographic and historical insights into why development benefits some while harming others, my project helps scholars and practitioners understand how social difference *matters* in development contexts.

Theoretical Framework: Life in Perpetual Development

The promise of development is central to how global leaders and decision-makers orchestrate and organize modern societies (Bastos et al. 2020; Crewe and Axelby 2013; Hervas 2019). The UN 2030 Sustainable Development Goals crystalize this sentiment: the phrase 'sustainable development' implies that development is indispensable for the earth's longevity. Despite our tendency to normalize development, it is important to understand global development as an outcome of a geopolitical history in which the US has played a leading and often problematic role (Bello 1994; Rai 2011). Brazil's mad sprint to join the ranks of 'developed' nations is related to US development ideology's global reverberations. In what follows, I deconstruct the historical processes that led economic development to become a hegemonic practice among nation-states in the Americas.

The history of development as a 'planned intervention' (Crewe and Axelby 2013) is associated with the post-WWII political climate when wealthy nations assumed that democracy and capitalism would achieve universal social benefits (Visvanathan 2011). In his inaugural

speech in 1949, US President Truman depicted a polarized world characterized by wealthy 'developed' and impoverished or 'underdeveloped' nations (Crewe and Axelby 2013,4-5; Rai 2011,14). Wealthy nations assumed that implementing modern, scientific, capitalist, socio-economic strategies in "underdeveloped" countries could help them 'catch up to their wealthier counterparts" (ibid). The US led the 1944 Bretton Woods conference that established the International Monetary Fund (IMF) and the World Bank—two International Financial Institutions (IFIs) that continue to shape economic development in Latin America and the Caribbean (Visvanathan 2011; Rai 2011). IFIs were designed to "promote stable exchange rates, foster the growth of world trade, and facilitate international movements of capital" (Rai 2011,15). However, IFI voting mechanisms reserved "clear control" for Western capitalist countries who made the largest financial contributions (Rai 2011, 15). Therefore, industrialized countries assumed power in decision-making processes that formed the global financial system, with 'underdeveloped' countries (often former colonies) having less input (ibid.).

World Bank lending for developing countries from the 1950s-1970s was based on *containment liberalism* (Bello 1994). Throughout the Cold War, the US considered Latin America vulnerable to communism's domino effect (Bello 1994; Rai 2011). The US believed that spreading democracy and capitalism through liberal development strategies could contain communism and support US economic interests abroad. Containment liberalism preserved some elements of Keynesian economic philosophy, emphasizing strong government influence combined with aspects of free market capitalism (Bello 1994,12). By infusing economies with foreign aid and capital, the World Bank believed it could combat global poverty and subvert communist revolutions (ibid.). However, by the 1970s, it became clear that containment liberalism had failed to meet its promise of "security for Western interests in the [Global] South"

(Bello 1994, 15). By the late 1970s, Latin American countries were increasingly unable to make payments on their swelling foreign debts, leading to a debt crisis in Brazil, Chile, Mexico, Venezuela, and Argentina (Ocampo 2014; Sims and Romero 2013). The Latin American debt crisis between 1982-1989 is known as the "lost decade" and is considered analogous in magnitude to the Great Depression in the US (ibid). In 1983 Brazil had more foreign debt than any other nation, a staggering $92 billion (a value of $273,571,606.43 today) (Kilborn 1983).

In 1985, the Reagan Administration proposed 'The Baker Plan,' asserting that the World Bank and IMF would help Latin American countries pay interest on outstanding loans. However, only if they "adopted economic politics along Reaganomics lines—privatization of state enterprises, an end to subsidies, opening the economies to foreign investment" (Bello 1994, 28). The Reagan administration consulted far-right policy think-tanks such as the Heritage Foundation, which characterized the Global South as threatening democratic and capitalist values (ibid). The Reagan Administration subsequently implemented stricter requirements for development aid, including more regulation of aid recipients, prohibiting aid to countries that did not share US geopolitical interests, and intervening in governments that impeded free market capitalism (ibid.). As part of this effort, the US pressured the World Bank to prioritize structural adjustment loans (SAL). Before Reagan, structural adjustment loans accounted for a small percentage of World Bank loans. However, in the 1980s, SAL were increasingly used to 'open' Global South economies, including Brazil (Bello 1994, 27). Structural adjustment loans were administered on the condition that loan recipients agreed to reduce spending, increase efficiency, and liberalize the economy (ibid.). Some key characteristics of structural adjustments requirements were: deregulating industries, reducing spending through privatizing state programs, cutting wages and laying off public employees, trade reforms, and reducing

restrictions on foreign investments (Harvey 2005). Despite their initial reluctance to accept SALs, the debt crisis of the 1980s often meant that Latin American countries had little choice but to comply (ibid).

Neoliberal economic development is premised on the policy recommendations developed by the so-called Washington Consensus in 1989 (Harvey 2005). Many Latin American countries had to adopt Washington Consensus reforms to pay off the accumulated debts from IFI loans. Similar to the Baker Plan, the Washington consensus advocated for fiscal discipline, including cuts to social programs, trade liberalization, and deregulation (ibid.) Because of widespread global protests, the World Bank modified some of its structural adjustment policies in the 1990s and 2000s (Peet and Hartwick 2015). Nevertheless, the neoliberal philosophies embedded within structural adjustment lending had a lasting impact on Latin American economies (Alvares 1990; Borras Jr. et al. 2012; Ocampo 2014; Saad-Filho 2020).

Questioning Development's Universal Benefits

Development ideologies have historically aligned with modernization theory or the idea that capitalist development is both logical and inevitable (Jaquette 1982; Mignolo 2010). Modernists believe that rational, science-based development can achieve universal societal benefit (ibid.). However, this logic assumes that there is a single path to social progress culminating in a Western ways of life (Escobar 1995; Lugones 2010; Mignolo 2010; Mollett and Faria 2013) To advance civilization, all non-Western countries needed to do is to embrace scientific rationality and global capitalism (Peet and Hartwick 2015, 58-159). However, post-structural or post-modern scholars, including but not limited to postcolonial, decolonial, feminist,

and political ecologists (along with the presumed beneficiaries of capitalist development) increasingly challenge capitalist development's universal benefits.

Part I: Feminist and Postcolonial Critiques of Development's Universal Subject

In the 1980s and 1990s, feminist, postcolonial, and decolonial scholars began questioning the root assumptions of modern economic development: that development is universally beneficial (Jaquette 1982; Mies 1998). Western conceptions of modernity—the promise of development—are premised on universalism, or that "Enlightenment thinking is universal reasoning, that classical economics (born of the prejudices of English gentleman-scholars), is a universal economic science capable of representing all productive thinking" (Peet and Hartwick 2015, 227). Universalists consider people to be the same or undifferentiated—and if humans are undifferentiated, then development experiences are undifferentiated (i.e., universally beneficial) (Mignolo 2010; Quijano 2010). However, this assumption effectively ignores history, power relations, and culture—all things that create social differences (and, by extension, social inequalities) that become consequential in development contexts (Hall 1996; Mosse 2013). Postcolonial scholars argue that the modern notion of a 'rational self' ignores the colonial production of indigenous and racialized groups as the "other" to the normalized white Western "self" (Loomba 2015; Mohanty 2003). Loomba (2015) argues, "the definition of civilization and barbarism rests on the production of an irreconcilable difference between 'black' and 'white,' self and other" (53). Though the 20th century marked the end of formalized colonialism, 'coloniality,' or racialized and gender-based logic, persists in the present day, continually shaping development agendas (Lugones 2008; Mignolo 2010; Mollett and Faria 2013). Colonizers imposed racial hierarchies and binary gender constructions—a "colonial vision" that established Europeanness as the archetype all countries should aspire to achieve (Lugones 2008,

2010; Mignolo 2010). In other words, coloniality racializes non-white groups as exotic "others" while creating whiteness and patriarchy as cultural ideals (Lugones 2010). Race and gender-based hierarchical stratification can continue to justify the marginalization (and often exploitation) of "othered" groups in development contexts (Mollett and Faria 2013).

Feminist development scholars also question the idea that modern development is universally beneficial. Since the 1970s, women in development (WID) research has examined why processes associated with capitalism (foreign investment, deregulation, export commodity production, privatization) persistently have different outcomes for men and women (Jaquette 1982; Paulilo 2013; Rai 2011). Development strategies in the post-WWII era overwhelmingly emphasized male employment, especially in commercialized industries (Rai 2011, 17). But people largely believed that women's inequality was due to women not having access to the same opportunities as men (Rai 2011, 29) This belief informed the 'women in development (WID) agenda' that became mainstream within international organizations such as the United Nations (ibid.). However, this 'access-based framework' has ignored structures of inequality and focused on 'women's status' rather than gender relations (Rai 2011:29). WID supported technical and programmatic approaches to abate women's poverty but largely ignored how uneven gendered power relations shape inequalities (Beneria and Sen 1981; Rai 2011, 28).

By the 1980s, it became increasingly evident that enrolling women into the formal economy was not improving women's socio-economic status, and development agencies began trying to understand feminized poverty (Chant 2008; Kabeer 2015). Unlike WID, gender and development (GAD) research critiques the access-based framework and instead emphasizes the "transformation of gender relations as a major concern" (Rai 2011:32; Peet and Hartwick 2015). GAD scholars found widespread poverty among women is connected to gender 'asymmetries'

such as their unpaid responsibilities to the household (Kabeer 2015:195). Feminist scholars critiqued neoliberal philosophies and practices, especially structural adjustment programs that took advantage of women's unpaid social reproductive roles[4] (Bakker 2003; Sparr 1994). Because structural adjustments demanded that Global South countries cut public funding for social programs, they ultimately burdened poor and working-class women with more domestic obligations (Sparr 1994). Structural adjustment programs tended to "assum[e] that women's work is infinitely flexible and free" (Sparr 1994,17). Measures to "increase efficiency" relocate the burden of care responsibilities onto unpaid, domestic labor (ibid.). Sparr (1994) argues that social program cuts have "relied on a quiet army of wives, co-wives, mothers, daughters, aunts, grandmothers, sisters, female friends and neighbors to pick up the slack" (17).

Despite the contributions of women, gender and development studies, Mohanty (1984, 2003) infamously critiqued WID for portraying "third world women" as occupying a universal subject position, which effectively obfuscates the "heterogeneities of women in the third world" and how "different classes, religions, cultures, races and castes" also shape their lives (Mohanty 1984, 335). These heterogeneities lead to differentiated engagements with development goals and projects (Mohanty 1984, 344). At the same time, black feminist scholars challenged the universal 'woman' category within liberal, predominantly white feminism (Davis 1981; Crenshaw 1991). Black feminist scholars illustrated how gender-based oppression must also be understood intersectionally, as constituted and experienced inseparably from race and class-based (among other) forms of oppression (Crenshaw 1991; Davis 1981; Harrison 1997). Because interlocking forms of oppression shape diverse experiences, black feminist scholars challenged

[4] Social reproduction refers to women's unpaid household obligations; among other this, these include 1) biological procreation; 2) labor force reproduction through "subsistence, education, and training"; 3) providing essential care tasks within families and communities (Bakker 2003, 541).

the idea that all women deal with the same kind of subjugation or, by extension, share a unified experience (Crenshaw 1991). What is needed, then, is more understanding of how intersectional social difference shapes development outcomes and experiences.

Part II: History, Culture, and Articulation

Post/decolonial and other critical perspectives also present an epistemic challenge to the assumption that modern development advances social progress (Peet and Hartwick 2015, 245-247). Development occurs within complex 'historic-cultural formations' and needs to be evaluated in intricate historical and social contexts (Hall 1996; Mosse 2013). The concept of articulation (Hall 1996) elaborates how modes of production (such as neoliberal capitalism) interact with ideological, political, and economic, i.e., deeply historical contexts or social formations. Social formations are not value-neutral but "structured in dominance" (Hall 1996, 320). Specifically, social formations are structured by race and position racialized groups differently to capital accumulation (Hall 1996, 338). Articulation is a critical heuristic in the context of Northeast Brazil's Zona da Mata, where centuries-old sugarcane plantation economies persist in the present and comprise the social (and ecological) terrain of articulation for current development projects (Andrade 2001; Dabat 2011; Gunewardena 2010; Li and Semedi 2021). In sites where plantation economies instituted by colonizers are still powerful, plantation politics continue to delimit possibilities for people identified as racially "other" by colonial powers (Costa Silva 2013; Dabat 2011; Gunewardena 2010; Li and Semedi 2021). Ideologies and discourses about human difference persist in the present, and processes associated with race, racism, and racialization articulate with gender ideologies to inform development practice (Harrison 1997; Mohanty 2003; Mollett and Faria 2013). Racialization or the extension of racial meanings to "a previously racially unclassified relationship, social practice or group" (Omi and

Winant 2014, 111) is an *ongoing* process. Racialization occurs differently within varied historical and geographical contexts but can be understood in relation to broader economic and political processes (ibid.). Considering these critiques, social scientists increasingly question development's benefits and whether it improves the lives of suffering people (Mollett 2017). Or, alternatively—is development another Western imperial attempt to control the Global South (Escobar 1995)?

Political ecology is another field that critically examines how capitalism articulates in historical, social, and ecological contexts. Eric R. Wolf first conceptualized a neo-Marxist political ecology as how "power relations mediate human-environmental relations" (Biersack 2006, 3). Early political ecology critiqued purely Marxist or neo-Marxist political economy for neglecting environmental matters, while also critiquing cultural ecology (especially the work of Sauer, Steward, and Rappaport) for omitting "structures of inequality that mediat[e] human-nature articulations" (ibid.). Today political ecologists examine local-global articulations or how global processes like capitalism and development articulate with highly localized socio-political and ecological landscapes, shaping commonalities and differences (Biersack 2006). Development has become a central theme in examining diverse relationships between the global and the local; political ecologists have studied the highly contextual ways development agendas unfurl, including resistance to development (Biersack 2006, 9; Katz 2004).

Political ecology has advanced an understanding of how neoliberalism articulates in time and space, illuminating its profound global impact on social inequality, environmental change, global governance, and social movements (Heynen et al., 2007). Political ecologists understand neoliberalism as an economic philosophy and political project that attempts to naturalize market relations in all domains of life (Harvey 2005; Heynen et al. 2007). Economic liberalism

(unrestricted trade, capital investment, and commodity production) have co-occurred alongside deep cuts to public institutions and social safety net programs, leading to dramatic global income inequalities and radical transformations of social and environmental conditions (Heynen et al. 2007, 12). One outcome of neoliberal economic development has been widespread enclosure processes—the privatization of commons for private, often commercial use—that profoundly alter human relations with the non-human world (Heynen et al. 2007).

While political ecology examines how power mediates socio-natural interrelationships, the subsection feminist political ecology (FPE) emphasizes gender as a "critical variable in shaping resource access and control, interacting with class, caste, race, culture, and ethnicity to shape processes of ecological change" (Rocheleau et al. 1996, 4). Unequal power relations can cause women to do extra work in procuring household resources (Mehta 2011; Sultana 2011). Women's responsibilities or obligations to procure household resources can also make them disproportionately impacted by environmental degradation (Mehta 2011; Sultana 2011, 2015). Therefore, FPE is interested in the gendered dimensions of environmental rights, responsibilities, and ecological knowledge (Rocheleau et al. 1996, 13-14). FPE also examines women's increasing involvement in social and environmental justice movements, attending to the "critical linkages between global environmental and economic processes" (Rocheleau et al. 1996,15).

Like other feminist development scholarship, feminist political ecology has responded to post-structural critiques that 'women' share a unified identity (Elmhirst 2011). While Rocheleau et al. (1996) claimed to do this with early iterations of FPE, they retained an "ambiguous" understanding of how gender interacts with race, racism, and racialization (Mollett and Faria 2013,116). This is a significant omission, as racism and racialization are implicated in development initiatives and discourses and their concomitant ecological effects (Heynen 2016;

Sundberg 2008). Mollett and Faria (2013) argue that contemporary development discourses often portray non-Euro-American countries as 'lacking,' 'inferior,' and needing improvement (117). Therefore race is elemental to both "international development and narratives of modernization and progress," and they urge scholars of Latin America to understand developments 'colonial origins' (Mollett and Faria 2013, 117). They emphasize that development scholars should utilize postcolonial intersectional analyses that go "beyond US based racial and gender hierarchies to acknowledge the way patriarchy and racialized processes (including whiteness) are consistently bound up in national and international development practice" (Mollett and Faria 2013,117). Examining how race and gender shape development ideologies and practices can provide a more multi-dimensional understanding of capitalism's differentiated impacts (Mollett and Faria 2013, 123).

Part III: Creative Resistance and Repair in Development Contexts

Since the 1990s, anthropologists have critiqued global development discourses for their veiled projects (Escobar 1995). Escobar (1995) infamously argued that global development discourses were conceived around Western ideas of social and economic progress. Rather than modernity (the promise of development) being a rational goal for all nations, Escobar considered development a 'historically produced discourse' under which the Global South was "systematically organized into and transformed according to European constructs" (1995,6-7).

While Escobar presented a powerful argument, anthropologists have recently pushed back against what they perceive as significant over-simplifications within the post-development critiques (Mosse 2005; Mosse 2013). Specifically, many contemporary anthropologists of development reject the "monolithic notions of dominance, resistance, hegemonic relations, and the implication of false consciousness among the developed (or developers)" (Mosse 2005, 6).

Mosse (2005) argued that development—rather than passively received—is brokered (i.e. negotiated) and constantly translated. Translation is the iterative process in which policy objectives are practically implemented (Mosse 2005,9). Brokerage and translation provide space for interpretation and differentiation and, by extension, give actors and institutions enrolled in development programs more agency (Mosse 2013).

This project attends to economic development's actual consequences for differently situated social groups, yet it also goes beyond normative understandings of marginalization by exploring how economic development can shape diverse emancipatory struggles (Scoones et al. 2018). While necessary for illuminating the societal suffering and injustices, academic focus on marginalization and ecological degradation too often comes at the expense of understanding how (even exploitative) development practices may shape practices and spaces of resistance (Scoones et al. 2018; Robbins 2013). The result is a perhaps unintentional association of the rural poor and communities of color with helplessness, environmental degradation, and suffering (Brown et al. 2016; Mohanty 2003) while missing what marginalized groups can teach us about personal and collective healing from violence and oppression (Miles 2018; Smith 2016).

James C. Scott (1985) infamously illuminated how everyday practices of peasant resistance or "hidden transcripts" worked to fissure class domination. More recently, anthropology is exploring how marginalized groups can be "full of a radical hope in the possibilities of the future, despite the everyday precarity of their existence on the margins of the global marketplace" (Srinivas 2018, 8). The project of what Robbins (2013) has called 'anthropology of the good' is not about denying social ills, but complicating narratives of "the suffering subject."

Black feminist epistemologies in the Americas offer similar conceptual guidance for thinking about how intersectional forms of identity shape creative practices of healing and resistance (Cardoso 2016; Carneiro 2016; McKittrick 2013). In Plantation Futures, McKittrick (2013) utilizes the plantation as a heuristic for conceptualizing how plantation logics—or logics that normalized racial violence, surveillance, sexual assault, and a racialized economy—are reproduced over time and shape contemporary racial inequalities (2013). Nevertheless, plantation logics also demanded creative survival strategies, or 'secretive histories' (ibid.). In the Zona da Mata, women utilize radio programming and community healing circles (rodas) to strategize, share angst, and educate low-literacy populations about everything from environmental injustice to domestic violence (Freire and Tauk 2009; Oliveira et al. 2016). Without attending to creative forms of healing and resistance (McKittrick 2013), we not only deny agency to marginalized groups but fail to recognize how emancipatory struggles can illuminate alternate practices for relating to and being in the world (Cadena 2015; Scoones et al. 2018; Srinivas 2018).

Research Context Part I: Intersectional Inequalities in Brazil

Despite the complicated nature of race in Brazil and the country's self-proclaimed status as a "racial democracy," Northeast Brazil continues to be a place where intersecting racism, sexism, and class-based inequalities influence one's health (Caldwell 2017; Scheper-Hughes 1992), economic opportunity (Costa Silva 2013; Lovell 2000; Silva 2010), access to education (de Hollanda 2018), access to land (Perry 2004, 2013) and quality of life (Caldwell 2007; Carneiro 2011; Paulilo 2013). Therefore, it is imperative to understand how intersecting gender, race, and class-based inequalities, are formed, evolve, and become meaningful in economic development contexts.

Pernambuco sociologist and anthropologist Gilberto Freyre (2002) popularized the notion that Brazil is a racial democracy in his 1933 book *Casa-Grande e Senzala* (published in English as *The Masters and the Slaves).* This problematic discourse became circulated in popular culture and nationalist discourses (Caldwell 2007; Castilho 2016; Mitchell 2015; Nascimento 2007). Brazilian abolition (1888) was followed by the installment of Brazil's first Republic (1889-1930). Informed by social Darwinist philosophies, scientific discourses during this time widely believed racially mixed populations could cause social degeneracy and stifle societal progress (Mitchell 2018). The elite classes were concerned about Brazil's immense population of formerly enslaved and slave-descended peoples (Mitchell 2018). By the 1920s, Brazilian elites considered embranquecimento, or racial whitening programs, to be the solution to its racial problems. As a result, mixed-racial people became accepted conditionally as "an intermediate step in the national process of whitening" (Caldwell 2007, 31). Caldwell argues that "while whitening ideology accepted intermediate racial types such as mulattos and metiços, it rejected "pure" blacks" (2007, 31).

But in the 1930s, Freyre's theories began to shape a new, widely influential racial discourse in Brazil. Though Freyre's work challenged the eugenics philosophies of the time, he problematically argued that Brazil's history was one of interracial tolerance (Gonzalez 2020; Mitchell 2018). Central to Freyre's conception of Brazil as racially harmonious was his *luso-tropicalismo* thesis or the "system of cultural values that enabled the Portuguese to overcome racial and ethnic divisions and construct racially harmonious societies in tropical climates" (Caldwell 2007:32-33). Freyre believed miscegenation was evidence of the Portuguese's "egalitarian racial attitudes during colonial times" (Caldwell 2007, 33). Caldwell asserts that "interracial sexual contact has been envisioned as means of progressively whitening and thus

assimilating the black population" (ibid.). Therefore, *luso-tropicalismo* obscures the "brutal sexual and psychosocial violence" of female slavery and demonstrates how 'racial patriarchy' has normalized the sexual availability of black women to white men (Caldwell 2007, 39; Carneiro 2011; Gonzales 2020).

The widely-held misconception that Brazil is racially harmonious has led to a problematic understanding of the country's social inequalities as strictly class-based, undermining Afro-Brazilian claims of race-based discrimination (Needleman 2011; Mitchell 2015). Two recent ethnographies demonstrate how economic development can act as "state-sponsored racism and violence" toward black women in Northeast Brazil (Perry 2013; Smith 2016). In Perry's study in Gamboa de Baixo, a historically black fishing community in urban Salvador, land conflicts have forcibly displaced predominantly black and poor communities. Black women are often on the front lines of land struggles, confronting state and private developers who work to expand Salvador's growing tourism economy (Perry 2013). Perry (2013) argues that urban renewal projects in Salvador celebrate colonial heritage while simultaneously displacing and discriminating against black Brazilians within the city center. These processes give "new hygienic meanings" to the past and omit the brutality of slavery (Perry 2013,51). Similarly, Smith's (2016) ethnography highlights the contradictions of the 'afro-paradise' discourse that is sustained by afro-centric tourism in Salvador but masks brutal police violence and structural inequalities enacted against black residents. Smith illustrates how black communities use performance theater, among other forms of artistic expression, to work through the continued violence against black residents (2016).

Despite living at the intersection of multiple forms of oppression, Afro-Brazilian women organize and fight race, gender, and class-based inequalities and are central figures in Brazilian

justice movements (Alvarez 1990; Burdick 1998; Needleman 2011; Thayer 2010). During Brazil's military dictatorship (1964-1985), the military government's violent and coercive measures occurred alongside radical neoliberal reforms that were especially detrimental for Afro-Brazilian, indigenous and rural women (Alvarez 1990; Needleman 2011, 360; Thayer 2010). In Brazil, "poverty and gender are inseparable," and women became more impoverished during urbanization caused by neoliberal reforms (Needleman 2011, 360). Brazil's military dictatorship allowed the country to be a testing ground for neoliberal structural adjustment programs (ibid). Brazil's "economic miracle" facilitated transnational corporate investment and privatizing previously public land, services, and businesses (Needleman 2011, 361). These reforms displaced "millions of peasant families, many indigenous and Afro-descendent, who moved to the outskirts of cities in search of housing and income" (ibid.). Subsequent migration and urbanization led to the expansion of favelas (slums) in Brazil's urban centers, where women lost access to critical social programs such as healthcare and education (ibid.).

Nevertheless, the crushing impact of dictatorship-driven neoliberal development created "mass social movements" among trade unions, women, students, the jobless, and landless workers (ibid.). An outcome of dramatic reforms was widespread social mobilization both to secure basic needs in the absence of social programs and to oppose the military dictatorship and neoliberal capitalist expansion (Alvarez 1990, 8-9). The conservative military regime's insistence upon 'traditional' women's roles began to disintegrate as government repression made it increasingly difficult for women to care for children and other family members (Alvarez 1990, 9). Low-income and racialized women disproportionately experienced these hardships because while the 'Brazilian miracle' created some jobs for middle-class white women, women of color and working-class women were discriminated against (ibid.). Alvarez explains, "regressive wage

policies…pushed millions of poor and working-class women into low-paying, low-status jobs in the least progressive, most exploitative sectors of the economy" (1990,9).

Research Context Part II: **Waves of 'Development'—Sugar, Slavery, and Colonialism in Northeast Brazil**

Economic development does not occur in a vacuum but interacts with complicated historical, cultural, and geographic contexts (Mosse 2013; Hall 1996). This research demonstrates that development must be examined with historical specificity and in relation to broader social and political processes, including uneven power relations (Hall 1996; Roseberry 1989). Contemporary development in Northeast Brazil is the most recent part of an extended extractive history that continues to shape interrelated social and ecological conditions, especially land inequalities (Rogers 2010; Dabat 2011; Wolford). Much like US South, Northeast Brazil holds a problematical and idealized place in Brazil's national imagination (Albuquerque 2014). In part, this imaginary is related to the region's ecology. The tropical *Zona da Mata* along the coast receives a significant amount of annual rainfall that once supported lush forests but for nearly 500 years has facilitated sugarcane plantation agriculture (Dabat 2011). Northeast Brazil's semi-arid interior, called the Sertão, has a related but alternative history of crippling drought, which has contributed to the region's extreme poverty and vulnerability (Nelson and Finan 2009, 302). These two eco-regions are deeply entangled, partly because people migrating from the Sertão to escape drought have provided a reserve labor force for the Zona da Mata's plantation economy (Dabat 2011, Rogers 2010). Additionally, the harsh climate and scrub (caatinga) vegetation has made the Sertão a vital refuge for indigenous and enslaved peoples attempting to escape Zona da Mata plantation production (ibid.). Some settled in *quilombos*, or maroon

communities of formerly enslaved peoples who escaped the brutal hardships of slavery in order to establish independent societies before emancipation in 1888. Most infamously, the Afro-Brazilian folk hero Zumbi dos Palmares established the Quilombo das Palmares in the hinterlands of present-day Alagoas and Bahia. The storied history of Northeast Brazil has contributed to discursive tropes often deployed about the region. These discourses nostalgically portray the region as a place of extreme religiosity, banditry, patronage, and hardship (Albuquerque 2014). Alternatively, a place that is backward or deficient meaning impoverished, oppressed and forgotten by those in power (Albuquerque 2014).

Northeast Brazil's socio-economic history begins before the country was colonized. When Cabral landed in Northeast Brazil in 1500, the Portuguese were already "offshoring" sugar production on Atlantic Islands—this process began in Madeira in 1433 (Rogers 2010; Taylor 1978). Other Portuguese agricultural colonies developed in the 15th century, including São Tomé, Príncipe, the Azores, and Cape Verde Islands (Taylor 1978, 13). Taylor (1978) suggests that initial interest in Brazil was related to the export of brazilwood, Brazil's first major export commodity. There were an estimated 1,500,000 indigenous peoples living in Brazil at the time of Portuguese colonization (Taylor 1978). In colonial Brazil, colonizers instituted a European notion of 'appropriate resource management' premised on racial ideologies (Sundberg 2008). In 1534 King Dom João III divvied Brazil into 15 captaincies that were granted with land and executive privileges (Taylor 1978,17). Grantees received "personal use of 20 percent of the land, 50 percent of the value of extracted products, and civil jurisdiction within specified limits" (ibid.). Special provisions related to sugar production were included. For example, grantees were responsible for allocating licenses for sugar mills (engenhos) (ibid.). Additionally, trade with Portugal was not taxed (ibid.). In the 16th century, the Portuguese coerced indigenous

populations into plantation labor, however, this ultimately devolved into purchasing or capturing and enslaving indigenous people for sugar production (Schwartz 1985). Portuguese diseases and violence devastated indigenous populations, prompting the Portuguese to acquire labor through the widening African slave trade (Schwartz 1985). Taylor notes that "plantation labor in the New World would not have been profitable without slavery" (1978, 19).

In the Zona da Mata, sugar has been both a cultural institution and a source of the region's social, political, economic, and environmental hardships (Moore 2000; Scheper-Hughes 1992, 32). In the early 17th century, northeast Brazil experienced an extensive sugar boom, that was not thwarted by Dutch colonization between 1630 and 1654 (Rogers 2010). This was related to an insatiable European market for sugar (Mintz 1985). Consequently, plantations needed an extensive, reliable labor supply (Schwartz 1985). Northeast Brazil relied on African slavery for sugar production for 240 years, followed by a long "transitional stage lasting nearly 80 years" (Taylor 1978:27). Competition from Caribbean producers contributed to a decline in sugar production at the turn of the 18th century (Schwartz 1985). Despite production declines, Northeast Brazilian planters did not abandon sugar as their principal export crop (Taylor 1978). During the 18th century, the Portuguese continued importing thousands of enslaved Africans to work on cane plantations (Rogers 2010). While Freyre (2002) suggests Brazil's historically relaxed attitude toward miscegenation is evidence of interracial acceptance, most historians depict a much different story. For example, Eisenberg (1974) argues that land ownership in Pernambuco was "the basis of power" from which the planter class (*senhores do engenho*) exercised "nearly absolute" political control (1974, 134). Plantation conditions were so violent that, once purchased, enslaved sugarcane workers had a life expectancy of between 10 and 17 years (Eisenberg 1974; Schwartz 1985; Taylor 1978). Planters purchased enslaved people rather

than relying on “natural” reproduction, as excruciating labor and high male-to-female ratios contributed to low birth rates (Eisenberg 1974,148). Even after the Free Womb Law in 1871, African women’s birth rates remained significantly lower than the rest of the population (Ibid.). Low fertility was blamed on the mothers' improper self-care rather than the brutal conditions of enslavement (ibid.).

At the beginning of the 19th century, northeast Brazil’s sugar industry began another decline while coffee plantations in Southern Brazil became increasingly profitable (Schwartz 1985). Northeastern sugar production declines contributed to a massive migration of enslaved Africans to coffee plantations in the South (ibid.). Throughout this century, quilombo (maroon) communities and abolitionist movements in Northeast Brazil fought to free enslaved peoples but were undermined by Northeast Brazil’s planter class (Nabuco 1977). The slave trade ended in 1850, but abolition was not instituted until 1888 (Eisenberg 1974; Taylor 1978). Similar to the US South, the tenant system following abolition largely failed to resolve historic racial land inequalities (Eisenberg 1974). Through the tenant (*morada*) system, laborers had access to a small amount of land for subsistence production, which bound them to the land-holding planters without any legal rights (Dabat 2011; Eisenberg 1974). The first National Alcohol Program was implemented in 1942 to encourage sugarcane-based fuel production (ibid.). The Sugarcane Statute was insufficient to reallocate resources to the working poor and the tenant farmers in Northeastern Brazil (Wolford 2010). The Brazilian Communist Party collaborated with rural workers’ groups to organize the Peasant Leagues in 1955 and challenge the prioritization of sugarcane over land inequality, poverty, and starvation (Scheper Hughes 1992). The Leagues helped pass the Rural Worker’s Statute (1963) that allowed workers legal rights to unionize

(ibid.). The Peasant Leagues also agitated US fears of communism, prompting the US-backed coup that installed the military dictatorship between 1964-1985.

In the 1970s, the global oil crises prompted renewed interest in sugarcane-based Brazilian ethanol (Rogers 2010; Scheper-Hughes 1992). Considering concerns about energy security and low market prices for sugar, the Brazilian government implemented the National Alcohol Program (Proácool) in 1975 to support the sugar industry. Primarily designed by the sugar lobby, Proácool created mandates for bioethanol blending and protections, subsidies, and incentives for sugarcane ethanol producers (Lehtonen 2011). The effects of this program were significant. Among many things, Proácool expanded the sugarcane plantation agriculture frontier, appropriated tenant farmers' subsistence lands, and concentrated power among the "sugar elite" (Lehtonen 2011:2429; Scheper-Hughes 1992). These subsidies ended in the late 1980s and 1990s when Brazil adopted a more neoliberal (less regulated) stance on sugar production (Alvarez 1990; Rogers 2010). The neoliberalization of sugar production led growers to prioritize efficiency measures, including adopting new technologies and flexible labor arrangements (Dabat 2011; Rogers 2010).

Research Sites: Cabo de Santo Agostinho and Ipojuca, Pernambuco

Together the coastal communities of Cabo de Santo Agostinho and Ipojuca have a population of 300,000 and are located in the Zona Sul, or southern region of Pernambuco's sugarcane-producing zone known as the *Zona da Mata*. While São Paulo is Brazil's leading sugarcane-producing state today, Pernambuco *Zona da Mata* has been in production for nearly five centuries and is the country's oldest sugarcane-producing region (Dabat 2007; Scheper-Hughes 1992). Once a vital forest for indigenous cultivation, this region was put into sugarcane

production in the early 16th century. Sugar was a formative commodity for the Portuguese empire and was a principal reason for the forcible transportation of 818 million enslaved peoples to Pernambuco (Eltis and Richardson 2010). While numerous plantations in Pernambuco still exist, plantation lands have been expropriated to expand the sprawling Suape Port Industrial Complex that occupies over 33,000 acres of territory. The port is a crucial locus of the sugarcane supply chain, where sugar goes into the industrial production of soda, food, and sugar-based ethanol, among other products. In the past two decades, state and private capital investments have made CIPS a 'mega port': a maritime port with around 100 manufacturing facilities. Brazil's status as a centuries-old commodity producer and global leader in agro-industrial export makes it an important site for understanding how contemporary development articulates historic, intersectional inequalities.

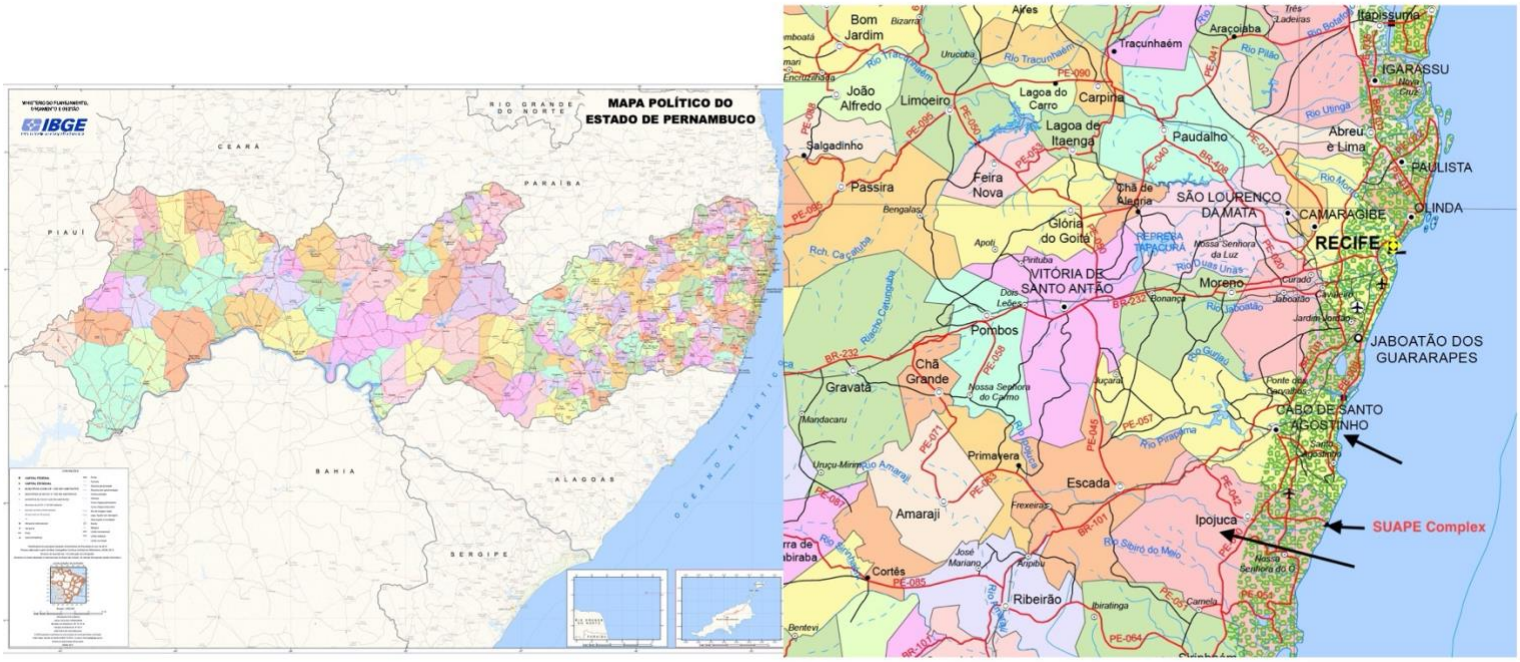

Figure 1-IBGE map of Pernambuco and zoom of Cabo and Ipojuca

Residents of Cabo and Ipojuca are primarily black (negro/negra) and mixed-race (pardo/parda) descendants of enslaved Africans who were brought to the region for sugarcane cultivation (Andrade 2001; Rogers 2010). During the 240 years of slavery and the 80-year transitional period to abolition, sugar was not abandoned as Pernambuco's principal export crop (Andrade 2001). During the first decades of Portuguese colonization, land inequalities shaped deep social and material inequalities between *latifúndia* or landed elites and Afro-descendant communities (Ferraz 2008). After abolition, formerly enslaved residents were allowed to stay on the plantation lands (*terras do engenho*) to establish worker communities while working for the plantation (Dabat 2011). This tenancy system allowed some subsistence agriculture, but without giving land rights to the tenants, it bound formerly enslaved workers to their bosses (*senhores do engenho)* (Dabat 2011). The booms and busts of the sugar industry meant that many wealthy planters eventually abandoned cane production in Pernambuco because of the state's difficulty competing with the more efficient production methods in the southern state of São Paulo. This fact has been attributed to Pernambuco's signature rolling hill topography, which prevents easy mechanization of sugarcane harvesting (Dabat 2011; Rogers 2010).

Figure 2-Cabo de Santo Agostinho surrounded by sugarcane fields, early 1900s

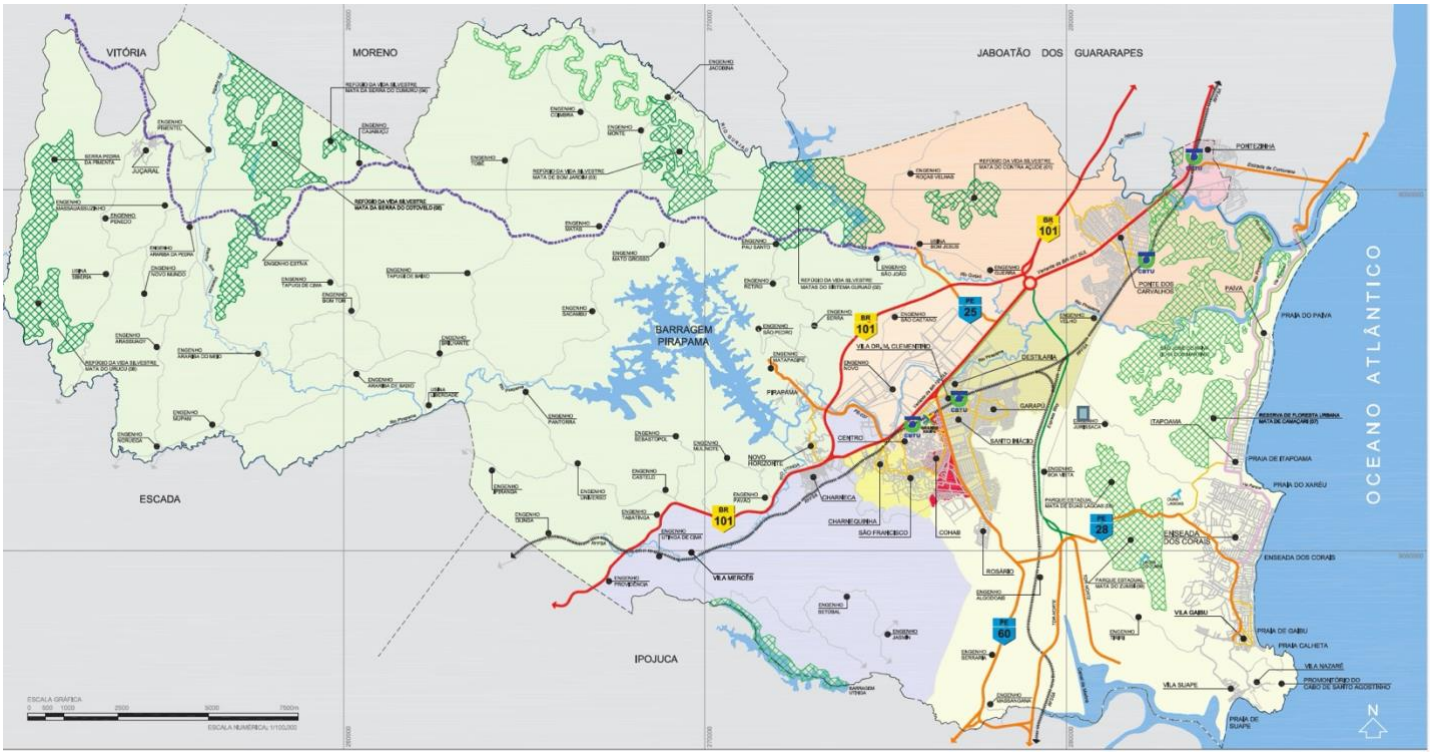

Figure 3-CBTU map of contemporary engenhos of Cabo (black dots indicate each engenho)

The protracted departure of many of Pernambuco's plantation owners meant that workers who remained on engenhos began developing non-specialized agricultural communities (DHESCA 2018). These communities used abandoned plantation lands as commons to develop

small-scale agriculture, fishing, shellfish collection, or other traditional practices. Today two formally recognized quilombo descendant communities (Quilombolas Ilha de Mercês and Onze Negras) reside within these territories. Others remain 'posseiros,' lacking formal designations.

By the 1980s, Pernambuco's land-ownership inequalities originating from the colonial land tenure systems remained entrenched, and the Landless Worker's Movement (Movimento dos Trabalhadores Sem Terra or MST) and the Catholic Church organized the Pastoral Land Commission to investigate land inequality (Comissão Pastoral da Terra or CPT). Together they studied how the region's deep land inequities created social problems for Pernambuco's landless poor (Micaelo 2014). In the 1990s and 2000s, social movement groups like MST and Via Campesina held numerous land occupations, leading to large peasant settlements in the Zona da Mata—where two-thirds of rural settlements are located—facilitated by the National Institute for Colonization and Agrarian Reform (Instituto Nacional de Colonização e Reforma Agrária or INCRA) (Ibid.) These changes were supposed to rupture long-standing social and political relationships, allowing former plantation workers to establish new relationships with the land (Micaela 2014, 326-327). However, though some posseiros were granted use rights, formal land titles were not distributed, making it impossible to transfer land to children or other heirs. Furthermore, married couples received preferential land allocation treatment (Micaela 2014).

Having stewarded the land for generations, many posseiros are fighting to get INCRA to "regularize" or formalize land titles in their ancestral territories. Regularizing land in Brazil formally designating property rights to squatter communities already settled in specific places. However, regularizing land is highly political, and it often takes a long time. Bolsonaro's Administration frustrated matters by publicly expressing opposition to special land rights for landless peasants, quilombo, and indigenous communities (Menezes and Barbosa Jr. 2021). With

its ongoing expansion efforts, the Suape Port Industrial Complex continually violently dispossesses posseiros without land rights. CIPS has hired private security (or sometimes just thugs with guns) to destroy residents' homes, gardens, and fences while they are away. Others were forced to stand by and witness the destruction of their homes. The violence, paired with the degradation of ocean and mangroves and dispossession from their traditional fishing, collecting, and farming spaces, has created widespread depression, stress, and sometimes even death of community elders. Respiratory disease and public health are also growing concerns as more residents contract asthma from oil and gas refinery toxins.

Despite the vast ecological and social transformations of recent years, Cabo and Ipojucans are fighting hard to resist these waves of expropriation. Some participate in community organizing with the local women's center (Centro das Mulheres do Cabo) or environmental justice non-profit Fórum Suape. Others make visual, video, and digital art to educate their communities about CIPS injustices. Others have more personal methods of resilience, whether drawing upon cultural resources like dancing and music to using their ancestral connection to the land and its species to gather strength to carry on.

Methods and Reflexive Note

Many scholars pursue projects that interest them on an intellectual level. While there is nothing wrong with this, I had a slightly more personal motivation for pursuing my scholarly interests. My path to academia began with losing beloved family members to rare diseases caused by living across from industrial manufacturing facilities, who could not afford to pick up and move or access quality healthcare in the United States. My first anthropological questions were related to why my family seemed to experience poverty and pre-mature death more than

my friends' families. These questions shaped my interest in environmental justice, and I was an activist throughout my twenties. After getting my Master's degree in Anthropology in Kentucky, I began working professionally at an environmental justice non-profit, where we tried to understand how industrial pollutants impact human health. We attempted to intervene in predatory industrial development through measures such as developing health impact statements to community organizing.

When I decided to earn my doctorate, I knew I wanted to cultivate a conceptual toolkit for understanding race, gender, and environmental justice struggles. I also wanted to work in another country and gain a broader sense of the global nature of these problems, especially how predatory development impacts rural communities. As Dr. Nelson has worked in Northeast Brazil for many years, I decided to give it a shot as a field site. Truly, I had no idea that Northeast Brazil would remind me so much of Kentucky, where poverty, corruption, and religiosity has given the region a reputation as 'backward' and 'deficient.' The very fact that the region is culturally stigmatized often is used to justify predatory development and environmental injustices. Once there, I found that Nordestinos, like Kentuckians, experience persistent poverty primarily caused by the failures of the state to deal with corruption, inequality, and environmental injustices.

In 2016, the Rhoda Halperin Pre dissertation fieldwork award supported a pilot study in Ceará on how rural communities adapt to drought cycles exacerbated by climate change. Speaking with farmers, agriculturalists, and workers at the rural farmer's syndicate, I began to see how even slight climatic changes could have dire consequences for local communities. During a 5-year drought, families often had one day of water, followed by two without. I also

learned about the gendered divisions of labor within small farming communities and how rural farm-workers unions or syndicates act as strong support networks for rural farmers.

After fieldwork in Ceará, I spent five weeks in UGA's Portuguese immersion program at UNISUL in Santa Catarina, where I interned with the research team Grupo de Pesquisa em Eficiência Energética e Sustentabilidade-GREENS (Research Group in Energy Efficiency and Sustainability). The Department of Education's Foreign Language and Area Studies (FLAS) program supported this language immersion. In 2017, I did another three weeks of language immersion with the University of Florida's program in Rio De Janeiro, also sponsored by FLAS. In addition to immersion programs, I completed three semesters of US-based language training in Portuguese courses in UGA's Department of Romance Languages.

By 2018, I had shifted my project focus to align slightly more with my original intentions wanting to investigate questions related to race, gender, and global environmental justice struggles. With my energy research and organizing background, I decided to investigate how agro-industrial biofuel development was impacting women and racialized communities in Pernambuco's infamous cane-producing region. In 2018, I completed a 5-week pilot study, beginning in Recife and establishing good relationships with Historian Christine Dabat and Anthropologist Russell Scott Perry at the Universidade Federal de Pernambuco. Separately, they suggested Cabo de Santo Agostinho as a potential field site for what I wanted to study. I then traveled to Cabo by bus and established connections with members of the Centro das Mulheres do Cabo (Women's Center of Cabo) and Fórum Suape: a local environmental justice non-profit helping communities dislocated by CPS. These two institutions are in neighboring offices and collaborate on many of their projects. I had great conversations with women at both

organizations about their programs and support for women cane-workers. For the first time, I also learned about the violence their communities were experiencing because of CIPS.

In June of 2019, I conducted three weeks of archival research at the special collections library of the University of Florida, digitizing rare books from Northeast Brazil and UF's collection of *Diario de Pernambuco* (1825-1943). As the *dates of the Diario* collection spanned Pernambuco's long abolition movement and the transition to post-emancipation plantation agriculture, this collection helped me understand how the historic socio-ecological politics of cane plantation agriculture shaped identity-based marginalization.

Having support from Fulbright-Hays to return to Cabo, I finally returned to Pernambuco for long-term fieldwork in January 2021. I began my fieldwork in Recife, where I worked with the Brazilian Institute of Development and Sustainability (IABS) on their Chapeu de Palha programs. These programs offer social support funds to cane workers and other agriculturalists during the off-season. This work included a return trip to the sertão (northeast Brazil's semi-arid rural interior), where I spent 10 days helping seasonal farmworkers register for social program payments during the off-season. Most of the time, I was based in Recife, and on days that I was not working with IABS, I was working in the labor court archives (Tribunal de Justiça) at the Universidade Federal de Pernambuco, where I learned how cane workers had litigated against cane plantations for abuses, discrimination, and inadequate pay. I returned to Cabo and spent some time with the Women's Center and Fórum Suape to march in their International Women's Day march, but I had not yet moved to Cabo for the ethnographic phase of my project (phase two). However, before phase two could occur, Covid-19 emerged as a real, lethal threat, and Fulbright sent all of its researchers abroad back to their home countries. Those who chose to stay

in their field countries would have to forfeit the grant and potentially not get support leaving the country in the future.

In the months that followed, I struggled to reorient myself to potentially doing a completely different project and trying to overcome the anxiety that came with getting funding for a project that was interminably on hold. I attended workshops, watched videos, and read many resources about academics reorienting their projects. However, nothing excited me or seemed appropriate for my research. Luckily, because of the pandemic in the region where I was working, more and more Brazilians were increasingly turning to social media platforms to communicate. Following numerous Pernambuco organizations' "stories" and "lives" on social media helped me feel slightly more connected to the field site I had to rapidly abandon.

I realized that to continue my dissertation research, I would have to practice 'radical vulnerability' (Nagar 2014) and evolve my project to a truly collaborative study that was designed, conducted, and written with community partners. I talked to the Women's Center in Cabo about collaborating on a hybrid project that I would lead from the US. Since Brazil has been experiencing economic recession and inflation since roughly 2016, we decided that the Women's Center would find someone to act as a research assistant whom I would hire and train to carry out some of the things that were impossible to do from the US. Shortly thereafter, I hired Elaine Salgado Mendonça, a member of Fórum Suape, and we decided to shift the project focus to something more immediately relevant for local communities, investigating how CIPS's expansion was contributing to social and ecological change. Elaine and I collaborated on survey design (this took a mere six drafts) and decided to snowball sample women who were already coming to the Women's Center and Fórum Suape. We met weekly for updates, and Elaine kept a field journal, took pictures, and did regular interviews with cane workers, fishers, small farmers,

and marisqueiras, whom we identified through the women's center, then through snowball sampling. In total, we interviewed 32 community members. I also conducted virtual interviews with regional scholars, ecologists, and journalists, who gave us contextual (non-personal) information on the socio-ecological changes happening in the region (n 8). I transcribed interviews and hired a local assistant Glaubberthy Russman da Silva to transcribe interviews when interlocutors had a strong regional dialect. For data analysis, I spent three months coding each of these interviews for patterns and emergent themes with MAX QDA using grounded theory methodology. The final code system had 232 codes and 4,325 coded segments.

Organization of Dissertation

Chapter two, *Continual Loss*, is coauthored with my primary community collaborator Elaine Salgado Mendonça and investigates the first research question: how does state-sponsored marine commercial development articulate with entangled histories of plantation agriculture and slavery in Cabo and Ipojuca? We center black feminist theoretical frameworks to bring new conceptual insights to an old problem: how colonial legacies continue to shape contemporary race, gender, and class-based inequalities. However, we do not simply assume that Pernambuco's land inequalities are an abstract imperial and colonial legacy in Brazil; we historically track the uneven distribution of land rights from the colonial era to the present. We highlight specific linkages between Brazil's land-granting system, sesmarias, and contemporary territorial conflicts. We then examine the articulation of the Accelerated Growth Program, Brazil's extensive infrastructure development program with Pernambuco's socio-ecological context characterized by historic intersecting inequalities, mainly associated with land rights. Though social support programs lifted a lot of low-income Brazilians from poverty, Lula had to make considerable concessions to agribusiness and entrenched Brazil's dependence on the commercial

export of raw commodities (Welch 2011). Consequently, Lula had to heavily subsidize massive infrastructure projects to facilitate transnational commerce, ultimately dispossessing local communities and becoming adversarial to many peasant struggles for land rights (Menezes and Barbosa 2021; Welch 2011). Through funding a mega-port designed to be the critical locus of Brazilian commercial export, Lula's growth agenda ultimately expropriated thousands of traditional Afro-Brazilian communities whose ancestors have struggled with land rights for centuries.

Chapter three, *Muda da Maré* (Change of the Tides), investigates research question two: how do historic, intersectional inequalities influence social and ecological experiences of the port development complex? Bringing together multi-species studies, anthropologies of grief, and feminist political ecologies, the chapter explores the emotional geographies of Afro-Brazil dispossession from their ancestral territories. The habitual and deliberate violence against residents and their more-than-human networks incited widespread depression and even premature death among community elders. I center CIPS's affective impact on fishers and shellfish collectors, who grieve their more-than-human kinship with the ocean, mangroves, and wildlife. The chapter also elucidates the affective consequences of violence, dispossession, and ecological loss in development contexts are mutually implicating with existing race and gender-based inequalities. For many traditional communities in Brazil, biodiversity loss *is* an environmental injustice because those communities depend on more-than-human relationships for emotional well-being, household income, and sustenance. Therefore, the third chapter illustrates how grief in development contexts can reshape more-than-human sociality. This chapter advances debates on the emerging topic of "ecological grief," or how societies are ßmourning their rapidly-changing environments due to climate change. The concept offers

crucial insights into the relationship between well-being and biodiversity loss. However, current theories of ecological grief lack engagement with environmental justice movements and scholarship and need to be expanded to account for the *uneven* distribution of ecological degradation in racialized and poor communities.

Chapter four, *Divine Energy*, explores research question three: how do communities resist, negotiate, or heal from the port development complex's negative socio-ecological impacts? Scholars are increasingly grappling with what we lose when we focus exclusively on suffering in Latin American and Caribbean Research. I illuminate how black feminist geographies can help Latin American and Caribbean anthropologies meaningfully attend to colonial legacies *and* healing and repair. McKittrick (2013) theorizes how plantation slavery shaped circumstances of violence but also demanded creative survival strategies or 'secretive histories'. I illuminate how spiritual practices became a critical juncture of creative subterfuge, healing, and repair for the African diaspora in Pernambuco and Northeast Brazil. The Candomblé terreiros allowed practitioners and their descendants to have good relationships with a spiritual community, the Supreme Being, and the natural world. I explore how Candomblé evolved with aspects of Christianity and began to shape contemporary syncretic cosmologies that serve as a vital tool for personal and collective healing. Chapter four focuses on how syncretic Afro-Brazilian cosmologies shape creative healing and repair through music, dancing, and communing with the natural world. Despite having more syncretic beliefs than their forebears, Afro-Brazilians still draw upon *axé*, the vital lifeforce, to fortify themselves for personal and collective struggle.

Works Cited

Alvarez, Sonia E. 1990. *Engendering democracy in Brazil: women's movements in politics*: Princeton: Princeton University Press.

Andrade, Manuel Correia de Oliveira. 2001. "Espaço e tempo na agroindústria canavieira de Pernambuco." *Estudos Avançados* 15 (43):267-280.

Amato, Fabio. 2012. "Portos escoam 95% das exportações do país, mas seguem com gargalos." *Globo* 12/06/2012. Accessed from https://g1.globo.com/economia/noticia/2012/12/portos-escoam-95-das-exportacoes-do-pais-mas-seguem-com-gargalos.html

Bakker, Isabella. 2007. "Social reproduction and the constitution of a gendered political economy." *New Political Economy* 12 (4):541-556.

Bastos, Pedro Paulo Zahluth, Guilherme Santos Mello, and Pedro Rossi. 2020. "The Growth Model of the PT Governments: A Furtadian View of the Limits of Recent Brazilian Development" (Translated by Luis Fierro). *Latin American Perspectives* 47 (1):100-114. doi: https://doi.org/10.1177%2F0094582X19891700.

Bello, Walden F., Bill Rau, and Shea Cunningham. 1994. *Dark victory: the United States, structural adjustment, and global poverty*. London: Pluto.

Benería, Lourdes, and Gita Sen. 1981. "Accumulation, Reproduction, and "Women's Role in Economic Development": Boserup Revisited." *Signs* (2):279.

Biersack, Aletta. 2006. "Reimagining Political Ecology: Culture/Power/History/Nature." In *Reimaging Political Ecology*, edited by Aletta Biersack, James B. Greenberg, 3-40. Durham and London: Duke University Press.

Borras, S. M., J. C. Franco, S. Gomez, C. Kay, and M. Spoor. 2012. "Land grabbing in Latin America and the Caribbean." *JOURNAL OF PEASANT STUDIES* 39 (3-4):845-872.

Brown, K. L., M. W. Murphy, and A. M. Porcelli. 2016. "RUIN'S PROGENY: Race, Environment, and Appalachia's Coal Camp Blacks." *Du Bois Review-Social Science Research on Race* 13 (2):327-344. doi: 10.1017/s1742058x16000138.

Burdick, John. 1998. *Blessed Anastacia: women, race, and popular Christianity in Brazil*. London: Routledge.

Caldwell, Kia Lilly. 2007. *Negras in Brazil: Re-envisioning Black Women, Citizenship, and the Politics of Identity*. New Brunswick: Rutgers University Press.

Caldwell, Kia Lilly. 2017. *Health equity in Brazil: intersections of gender, race, and policy*: Urbana : University of Illinois Press.

Cadena, Marisol de la. 2015. *Earth beings: ecologies of practice across Andean worlds*. Durham: Duke University Press.

Cardoso, Cláuda Pons. 2016. "Feminisms from the Perspective of Afro-Brazilian Women." *Meridians: Feminism, Race, Transnationalism* 14 (1):1-29.

Carneiro, Sueli. 2011. *Racismo, Sexismo e Desigualdade no Brazil*. São Paulo: Selo Negro.

Carneiro, Sueli. 2016. "Women in Movement." *Meridians: Feminism, Race, Transnationalism* 14 (1):30-49.

Castilho, Celso Thomas. 2016. *Slave Emancipation and Transformations in Brazilian Political Citizenship*, *Pitt Latin American Series*. Pittsburgh: University of Pittsburgh Press.

Chant, Sylvia. 2008. "The 'feminisation of poverty'and the 'feminisation'of anti-poverty programmes: Room for revision?" *The Journal of Development Studies* 44 (2):165-197.

Costa Silva, René Marc da. 2013. "História dos trabalhadores negros no Brasil e desigualdade racial." *Revista Universitas Jus* 24 (3):93-107. doi: 10.5102/unijus.v24i3.2542.

Crenshaw, Kimberlé. 1991. "Mapping the Margins: Intersectionality, identity politics, and violence against women of color." *Stanford Law Review* 43 (6):1241-1299.

Crewe, Emma and Axelby, Richard. 2013. *Anthropology and Development: Culture, Morality and Politics in a Globalized World*. Cambridge: Cambridge University Press.

Dabat, Christine. 2007. *Moradores de engenho: relações de trabalho e condições de vida dos trabalhadores rurais na zona canavieira de Pernambuco segundo a literatura, a academia e os próprios atores sociais*. Recife: Editora Universitária, UFPE. Book.

Dabat, Christine Rufino. 2011. "Sugar Cane "Plantations" in Pernambuco: From "Natural Vocation" to Ethanol Production." *Review (Fernand Braudel Center)* (1/2):115.

Davis, Angela. 1981. *Women, Race, and Class*. New York: Random House.

DHESCA. 2018. Complexos industriais e violações de direitos: O caso de SUAPE, Complexo Industrial Portuário Governador Eraldo Gueiros (CIPS). Relatório da Missão de Investigação e Incidência (a Relatoria do Direito Humano ao Meio Ambiente da Plataforma Dhesca Brasil).

Eisenberg, Peter L. 1974. *The sugar industry in Pernambuco; modernization without change, 1840-1910*: Berkeley, University of California Press [1974].

Elmhirst, Rebecca. 2011. "Introducing new feminist political ecologies." *Geoforum* 42:129-132.

Eltis, David, and David Richardson. 2010. Volume and direction of the trans-Atlantic slave trade from all African to all American regions. [Map] Slave Voyages.

Escobar, Arturo. 1995. *Encountering development: the making and unmaking of the third world*. Princeton: Princeton University Press.

Ferraz, Maria do Socorro Barbosa. 2008. Sesmarias do açúcar: sítos históricos. *Clio: Revista de Pesquisa Histórica* 26 (2):59-78.

Freire, Adriana do Amaral, and Maria Salett Tauk. "Rádio Comunitária, Gênero e Desenvolvimento Local: um estudo de recepção do programa Rádio Mulher." *Comunicação & Sociedade* 31 (52):241-269.

Freyre, Gilberto. 2002. [1933] *Casa-grande & senzala, Introdução à historia da sociedade patriarcal no Brasil (46th ed.)* Rio de Janeiro: Editora Record.

Gonzalez, Lélia. 2020. *Por um feminismo afro-latino-americano: ensaios, intervenções e diálogos*. Edited by F. Rios and M. Lima. Rio de Janeiro: Zahar.

Gunewardena, Nandini. 2010. "Bitter Cane: Gendered Fields of Power in Sri Lanka's Sugar Economy." *Signs* 35 (2):371-396.

Hall, Stuart. 1980. "Cultural Studies: Two Paradigms." *Media, Culture and Society* 2:57-72.

Harrison, Faye Venetia. 1997. *Decolonizing anthropology: moving further toward an anthropology of liberation*. Arlington: Association of Black Anthropologists, American Anthropological Association.

Harvey, David. 2005. *A brief history of neoliberalism*: Oxford: Oxford University Press, 2005.

Hervas, A. 2019. "Land, development and contract farming on the Guatemalan oil palm frontier." *Journal of Peasant Studies* 46 (1):115-141. doi: 10.1080/03066150.2017.1351435.

Heynen, Nik. 2016. "Urban political ecology II." *Progress in Human Geography* 40 (6):839. doi: 10.1177/0309132515617394.

Heynen, Nik, McCarthy, J., Prudham, S., & Robbins, P. 2007. "Introduction: false promises." In *Neoliberal Environments: false promises and unnatural consequences* edited by N. Heynen, J. McCarthy, S. Prudham, & P. Robbins eds, 1-22. New York: Routledge.

Hollanda, Heloisa Buarque de. 2018. *Explosão Feminista: Arte, Cultura, Política e Universidade*. São Paulo e Rio de Janeiro: Companhia das Letras.

Jaquette, Jane S. 1982. "Women and Modernization theory: A Decade of Feminist Criticism." *World Politics* 34 (2):267-284.

Kabeer, Naila. 2015. "Gender, poverty, and inequality: a brief history of feminist contributions in the field of international development." *Gender & Development* 23 (2):189-205. doi: 10.1080/13552074.2015.1062300.

Katz, Cindi. 2004. *Growing up global: economic restructuring and children's everyday lives*: Minneapolis: University of Minnesota Press.

Kilborn, Peter T. 1983. "Brazil's Economic Miracle and its Collapse." *The New York Times*, 11/26/1983. Available from, https://www.nytimes.com/1983/11/26/business/brazil-s-economic-miracle-and-its-collapse.html

Lehtonen, M. 2011. Social sustainability of the Brazilian bioethanol: power relations in a centre-periphery perspective. *Biomass and Bioenergy* 35 (6):2425-2434.

Li, Tania, and Pujo Semedi. 2021. *Plantation life: corporate occupation in Indonesia's oil palm zone*. Durham: Duke University Press.

Lovell, Peggy A. 2000. Race, Gender and Regional Labor Market Inequalities in Brazil. *Review of Social Economy* 58 (3):277-293.

Lugones, María. 2008. "Coloniality and gender." *Tabula rasa* (9):73-102.

Lugones, María. 2010. "Toward a decolonial feminism." *Hypatia* 25 (4):742-759.

Marquetti, Adalmir Antonio, Cecilia Hoff, and Alessandro Miebach. 2019. "Profitability and Distribution: The Origin of the Brazilian Economic and Political Crisis." *Latin American Perspectives* 47 (1):115-133. doi: 10.1177/0094582X19887751.

McKittrick, Katherine. 2013. "Plantation Futures." *Small Axe* 17 (3):1-15.

Mehta, Lyla. 2013. "Water and Ill Being." In *The Social Life of Water*, edited by John R. Wagner, 60-77. New York: Berghahn Books.

Menezes, Roberto Goulart, and Ricardo Barbosa Jr. 2021. Environmental governance under Bolsonaro: dismantling institutions, curtailing participation, delegitimising opposition. *Zeitschrift für Vergleichende Politikwissenschaft* 15 (2):229-247.

Micaelo, Ana Luísa. 2014. Territorialidade e sentidos da posse da terra na Zona da Mata de Pernambuco. In *Property Rights, Land and Territory in the European Overseas Empires*, edited by J. V. Serrão, B. Direito, E. Rodrigues and S. M. Miranda, 325-334. Portugal: CEHC-IUL.

Mies, Maria. 1998. *Patriarchy and accumulation on a world scale: Women in the international division of labour*. London: Zed Books.

Mignolo, Walter D. 2010. "Introduction: Coloniality of Power and De-colonial Thinking." In *Globalization and the decolonial option*, edited by Walter D Mignolo and Arturo Escobar, 1-21. New York: Routledge.

Miles, Tshombe. 2018. "Reflecting on the legacy of Brazilian slavery and reimagining Afro-Brazilian agency." *History Compass* 17:1-8.

Ministério da Infraestrutura, Brasil. 2022a. "Sistema Portuário Nacional." Available from, https://www.gov.br/infraestrutura/pt-br/assuntos/transporte_aquaviario/sistema-portuario

Ministério da Infraestrutura, Brasil. 2022b. "Legislação-FMM" Available from, https://www.gov.br/infraestrutura/pt-br/assuntos/incentivos/incentivos-fiscais/legislacao-fmm

Mitchell, Gladys L. 2018. *The politics of Blackness : racial identity and political behavior in contemporary Brazil*, *Cambridge studies in stratification economics : economics and social identity*: Cambridge, United Kingdom ; New York, NY, USA : Cambridge University Press, 2018.

Mitchell, S. T. 2015. American dreams and Brazilian racial democracy: The making of race and class in Brazil and the United States. *Focaal-Journal of Global and Historical Anthropology* (73):41-54.

Mohanty, Chandra Talpade. 1984. "Under Western Eyes: Feminist Scholarship and Colonial Discourses." *Boundary 2* 12/13 (3/1):333-358.

Mohanty, Chandra Talpade 2003. ""Under Western Eyes" Revisited: Feminist Solidarity through Anticapitalist Struggles." *Signs* (2):499-535. doi: 10.1086/342914.

Mollett, Sharlene. 2017. "Irreconcilable differences? A postcolonial intersectional reading of gender, development and Human rights in Latin America." *Gender, Place and Culture* 24 (1):1-17.

Mollett, Sharlene; Caroline Faria. 2013. "Messing with gender in feminist political ecology." *Geoforum* 45:116-125.

Mosse, David. 2005. *Cultivating development: an ethnography of aid policy and practice*: London: Pluto Press. Bibliographies

Mosse, David. 2013. "The Anthropology of International Development." *Annual Review of Anthropology* (42):227-246.

Nabuco, Joaquim. 1977. [1883]. *Abolitionism: the Brazilian antislavery struggle*, *Blacks in the New World*. Urbana: University of Illinois Press.

Nagar, Richa. 2014. *Muddying the Waters: coauthoring feminisms across scholarship and activism*. Urbana, Chicago and Springfield: University of Illinois Press.

Nascimento, Elisa Larkin. 2007. *The Sorcery of Color: Identity, Race and Gender in Brazil*. Philadelphia: Temple University Press.

Needleman, Ruth. 2011. 'I am somebody!': Brazil's social movements educate for gender equality and economic sustainability. In *The Women, Gender and Development Reader*, edited by N. Visvanathan, Duggan, Lynn, Wiegersma, Nan and Nisonoff, Laurie. London, New York: Zed Books.

Nelson, Donald R. and Timothy J. Finan. 2009. Praying for Drought: Persistent Vulnerability and the Politics of Patronage in Ceara, Northeast Brazil. *American Anthropologist* 111 (3):302-316.

Ocampo, José Antonio. "The Latin American debt crisis in historical perspective." In *Life After Debt*, pp. 87-115. Palgrave Macmillan, London, 2014.

Oliveira, Marluce Tavares de , Verônica Chaves Carrazzone, Maria Aurea Bittencourt Silva, Edna Maria Malheiros, Kátia Saraiva, and Cleide Ferreira Neves. 2016. "Pernambuco falando para o mundo: a cultura pernambucana e a formação de terapeutas comunitários." *RTES-Temas em Educação e Saúde* 12 (20):246-265.

Omi, Michael, and Howard Winant. 2014. *Racial Formation in the United States*. 4th edition. ed. New York and London: Routledge.

Paula, Luiz Fernando de, Fabiano Santos, and Rafael Moura. 2020. "The Developmentalist Project of the PT Governments: An Economic and Political Assessment." *Latin American Perspectives* 47 (2):8-24. doi: 10.1177/0094582X20907319.

Paulilo, Maria Ignez S. 2013. "FAO, Fome e Mulheres Rurais." *DADOS-REVISTA DE CIENCIAS SOCIAIS* 56 (2):285-310.

Peet, Richard, and Elaine R. Hartwick. 2015. *Theories of development: contentions, arguments, alternatives*. New York: Guilford Press.

Pereira, Luiz Carlos Bresser. 2013. "Empresários, o governo do PT e o desenvolvimentismo." *Revista de Sociologia e Política* 21 (47):21-29.

Perry, Keisha-Khan Y. 2013. *Black women against the land grab: the fight for racial justice in Brazil*. Minneapolis: University of Minnesota Press.

Quijano, Aníbal. 2010. "Coloniality and Modernity/Rationality." In *Globalization and the Decolonial Option*, edited by Walter D Mignolo and Arturo Escobar, 22-32. New York: Routledge.

Rai, Shirin M. 2011. "The history of international development: concepts and contexts." In *The Women, Gender and Development Reader*, edited by Nalini Visvanathan, Lynn Duggan, Nan Wiegersma and Laurie Nisonoff, 14-21.

Robbins, Joel. 2013. "Beyond the suffering subject: toward an anthropology of the good." *Journal of the Royal Anthropological Institute* 19:447-462.

Rocheleau, Dianne; Slayter-Thomas, Barbara; Wangari, Esther. 1996. "Gender and Environment: A feminist political ecology perspective. In Feminist Political Ecology." In *Feminist Political Ecology*, edited by Dianne Rocheleau, Barbara Thomas-Slayter, and Esther Wangari, eds, 3-23. London and New York: Routledge.

Saad-Filho, Alfredo. 2020. "Varieties of Neoliberalism in Brazil (2003–2019)." *Latin American Perspectives* 47 (1):9-27. doi: https://doi.org/10.1177%2F0094582X19881968.

Santos, Mariana Olívia Santana, Aline do Monte Gurgel, and Idê Gomes Dantas Gurgel. 2019. *Conflitos e Injustiças na Instalação de Refinarias: Os caminhos sinuosos de Suape, Pernambuco*. Recife: Universidade Federal de Pernambuco.

Scheper-Hughes, Nancy. 1992. *Death without weeping : the violence of everyday life in Brazil*: Berkeley : University of California Press, 1992.

Schwartz, Stuart B. 1985. *Sugar plantations in the formation of Brazilian society : Bahia, 1550-1835*, *Cambridge Latin American studies.* Cambridge: Cambridge University Press.

Scoones, Ian, Marc Edelman, Saturnino M. Borras, Ruth Hall, Wendy Wolford, and Ben White. 2018. "Emancipatory rural politics: confronting authoritarian populism." *The Journal of Peasant Studies* 45 (1):1-20. doi: 10.1080/03066150.2017.1339693.

Scott, James C. 1985. *Weapons of the weak: everyday forms of peasant resistance*: New Haven: Yale University Press.

Silva, Maria Aparecida de Moraes. 2010. Mulheres Trabalhadoras Rurais. *Ruris* 4 (2):13-43.

Sims, Jocelyn, and Jesse Romero. 2013. "Latin American Debt Crisis of the 1980s." Federal Reserve History. The Federal Reserve. Accessed from, https://www.federalreservehistory.org/essays/latin-american-debt-crisis#:~:text=The%20Origins%20of%20the%20Debt%20Crisis,-During%20the%201970s&text=Latin%20American%20borrowing%20from%20US,had%20skyrocketed%20to%20%24159%20billion.

Srinivas, Tulasi. 2018. *A Cow in the Elevator: An Anthropology of Wonder*. Durham and London: Duke University Press.

Smith, Christen A. 2016. *Afro-Paradise: Blackness, Violence, and Performance in Brazil*. Chicago: University of Illinois Press.

Smith, Neil. 2010. *Uneven development: Nature, capital, and the production of space*. Athens: University of Georgia Press.

SUAPE. 2020a. Polos do Desenvolvimento do Complexo. Webpage, (https://www.suape.pe.gov.br/pt/negocios/polos-negocios). Accessed Dec. 1st, 2022.

SUAPE. 2020b. History of the Port. Accessed from, https://www.suape.pe.gov.br/en/institutional/history-of-the-port.

Sultana, Farhana. 2011. "Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict." *Geoforum* 42:163-172. doi: 10.1016/j.geoforum.2010.12.002.

Sultana, Farhana. 2015. "Emotional Political Ecology." *The International Handbook of Political Ecology*:633-645.

Sundberg, Juanita. 2008. "Placing race in environmental justice research in Latin America." *Society and Natural Resources* 21 (7):569-582. doi: 10.1080/08941920802111538.

Taylor, Kit Sims. 1978. *Sugar and the underdevelopment of northeastern Brazil, 1500-1970*, *University of Florida monographs.* Gainesville: University Florida Press.

Thayer, Millie. 2010. *Making transnational feminism : rural women, NGO activists, and northern donors in Brazil*, *Perspectives on gender*: New York : Routledge, 2010.

Visvanathan, Nalini. 2011. "Introduction." In *The Women, Gender, and Development Reader*, edited by N. Visvanathan, L. Duggan, N. Wiegersma and L. Nisonoff, 1-13. London: Zed Books.

Welch, Cliff. 2011. "Lula and the Meaning of Agrarian Reform." *NACLA Report on the Americas* 44 (2):27-30. doi: 10.1080/10714839.2011.11725534.

Wolford, Wendy. 2010. *This land is ours now: social mobilization and the meanings of land in Brazil*, *New ecologies for the twenty-first century*: Durham [NC] : Duke University Press

CHAPTER TWO

CONTINUAL LOSS: RACIAL LAND TENURE AND TERRITORIAL EXPROPRIATION IN PERNAMBUCO

by Shelly Annette Biesel and Elaine Salgado Mendonça

Introduction

As recently as a decade ago, Brazil was widely considered one of the world's fastest-growing democracies, an economic powerhouse, and an icon for socially and environmentally conscious public policies**.** However, in recent years Brazil has suffered massive enclosures and destruction of public lands (Maia 2019, Menezes and Barbosa Jr. 2021), growing racial tensions, and class inequalities (Bledsoe 2019; Silva and Larkins 2019), and rising inflation and economic recession (Marquetti et al. 2020). Under Jair Bolsonaro, Brazil also witnessed a concomitant shift in state ideology and governance concerning indigenous groups, African-descendant communities, and the landless poor. Worker's Party (PT) leadership (2003-2016) officially recognized (or "regularized," as it is called in Brazil) land rights for indigenous and quilombo[5] communities. Today those same communities are being blamed for getting specialized treatment, and their land rights are increasingly threatened (Menezes and Barbosa Jr. 2021). Bolsonaro, who made his racism, homophobia, and misogynistic prejudices apparent in public forums and discourses, has fomented racial tensions, especially over who should be granted privileges over land and territory (Gledhill and Dussel 2019). Rising social tensions, environmental disaster,

[5] Quilombos are African-descendent communities comprised initially of individuals who escaped slavery and formed organized settlements. Today these communities often—though not always—live off the land and other natural resources.

territorial conflict, and concomitant sentiments of despair have prompted many scholars to wonder whether Brazil's "precarious democracy" is unraveling (Junge et al. 2020).

These trends are evident in the deepening territorial conflict and racial inequality in predominantly Afro-Brazilian traditional communities in coastal areas of the southern Zona da Mata, or "Zona Sul" of Pernambuco. Pernambuco's sugarcane-producing zone, known as the Zona da Mata, has cultivated, processed, and exported sugarcane since the 16th century (Rogers 2010, Scheper-Hughes 1992). Consequently, the region continues to be characterized by large plantations estates (*engenhos*) and sugar mills (*usinas*), with the vast majority of residents being black (negro/negra) and mixed-race (pardo/parda) descendants of enslaved peoples (Andrade 1989; Buarque 2018). In addition to experiencing blatant acts of racial hostility,[6] these communities are at the center of growing regional land conflicts, where many have lived as "posseiros," or squatters on abandoned sugarcane plantation lands (*terras do engenho*) for generations. While land grabs in Brazil are nothing new (Oliveira 2013; Perry 2013), Bolsonaro and his administration's performative disdain for both environmental protection and the communities who occupy communal lands have emboldened land conflicts throughout the country, most infamously in the Amazon Rainforest (Menezes and Barbosa Jr. 2021). While not as widely reported, Bolsonaro's aggression and cynicism toward land protections have exacerbated rural land conflicts throughout Pernambuco, especially in communities linked to the

[6] The recent death of Miguel Otávio da Silva was one of the most dehumanizing instances of growing anti-black sentiment (Silva and Larkins 2019) and class inequality in coastal Pernambuco. Miguel, five years old, was the son of domestic worker Mirtes Santana in the coastal community of Tamandaré. While Mirtes was working, she left her son under the care of her white boss Sarí Corte Real, a wealthy politician's wife. Real was caught on camera abandoning the five-year-old in an elevator before he accidentally fell to his death from the ninth story of their luxury apartment building. Pernambuco (like other parts of Brazil) is also experiencing growing religious racism, where African-based religions have been persecuted and attacked. The arson of the Candomblé spiritual center o Ilê Axé Ayabá Omi is a recent example. The center, also known as Terreiro das Salinas, was burned in São José da Coroa Grande following a day of religious festivities to celebrate the new year (Gonzaga 2022).

state's centuries-old sugarcane supply chain (Da Redação 2020; Sobreira 2021a). These communities have experienced direct and indirect violence from plantation owners who wish to expand their operations and the Suape Port Industrial Complex. The sprawling 13,500-hectare complex is a crucial locus for sugarcane processing and export and houses nearly 100 other industrial manufacturing facilities. Among the most insidious of the racially charged land disputes was when sugar mill Agropecuária Mata Sul S/A, used a helicopter to dump pesticides over posseiro communities, including their vegetable gardens and water sources, in an attempt to remove them from the plantation (Bezerra 2020, Sobreira 2021b). Similarly, in Engenho Roncador, the President of the Residents' Association (Associação de Moradores) and his nine-year-old son were brutally murdered in their home over a land dispute (Cirne 2022)[7] These land conflicts epitomize the growing tensions exacerbated by Bolsonaro's negation of land rights for the poor or racialized communities.

Given the relative gains for Brazil's poor, indigenous, and Afro-descendent communities under Worker's Party leadership, including affirmative action programs, the regularization of land rights for African-descendant and Indigenous communities, and efforts to create a more inclusive educational curriculum, many scholars are trying to figure out: what is happening in Brazil (Junge et al. 2020; Silva and Larkins 2019)? While it would be easy to hang these tensions exclusively on Bolsonaro's shoulders, we demonstrate how Bolsonaro has merely exacerbated social inequalities that have been a long time in the making. Our research in two neighboring coastal communities of Cabo de Santo Agostinho ("Cabo") and Ipojuca in Pernambuco's

[7]Sugar mill Usina Santo André do Rio Una legally owns the engenho and filed for bankruptcy decades ago, but 400 residents chose to remain living on the land they had worked for nearly 40 years (ibid.) Without formal land rights from the bankrupt plantation owners, these communities were already vulnerable. When another company, Agropecuária Javari, began leasing the land and replanting sugarcane, it threatened the remaining residents so they would leave (Cirne 2022). These conflicts culminated in a brutal murder of father and child that sent shock waves throughout the region.

sugarcane-producing region traces contemporary racial inequalities to colonial plantation logics that continue to delimit potentialities for communities of color (McKittrick 2013). We draw upon a deep historical analysis to elucidate how plantation logics continually reinscribe a racial land tenure and limit economic opportunities for racialized communities from the colonial era to the present. In what follows, we examine the intimate and often violent ways in which poor, predominantly Afro-descendant residents of Cabo and Ipojuca live with what Hartman has termed the "afterlife of slavery," where "black lives are still imperiled and devalued by a racial calculus and political arithmetic that were entrenched centuries ago" (Hartman 2007, 6). We trace specific linkages between Portuguese sugar-based colonization and contemporary livelihoods, identity, labor, territory, and access/use of natural resources among traditional fishing and farming communities. Engaging with plantation workers, family farmers, fishers, and marisqueiras (shellfish collectors) between 2020 and 2021, our research demonstrates how historic racial inequalities lead to unequal participation in regional economic development planning or employment, unequal access to land and natural resources, and the widespread, often violent expropriation of these communities from their ancestral territories.

Theoretical Considerations: Plantation Logics and Development in Brazil

To understand the links between race, class, and territory, we must recognize how plantation politics instituted a racialized economy (often called *racial capitalism*, see Robinson 2000, Maia 2019) and racialized control of natural resources, especially land ownership (Sundberg 2008, Mollet and Faria 2013). Latin American scholars have offered crucial contributions regarding the persistence of coloniality within globalized capitalist societies (Lugones 2010, Mignolo 2010, Quijano 2010). Colonizers imposed both racial hierarchies as well as binary constructions of gender, a "colonial vision" that indoctrinated white, Europeanness

as the cultural model that all should aspire to, effectively racializing non-white groups as exotic "others" (Quijano 2010). The racialized, gendered colonial ideologies did not just 'other' non-white communities but also rendered them discursively and materially inhuman (Lugones 2010). Indigenous and African groups were considered "bestial," "sexual," and "wild," a social construction that was, and at times still is used to justify white oppression toward these groups, including enslavement, exploitation, sexual violence, as well as ideological colonization through religious conversion (ibid.). Colonialism continues to inform (among other things) control of the economy, especially the Global North's privileged relationships with international financial institutions, which have historically led to land appropriation, labor exploitation, and control of natural resources for capital accumulation in the Global South (Mignolo 2010). Social scientists have long explored how plantation economies influence contemporary labor relations, economic organization, and social hierarchies, among myriad other facets of everyday life (Beckford 1972; Dabat 2007; Mintz 1985; Robotham 2018; Tomich 2011; Thomas 2016; Wolf and Mintz 1957). However, calls to decolonize anthropology (Harrison 1997; Allen and Jobson 2020) argue that anthropology continues to misunderstand race and racism, especially in Latin American and Caribbean contexts, partly because it fails to meaningfully engage with non-Western knowledge production that is often considered less scientific, reliable, or legitimate (Harrison 1997). Therefore, decolonized anthropology would more equitably draw from women, indigenous peoples, scholars of color, and other marginalized work (ibid.). Over 25 years later, Allen and Jobson (2016) return to Harrison's call for engaging with peripheralized scholarship. Notably, they underscore the "sustained absence of black thinkers" in anthropology's citational practices and theoretical frameworks (136). For Allen and Jobson (2016) a "liberatory praxis" in Anthropology may require creating new 'institutional locations' where we can engage with

scholars and people of color and look outside of the discipline to African and Diaspora studies for black intellectual contributions (136). In this spirit, we intentionally center black feminist epistemologies from Canada and Brazil to demonstrate how black feminist theoretical frameworks on plantations and contemporary racial inequality are critical for interpreting the Pernambuco context. More broadly, we explore how black feminist epistemologies and frameworks can offer novel insights into post-colonial politics and plantation life.

Katherine McKittrick and Plantation Logics

In *Plantation Futures*, McKittrick (2013) offers a way to conceptualize spatial continuities between the plantation and contemporary racial struggles. Plantation slavery took many forms but contributed to racial surveillance, anti-black violence, sexual cruelty, and economic accumulation: its legacies generate racialized violence and oppression today (2013, 9). McKittrick is interested in how *plantation logics*, or logics that normalize anti-black violence, surveillance, exploitation, and exclusion, persist through time and continue to influence contemporary black lives. Like Mignolo (2010), Quijano (2010), and Lugones (2010), McKittrick describes the colonial encounter in the Americas as being rooted in racial prejudice, wherein white men were considered rational fully-human beings, and indigenous and black peoples were deemed irrational, barbaric, not-quite-humans. The normalization of violence against black and indigenous peoples in the plantation context is the foundation for the contemporary normalization of racialized spaces as *uninhabitable* or "unlivable spaces occupied by the racially condemned, the already dead and dying" (2013, 6-9). The colonial occupation of the "new world" was premised on the idea that its territories were "lands of no one" (2013, 6). Indeed, these "lands of no one" would become the very spaces in which the brutalities of

plantation-based racial capitalism were carried out (2013, 6). Of course, lands of no one were already inhabited by indigenous peoples, yet colonizers deemed these spaces primitive, young, in need of development, and spaces of the 'racial other' who were considered insignificant (or "no one") (2013, 6-7). McKittrick states, "the historical constitution of the lands of no one can, at least in part, be linked to the present and normalized spaces of the racial other; with this the geographies of the racial other are emptied out of life precisely because the historical constitution of these geographies has cast them as the lands of no one," (2013, 7). Spaces that are simultaneously considered lands of no one and yet populated with the racially other remain significant in Cabo and Ipojuca, where indigenous expropriation during the colonial encounter is very similar to contemporary dispossession of Afro-descendant communities (who are deemed disposable) for megadevelopment projects.

Racial logics of plantations serve as the foundation of a racialized economy, not only in that black bodies were used as commodities that produced goods for the world market, but that the spatial organization of plantation communities (both landscapes and architecture) was designed to surveil and control enslaved populations (McKittrick 2013, 5-9). Therefore, plantation economies contributed to early architecture, organization of the landscape, and the division of labor, all shaped by racial prejudices (2013, 9). The normalization of racial surveillance, anti-black violence, sexual assault, and economic accumulation has lingering effects today. However, the discourses of modernization and development deny black oppression and the historical continuities of the plantation… "denying it context" (McKittrick 2013, 9). Black struggles are delinked from their historic contexts and interpreted through the present, where black peoples are told to strive for the goals of the economically comfortable white man (ibid.) This historical erasure decontextualizes the deep history of racism that creates problems

for racialized people and establishes white men as the basis for what others should strive to be (ibid.). And yet, for McKittrick, imagining a future as solely linked to a brutal past leads to a hopeless future predicated on violence. Therefore McKittrick is also interested in the histories of creative resistance (for example, blues music, maroon communities, garden plots, and other forms of resistance) that help envision a more hopeful future for black communities (2013, 2).

Lélia Gonzalez, Black Labor, and Brazil's 'Neocolonial Dependent Economy'

In *Por Um Feminismo Afro-Latino-Americano* (For an Afro-Latin-American Feminism), Gonzalez (2020) illustrates how racism and slavery influenced Brazil's dependent insertion in the global economy and concomitant labor organization. Because Brazil's 'neocolonial dependent economy' was founded and centered on exporting raw materials during slavery, Brazil now maintains a dependent relationship with wealthy consumer countries. (2020, 46). Brazil's role as an exporter of cheap foods (sugar, soy, beef) and other raw materials ensured that "pillage from the start, and external commerce after, would assume the role of the largest sources of wealth, manipulated from the metropoles," (Gonzalez 2021: 26-27, authors' translation). Like during slavery, a wealthy minority benefits from this neocolonial dependency, and they appropriate most of the surplus wealth (2020, 26). The transition from slavery to 'free labor' was not accompanied by adequate agrarian reform that might truly redistribute wealth and economic opportunity (ibid.). The lack of agricultural restructuring and Brazil's dependence on the exportation of cheap, raw materials ensure that the vast wealth inequities and worker exploitation remain firmly entrenched.

For Gonzalez, the 'deformed factors' of slavery also organized the Brazilian labor market, especially in the rural sector (2020, 26). Capitalism articulates with "pre-capitalist forms of

exploitation of manual labor… in a way that takes advantage of the last (previous labor arrangements)" (Gonzalez 2020, 26., authors' translation). However, in most cases, racialized individuals in Brazil become superfluous to economic development, becoming part of a *marginal mass* (2020, 26). Black individuals, especially women, constitute many of Brazil's underemployed and unemployed (2020). Developing Nun's (2000) concept of the marginal mass (*massa marginal)*, Gonzalez illustrates how black individuals end up comprising the vast majority of the 'contingent' workforce as 1) manual laborers (either on their own accord or under control by a wealthy patron (*sob patrão*); 2) the majority of underemployed workers (temporary, intermittent, and occasional workers); and 3) or salaried workers who work in "less modernized sectors" who do arduous labor for meager remuneration (Gonzalez 2021, 30). In sum, as previous labor relations (slavery) shaped labor organization, and agrarian reform never comprehensively redistributed land to racialized communities, black laborers tend to fill positions as exploited workers when they are enrolled in the labor force. Many others who are not employed constitute a reserve army of laborers not included in development initiatives but available to fill in if the chance arises. Gonzales writes that slavery and the dehumanization of black communities, paired with unequal access to education and land, normalized the idea of black workers being on the lowest rungs of the labor market. This especially true for black women, who make up the majority of domestic workers for white families in Brazil (Gonzales 2020).

Racial Land Tenure and Waves of Expropriation in Pernambuco

"The plantation system was crucial for capitalist development not only because of the immense amount of surplus labor that was accumulated from it, but because it set a model of labor-management, export-oriented production, economic integration and international division of labor that have since become paradigmatic for capitalist class relations." [Federici 2004, 104]

Sugarcane, Slavery, and Land Tenure during Portuguese Imperial Rule

Northeast Brazil's long history of slavery for commodity export production would have lingering social, economic, and ecological consequences that continue to shape contemporary struggles for territorial rights within racialized communities (Farfán-Santos 2019, Maia 2021, Perry 2013). When Cabral landed in Northeast Brazil in 1500, the Portuguese already had extensive sugarcane cultivation and trade knowledge. The Portuguese began "offshoring" sugar production on Atlantic Islands as early as 1433 (Rogers 2010; Taylor 1978). They developed other plantation-based economies throughout 15th and 16th centuries, including São Tomé, Príncipe, the Azores, and Cape Verde Islands (Taylor 1978, 13). In colonial Brazil and elsewhere in Latin America, colonizers instituted and enforced a European notion of 'appropriate resource management' based on clear racial ideologies (Sundberg 2008). Throughout this paper, we refer to this as *racial land tenure* or the racial ideologies ideas that inform land ownership, control, and decision-making. In 1534 King Dom João III divvied Brazil into 15 captaincies and granted them to white Portuguese gentry; these "donations" included land and executive privileges (Ferraz 2008; Taylor 1978, 17). Pernambuco was by far the largest captaincy in colonial Brazil, and its donatário (or land grantee) was the Portuguese nobleman Duarte Coelho. At that time, the captaincy extended 'seventy leagues' along the coast of Brazil, beginning just south of Cabo de Santo Agostinho, extending to present-day Alagoas (Ferraz 2008, 62). The Portuguese crown expected Coelho to conquer the donated territories by warring with indigenous communities settled within the territories (Ferraz 2008, 61). An estimated 1,500,000 indigenous people lived in Brazil at the time of Portuguese colonization (Taylor 1978). The land grants gave the captains judicial, administrative, and political powers, and the grantees were expected to administer

justice within the captaincy and collect rents to send back to the Portuguese crown (Ferraz 2008). The donatários received "personal use of 20 percent of the land, 50 percent of the value of extracted products, and civil jurisdiction within specified limits" (Taylor 1978:17).

In 1534, King Dom João III also authorized the Portuguese to distribute land to other settlers through the *sesmaria* system. The sesmaria system was a racial land tenure system where indigenous tribes' lands (presumably 'lands of no one') were "donated" to white European settlers, who used the land to establish sugar plantations. Sesmarias were smaller territory grants within the captaincy that could be given to any Christian person but could not be inherited or divided (Ferraz 2008). As coastal Brazil lacked precious metals, the captaincies prioritized sugar production to pay their rents to the crown (Ferraz 2008, 62). Coelho distributed the land predominantly to white noblemen and wealthy European families who planned to establish sugarcane plantations (Ferraz 2008, 64). The captain brought these families to Pernambuco through enticing offers of marriage within the parentage of donatário and receiving a sesmaria to establish sugarcane plantations or pursue military campaigns to capture and enslave indigenous groups (ibid). In the 16th century, bartering with indigenous populations for plantation labor quickly devolved into purchasing or capturing, and enslaving indigenous people for sugar production (Andrade1989; Schwartz 1985).

Like other areas in the Pernambuco captaincy, the sesmaria system in Cabo began with violent military campaigns against indigenous groups, followed by Coelho "donating" the land to Portuguese military officers to establish sugarcane plantations. Portuguese campaigns in Cabo technically predated even Coelho, as a Portuguese commander had claimed the land for the crown as early as 1521 (Ferraz 2008, 67). At the time, indigenous populations lived in both settlements and in the lush Atlantic Forest (*Mata Atlântica*) that was promptly deforested upon

settler arrival. The Portuguese eventually launched two violent military campaigns against the indigenous groups, ultimately conquering present-day Cabo de Santo Agostinho between 1560 and 1571. After the violent military conquest, Coelho began distributing the land through the process of sesmarais so it could generate wealth through sugarcane plantations (Ferraz 2008). Coelho ensured the first recipients of the sesmarias territory were the military conquistadors that helped him defeat the indigenous groups: João Paes Barreto, Cristóvão Lins, and Filipi Cavalcanti (Ferraz 2008, 67). By 1573, the Pernambuco captaincy was already administratively organized around sugarcane production (Ferraz 2008, 62). By the 1570s, around 700 Portuguese families lived in the Pernambuco captaincy; each sugarcane plantation had 20-30 laborers, and between 4,000-5,000 enslaved indigenous and African peoples residing within the settler territory (ibid.). The Portuguese also had a military of 3,000 men and 400 cavalrymen (ibid.). The Portuguese crown incentivized slavery by offering tax deductions for wealthy planters who imported enslaved Africans. Portuguese violence and disease eventually devastated or drove out the vast majority of indigenous peoples, prompting the Portuguese to acquire more and more labor through the widening African slave trade (Schwartz 1985). Taylor writes, "plantation labor in the New World would not have been profitable without slavery" (1978:19).

The 17th and 18th centuries were characterized by brutal slavery at the hands of the planter class, who continued to benefit from the racial land tenure arrangements of the 16th century. Eisenberg (1974) argues that land ownership in Pernambuco was "the basis of power" from which the planter class exercised "nearly absolute" political control (1974:134). As sugarcane production generated more and more wealth in Pernambuco, new villages and settlements emerged with more and more plantations. Ipojuca was established with a sesmaria at the beginning of the 17th century, with the founding families continuing the local tradition of

establishing sugarcane plantations and brutal slave labor (Ferraz 2008, 69). In the early 17th century, northeast Brazil experienced an extensive sugar boom that did not subside during Dutch colonization between 1630 and 1654 (Rogers 2010). This was related to an insatiable European market for sugar (Mintz 1985). Consequently, plantations needed an ample, reliable labor supply. During the 17th and 18th centuries, the Portuguese continued to import thousands of enslaved Africans annually to work on cane plantations (Rogers 2010). Conservative estimates of the number of enslaved people who journeyed through the Trans-Atlantic slave trade to Pernambuco *alone* to around 818,000 individuals (Eltis and Richardson 2010). To put this in perspective, the number of enslaved people forced to journey across the Trans-Atlantic slave trade to the whole United States is estimated to be 387,000 (Eltis and Richardson 2010). Competition from Caribbean producers contributed to a decline in sugar production at the turn of the 18th century (Schwartz 1985). However, many Northeast planters did not abandon sugar as their principal export crop (Taylor 1978). Plantation conditions were so violent that once purchased, enslaved sugarcane workers had a life expectancy of between 10 and 17 years (Eisenberg 1974; Schwartz 1985; Taylor 1978). Planters purchased enslaved people rather than relying on "natural" reproduction, as excruciating labor and high male to female ratios contributed to low birth rates (Eisenberg 1974:148).

Northeast Brazil's reliance on African slavery for 240 years, followed by a "transitional stage lasting nearly 80 years," entrenched land and wealth inequalities between predominantly white landed elites (latifúndia) and Afro-Brazilians who were forbidden from purchasing land until after abolition (Dabat 2011; Taylor 1978:27). At the beginning of the 19th century, northeast Brazil's sugar industry began another decline while coffee plantations in southern Brazil became increasingly profitable (Schwartz 1985). Southern Brazil's coffee boom contributed to a massive

migration of enslaved Africans to plantations in the South (ibid.). Throughout this century, abolitionists and quilombos in Northeast Brazil fought to free enslaved peoples and yet were aggressively opposed by Northeast Brazil's latifúndio, or planter class (Farán Santos 2015, Miles 2019). The slave trade ended in 1850, but abolition was not officially instituted until the "Golden Law" (Lei Áurea) of 1888. Similar to the US South, abolition efforts failed to redress the vast wealth and land-based inequalities that slavery had created and sustained (Eisenberg 1974, Dabat 2011, Miles 2019). After abolition, sugarcane plantations endured in the Northeast, slavery was replaced by a tenancy system that failed to reallocate land from the prominent landholding elites to the poor workers and formerly enslaved (Dabat 2011). Through the tenant (morada) system, laborers had access to a small amount of land for subsistence production, which bound them to the landholding planters without legal rights (Dabat 2011; Eisenberg 1974). Without legal land titles, poor workers remained dependent on small iland owning elites long after the formal end of Brazil's 'slaveocracy' (Scheper Hughes 1992; Perry 2013).

Twentieth Century Pernambuco and the Maintenance of Social and Material Inequalities

At the beginning of the Twentieth Century, Pernambuco's sugar economy and its concomitant racial land tenure remained firmly entrenched, prompting social unrest and protest. By 1934, Getúlio Vargas had implemented the first Sugar and Alcohol Institute (IAA), and shortly after that, the Sugarcane Statute (1941), which attempted to institute measures to guarantee plantation workers access to land (Rogers 2010). Though it expanded land access for some individuals and families, the Sugarcane Statute failed to break up the latifúndio and redistribute land to the landless poor. The Brazilian Communist Party (PCB), among other rural worker's groups, helped organize the first Peasant Leagues (*ligas camponesas*) in Pernambuco

between 1945-1947, which challenged the sugarcane industry's prioritization of external commerce profits over local poverty and hunger (Buarque 2018; Scheper Hughes 1992). The peasant leagues advocated for radical agrarian reform that would more equitably and meaningfully redistribute land from the latifúndio to landless peasants, but the government suppressed their efforts (Buarque 2018). Later in 1955, members of the PCB and other protestors occupied the Galiléia plantation in Pernambuco's Zona da Mata, calling it a peasant league to evoke the symbolic power of the previous movement. This action prompted renewed peasant league campaigns in Pernambuco and across Brazil, which infamously advocated for agrarian reform 'by law or force.' The Peasant Leagues helped pass the Rural Worker's Statute (1963), which granted workers legal rights to unionize (Rogers 2010). The same year CONTACT (the Confederation of Workers in Agriculture) was established and popularized the idea of agrarian reform (Welch 2011). The US-backed coup d'état installed a military dictatorship between 1964-1985 and promptly stifled this forward momentum.

Agrarian reform under the dictatorship was more about modernizing and industrializing Brazilian agriculture than helping poor, landless populations (Martins 1984). The military dictatorship adopted a "depoliticized version of agrarian reform" primarily designed to industrialize and modernize Brazilian agriculture (Welch 2011, 30). The National Institute of Colonization and Agrarian Reform was established in 1970 and attempted to resolve Northeast Brazil's land inequities by resettling landless peasants in the Amazonas region of Brazil. At the same time, agrarian reform under the dictatorship promoted agro-industrial development through infrastructure projects like hydroelectric plants, ports, and irrigation, while subsidizing chemical inputs and machines for modernist agricultural practices (Martins 1984; Welch 2011). As part of these initiatives, Pernambuco's Mayor Eraldo Guerios Leite (1971-1975), a former attorney who

had criminally investigated the Brazilian Communist Party and served as Attorney General of Military Justice during the dictatorship, developed plans for the Suape Port Industrial Complex to enhance efficiencies for sugarcane export and trade and industrialize the region through an industrial park (SUAPE). The first stone was laid during his term in 1974; however, territorial expropriation did not begin in Cabo and Ipojuca until 1977 (SUAPE).

In the Zona da Mata, the global oil crisis in the 1970s prompted renewed interest in sugarcane-based ethanol production in Brazil, further concentrating land among wealthy elites (Rogers 2010; Lehtonen 2011). Considering concerns about energy security and low market prices for sugar, the Brazilian government implemented the National Alcohol Program (Proácool) in 1975 to support the sugar industry. Designed principally by the sugar lobby, Proácool created mandates for sugarcane-based bioethanol blending and protections, subsidies and incentives for sugarcane ethanol producers (Lehtonen 2011). The effects of this program were significant. Among many things, Proácool expanded the sugarcane plantation agriculture frontier, appropriated tenant farmers' subsistence lands, and further concentrated land and power among the "sugar elite" (Lehtonen 2011, 2429; Scheper-Hughes 1992). The conflicting objectives of agrarian reform under the dictatorship sought to incentivize and support Brazilian agriculture modernization and industrialization while resettling landless peasants. These contradictory goals ultimately led to the mass migration of rural workers to cities between 1960 and 1990 (Alvarez 1990, Welch 2011). Infrastructure and extensive land titling to industrialize agribusiness ended up—as Welch and others have noted—hurting the very populations it was designed to help (Alvarez 1990, Welch 2011).

After the dictatorship ended, the new Brazilian Constitution formally demarcated some land rights. However, the language was equivocal, causing much controversy in how land rights

should be distributed and who has access to them. When Brazil's military dictatorship finally ended in 1985, the Landless Worker's Movement in Brazil (Movimento dos Trabalhadores Sem Terra, or MST) and other social movements pushed for the inclusion of socialist agrarian reform in the new democratic constitution. However, disagreement over what agrarian reform should entail led to a narrow definition of agrarian reform contained within the constitutional language (Welch 2011, 30). This wording limited land redistribution to specific circumstances in which "landlords were proved to have failed to use their land productively or to have violated labor and environmental laws" (ibid). President Cardoso (1995-2002) maintained a market-centered version of agrarian reform that required peasants to secure loans from the World Bank to purchase farms (ibid). Landless peasant movements such as Via Campesina and the MST were unhappy with these initiatives and occupied sugarcane plantations and corporate landholdings that technically did not fall under the banner of agrarian reform (Massicote 2010). These communities emphasized the failure of market-based agrarian reform to address the "social function" of the land to sustain community life (Welch 2011, 30). Nevertheless, Brazil's new Constitution explicitly recognized land rights for quilombo descendants to redress the Afro-descendant communities' exclusion from land rights prior to abolition (Farfán-Santos 2015, 120). However, the Constitution was ambiguous in its characterization of who qualifies for these rights: a topic that continues to be debated and scrutinized by Brazilian citizens and leadership (Farfán-Santos 2015).

Workers' Party Presidencies (2003-2016): Developmentalism and Market-based Agrarian Reform

When beloved steelworker turned Worker's Party (PT) President Luiz Inácio Lula da Silva ("Lula") began his first term in 2003, he shifted his political ideology from critiquing to embracing capitalism. While most Pernambucanos voted for Lula, he ultimately cultivated political alliances with agribusiness and advocated for a market-based agrarian reform that would not change with his successor Dilma Rouseff (2011-2016). In the 1990s, brutal neoliberal economic reforms were widely deployed in Brazil, leading to economic restructuring to receive development aid from international financial institutions (Alvarez 1990). While the World Bank ultimately back-peddled on structural adjustment policies in the 2000s, the importance of privatization and liberalization remained significant to their development agenda (Menezes and Barbosa Jr. 2021,6). While Lula critiqued neoliberal structural adjustment mandates during his run for office, he adhered to the slightly modified neoliberal measures outlined by the World Bank during his first term (2003-2006) (Paula et al. 2020; Menezes and Barbosa Jr. 2021). During his campaign, Lula also claimed to have supported a 'radical definition of agrarian reform' that would profoundly alter the power inequities between the landholding elites and landless peasants while leading to more socialist land tenure arrangements (Welch 2011,27). However, once elected in 2002, Lula's PT abandoned their hopes for agrarian reform as a foundational step in the path to socialism (ibid). Instead, agrarian reform would be a step toward Lula's capitalist agenda. Welch argues that "emptied of all its political content, agrarian reform was now subordinated to economic objectives" (2011,28). Lula's shifting conceptualization of agrarian reform was part of his 'third road strategy' that was "neither neoliberal nor social" (Pereira 2013; Welch 2011,28). This strategy ideologically moved the worker's party from critiquing to supporting capitalism while still supporting social programs for the poor (Pereira 2013, Saad-Filho 2020). Under Lula's developmentalist (or heavy-handed state investments in

development) agenda, agrarian reform included market-oriented programs to include small farmers in Brazil's agricultural development agenda instead of redistributing land (Welch 2011, 28). Agribusiness was vital to the Lula administration's economic development strategy dependent on external commerce, mainly agricultural commodity export. His appointment of agribusiness leaders, such as Finance Minister Antonio Palocci and Minister of Agriculture Roberto Rodrigues, exemplified his support for agribusiness. These appointees paid down the country's debt to the IMF through the commercial export of agricultural commodities (Marquetti et al. 2020,120). During this time, Brazil became the leading exporter of sugar, soy, and beef, among other raw goods (Welch 2011). While reducing Brazil's debt burden to the IMF, these policies led to widespread land concentration among wealthy agribusiness, especially in sugarcane, soy, and beef-producing states (ibid.).

Lula's market-centered agrarian reform had contradictory objectives. PT involved two agricultural ministries in agrarian reform: the Ministry of Agriculture and the Agrarian Development Ministry (MDA). The Ministry of Agriculture expanded Brazil's role as a global player in the marketplace and, working closely with agribusiness, pushed a modernist vision for agricultural development, trade, and export (Welch 2011, 28). Conversely, the MDA invested time and resources in the needs of small-holders and family farmers. It also coordinated with the INCRA in formalizing the often tenuous land rights for quilombo communities, posseiros or squatters, and other landless peasants (Farfán-Santos 2015, Welch 2011, 29). The Lula administration did this through "regularization" or formally designating land for families and communities that were *already* settled in rural territories. In order to avoid conflicts with coastal agribusiness interests, Lula's PT administration also resettled coastal landless populations to areas of the Amazon (Welch 2011). For many, this move demonstrated the PT's willingness to

placate agribusiness even if it meant settling landless peasants in indigenous territories (Oliveira 2013).

During his second term, Lula advocated for what has been called ‘new or social developmentalism’ or economic development paired with social and environmental programs (Pereira 2013; Paula et al. 2020). The Lula administration considered its development agenda compatible with social and environmental objectives, yet because the economy centered on commodity exportation, the PT had to make considerable concessions to agribusiness and developer demands, resulting in considerable investments in megaprojects (Menezes and Barbosa 2021, 7). One example of Lula's growth-based economic initiatives was the Growth Acceleration Program (PAC), which heavily invested in large-scale infrastructure projects. The SUAPE Port Industrial Complex gained the necessary public funds to expand its operations dramatically, attracting even more transnational financiers and private investors (DHESCA 2018, SUAPE). The Alagoas-Pernambuco and the Pilar-Ipojuca oil and gas pipelines were constructed in Cabo and Ipojuca to facilitate oil and gas production and transport at the complex. Lula's successor Dilma Rouseff (2011-2016), followed suit, continuing the Growth Acceleration Program with PAC-2. By displacing indigenous and traditional communities with megaprojects like the Suape Port Industrial Complex, Lula's developmentalist efforts became at odds with environmental justice struggles (Menezes and Barbosa 2007, 7). It also caused PT to lose support. PT's concessions to unsustainable megaprojects and agribusiness are why PT lost public support in the lead up to the 2016 soft coup of Lula's successor Dilma Rousseff (ibid.). During her first term, Rousseff (2011-2013) attempted to encourage economic growth by incentivizing private investments, resulting in large fiscal deficits (Marquetti et al. 2021, 128). Economic

recession and fiscal deficits ultimately forced Rousseff into adopting more neoliberal economic practices during her second term (2014-2016) (ibid.).

Brazil Today: Austerity and Authoritarianism

After Rousseff was ousted from office, Vice President Michel Temer (2016-2018) of the Brazilian Democratic Movement Party (PMDB) became President and effectively defunded many of the social programs helping so many poor Brazilians handle the recession. Though he tolerated PT social measures during Rousseff's term, Temer was profoundly pro-business and attempted to fix Brazil's economic deficit issues through extreme neoliberal austerity measures, including lowering labor costs through changing minimum wage laws, reducing worker's abilities to access social security programs and unemployment insurance, and dramatically cutting education and healthcare budgets (Marquetti et al. 2021). Paired with exchange-rate devaluation, commodity prices and inflation soared, deepening Brazil's economic crisis (Marquetti et al. 2021, 126-128). Lower wages, higher commodity prices, and reduced access to healthcare and other social programs hit hard among poor farmworkers and traditional communities in Pernambuco, who became unable to afford basic needs on their already limited household budget and began to experience hunger.

Land tenure in Brazil is necessarily linked to environmental governance because environmental policies and programs are often related to the indigenous, quilombo, and other traditional community struggles for territorial rights (Massicote 2010). Nevertheless, Bolsonaro systematically undermined environmental policies and programs, appointing blatantly anti-environment personnel to key decision-making positions within Brazil's many environmental institutions. Menezes and Barbosa Jr. (2021) indicate how the Bolsonaro Administration

dismantled environmental protections through 1) personnel change within environmental institutions; 2) reducing public participation and centralizing environmental decision-making within his own office; and 3) publicly demeaning indigenous, quilombo, and poor communities, as well as environmental scientists and civil servants. The first step was hollowing out environmental protection institutions through personnel and leadership changes. The Secretariat of Climate Change and Forestry was dissolved, with the Minister of Agriculture (MAPA) taking charge of forestry. Bolsonaro also appointed Richard Salles as head of the Ministry of Environment (MMA), a known advocate for agribusiness interests. Salles targeted and threatened civil servants in charge of environmental protection and in some cases, replaced civil servants with military personnel (Menezes and Barbosa Jr. 2021, 9). He was also infamously caught advocating that the administration use Covid-19 as a distraction to dismantle environmental protections (Gimenes 2020). Second, Bolsonaro has also severely limited public participation in environmental legislation and decision-making through centralizing decision-making within his own office (Menezes and Barbosa Jr. 2021, 11). The National Environmental Council (Conoma) was created in 1981 and was responsible for creating environmental policy in Brazil. Bolsonaro reduced its membership from 96 to 23 members, with a concomitant reduction of civilian seats from 22 to four (ibid.). This reduction in civil society inclusion and participation leads to agribusiness and extractivist sectors having even more control over territorial rights and other socio-environmental decision-making.

Perhaps most significant in Pernambuco was the third step: to publicly dehumanize—and by extension—delegitimize the land claims of communities protected within environmental policies' institutional and policy apparatus (Menezes and Barbosa Jr. 2021). Bolsonaro's racist dehumanization of communities who benefit from environmental protections (poor, indigenous,

and quilombo) serves to delegitimize their land claims and embolden others to do the same. In Brazil, environmental policies are necessarily linked to traditional communities because indigenous and quilombo groups are central figures in many environmental protections. However, Bolsonaro and his appointees attempt to delegitimize groups depending on environmental protection measures for land rights (ibid.). The Bolsonaro administration has attacked defenders of environmental protections, including environmental scientists, indigenous, quilombo, and other community leaders who have fought for environmental protections (ibid.) His racist, public dehumanization of traditional communities serves the political purpose of questioning both their humanity and whether they deserve environmental protection and land claims (Gledhill and Dussell 2019; Menezes and Barbosa Jr. 2021, 12). The administration refused to demarcate new lands for protection and has attempted to revise designated lands to open them up for mining and agribusiness (Human Rights Watch 2021). He has also attempted to designate new areas for extraction in indigenous territories of the Amazon, which has emboldened agribusiness and wildcat miners. Thus, Bolsonaro instituted an extreme extractivism that is not a legitimate economic development attempt for the masses but rather an attempt to generate wealth for a privileged few in his inner circle (Menezes and Barbosa Jr. 2021, 13).

From Public Utility to Mega Development: The Suape Port Industrial Complex

The Suape Port Industrial Complex (CIPS)—first developed in the 1970s under the military dictatorship—went from being a small public utility in the 1970s-1990s to a hub for state and private financial capital during the PT developmentalist period 2003-2016. The Lula Administration especially aspired for the country to be a leader in agro-industrial commercial export and prioritized this goal in its economic agenda. This underlying motivation was a principle justification for the construction and expansion of maritime cargo ports in national

economic plans (DHESCA 2018, 12). Whereas formerly Bahia was the only state in Northeast Brazil to receive public investments for such a large-scale infrastructure and development project, the Lula Administration oversaw the development of a port industrial complex in the neighboring state of Ceará (Pecém) and heavy investments in amplifying the existing port in Pernambuco. Today, CIPS is one of 37 Organized Public Ports in the country and is considered a critical locus of transnational commerce in Brazil, sometimes called "the engine of the Northeast" (Lazzeri 2017). Situated between Cabo and Ipojuca, CIPS is a "super port" combining maritime commerce and heavy industry. Sprawling over 13,5000 hectares, more than 100 businesses outside of maritime trade, including an oil and gas refinery, a petrochemical plant, a pharmaceutical plant, and food manufacturing (among other) facilities, operate within the complex (SUAPE 2020). CIPS is a joint private and state operation, with the Pernambuco being its primary shareholder (Lazerri 2017). In recent years, CIPS's numerous transnational corporations have invested tens of billions of reais into the complex (ibid.).

CIPS's massive expansion during the 2000s would have devastating consequences for the thousands of residents living in neighboring villages and plantations (engenhos), many posseiros; others were formally recognized quilombo communities. CIPS's expansion efforts occupied the ancestral territories of predominantly Afro-descendent and mixed-race traditional communities (or communities who primarily live non-capitalist livelihoods off the land). These communities developed in close quarters with Pernambuco's centuries-old sugarcane plantation economy, which still marks the land and culture of communities that evolved around the engenhos or plantations. When slavery was abolished in 1888, the patrões (or wealthy owners) maintained black manual labor near the engenhos and usinas who were allowed to construct worker communities in specific spaces within the plantation territories (*terras do engenho*), prompting

the development of non-specialized agricultural communities (DHESCA 2018, 13; Ramalho 2006). Among these is traditional communities is Ilha Mercês, a quilombo (maroon) community that has survived farming and fishing in Cabo and Ipojuca for over a century. With Pernambuco's waning competitiveness in the sugarcane industry, numerous plantations have foreclosed or gone bankrupt, their owners (*senhores or patrões*) leaving behind nothing but debts. Within these 'capitalist ruins' (Tsing 2015), poor farmworkers and Afro-descendant communities have more actively stewarded the land, collecting wild fruits and shellfish, fishing, and engaging in small-scale agriculture. While no population statistics exist prior to 2010, locals estimate that about 25,000 resided in the region before CIPS's arrival (DHESCA 2018). In 2010, CIPS finally surveyed the local populations and found that 6,800 people still resided in 26 engenhos and villages within the so-called "port territory" (ibid).

How did CIPS acquire the land if thousands of residents lived in dozens of engenhos and communities within in the 'port territory'? Racial land tenure and plantation logics are evident in CIP's neocolonial expropriation of the surrounding territory. Because many people living on the land lacked regularization or private property documentation (though some did have such documentation), the land was by and large considered "lands of no one" (McKittrick 2013), and its populations were deemed inconsequential. Community members lament that they were not informed about CIPS's intentions with the land or invited to participate in crucial decision-making processes. Since so many people relied on these territories as a commons in which people lived, collected, farmed, fished, and generally maintained peaceful ways of living, CIPS's occupation of the territory came as a profound shock. As CIPS occupied and industrialized more and more territory with the expansion and modernization efforts of the past two decades, more injustices transpired. According to a human rights investigation of CIPS (DHESCA 2018),

among the most distressing of these injustices is that CIPS: 1) did not comply with existing regulations for environmental licensing; 2) did not disclose the environmental risks and biodiversity loss that would be necessary for expanding its operations; 3) continuously patrolled and denied access to natural resources and traditional spaces; and 4) made it both dangerous and nearly impossible for communities to continue with traditional ways of life such as artisanal fishing, collecting, and small-scale farming. Those who tried to retain former ways of life were met with violence.

Many residents were hopeful that at least the port would provide job opportunities for locals, but poor, primarily black (negro/negra) and brown (pardo/parda) working-class individuals were expected to be contingent laborers or not offered any position at all, keeping them firmly within the *marginal mass*. It is fair to say that many residents (at least initially) were excited by the prospect of jobs foretold by the port complex and kept an open mind about what the expansion projects would mean for local economies. However, locals quickly became disabused of their hopes of accessing stable, good-paying work through the port and its related industries. For residents of Cabo and Ipojuca, there are still high rates of illiteracy associated with low access to education, and residents soon found that they did not have the required education or experience for the quality jobs the port was offering. The failure to achieve its promise of economic development remains a sore subject for many locals:

> It's not development. Development how? If the population doesn't participate in this development? They are going to give some employment to people from elsewhere, the better ones (jobs). And they leave the worst ones for those who live in the state, and we see this. When they constructed these things there, we saw even engineers being hired from outside. "Oh, because people from here aren't qualified." Because we never had the opportunity to become qualified. [Tomás and Camila, interview, 03-22-2021]

CIPS's failure to provide stable, decent work for local communities reinforced their reliance on the low-paying and strenuous sugar industry jobs. While residents initially found jobs at CIPS as construction workers or manual laborers, they soon found that these jobs would not last. Locals were able to acquire positions as short-term "pawn laborers" (or *peões*, named after the most expendable chess piece on the chessboard): short-term service work or manual labor that has little opportunity for upward mobility or benefits. Women found work as domestic workers in the port and its associated hotel, but nothing that would lift them from economic precarity as they had hoped. The initial employment that locals acquired quickly dissipated when CIPS was implicated in the corruption scandal *Lavo Jato*, and further still with economic declines associated with Covid-19. The lack of stable, decent-paying jobs for residents have further entrenched the historical need to work in sugarcane to make generate income. One cane-worker poetically explained: "this usina is what sustains the people… this usina is the mother of the family because it sustains the people," (Lia, interview, March 25, 2020). Even though many sugarcane companies have shuttered operations due to Brazil's ongoing recession, residents from Cabo and Ipojuca feel like it is the one job they can obtain regardless of education or experience. However, even sugarcane manual labor in Cabo and Ipojuca cannot take on all the unemployed locals. Diana explained:

> We still have loads of families who are still unemployed. So the jobs, for example (Usina) Salgado even closed…in Ipojuca, Usina Trapiche has eight or ten engenhos…I started at the usina and it already had workers from the one that closed. But it's not sufficient, it doesn't have the sufficient capacity to pay all those who are unemployed…There lots of people unemployed still. [Diana, interview, 11-26-2020]

In sum, plantation logic shaped the neocolonial occupation of black and brown traditional communities and their exclusion from decent work, forcing them to continue to rely on sugarcane plantations for salaried employment or earn money through the increasingly difficult

task of selling farm goods and fish. The port's employment opportunities were primarily temporary positions, ensuring these communities remained part of the marginal mass (Gonzalez 2020) or among the lowest levels of the labor market. CIPS justified its actions through discourses of economic development and employment opportunities that would benefit locals and local economies. While many were initially excited by the prospect of those claims, the employment residents could access low-paid, often temporary labor, which locals consider "pawn labor." These opportunities dissolved as the port was incriminated in the corruption scandal Lavo Jato, and further still during Brazil's deepening recession following Covid-19. Through its lack of interest in instituting real change, the port helps maintain previous economic inequality by keeping local communities in the clutches of poverty. The fact that a minority of formally educated, middle-upper class people from Recife and the neighboring state of Bahia were the ones who truly benefited from the development initiative meant that pre-existing intersecting class and racial inequalities were kept firmly in place. CIPS's failure to be the economic boon to locals as promised also maintained the reliance on old forms of labor, or low-paid, seasonal labor in the many neighboring sugarcane fields. Alternatively, they worked for themselves as artisanal fishers, agriculturalists, or shellfish collectors.

From Plantation to Commons to Industrial Hub: Dispossession from Culturally Meaningful Territories

CIPS's efforts to turn the port into an industrial hub has destroyed culturally meaningful territory for local Afro-descendant traditional communities. Despite the dramatic ecological transformation of coastal Pernambuco in recent years, the landscape (including the oceanscape) remains imbued with cultural meaning and importance for the many diverse communities who utilize the ocean, mangroves, and the remaining patches of forest (*mata*) for supplementing

household food supply and income. However, these spaces are more than rudimentary suppliers of basic needs. For residents of Cabo and Ipojuca, every corner of the landscape provokes a memory or story, often of family trips fishing and collecting shellfish and wild fruits, or learning, from about the age of 10, the intricacies of being a master interpreter of the bewildering forces of nature. In these landscapes, kids learn how to read the subtleties of the weather and the tides (*maré*) and the unique qualities of innumerable other species that inhabit these territories. They also learn to steward the land to cultivate wild fruits and vegetables. But in recent years, CIPs have increasingly threatened these communities and their intergenerational knowledge through dispossession and pollution. With the establishment of the port in the 1970s, and subsequent expansion efforts to turn the port into an instrument for capitalist accumulation, CIPs added numerous industries whose toxic effluents pollute the air and water, most notoriously the pharmaceutical manufacturing facility, the Abreu and Lima Petroleum Refinery, the Coca Cola plant, among other firms. In addition to pollution from these facilities, dredging and deforestation to make room for the heavy traffic of enormous cargo ships devastate local marine life, making it difficult and dangerous for residents to maintain their traditional livelihoods. These changes, along with intimidation, coercion, and violence, have forced Cabo and Ipojuca's traditional communities out of these territories in massive numbers.

Using plantation lands as a commons, posseiros and other traditional communities have stewarded the land back from 'capitalist ruins' (Tsing 2015) left behind by centuries of an extraction-based economy. Expropriation—the act of dispossessing people from the territories in which they inhabit, especially when "loss of land occur[s] against the individual's or community's will and undermine[s] their capacity for subsistence"—often transpires through coercive or violent measures (Federici 2004,68). Expropriation, often called dispossession, most

infamously occurs when a powerful entity (colonial power, nation-state, military or corporate power) encloses common-use land, designating it private property (Federici 2004, Nichols 2020).

In Cabo and Ipojuca, the first moment of territorial expropriation was the dispossession of indigenous communities during Portuguese colonization with the establishment of the Pernambuco captaincy and the racial land tenure system sesmaria in 1534; the Portuguese crown granted land to be put to "productive use" by Portuguese officers, which meant used for sugarcane cultivation. The most recent example is the expropriation of the traditional communities that have stewarded land left vacant by the booms and busts of the sugar industry. Moving forward to a moment in which many of Pernambuco's numerous sugar plantations are have been abandoned, gone bankrupt, or are crippled with debt due to the state's difficulty in competing with the technologically advanced cane producers in the southern state of São Paulo, the absence of some of the landed elite contributed to new possibilities for land stewardship. Specifically, Afro-descendant and other poor communities remained on the land, utilizing the land for small-scale agriculture, collecting wild fruits and herbs, and fishing and collecting shellfish from the ocean and mangroves, allowing these communities to support their households without strictly relying on wages. 'Posseiros' are technically squatters who cultivate abandoned or undeveloped land. But in Cabo and Ipojuca, posseiro is used broadly to encompass many different land tenure arrangements. Some families are in legal battles to get formal property rights from the landowners, many of whom now live in other parts of Brazil. Some families maintain tenancy arrangements with plantation owners, often cultivating a small amount of sugarcane for the landowner in exchange for their family to remain on the land. Whatever the tenure arrangement, of primary importance is that these communities have, for numerous generations, lived from the natural abundance of these territories: raising families, caring for

small animals, collecting, fishing, and cultivating land to their liking demonstrating that a "plantation can be a commons" (Heynen 2020). Often with tenuous land rights, these communities are the same communities CIPS targeted for expropriation.

Of the thousands inhabiting the plantation lands when CIPS began its expansion efforts in the last two decades, many were offered indemnification payments for their properties. However, it quickly became apparent that if people did not want to leave or were unsatisfied with the amount offered, CIPS would hire private security to threaten, harass or even take violent measures like property destruction and abuse to convince them to leave. CIPS destroyed their homes while residents ran errands or worked (this is discussed in detail in the next chapter). In light of these violent acts of intimidation and coercion, many people accepted CIPS offers out of fear. Locals were terrified they would see their family homes (often that they built themselves, brick by brick) destroyed. Inês's story elucidates this feeling,

> (I feel) sadness and fear. And fear, because when they arrive, they come by car with the police, with everything and they come to knock it down (their house). My father-in-law had lived across the street for 55 years... they took it (the house and land) from here in front all the way to the farm... Then when my ex-husband's daughter went to build a house there, Suape came to tear it down. He made a wooden gate in front, Suape broke it...When we bought this here, we made a board shack, it was made of bricks, this one, they came to knock it down, they came to tear it down. (Inês, interview, 03-10-21)

Much like the long history of sugarcane, expropriation contributed to the *favelação* or ghettoization of displaced communities in nearby cities and neighborhoods. Many of them had to live without caring for animals, cultivating plants, collecting and fishing, or returning to the commons they once enjoyed. Those who received indemnification payments quickly found that they were not allowed back into the territory CIPS now occupied. CIPS prohibited Cabo and Ipojucan residents from accessing the same forests, mangroves, and ocean that they traditionally utilized for fishing, raising animals, cultivation, or collecting. Even in surrounding areas where

people where CIPS relocated many residents, spaces formerly used as commons were no longer accessible. As a result of these processes of enclosure, small farmers found it exceedingly difficult to maintain former ways of life. Artur explains:

> It would be great if I could buy a little place for myself, because you can't put up a fence around here, Suape comes and takes it. Suape comes and takes it. In many places around here, Suape tore out banana tree stalks, coconut tree stalks, tore out the stalks of the coconut. One day we went up there and made a wire fence so the oxen wouldn't get out. Suape came and cut it out. –[Artur, interview, 3-09-21]

Similarly, people who relied on cultivating and collecting wild fruits and other goods for subsistence or extra income suddenly were forced to purchase these items from the supermarket. Cátia explains,

> "We had trees, we had forests to collect, to plant cassava and fruits. There (urbanized communities where people moved) we don't have anything…the best fruit is something you buy. People have to purchase (food), they don't plant anything." [Cátia, interview, 3-19-21]

During CIPS's expansion, the transformation of common-use land *back into* private property allowed them to criminalize and police natural resources like the forest, ocean, mangroves, and other lands, causing locals economic hardships, food insecurity, and at times, even hunger. In her insightful ethnography of the Flordia Everglades, Ogden (2011) illuminates how alligator hunters suddenly became poachers when conservation laws banned traditional hunting practices in the mangroves and swamps. These changes prompted transformations in self-identity and hunters relationships to their communities and territories. Ogden argues that the "subversive landscape" is the context in which simple ways of relating to nature become criminalized; "in the subversive landscape, the law was always present, a danger to be constantly avoided," (2011, 138). In Cabo and Ipojuca, expropriation occurred not only through dispossessing people from their homes and ancestral territories but *also* through criminalizing

and policing their access to the everyday natural resources vital to their livelihoods, making these activities *subversive*. As predominantly farming, fishing, and collecting communities, once CIPS began its expansion efforts, it started policing and surveilling parts of the ocean and mangroves that had been fundamental commons territories necessary for local food security, household subsistence, and income. This policing and surveillance occurred both through physical barriers like fencing, financial barriers (in one area, CIPS built a toll station, so you have to pay to access parts of the beach) and through private security, which CIPS used to police, intimidate and sometimes forcibly remove residents. In local 'narratives of dispossession' (Brosius 2006), many communities consider the Island of Tatuoca (where CIPS forced everyone out) to have suffered the worst fate. Stories of Tatuoca weigh heavy on people's anxieties in neighboring communities and villages, instilling fear and uncertainty that others could suffer a similar fate. Alvaro explains:

> There is an Island there, called Tatuoca, the people would always spend the day there. Then when Suape became aware of the people there, then they would send security and take people out. And even here, not now that Suape stopped (due to Covid-19), around here Suape would always tear down houses, tear down houses of the people here. Then there was no way to go to even a corner and build a shed while hiding, when Suape finds out, they take photos, send them to the Suape gang. And when they (Suape security) come, they come with a group to tear it down. [Alvaro, interview, 03-23-22]

Even large parts of the ocean and rivers surrounding the port were for private use. As one fisherwoman reflected: "sometimes when people fish there close by (to the port), they take you and make you leave. The people there, the Port security. If I go fishing there close by, they make me leave." (Cátia, interview, 03-19-21). Unable to access the same spaces for collecting shellfish, fruit, or fish to sell forced onto the many communities and villages created unprecedented poverty (*pobreza*) for locals. Whereas before, during difficult financial times, locals could access natural spaces to subsist and gain extra income, dispossession at the hands of

CIPS forced them into situations of economic and food insecurity. The oil spill in Northeast Brazil in 2019—which made it impossible to access even large sections of ocean and mangrove territory—only exacerbated the poverty and food insecurity that people were already experiencing.

Environmental Injustices and Violent Neglect in Cabo and Ipojuca

In one of the most egregious examples of environmental injustice and racial land tenure, CIPS has also expropriated local communities by hindering their ability to breathe, causing widespread public health problems. Li and Pan (2020) have described "expulsion by pollution" as the process in which industry does not necessarily forcibly take land but forces communities to relocate by inundating them and the territories they depend on with noxious pollutants. CIPS opened the Abreu and Lima petroleum processing facility in 2014, one of the largest petroleum refineries globally, with the capacity to make 230 thousand barrels of petroleum per day (PETROBRAS). Petroleum production is quite literally a dirty business known to have toxic externalities that the surrounding environs and its human and non-human residents must absorb (Santos et al. 2019). Especially in Ipojuca, locals feel they cannot open the door or go outside without being struck by the odious smell of unfiltered toxins such as benzene, ammonia, carbon dioxide, carbon monoxide, and hydrogen sulfate emanating from the refinery (Bezerra 2022). Abreu and Lima's pollution contaminates soil, air, water, and the fragile network of species locals rely on for fishing, collecting, and cultivation. Noxious emissions also compromise the health of residents, causing high rates of nausea, fainting, respiratory and other illnesses. In the few years since Abreu and Lima opened, around 3,000 people in the surrounding communities have reported gastrointestinal problems, respiratory illnesses and diseases, skin, eye, and throat

irritation, and even being intoxicated by gas emissions (Bezerra 2021). For traditional communities whose livelihoods are often maintained through being outside, their bodies are disproportionately exposed to the chemical toxins emanating from the port complex. Matilde, a fisherwoman, conveys the general sentiment of sorrow and distress that people feel from breathing in toxic effluents:

> "I thought that I would grow old in a paradise, and suddenly I see a place without air, without having air. There were plants, we had air, and now we are without air. We lost everything we had for the greed of men, because we did not need a lot to live before. We needed health, we had health." (Matilde, interview, 2-10-21)

Matilde shared how her father had never gotten sick until the refinery came, and now he has severe asthma. Matilde's says her father's experience with asthma is just one example of the widespread health consequences of living "without air":

> "A lot of people never got sick (before the refinery). You did not see anyone with asthma. And now, if you go to the health center and spend ten minutes in front of the emergency room, you will see many people coming in with asthma. We did not have this problem, because we had ventilation, we did not have anything toxic…after the port arrived, this pollution (arrived)" (Matilde, interview, 2-10-21).

Perhaps the most heartbreaking example of CIPS's negligent treatment of these communities is that they have the technology to lessen emissions that would improve the health of residents. They constructed an emissions abatement unit to about 70% completion but never finished it, and the unit remains unused (Bezerra 2021). The fact that CIPS has net profits of over a billion reais (Lazerri 2017) yet does not prioritize investing in finishing the infrastructure that would control emissions exemplifies its violent disregard for the existence and well-being of local citizens.

Conclusion

Colonialism—especially the institution of slavery—organized the Brazilian economy around racial capitalism, or capitalism that exploited racist ideologies to justify an exploitative racial division of labor (Maia 2021, Robinson 2000). Racial capitalism depended upon racial land tenure or racist ideologies that shaped land ownership, control, and decision-making. Racial land tenure was explicitly mandated in the founding of Cabo and Ipojuca, Pernambuco, where King Dom João III "donated" indigenous land (considered *terra nullius*—or nobody's land) to Portuguese and European nobles through the sesmaria system in order to establish sugarcane plantations and militias to fight and enslave indigenous peoples. Once indigenous labor was no longer viable, settlers utilized the widening Trans-Atlantic Slave Trade to acquire an African labor force. This racial land tenure would have lasting impacts on subsequent Black and mixed-race communities, who were forbidden from purchasing land until after abolition in 1888, 354 years after the Portuguese crown donated the land to white settlers in 1534.

While the Brazilian Constitution of 1988 allocates land to quilombo communities, many of those communities still await legal land titles. Many others, who have neither formal quilombo status nor land titles, live as posseiros (literally translated as squatters) who cultivate and steward the land's natural resources, practicing small-scale farming, fishing. These 'traditional' communities have lived off the land for generations but—without formal private property designation—are regularly dispossessed. This expropriation is a legacy of plantation logics: logics that continually prioritize wealth creation over the well-being of black, indigenous, and mestiço life (McKittrick and 2013). Plantation logics also bely the designation of posseiro spaces as 'lands of no one' in need of development and its occupants disposable (McKittrick 2013). Posseiros and other landless peasants exist in Pernambuco because of the long history of racial land tenure and the failures of agrarian reform to adequately redress land inequalities for

racialized communities. While Lula and PT tried to regularize land rights for quilombo and other traditional communities, PT's developmentalist agenda centered on agricultural commodity export ultimately hindered these efforts. The desire to make Brazil a global leader in exporting raw materials to the Global North ultimately forced Lula to cede to agribusiness interests and heavily invest in mega-development projects like the Suape Port Industrial Complex to facilitate transnational commerce. In Cabo and Ipojuca, these developmentalist initiatives ultimately displaced thousands of posseiros who lacked formal land titling. By placating agribusiness and displacing posseiros and other traditional communities, Lula's development agenda became adversarial to environmental justice struggles in Pernambuco.

Because of Brazil's continued 'neocolonial dependence' on the exportation of food and raw materials, it relies on a low-cost labor force to provide cheap commodities to the global economy (Gonzales 2020). The necessity for cheap labor ensures that "contingent" or pawn labor (low-paid, part-time, et cetera) will continually persist (ibid.). Brazil's persistent racism, including unequal historical access to land, educational opportunity, or decent work, ensures that poor and racialized workers are precisely those who fulfill these roles among the lowest rungs of the labor market (within a marginal mass, ibid.). For these reasons, CIPS only offered local residents jobs as part-time, low-paid, manual laborers, failing to provide a dignified alternative to sugarcane labor. Nevertheless, persistent racism and expropriation also energize collective organizing and creative resistance strategies, inspiring many Cabo and Ipojucan residents to fight for more equitable futures.

Works Cited

Alvarez, Sonia E. 1990. *Engendering Democracy in Brazil: women's movements in politics*. Princeton: Princeton University Press.

Andrade, Manuel Correia de Oliveira. 1989. *História das usinas de açúcar de Pernambuco*, *Série República; 1*. Recife, Brazil: Fundação Joaquim Nabuco, Editora Massangana Ministério da Ciência e Tecnologia-CNPq.

Beckford, George L. 1972. *Persistent poverty: underdevelopment in plantation economies of the Third World*. New York: Oxford University Press.

Bezerra, Afonso. 2020. Helicóptero lança agrotóxico sobre área rural de Jaqueira, mata sul de Pernambuco. *Brasil de Fato*, April 8. Accessed, Mar 29, 2022, https://www.brasildefatope.com.br/2020/04/08/helicoptero-lanca-agrotoxico-sobre-area-rural-de-jaqueira-mata-sul-de-pernambuco

Bezerra, Lucila. 2021. Emissão de gases da Refinaria Abreu e Lima adoece moradores e separa famílias em Suape (PE). *Brasil de Fato*, November 16. Accessed Mar 31, 2022, https://www.brasildefatope.com.br/2021/11/16/emissao-de-gases-da-refinaria-abreu-e-lima-adoece-moradores-e-separa-familias-em-suape-pe

Bezerra, Lucila. 2022. "A gente não tem como respirar": População sofre com gases emitidos por refinaria em Pernambuco. *Brasil de Fato*, January 13. Accessed March 31, 2022, https://www.brasildefatope.com.br/2022/01/13/a-gente-nao-tem-como-respirar-populacao-sofre-com-gases-emitidos-por-refinaria-em-pernambuco

Bledsoe, Adam. 2019. Racial Antagonism and the 2018 Brazilian Presidential Election. *Journal of Latin American Geography* 18 (2):165-170.

Brosius, J. Peter. 2006. Between Politics and Poetics: Narratives of Dispossession in Sarawak, East Malaysia. In *Reimagining Political Ecology*, edited by A. Biersack and J. B. Greenberg. Pp. 281-322. Durham: Duke University Press.

Buarque, Cristina Maria. 2018. Feminino e Feminismo na Zona Canavieira: uma releitura antropológica das desigualdades de gênero em Pernambuco, Antropologia, Universidade Federal de Pernambuco, Recife.

Cirne, Liana. 2022. Era uma vez no Oeste: o infanticídio político de Jonathas na Zona da Mata de PE. *Brasil de Fato*, Feb 15. Accessed Mar 29, 2022 https://www.brasildefato.com.br/2022/02/15/artigo-era-uma-vez-no-oeste-o-infanticidio-politico-de-jonathas-na-zona-da-mata-de-pe.

Da Redação. 2020. Trabalhadores rurais protestam por regularização de terras na zona da mata de PE. *Brasil de Fato*, November 9. Accessed Mar 29, 2022

https://www.brasildefato.com.br/2020/11/09/trabalhadores-rurais-protestam-por-regularizacao-de-terras-na-zona-da-mata-de-pe

Dabat, Christine. 2007. *Moradores de engenho: relações de trabalho e condições de vida dos trabalhadores rurais na zona canavieira de Pernambuco segundo a literatura, a academia e os próprios atores sociais*. Recife: Editora Universitária, UFPE.

Dabat, Christine Rufino. 2011. Sugar Cane "Plantations" in Pernambuco: From "Natural Vocation" to Ethanol Production. *Review (Fernand Braudel Center)* (1/2):115.

DHESCA. 2018. Complexos industriais e violações de direitos: O caso de SUAPE, Complexo Industrial Portuário Governador Eraldo Gueiros (CIPS). Relatório da Missão de Investigação e Incidência (a Relatoria do Direito Humano ao Meio Ambiente da Plataforma Dhesca Brasil).

Eisenberg, Peter L. 1974. *The sugar industry in Pernambuco; modernization without change, 1840-1910*. Berkeley: University of California Press.

Eltis, David, and David Richardson. 2010. Volume and direction of the trans-Atlantic slave trade from all African to all American regions. Slave Voyages. Accessed, March 29, 2022. https://www.slavevoyages.org/static/images/assessment/intro-maps/09.jpg

Farfán-Santos, Elizabeth. 2015. 'Fraudulent' Identities: The Politics of Defining Quilombo Descendants in Brazil. *The Journal of Latin American and Caribbean Anthropology* 20 (1):110-132.

Federici, Silvia. 2004. *Caliban and the Witch: Women, the Body and Primitive Accumulation*. Brooklyn: Autonomedia.

Ferraz, Maria do Socorro Barbosa. 2008. Sesmarias do açúcar: sítos históricos. *Clio: Revista de Pesquisa Histórica* 26 (2):59-78.

Gledhill, John, and María Gabriela Hita Dussel. 2019. La política de odio en Brasil. *Alteridades* 29 (58):47-58.

Gonzaga, Vanessa. 2022. Terreiro é incendiado no litoral sul de Pernambuco: "Querem apagar nossa história." *Brasil de Fato*, January 5. Accessed March 29, 2022 https://www.brasildefato.com.br/2022/01/05/terreiro-e-incendiado-no-litoral-sul-de-pernambuco-querem-apagar-nossa-historia

Gonzalez, Lélia. 2020. *Por um feminismo afro-latino-americano: ensaios, intervenções e diálogos*. Edited by Flavia Rios and Márica Lima. Rio de Janeiro: Zahar.

Harrison, Faye Venetia. 1997. *Decolonizing anthropology: moving further toward an anthropology of liberation*. Arlington: Association of Black Anthropologists, American Anthropological Association.

Hartman, Saidiya. 2007. *Lose Your Mother: A Journey Along the Atlantic Slave Route*. New York: Farrar, Straus and Giroux.

Heynen, Nik. 2020. 'A plantation can be a commons': Re-Earthing Sapelo Island through Abolition Ecology. *Antipode* 53:95-114.

Human Rights Watch. 2021. "Brazil: Reject Anti-Indigenous Rights Bill. Proposal a Major Setback to Land Rights Recognition", August 24. Accessed Mar 29, 2022, https://www.hrw.org/news/2021/08/24/brazil-reject-anti-indigenous-rights-bill

Allen, Jafari Sinclaire, and Ryan Cecil Jobson. 2016. "The decolonizing generation:(race and) theory in Anthropology since the eighties." *Current Anthropology* 57 (2):129-140.

Junge, Benjamin , Sean T Mitchell, Alvaro Jarrin, and Lucia Cantero. 2021. *Precarious Democracy: Ethnographies of Hope, Despair, and Resistance in Brazil*. New Brunswick: Rutgers University Press.

Lazerri, Thais. 2017. The crooked paths of Suape. *Repórter Brasil*, November 28. Accessed Feb 11, 2022, https://reporterbrasil.org.br/2017/11/the-crooked-paths-of-suape/

Lehtonen, M. 2011. Social sustainability of the Brazilian bioethanol: power relations in a centre-periphery perspective. *Biomass and Bioenergy* 35 (6):2425-2434.

Li, Hua, and Lu Pan. 2021. Expulsion by pollution: the political economy of land grab for industrial parks in rural China. *Globalizations* 18:409-421.

Lugones, María. 2010. Toward a decolonial feminism. *Hypatia* 25 (4):742-759.

Maia, Suzana. 2021. Neoliberalismo global, capitalismo racial e organização política de mulheres numa comunidade pesqueira quilombola do Recôncavo da Bahia. *Latin American Research Review* 56 (2):371-384.

Massicote, Marie-Josée. 2010. La Vía Campesina, Brazilian peasants and the agribusiness model of agriculture: towards an alternative model of agrarian democratic governance. *Studies in Political Economy* 85:69-98.

Marquetti, Adalmir Antonio, Cecilia Hoff, and Alessandro Miebach. 2019. Profitability and Distribution: The Origin of the Brazilian Economic and Political Crisis. *Latin American Perspectives* 47 (1):115-133.

Martins, José Souza de. 1984. *A militarização da questão agrária no Brasil: terra e poder, o problema da terra na crise política*. Petrópolis: Vozes.

McKittrick, Katherine. 2013. Plantation Futures. *Small Axe* 17 (3):1-15.

Menezes, Roberto Goulart, and Ricardo Barbosa Jr. 2021. Environmental governance under Bolsonaro: dismantling institutions, curtailing participation, delegitimising opposition. *Zeitschrift für Vergleichende Politikwissenschaft* 15 (2):229-247.

Mignolo, Walter D. 2010. Introduction: Coloniality of Power and De-colonial Thinking. In *Globalization and the Decolonial Option*, edited by W. D. Mignolo and A. Escobar. Pp 1-21. New York: Routledge.

Miles, Tshombe. 2018. Reflecting on the legacy of Brazilian slavery and reimagining Afro-Brazilian agency. *History Compass* 17:1-8.

Mintz, Sidney Wilfred. 1985. *Sweetness and power: the place of sugar in modern history*: New York: Viking.

Nichols, Robert. 2020. *Theft is Property!* Durham: Duke University Press.

Nun, Jose. 2000. The End of Work and the "Marginal Mass" Thesis. *Latin American Perspectives* 27 (1):6-32.

Oliveira, Gustavo. 2013. Land regularization in Brazil and the global land grab. *Development and Change* 44 (2):261-283.

Paula, Luiz Fernando de, Fabiano Santos, and Rafael Moura. 2020. The Developmentalist Project of the PT Governments: An Economic and Political Assessment. *Latin American Perspectives* 47 (2):8-24.

Pereira, Luiz Carlos Bresser. 2013. Empresários, o governo do PT e o desenvolvimentismo. *Revista de Sociologia e Política* 21 (47):21-29.

Perry, Keisha-Khan Y. 2013. *Black women against the land grab: the fight for racial justice in Brazil*. Minneapolis: University of Minnesota Press.

PETROBRAS. *Abreu e Lima Refinery*. N.d. Available from https://petrobras.com.br/en/our-activities/main-operations/refineries/abreu-e-lima-refinery.htm.

Quijano, Aníbal. 2010. Coloniality and Modernity/Rationality. In *Globalization and the Decolonial Option*, edited by W. D. Mignolo and A. Escobar. Pp. 22-32. New York: Taylor and Francis.

Ramalho, Christiano Wellington Noberto. 2005. *Ah, esse povo do mar! Um estudo sobre trabalho e pertencimento na pesca artesanal pernambucana*. São Paulo: Editora Polis Ltda.

Robotham, Don. 2018. Introduction: Interrogating Postplantation Caribbean Society. *The Journal of Latin American and Caribbean Anthropology* 23 (3):409-415.

Robinson, Cedric R. 2000. *Black Marxism: The Making of a Black Radical Tradition*. Chapel Hill: University of North Carolina Press. Original edition, 1983.

Rogers, Thomas D. 2010. *The Deepest Wounds : A Labor and Environmental History of Sugar in Northeast Brazil*. Chapel Hill: University of North Carolina Press.

Saad-Filho, Alfredo. 2020. Varieties of Neoliberalism in Brazil (2003–2019). *Latin American Perspectives* 47 (1):9-27.

Santos, Mariana Olivívia Santana, Aline do Monte Gurgel, and Idê Gomes Dantas Gurgel. 2019. *Conflitos e Injustiças na Instalaçao de Refinarias: Os caminhos sinuosos de Suape, Pernambuco*. Recife: Universidade Federal de Pernambuco.

Scheper-Hughes, Nancy. 1992. *Death without weeping: the violence of everyday life in Brazil*: Berkeley: University of California Press.

Schwartz, Stuart B. 1985. *Sugar plantations in the formation of Brazilian society: Bahia, 1550-1835*, *Cambridge Latin American studies: 52*: Cambridge: Cambridge University Press.

Silva, Antonio José Bacelar da, and Erika Robb Larkins. 2019. The Bolsonaro election, antiblackness, and changing race relations in Brazil. *Journal of Latin American and Caribbean Anthropology* 24 (4):893-913.

Sobreira, Vinícius. 2021a. Sob gestão Bolsonaro, cresce número de pernambucanos afetados por conflitos no campo. *Brasil de Fato*, January 13. Accessed Mar 29, 2022, https://www.brasildefato.com.br/2021/01/13/sob-gestao-bolsonaro-cresce-numero-de-pernambucanos-afetados-por-conflitos-no-campo

Sobreira, Vinícius. 2021b. Famílias agricultoras acusam usina de invadir e destruir plantação no grande Recife (PE). *Brasil de Fato*, October 25. Accessed March 29, 2022, https://www.brasildefato.com.br/2021/10/25/familias-agricultoras-acusam-usina-de-invadir-e-destruir-plantacao-no-grande-recife-pe

SUAPE. *History of the Port*. 2020. Available from https://www.suape.pe.gov.br/en/institutional/history-of-the-port.

Sundberg, Juanita. 2008. Placing race in environmental justice research in Latin America. *Society and Natural Resources* 21 (7):569-582.

Taylor, Kit Sims. 1978. *Sugar and the underdevelopment of northeastern Brazil, 1500-1970*, *University of Florida monographs : Social sciences: no. 63*: Gainesville: University Presses of Florida, 1978.

Thomas, Deborah A. 2016. Time and the otherwise: Plantations, garrisons and being human in the Caribbean. *Anthropological Theory* 16 (2-3):177-200.

Tsing, Anna Lowenhaupt. 2015. *The mushroom at the end of the world: on the possibility of life in capitalist ruins*: Princeton: Princeton University Press.

Tomich, Dale. 2011. Rethinking the Plantation: Concepts and Histories. *Review (Fernand Braudel Center)* 34 (1/2):15-39.

Welch, Cliff. 2011. Lula and the Meaning of Agrarian Reform. *NACLA Report on the Americas* 44 (2):27-30.

Wolf, Eric R., and Sidney W. Mintz. 1957. Haciendas and Plantations in Middle America and the Antilles. *Social and Economic Studies* 6 (3):380-412.

Woods, Clyde Adrian. 1998. *Development arrested: The blues and plantation power in the Mississippi Delta*: Verso.

CHAPTER THREE

MUDA DA MARÉ (CHANGE OF THE TIDES): ENVIRONMENTAL CHANGE, ECOLOGICAL GRIEF, AND THE FISHERS AND MARISQUEIRAS OF PERNAMBUCO

Introduction: Biu, a Fisherman Who Lost his Place

Everyone says Biu died of depression. Biu[8], a nickname for Severino Caciano da Silva, 52, was a friend to many, a good fishing partner, and a generous neighbor on Ilha de Tatuoca. His family and ancestors were among the many traditional fishing communities in coastal Cabo de Santo Agostinho and Ipojuca in Pernambuco, Brazil. Sewing nets and traps and crafting fishing poles and rafts, members of these communities generally live dignified lives as artisanal fishers (pescadores) and shellfish collectors (marisqueiras). Biu opened a small bar, a space he built himself where people could come together and sit by the ocean, eat some freshly caught fish and enjoy a cold beverage. Biu's life forever changed when representatives from a nearby port, the Suape Port Industrial Complex (Complexo Industrial Portuário Governador Eraldo Gueiros—CIPS), came knocking on his door and the doors of his neighbors. CIPS informed Biu that they wanted him and his neighbors to leave their homes and to use Ilha de Tatuoca for expanding their operations in what was already a sprawling industrial complex. They offered to modestly compensate locals and resettle them elsewhere in an urbanized community called "new Tatuoca" or Vila Nova Tatuoca. Though many people accepted CIPS's offer, Biu refused,

[8] Here I paraphrase Biu's story as told by Sofia (pseudonym) during an interview on 02/22/2021.

insisting that no amount of money could force him to leave the only place he knew, cherished, and belonged.

CIPS began violently threatening Biu when they could not sway him with money. In April 2016, multiple gangsters armed with machine guns visited Biu at his home. He watched from afar as they destroyed his house, his business, and everything he had. Devastated, Biu finally left Ilha de Tatuoca. However, dislocated from his ancestral home, he lost his sense of belonging and purpose. He lost his friends, his relationships, and his life's work. Soon after, it became clear that Biu was falling apart. His friends describe him as showing signs of deep depression and even seeking professional help. Ultimately, things escalated to the point that Biu was admitted into a psychiatric facility. He died within a year, in February of 2017. Although the clinical cause of death was a stroke, Biu's friends knew he had died of the profound grief of losing his place.

Biu is one of over 26,000 people in Cabo and Ipojuca that CIPS, an international export terminal and industrial manufacturing complex has forcibly removed from their ancestral territories in recent decades (DHESCA 2018; Santos et al. 2019). When the Suape Port Industrial Complex arrived on the scene, it began to threaten Afro-Brazilian artisanal fishing communities' livelihood practices. In the 1970s, 13,500 hectares (33,280 acres) were expropriated between Cabo and Ipojuca to develop a 'mega port' that would fulfill the modernization dreams of the Brazilian military dictatorship (SUAPE 2020a). However, the necessary funds to realize the port complex did not occur until the worker's party (PT) presidency of Lula Inácio Lula da Silva (2003-2011), whose developmentalist agenda was to make Brazil a global leader in the commercial export of agricultural commodities and raw materials (Pereira 2013; Saad-Filho 2020). PT presidents Lula and his successor Dilma Rouseff created alliances with agribusiness to

realize this goal and heavily invested in mega-development projects like CIPS through the Growth Acceleration Program (PAC) between 2007 and 2014 (Marquetti et al. 2021, 221; Welch 2011). In addition to being a traditional maritime commercial port, today CIPS is also a sprawling industrial complex—home to companies like the state oil and gas company PETROBRAS which installed an oil and gas refinery in 2014. CIPS houses around 100 other national and transnational corporations, including Toyota, Coca-Cola, Unilever, Bunge, and Shineray among other petrochemical, construction, thermoelectric energy, preform plastic, pharmaceutical, and food and beverage plants, not to mention its naval shipyard and maritime commerce facilities (SUAPE 2020b). These industries not only generated devastating social and environmental injustices throughout construction, but the ongoing toxic effluents of operations (especially PETROBRAS's Abreu and Lima oil and gas refinery) are dramatically degrading fishing communities' more-than-human livelihoods throughout the region (DHESCA 2018; Santos et al. 2019). Because their survival depends on the functioning of mangrove forests and ocean ecosystems, especially the cleanliness, safety, and productivity of fish and shellfish, fishers and marisqueiras are disproportionately affected by CIPS's initiatives.

The Suape Port Industrial Complex is just one of Brazil's 34 state-supported public ports (portos públicos) situated along the country's northern and eastern coastline, occupying the same territory as the country's biologically-rich coastal mangroves. Brazil has the world's second-largest coastal mangroves territory, and these ecosystems' importance cannot be overstated (Rovai et al. 2022). The mangroves, stretching from the northern state of Amapá eastward and down the coast to the southern state of Santa Catarina, fulfill innumerable critical ecosystem services, including buffering coastal areas from severe storms and pollution, abating soil erosion, and providing critical breeding and habitat areas for the country's diverse ocean species (Lacerda

2006; ICMBio 2018). Brazil's mangrove forests are also essential for combatting climate change as they sequester the most carbon outside the Amazon rainforest (Rovai et al. 2022). The mangroves are also culturally significant for Brazil's many traditional communities, including indigenous and quilombo descendent communities, especially fishers, shellfish collectors, and ribeirinhos (people who live river-based livelihoods), whose culture, livelihoods, ecological knowledge and subsistence often depend on these rich ecosystems (DHESCA 2018; Institute Chico Mendes 2018; Ramalho 2006). However, these biologically important and culturally meaningful ecosystems are increasingly threatened (ICMbio 2018). While climate change has contributed to sea level rise, the vast majority of mangrove fragmentation or destruction has been at the hands of human activity, especially urbanization, coastal development, and industrial pollution (Lacerda 2006). Around 25 percent of Brazil's mangroves have been destroyed in the past century, while in Northeast Brazil, that percentage is around 40 percent (ICMBio 2018).

Over the past two decades, CIPS's industrial expansion has dramatically altered cultural practices, local ecologies, and land tenure arrangements for coastal fishing communities in Pernambuco. CIPS destruction, degradation, and fragmentation of Pernambuco's mangroves have incited shocking socio-ecological changes that have deeply emotionally impacted the predominantly Afro-descendent traditional communities of Cabo and Ipojuca. Among other injustices, CIPs violently dispossessed thousands of residents from their ancestral territories, destroyed or limited access to culturally meaningful beaches and mangroves, and devasted diverse more-than-human relationships that these communities depend on for financial and emotional well-being (DHESCA 2018; Santos et al. 2019). One community leader explained that the dispossession from and destruction of traditional territories generated a widespread psychological toll which caused the "death of elderly people who literally died of

grief...depression caused by displacement" (Paula[9], interview, 7/23/20). For those who continue living, CIPS's expansion efforts, which began in the late 2000s and continue today, have irreversibly changed their livelihoods, identities, and territories.

I utilize Biu's story and the case of Cabo and Ipojuca as a lens for interrogating the emerging concept of "ecological grief," or how humans mourn environmental degradation and loss. The concept offers promising new insights into the relationships between well-being and environmental change (Cunsolo and Landman 2017). However, ecological grief scholarship primarily focuses on climate-related environmental change (Comtesse et al. 2021; Cunsolo and Ellis 2018; Pihkala 2020) and has yet to engage environmental justice movements and scholarship that emphasize the *uneven* distribution of industrial pollution and other environmental degradation and loss on racialized and poor communities (Bullard 2000, Gutierrez et al. 2021; Herculano 2006; Mascarenhas et al. 2021; Pulido 2000). By not historically contextualizing how ecological grief relates to existing social inequalities, we are left assuming that ecological harms are distributed evenly within society and equally experienced among population groups. By contrast, I argue that if we want to understand the relationship between well-being and environmental change, conceptualizations of ecological grief must expand to account for the unequal distribution of environmental risks and benefits. We must also consider how environmental mourning and grief are constituted and experienced intersectionally, recognizing how race, class, gender, and other structures of inequality are mutually imbricating and both shape and are shaped by environmental and economic issues in a multitude of ways. This study illuminates how historic race, gender, and class-based social inequalities shape struggles to access natural resources, reliance on nature for survival, and experiences of

[9] All informants have been given pseudonyms.

environmental degradation, where ecological grief articulates with existing gender and race-based discrimination. By being dispossessed and disconnected from the ocean, traditional fishers and marisqueiras experience a kind of ecological grief that they recognize as fatal to their communities. However, that grief is inseparable from existing structural inequalities in Brazil, including the legacies of slavery and the history of racialization and marginalization of non-white traditional communities.

Theoretical Orientations: Ecological Grief, Environmental Justice, and Intersectionality

Placing Grief in More-than-Human Contexts

Since the discipline's early days, anthropologists have offered detailed accounts of grief and mourning rituals across cultures, most infamously Rosaldo's haunting account of ritual headhunting among the Ilonget (2012). Recognizing the diversity of grief experiences has helped anthropologists transcend traditional psychological interpretations of grief as a universal individual experience (for example, stages of grief), to understand grief as a "social emotion" (Hemer 2010; Jakoby 2012). Grief is indelibly linked to "social, cultural, religious, economic, political and historical contexts" (Silverman 2021, 2). Mourning and bereavement are considered personal *and* communal experiences (Silverman 2021, 1). Grief is personal in that loss is partly about losing oneself, as "death shakes the foundations of which the survivor is constructed and known" (Jakoby 2012,686). However, as self-identity is constituted through social relationships (ibid), the loss of a loved one requires us to reconstruct new meaning and relationships in that person's absence, what Souza calls establishing a "new normal" (2017, 52). Anthropologists have documented how grief can incite political transformation or contribute to social stagnation (Wolseth 2018). Trauma caused by violence can lead to "social death," eroding hopes for a

livable future (Wolseth 2018, 314). This kind of "unresolved grief" can be personally devastating but politically fruitful as the rawness of grief remains at the forefront of society (ibid.).

Despite anthropologists doing much to expand conceptualizations of grief and mourning, some dimensions of grief remain undertheorized. First, most anthropologies of death, mourning, and bereavement practices primarily focus on human relationships, often failing to consider grief associated with non-human death.[10] A second, related issue is that death and bereavement anthropologies often fail to consider the spatial components of grief, such as the relationship between grief, space, and *place*. However, grief has spatial geography, as grief can "produce a whole new set of emotional topographies, mobilities, and moorings… includ[ing] those places individuals and communities navigate as emotionally 'safe,'" (Maddrell 2016, 170-171). Engaging with ecological grief as a concept can help anthropology consider emotional geographies of grief, especially those associated with more-than-human worlds and the diverse relationships societies have with *places* of environmental change.

To live in the world today is to experience negative changes to places that are special to us. The seeming ubiquity of environmental change foregrounds the importance of anthropological understanding of the affective consequences of dramatic ecological loss (Kent and Brondo 2019). When we experience negative environmental change, it often provokes discomfort or even profound sadness. We sense these emotions are about loss; we sense they are about change; we sense they are about fearing what is to come. However, grieving a place is also about losing the joy to which we had become accustomed. It is about losing safety, peace, and spaces where we can take a breath. At times, it is also about the places we lose to others, places

[10] As I describe below, important exceptions exist at the intersection of anthropology and environmental humanities including but not limited to animal and multispecies studies (Johnston and Probyn-Rapsey 2013) and extinction studies (Bird-Rose et al. 2017).

that we once found peaceful, joyful, even full of freedom, that are now unavailable, uninviting, or fundamentally changed. Maybe those places no longer offer peace, but only sorrow, stress, or perhaps even risk or harm. These feelings have been named ‘solastalgia,': a term that recognizes the solace lost when someone's home environment (or another beloved place) is fundamentally and often irrevocably changed (Albrecht 2006, 2020). The concept of ecological grief emerges from solastalgia, emphasizing how individuals and societies grieve their rapidly changing environments in contexts of climate change (Cunsolo and Ellis 2018; Cunsolo and Landman 2017). Scientist Kriss Kavorkian coined the concept of environmental grief after experiencing the demise of killer whale populations throughout her field research (Rosenfeld 2016). However, Cunsolo and Landman (2017) and Cunsolo and Ellis (2018) theoretically developed ecological grief as “grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change,” (Cunsolo and Ellis 2018, 275).

Ecological grief is contingent upon one's sense of place,' the meaning people ascribe to a place, and the level to which they identify with those places (Marshall et al. 2019, 180). It is tethered to ecological memories and relationships between humans, plants, and animals (among other entities) that constitute places (Nazarea and Gagnon 2021). Nazarea states, "humans in particular experience great sadness over the loss of other species that they came into the world with, ecological grief cannot be divorced from ecological memory, the two go together, “(2019). Despite human emotional attachments to the species that constitute places, grieving non-human life is often uncommon or absent in social traditions and can therefore be minimized (Marshall et al. 2019; Ryan 2017). As a result, ecological grief can be experienced as a type of "disenfranchised grief" given that environmental discourses, research and policy largely fail to

incorporate or take seriously environmental mourning (Cunsolo and Ellis (2018, 25-26). Kent and Brondo (2019) have argued that the conflation of emotions with irrationality within Western philosophical traditions can "deny space for emotions surrounding the tradeoffs or a rejection of economic priorities" (2019, 2). Portraying emotional reactions as "irrational" is a key step toward rendering "environments and peoples as disposable and dismiss[able]" (2019, 3). Inquiring into patterns of ecological grief is thus about "creating space for documenting, considering revealing and naming… emotions' relation to an environment in rapid flux." (Kent and Brondo 2019, 8). Ecological grief, therefore, can help environmental anthropologists and others 'open space' for understanding affective or deeply emotional implications of environmental change and how societies relate to and especially grieve more-than-human worlds.

Ecological grief builds upon the intellectual terrain of multispecies studies (including posthumanism and extinction studies, among others) prominent in the humanistic and social sciences and popularized in philosophy, human geography, environmental humanities, and anthropology. At its heart, multispecies studies attempt to respond to what it considers problematic aspects of Western philosophy: the ontological separation between the 'self' and the 'other' (Celermajer et al. 2021; Larsen and Johnson 2017; Ogden et al. 2013). Feminist, decolonial, and indigenous scholars have critiqued this separation for many reasons, but principally because 'othering' the non-self can lead to problematic hierarchies and distinctions that consciously and unconsciously create rigid divisions between men and women, white and non-white, civilized and barbaric, human and non-human, among other entities (Harrison 1997; Larsen and Johnson 2017; Loomba 2015; Lugones 2010; Quijano 2010). They argue that such stringent distinctions are at the heart of oppressive relations toward women, people of color, and the natural world (ibid.). Multispecies scholars have emphasized the importance of *relational*

ontologies, or ontological grounding that honors humanity's dependency on relational networks to each other and a wide array of non-human life, especially animals, plants, and fungi, among countless other entities (Cadena 2015; Ogden et al. 2013; Tsing 2015). Multispecies scholars often emphasize indigenous and relational ontologies by focusing on the complex *assemblages* of human and non-human life (Ogden et al. 2013; Van Dooren et al. 2016). While this work is crucial for breaking rigid conceptual boundaries between the self and the other (something feminist and indigenous scholars have been advocating for a very long time), it often focuses on *affective* experiences of species loss (Ryan 2017, Van Dooren et al. 2016; Bird Rose 2013) while focusing less on the *injustice* of environmental degradation (Celermajer et al. 2021). Without a theory of (in)justice, we are left with many ethical and empirical questions. If we are all connected through relational networks, can any single node, entity, or process in that network be considered *responsible* for causing environmental damage? What if multispecies entanglements—often characterized as harmonious and aspirational—are threatened by industrial pollution or climate change? And why do some *toxic* socio-natural entanglements disproportionately impact specific populations and not others?

Grief and Environmental (In)Justice in Brazil

When we fail to contextualize negative environmental change within broader structures of inequality, we leave the impression that climate-related and other environmental challenges are distributed evenly throughout populations. By contrast, this study illustrates that environmental change articulates with *existing* historically-situated social and ecological inequalities, contributing to the unequal distribution of environmental risks and benefits. Global environmental justice movements and scholars have made clear that negative environmental change is distributed unequally and environmental risks and degradation disproportionately

impact poor and racialized communities (Herculano 2006; Martinez-Alier 2016; Schlosberg 2013; Gutierrez et al. 2021). Therefore we must understand ecological grief alongside broader histories of inequality that shape and sustain uneven development. Furthermore, we should understand that ecological grief is constituted and experienced *intersectionally,* as gender, race, and class, among other overlapping structures of oppression shape diverse socio-natural relationships, including access to and control over natural resources (Elmhirst 2011; Mollett and Faria 2013; Perry 2016).

Engaging with environmental justice scholarship and global environmental justice movements can help multispecies studies better account for patterns of historic injustices within the complex assemblages of human and non-human life (Celemajer et al. 2021). Since it began in the 1970s and 80s, the US Environmental Justice Movement has provided overwhelming evidence that environmental risks and benefits are not unequally distributed among population groups (Bullard 2000; Bullard et al. 2008; United Church of Christ 1987). The movement began in response to private and public entities systematically siting toxic industries and waste facilities in communities of color (Bullard 2000; Bullard et al. 2008; Mascarenhas et al. 2021; United Church of Christ 1987). This development pattern has caused tremendous health problems for communities of color, including increased respiratory and degenerative diseases, as well as higher cancer and mortality rates from exposure to toxic effluents (Checker 2005; Hoover 2017). While early EJ scholarship focused on statistically proving the existence of environmental racism in the *siting* of toxic facilities in communities of color (Pulido 2000), today, environmental justice research takes diverse forms as it continues to evolve in iteration with dynamic EJ movements and activism (Schlosberg 2013). Critiquing the strictly *site*-based approach to studying environmental racism, Pulido (2000) identified environmental racism as a multi-scalar

process reflecting specific (racist) social relations in a social formation (19). Any focus on a single *site* of environmental racism ignores the broader histories and multiple scales of racism within society (ibid). For Pulido (2000), whether environmental racism is 'intentional' is not important, as often less conscious forms of racism, like white privilege, produce environmental racism through "preserving the privileges of white people (regardless of whether agents recognize this or not)" (2000, 15). Therefore, development that prioritizes affluent white populations over other populations creates uneven geographies where environmental degradation disproportionately burdens communities of color while wealthy white communities enjoy the benefits of healthy environments (Bullard et al. 2008; Pulido 2000; Hoover 2017). Environmental racism in the form of white privilege is important in the Pernambuco context, where wealthy middle and upper-class populations (often white) benefit from the Suape Port Industrial complex through access to middle-upper class jobs or financial shares but do not live among the facilities' toxic effluents or experience violence like the neighboring low-income communities of color. Furthermore, poor, racialized communities were not invited to participate in the planning for the complex expansion and have been denied access to their traditional beaches that have been enclosed for exclusive use by the port and its business hotel guests (DHESCA 2018).

More recently, ethnographers of environmental justice struggles have helped us understand how diverse communities experience embodied vulnerability through environmental degradation (Gutierrez et al. 2021; Hoover 2017). Communities on the front lines of heavy industry and waste often embody noxious pollutants, creating wide-ranging mental and physiological health impacts (Checker 2005; Hoover 2017). While some ethnographic scholarship still focuses on embodiment, others have analyzed environmental racism and

injustice as contemporary outcomes of longer-term processes such as colonialism and state violence (Gutierrez et al. 2021; Pulido 2017; Spiegel 2021). Moreover, other bodies of scholarship emphasize the strength of environmental justice activism, illustrating how communities often do not sit idly by while their environments and livelihoods are destroyed but organize, fight, and work hard to heal their communities (Martinez-Alier et al. 2016; Perry 2013; Spiegel 2021).

The concepts of environmental justice and environmental racism have migrated from the US to diverse global contexts, fortifying existing social and ecological justice movements (Martinez-Alier et al. 2016). Despite evidence for robust global environmental justice movements (Martinez-Alier et al. 2016), there are still too few ethnographic studies of environmental justice struggles and movements outside US contexts (Gutierrez et al. 2021). This is a significant omission in Brazil, where existing social movements have embraced and mobilized the terms environmental justice and environmental racism in recent years (Cidreira-Neto and Rodrigues 2018; Herculano 2006; Pacheco 2008; Paes e Silva 2012). Like the US, Brazilian populations do not equally share the burdens of environmental degradation, and environmental risks are heavily concentrated in communities "marked by situations of inequality and injustice" (Paes e Silva 2012, 4). While many Brazilian social movements were already engaged in often intersecting racial, ethnic, environmental, gender, and class-based struggles, the specific terminology of environmental justice and environmental racism were not widely adopted in Brazil until after the first International Colloquium on Environmental Justice, Work, and Citizenship (Colóquio Internacional Sobre Justiça Ambiental, Trabalho, e Cidadania) in Niterói in 2001 (Herculano 2006). Brazilian representatives from indigenous, Afro-descendent, and environmentalist groups, in addition to representatives from worker syndicates, NGOs, and

diverse international attendees, established the Brazilian Network of Environmental Justice (Rede Brasileira de Justiça Ambiental—RBJA) and demarcated the significance of environmental justice and environmental racism in Brazilian contexts (Herculano 2006).

In the committee's declaration for its launch, RBJA asserted that environmental injustice is the "dominant development model in Brazil" (RBJA 2001). In their manifesto, RBJA stresses that most Brazilians—in addition to having precarious employment—are burdened by toxic environmental hazards at work and in their communities. Many communities lack potable water and basic sanitation, are regularly exposed to toxic substances and are forced to reside in dangerous locations, often flood-prone areas, near toxic waste facilities, or living near gas pipelines or electricity transmission lines (ibid). As Brazilian environmental justice scholars have made clear, diverse forms of environmental racism, whether intentional or not, negatively impact black and indigenous communities (Pacheco 2008; Paes e Silva 2012). Nevertheless, in Brazil, environmental racism also harms more racially ambiguous marginalized groups considered 'ethnically different' because of their status as 'traditional communities' (Paes e Silva 2012, 8). RBJA blames economic conditions in the country for producing "territorial and social exclusion" that contributes to the peripheralization of the large majority of working-class citizens (RBJA 2001). While recognizing the importance of racial inequalities, the Brazilian EJ manifesto addresses how injustice impacts traditional populations. According RBJA, these communities:

> "live in the frontier regions of capitalist expansion, suffer pressures of compulsory dislocation of their areas of living and work, losing access to land, the forests, and rivers, being expulsed by large hydroelectric projects, transport or mineral exploration, timber or industrial agriculture." (RBJA 2001)

In this way, environmental racism in Brazil impacts racialized communities *and* traditional populations whose identities transcend single-axis categorization. Herculano explains further:

> Riverside dwellers, extractivists, geraizeiros, fishermen, swamplanders, caiçaras, vazanteiros, pomeranos, ciganos, terreiro communities, faxinais, quilombolas, etc. - have faced the 'arrival of the stranger', that is, of large business developmentalists – dams, monoculture projects, shrimp farming, mariculture, waterways and highways – which expel them from their territories and disorganize their cultures, either by pushing them to the slums of the urban periphery, or by forcing them to live with a daily life of poisoning and degradation of their living environments… [Herculano, 2006, 16]

Environmental racism is experienced by communities, like the fishers and marisqueiras of Pernambuco, whose livelihoods are deemed 'exotic' or inferior because they are considered to be 'closer to nature' (Cidreira-Neto and Rodrigues 2018; Herculano 2006; Paes e Silva 2012). This inferior status contributes to their disposability, and the territories they occupy are normalized as "deserted and empty spaces, hence available for the implementation of large development projects" (Paes e Silva 2012, 12). The influence of the Brazilian environmental justice movement is palpable in Pernambuco, where not only scholars but community organizations, NGOs, news outlets, and social media platforms deploy terminology stemming from the US EJ movement, such as environmental racism and environmental justice, in their attempt to describe the structural forces of injustice that disproportionately harm Afro-Brazilian traditional communities (Cidreira-Neto and Rodrigues 2018; Gomes 2022). These terms are also often used to explain socio-environmental disasters and their aftermath in the region, including the 2019 oil spill in Northeast Brazil and the recent floods that inundated and killed 122 people living in conditions of precarity (ibid.).

Intersectionality and Ecological Grief

While environmental justice activism and scholarship have gone a long way to explore how race, ethnicity, and class are bound up in the distribution of environmental risks and benefits, we are still left wondering how cultural gender norms interact with other inequalities to shape diverse experiences of negative environmental change. To truly understand grief associated with adverse environmental change, we must recognize that ecological degradation and loss (and by extension, emotions associated with degradation and loss) are experienced differently *within* population groups, especially when complex inequalities interact to shape access to and control over resources. Black feminist epistemologies in the US *and* Brazil have asserted that racial injustice must also be understood intersectionally: as constituted and experienced inseparably from gender and class (among other) structures of oppression (Carneiro 2011; Crenshaw 1991, Gonzalez 2019). Intersectionality illuminates how historical axes of oppression interact to shape differentiated life experiences for marginalized populations (Cho et al. 2013: 795-807). Afro-Brazilian women have long recognized how their lives are circumscribed by interrelated race, gender and class-based (among other) forms of discrimination (Alverez et al. 2016; Buarque 2018; Carneiro 2011; Gonzalez 2019; Nascimento 2007). However, scholars have only recently begun utilizing intersectional analytical frameworks to understand how overlapping inequalities interact to shape everyday life in Northeast Brazil (Costa 2013; Caldwell 2017; Perry 2016). This work has made clear that for many Northeast Brazilian women, interrelated gender, race, and class inequalities influence socio-economic status, life stressors, opportunities, and generally "define the parameters of health and wellness" (Costa 2013; Hogan et al. 2018,96; Smolen et al. 2018).

Intersectionality also shapes diverse relationships with the natural world, where gender interacts with other structural inequalities to shape differential access, use, and control of natural resources, as well as concomitant affective experiences of environmental change (Rocheleau et al. 1996; Mehta 2013; Sultana 2011, 2015). In their initial articulation of an explicitly feminist political ecology, Rocheleau et al. (1996) push for a "gendered science of survival" that challenges scientific expertise, specifically science that separates nature from individuals and draws distinct binaries between private and public spaces (7). Recognizing global patterns related to women's multiple roles in their homes and neighborhoods, Rocheleau et al. (1996) explored how these roles shape women's environmental knowledge and expertise, blurring the traditional separation between culture and nature (1996, 7). The disproportionate burden placed on women to care for other life motivates them to have an interest in environmental problems from "home perspectives" and other situated positions (Rocheleau et al. 1996, 8-9). Environmental management or care and its concomitant ecological knowledge, rights, and responsibilities are also highly gendered (Mehta 2013; Rocheleau et al. 1996). While knowledge, rights, and responsibilities are not universally shared among women, the overarching point is that "the existence of gendered spaces is widespread and affects both the technocratic and customary systems of resource tenure and control of environmental quality" (Rocheleau et al. 1996, 11). Since early formulations, feminist political ecology has responded to post-structural critiques that all women share a unified experience (Elmhirst 2011; Mohanty 1988). In contemporary FPE, "gender is destabilized as a central analytical category…emphasis is given to an exploration of multi-dimensional subjectivities where gender is constituted through other kinds of social differences and axes of power such as race, sexuality, class, and place, and practices of 'development' themselves" (Elmhirst 2011:130). For fishers and marisqueiras of Cabo and

Ipojuca, intersectionality shapes daily life, including routine activities, workspaces and places, household and societal expectations, and even ecological knowledge, among innumerable other facets. For example, men predominantly fish by boat in the high sea (alto mar), and women generally collect shellfish from the coastal mangroves (manguezais). These gender-specific activities cultivate discrete ecological knowledge of the sea and mangroves, leading to distinct household and social activities related to gathering, processing, and selling fish and shellfish.

In Cabo and Ipojuca, both men and women, fishers and marisqueiras, experience gendered pressure to fulfill household obligations, primarily through sustenance and income generation. The emotional tensions connected to fishing and collecting affirm that complex emotional geographies are indelibly linked to differential access, use, and control of natural resources (Sultana 2011, 2015). Sultana emphasizes that "conflicts over resources are thus as much about embodied emotions, feelings, and lived experiences, as they are about property rights and entitlements, long the focus of political ecology" (2015, 634). When men and women are restricted from fulfilling their household obligations by being unable to access natural resources (whether fresh water, land for cultivation, firewood, or another resource), the failure to fulfill daily gendered expectations often takes a heavy emotional toll, shaping both intra-household and broader societal resource conflicts (Sultana 2011, 2015). Connecting ecological grief to (feminist) political ecologies can thus help us understand the emotional, often intersectional, significance of resource loss within households and on a broader scale (ibid).

Ethnographic Context: Fishers and Marisqueiras of Cabo and Ipojuca

If observing Cabo de Santo Agostinho and Ipojuca from a birds-eye view, one would immediately spot the mono-crop sugarcane plantations that stretch across vast expanses of the

rolling countryside. The endless green fields have the unsettling aesthetic of a single species monopolizing a landscape. However, if you cast your vision eastward toward the coast, you are struck by the opposite sensation. Neighborhoods, villages, and an urbanized city dot dense mats of thick mangrove forests spreading toward elegant beaches giving way to the sea. And then, situated between the beaches of Cabo and Ipojuca, you would see it: an immense, sprawling industrial complex. You would see a colossal shipyard flanked by industrial manufacturing facilities, including an oil refinery, a petrochemical plant, and a pharmaceutical lab, fogging the surrounding air with nebulous effluents. You would see the ocean unnaturally well-organized in neat, dredged parallel lines between embankments, strangely fluorescent lights, and the sounds of large container ships coming and going. Moreover, you would see a multitude of walls, fences, and security guards, letting some people in and keeping others out.

For the coastal populations of Pernambuco, the sprawling expansion of the industrial port complex has irrevocably changed their communities, identities, and ancestral territories. US scholars have mainly studied land conflicts, especially among sugarcane workers of this region; I use the term territory to depart from strictly land-based studies and embrace what Brazilian social scientists know well, that coastal Pernambuco is a "povo do mar" or people of the sea (Ramalho 2006). Cabo and Ipojuca are only two coastal communities among many who connect their identity and livelihood to oceans and ocean products through fishing or collecting shellfish in the mangrove forests (manguezais). They are among those the state designates as 'traditional communities' (povos e comunidades tradicionais or PCT), a broad term encompassing a wide range of natural resource-based livelihood traditions. Brazil's National Policy for Sustainable Development of Traditional Peoples and Communities (PNPCT) defines traditional populations as "culturally differentiated groups that recognize themselves as such, that have their own form

of social organization, that occupy and use territories and natural resources as a condition for their cultural social, religious, and ancestral reproduction, using knowledge, innovations, and practices generated and transmitted by tradition" (Ministério do Desenvolvimento Social, n.d.). In coastal Cabo and Ipojuca, fishers and marisqueiras are largely racially black (negro/negra) or mixed-race (pardo/parda), with many having indigenous and/or quilombo ancestry (maroon communities comprised initially of individuals who escaped slavery and formed organized settlements). One shared aspect of traditional communities is that they are often poor or of a lower economic class than middle and upper-class residents and urbanites. Furthermore, they often have tenuous land rights. Some have developed formal quilombo descendant communities and gained land rights through Brazil's National Institute for Colonization and Agrarian Reform (INCRA). However, without formal land rights, most live as "posseiros" (or squatters) on undeveloped or abandoned land. In Cabo and Ipojuca, these lands are often "terras do engenho," or former sugarcane plantation lands that have been unoccupied or abandoned for generations and used as common lands (Pedro, interview, February 5th, 2021).

Pescadores and marisqueiras draw their livelihood and subsistence from the ocean, using fish for home consumption and selling in fish markets, as street vendors, or even in local bars and restaurants. However, just as important, they also derive a sense of pride, dignity, and belonging from their relational networks linked to the ocean and mangrove forests (Cidreira-Neto and Rodrigues 2018; Ramalho 2006). Their lives revolve around planning trips, being in the ocean, processing and selling their goods, crafting and repairing nets, and setting traps. Their weeks and schedules depend on the ever-changing maré or tides, which they know how to read with astonishing precision. These communities also are connected to the ocean and mangroves through intergenerational ancestors, who taught them, from around the age of 10, the

innumerable embodied skills one must possess to fish for agulha, atum, pirá or serra on the 'alto mar,' or collect siri, aratu, caranguejo, ostras or mariscos from the rocky mangroves.

I first visited Cabo in 2018 on an exploratory research trip, where I established connections with two regional social justice organizations: the Centro das Mulheres do Cabo (Women's Center of Cabo) and the environmental justice group Fórum Suape. I returned in February of 2020 with support from Fulbright Hays, planning to do a year of fieldwork. Unfortunately, when the gravity of Covid-19 became apparent, the project was forced to evolve into new realities. Luckily, with the assistance of community collaborators, I navigated these challenges through developing a virtual ethnography project in collaboration with the Centro das Mulheres do Cabo (Women's Center in Cabo), especially activist Elaine Salgado Mendonça. We continued to do remote and hybrid interviews, conducting 32 qualitative interviews with fishers, marisquerias, cane workers, and small agriculturalists, and eight more interviews with local community leaders and academics. I also attended multiple virtual talks and classes with fishers and marisqueiras, hosted by local social justice organizations such as the Fórum Suape, Centro das Mulheres do Cabo, and SOS Corpo. I transcribed interview recordings where possible; however, there were several interviews in which the remote regional dialect was incredibly challenging. For those transcriptions, I enlisted the help of a local assistant in Cabo, Glaubberthy Rusman Wanceslau Mendes da Silva. I used the qualitative analysis software MaxQDA 2020 to analyze all transcriptions.

Identity, Meaning, and Place

Basso (1996) has argued that ethnographers cannot understand cultural worldviews without first understanding 'senses of place' (1996, 130). Knowledge of places informs how

people experience the surrounding landscape and give meaning to particular spaces (ibid.). For many, places are not merely geographical locations but constitute memories and experiences with specific flora and fauna within those spaces (Nazarea and Gagnon 2021). Without considering how identities are entangled with more-than-human places, we cannot understand the true meaning of ecological loss and mourning (Nazarea and Gagnon 2021; Marshall et al. 2019). In Cabo and Ipojuca, ecological grief is directly related to the meaning and significance of lost places and the species fishers and marisqueiras associated with those places. And yet, race, class, and gender influence community members' reliance on those places for survival. In other words, fisher and marisqueira's 'science of survival' (Rocheleau et al. 1996) as working-class communities of color depends upon more than human relational networks that are increasingly under threat. Therefore, fishers and marisqueiras experience ecological grief as they lose their ability to do the basic tasks they have historically relied on to survive and fulfill gendered and social expectations within their households and communities .

Marisqueiras, who in Pernambuco are primarily women, often talk about being born and raised in the tides and mangroves. They describe an immense amount of security and peace in their lives from collecting with friends and family. Fishing and collecting provide an irreplaceable sense of self-autonomy and 'liberdade,' or freedom, which many of them rarely feel at home (Ramalho 2006). Women often consider it a joy to commune with nature and interact with mangrove and ocean species. Adriene explains;

> Look, if I were retired today, I would still go fishing, do you know why? One because I enjoy it, I enjoy going, because it's a beautiful thing, it's a moment when we feel good with nature, there's nothing better than the sea, than nature. We arrive... look, you see these agulhas [needlefish], it's work, it's one by one, here it passes through our hands, there are about four thousand agulhas, I think two thousand go through our hands… and we have that joy. If I have health, I will still stay in the area of fishing. I will still stay. [Adriene, interview, February 10th, 2021]

Talking about fishing and collecting evokes memories of taking trips out with family, usually parents, grandparents, siblings, or in some cases, whichever neighbor owned a boat. It also evokes memories of abundant species in beloved places that are no longer around. Fernanda recalls the richness of ocean life, which she longer experiences:

> My grandfather used to fish a lot around there, it was cast net, my grandfather used to fish like that and caught a lot of fish in the past, he was so happy… And it's all, seahorse, seahorse, everything is there, seahorse is in the mangrove, we go fishing, you get tired of seeing the seahorses pass like that, sometimes even we would pick it up and let it go, you know? (Interviewer: And today you do not see them anymore?) We don't see them anymore. Never. [Fernanda, interview, 02/22/2021].

While many have fond memories and find joy and solace in this work, it is not something fishing communities have historically arrived at by choice: it is deeply influenced by the racial land tenure (see the previous chapter) firmly entrenched by nearly five centuries of sugarcane production. The vast majority of farmable lands of Cabo de Santo Agostinho and Ipojuca continue to be occupied by dozens of engenhos or sugarcane plantations that date back to the early 16th century in Pernambuco (Dabat 2007; Rogers 2010). Many communities of this region are mixed-race descendants of enslaved Brazilians forced to work the cane fields until Brazilian abolition in 1888 (Scheper-Hughes 1992). The end of slavery did not bring about the re-distribution of lands to African descendants or indigenous communities. Over time, wealthy latifundia and large agribusinesses have retained much of the former plantation land (Rogers 2010; Scheper-Hughes 1992). Whether active or not, these lands retain the old names such as "Engenho Tiriri," "Engenho Boa Vista" among dozens of others scattered throughout Cabo and Ipojuca. Working on the sugarcane plantations, called 'trabalho do campo,' is one of the few jobs people can acquire, especially since poor and rural communities in Pernambuco continue to have high illiteracy rates. Large plantation jobs typically pay minimum wage (at the time of research, around 1,100 reais or 200 dollars per month), and the labor is notoriously challenging, making

this an unappealing option for many. Since they tend not to have the resources to purchase agricultural land, members of poor communities often find purchasing the needed fishing materials is much more accessible than family farming. However, some fishers have household gardens to plant vegetables to help supplement household food supplies.

Fishing is a source of sustenance and income that people find dignified because they work for themselves, often with their family and friends, and they do not rely on the engenhos or agribusinesses for paltry wages. In Cabo, the long history of artisanal fishing also garners certain respectability and dignity among locals, which is a source of pride and meaning for them (Cidreira-Neo and Rodrigues 2018; Ramalho 2006). At the same time, fishers and marisqueiras depend on the ocean and mangroves for basic needs or survival. As many of them state, if they do not fish, they do not eat. Beatriz explains:

> For my family we depend on it [the ocean]. This area here in Suape, people depend on the ocean. Every single one. On the ocean and the mangroves. No? Because some work with oysters, some work with tuna, some work with crab, and each one depends on the ocean and the tides. [Beatriz, interview, February 4th, 2021]

Each day marisqueiras and fishers wake up between four or five in the morning and usually meet friends or family to begin their day fishing or collecting. For domestic couples, women wake up one to two hours earlier to fulfill their gendered social reproductive obligations: cooking their family's meals for the day and cleaning their households before departing. Depending on their success that day, some will sell their catch in the streets or the fish markets the same afternoon or the next day. Marisqueiras must process the shellfish, which typically happens the day after collection. The sales from these activities serve to provide income, part of which is typically saved to prevent families from experiencing hunger and food insecurity during the winter off-season (especially July and August). Many fishers and marisqueiras have

personally experienced hunger during the off-season and, more recently, during the oil spill. Because of this, they work hard to ensure that their family might avoid re-experiencing the shame and distress of not being able to feed their families.

In Cabo and Ipojuca, historic inequalities related to race, gender, and class have influenced access to and dependencies on natural resources both historically and in the present day. African descendent communities experience intergenerational poverty and low access to education, often not having the same access to agricultural land for family farming. Many people say this is why they depend on the ocean for survival. Yet under these challenging circumstances, fishers and marisqueiras have shaped a 'science of survival' linked to more-than-human relational networks with the ocean and mangroves; these survival activities have become obligatory to fulfilling their gendered household expectations, including subsistence needs and income generation. Beyond subsistence needs, the ocean and mangroves are at the center of family and community relations and constitute their appreciation of and connection to the more-than-human world. The ocean and mangroves are also intrinsically linked to fisher and marisqueira senses of identity, place, and meaning. These more than human relations allow men and women to gather with the community while also fulfilling household obligations. However, CIPS increasingly threatens these relational webs and survival strategies, creating complex emotional geographies of stress and anxiety related to reduced access to these essential natural resources and meaningful connections to non-human life.

Environmental Racism and Dispossession

Because historic inequalities influence fishing communities reliance on natural resources for survival in Cabo and Ipojuca, they also shape experiences of environmental injustice,

especially racialized dispossession. Fishers and marisqueiras in Brazil are racialized by more than just race (Herculano 2006; Paes e Silva 2021). The state treats them as disposable because they are poor and live primarily subsistence (non-capitalist) livelihoods (ibid.). In Brazil, large development projects, hydroelectric dams, tourism sites, and pollution regularly expropriate fishers and marisqueiras (Cidreira-Neto and Rodrigues 2018; Paes e Silva 2012,5; Perry 2013). When CIPS began its massive expansion projects in the 2000s, environmental racism was blatant when developers began forcing traditional communities from their ancestral territories. The expansion involved enlarging existing facilities and adding numerous toxic industrial manufacturing facilities, including Petrobras's Abreu and Lima oil and gas refinery (which opened in 2014), a petrochemical plant, a pharmaceutical lab, expanding the shipyard, among other additions. The destruction of local mangrove forests and beaches and an onslaught of industrial pollution caused irreparable environmental damage throughout construction. The ongoing noxious effluents emitted into the air, water, and soil continue to transform social and ecological relations for traditional communities. CIPS's expansion initiatives disproportionately impacted fishers and marisqueiras because they depend on these more-than-human relational networks for survival.

Interlocutors often described the environmental changes with a deep sense of loss. First, the port Suape complex destroyed many of the mangrove forests where marisqueiras have fond memories of growing up. Because of their intimate ecological knowledge of fish and shellfish, marisqueiras immediately recognized the ecological reverberations destroying the mangroves would have. Adriene stated: "the mangrove is the birthplace of fish, it is where the fish spawn, its where fish leave the ocean and go spawn there, and then they do not have it anymore, we do not have the rocks that we had, they said it was not impacted, but lots of rocks were destroyed. Lots

of breeding grounds" (interview, 2/10/2021). Indeed, these areas are critical breeding grounds for marine biodiversity, and around 70-80% of the region's aquatic life spends crucial parts of their lifecycle in the mangroves (ICMBio 2018). The loss of vast stretches of mangroves pushed marisqueiras to collect elsewhere, forcing them into mangroves that were further away or more polluted, intensifying social and embodied physical dangers. Whereas fishing and collecting were once considered dignified ways to make a living, the new challenges prompted many multi-generation fishing families to encourage their children to pursue other life paths. An official from a fishers' union explained:

> Here comes Port Suape, which has environmentally degraded almost 80% of the mangroves, which is where all the nurseries are for our fish…before the Port, we had an abundance of fish that was everywhere. This went down, down, down, until now that it's in the 60% drop range…Fishermen used to raise their children to follow his work, to continue, today nobody wants to anymore. Today we make a little effort to pay for them to study, to leave, to not get into fishing. This is a shame, because if there is no fisherman, there is no good food. [Eduardo, interview, March 22nd, 2021]

Another devastating ecological change for the fishers was the dredging of the ocean to create deep canals for industrial size container ships. While in the past, there would be approximately two ships that would arrive per month, with the expansion efforts, around 20 ships arrive per week, making it impossible and dangerous to fish in the area. According to Cabo and Ipojuca residents, the port complex must keep re-dredging as the ocean floor naturally fills in with sediment. Every time the dredging bombards the areas that have typically been a breeding ground for species. According to fishers and experts at the Institute Mangue Mar (Ocean Mangrove Institute) of Pernambuco, these changes create devastating losses for the ecosystem. People talk about the intensity of ecological transformations with great difficulty since they are accustomed to healthy, abundant wildlife. Adriene and Adriana explained:

> There were a lot of dead turtles, a lot here after this Port, dead fish, we didn't see that [before the Port], a lot of dead fish; I saw a turtle... The turtle stayed here, it was not fat,

> very thin here and the body grew, I saw that, understand? It was a very big impact, and I suffered a lot. We went through a lot, fishers suffered a lot here. [Adriene and Adriana, interview, February 2nd, 2021]

Part of the trauma of species loss is, of course, the environmental racism inherent in CIPS's actions, whether intentional or not. Specifically, the destruction of more-than-human relational networks (the species and places Afro-Brazilian fishing communities depend on for their survival) illustrated that CIPS considered fishing communities disposable: a hindrance to their expansion efforts. Environmental racism—especially white privilege—also manifested in CIPS's decision to make some traditional fishing beaches exclusively available for the Port staff and the complex's hotel guests while restricting the fishers and marisqueiras from accessing the very territories they rely on for survival. While before the ocean territory acted as a commons in which they had great freedom to roam, the port complex began policing who enters the water around the complex and when. Security guards promptly remove anyone who gets too close to the complex. Walls and fences block access to traditional territories, often territories where people learned to fish from their ancestors and kin. For the most part, fishers who tend to fish via boat in the high sea have been able to work around these changes, but they must now have authorization cards identifying themselves as sanctioned fishers. Marisqueiras—who work almost exclusively in mangroves and beaches—state they are less able to get these cards and therefore more at risk of removal from the waters. Many women have worked around this, just moving to different places when asked to leave, yet it still means that they have to do the extra work of changing to a different location on top of their already strenuous labor. The criminalization of unauthorized fishing is one of CIPS's many eco-policing tactics. Some people who live close to CIPS engage in "pescarias clandestinas" or clandestine fishing without official cards because they cannot survive without breaking the rules.

Through enacting violent measures against fishing communities, CIPS instigated crushing social changes that, for many, were equally as challenging. Further substantiating that CIPS deemed fishing communities disposable, the port complex's first change was to enclose vast stretches of the public and abandoned lands where fishers lived and subsequently violently remove residents from these territories. CIPS offered modest indemnification payments to people living within these territories to expand its facilities. However, like Biu, if community members disagreed with the value they were offered or did not want to move, CIPS threatened, harassed, and even abused residents (Santos et al. 2019). CIPS also systematically destroyed homes and gardens, sometimes as homeowners watched, other times while residents were away doing errands or fishing (ibid.). As a result of these violent tactics, many fishers and marisqueiras were coerced into accepting CIPS's offers. When people ultimately moved, often to neighboring towns, many tried to return to the beaches to fish or collect, but private security guards asked them to leave or else be forcibly removed. In an ironic twist, the port complex cited environmental preservation as why they did not want former community members to return (DHESCA 2018). Experiencing the injustice of dispossession from their traditional territories took a profound toll on the mental health of locals. Many express the sense of sadness and loss that was widespread that they were not prepared to handle. Teresa explains:

> The community changed. Because it was larger, from top to bottom. There were old neighbors, they left taking everything. (long pause). A lot of the old people died. Because they (CIPS) took their plots of land, and the people left their places and fell into depression… a lot of land was lost. There is a lot that you will go to today and everything is wrong. (Interviewer: And how is this for you?) It's a bit difficult. And you don't get used to the state of pain or difficulty everyone is experiencing. You have to get used to it. [Teresa, interview, March 3rd, 2021]

Dispossession from the territory was not only a loss of locations where fishers fish and marisqueiras collect but also the loss of communal fishing relationships that made the trade

enjoyable and possible. While fishing, neighbors, and friends pool money for gas, and people pile into one person's boat. Sharing expenses makes it possible for people to make their trade without exorbitant costs. The high inflation rates in Brazil make gas and supplies out of reach for many people without being able to share these costs. Environmental racism, whether 'intentional' or not, is evident in CIPS's apparent disregard for these connections and activities while prioritizing its own economic goals. The concomitant influx of foreigners coming in and out of the complex, which many people believe increased crime, prostitution, and drug use in the region, exacerbated the losses of fishing communities. While Suape claims the complex would bring jobs to an impoverished region, they only hired many locals for initial manual labor jobs or as domestic service workers. For the more professional jobs, they brought in workers from Recife and the neighboring state of Bahia, which was a source of pain for many who thought that they were the ones who were supposed to benefit from the expansion. During Brazil's deep economic recession of recent years, many of the few jobs available to locals were terminated, adding even more financial hardship.

Exacerbating Grief: The 2019 Oil Spill in Northeast Brazil

Beginning in August of 2019, Northeast Brazil experienced the largest oil spill in the country's history when thousands of barrels of Venezuelan oil reached the coast (Araújo et al. 2020). Over several months, the oil spill would contaminate approximately 70 percent of Northeast's coastline, affecting at least 500 communities, including Cabo and Ipojuca (ibid.). For Tânia, who was out on the water, the smell arrived before the black muck:

> When the oil was here, I was here. On the day that oil arrived in the Suape area, I was going by canoe there... I don't remember well, because we were passing by, then the oil arrived. When we went back we started to smell the oil...It was sad, it was very sad... Because you see the area that you fish, the area where you get your food from, all dirty

> with oil. It was there in the mangrove, [and spread] more or less far from here, more or less to Porto de Galinha. In an area that's yours like that, with so much oil that keeps coming (long pause) you know, you know that it will end everything. If you don't clean it, it will end everything. Every day I went [to clean]. [Tânia interview, March 23rd, 2021]

As far as anyone could determine, it was not CIPS's fault, yet many locals thought that given the port complex's immense resources, they would surely help or somehow intervene. However, assistance from CIPS never came. In fact, for what felt like ages, there was no government assistance. Since so many locals depend on the ocean for survival, the fishing communities began to clean up *themselves*. Fishers and marisqueiras remember spending days filling bags full of the black waste, initially without protective gear. Some were hospitalized, and many were sick for several days from exposure to the toxic sludge. The disaster would exacerbate the problems people were already experiencing from CIPS, including the further decline of beloved species, destruction of mangroves and ocean, and the concomitant difficulties and the embodied dangers of doing their jobs. The oil spill added a new challenge that would have long-term emotional and economic impacts: the widespread social distrust of fish and shellfish. People were scared to eat and would not purchase fish and shellfish—a fear that propelled traditional fishers and marisqueiras into further precarity. Widespread social distrust of their goods would linger long after the disaster. Fishing and collecting became prohibited in many fishers and marisqueiras' familiar sites, which meant they could not make an income nor fish for subsistence to feed their families. Elsa elucidates:

> It was three months of no fishing, no selling. It was horrible...and no support either. Because we didn't get anything. Nothing, nothing... It took three months, and we were even banned from fishing. We were banned from the mangrove. Our food, you know? We still go and we hide. I went several times, hidden. Because we weren't selling it, we didn't fish to sell, but we need it for our own consumption. For people with five children, four, five, nine boys, they go hungry without fish. So we go for our own consumption. It is heavy. We have to eat, if we get caught, nobody will feel bad. [Elsa, interview, February 3rd, 2021]

If we were to look at the oil spill without considering the histories and identities of fishers and marisqueiras, how they already suffered at the hands of processes of racialization which positioned them against predatory industrial developers, we would not understand how tenuous their current access to the ocean is, and how much they depend on it for basic survival. Environmental change articulates with social inequalities—creating uneven benefits and risks that different population groups experience differently. The racialization and marginalization of the marisqueiras and fishers influence their reliance on steady access to those resources, making them more vulnerable to negative environmental change and loss. Nevertheless, environmental degradation (and by extension, ecological grief) is also experienced intersectionally. In Cabo and Ipojuca, women's experiences of environmental racism and injustice interact with their gendered responsibility to feed their children. For example, during the oil disaster, Tânia chose to put her body on the line and clean up the poisonous sludge, rather lose access to income and subsistence for her family. Similarly, Elsa's gendered responsibility to feed her children pressured her to break the no-fishing rules and partake in clandestine fishing, putting her own body at risk. Without understanding the broader contexts of historical inequalities and intersectional experiences of environmental loss, I would argue that we would understand very little about the ecological grief that fishers and marisqueiras experience.

Conclusions

The implications of this study extend beyond the Brazilian context. In recent years, the US has spent over 150 billion dollars fighting raging wildfires, extreme storms, droughts, and floods, not including costs associated with abating sea level rise and extinction (NOAA 2022). The unprecedented and devastating environmental changes of our time demand that

Anthropology expand the scope of death and bereavement studies to include insights from multispecies studies. This body of work has illuminated that humans are mourning diverse places and networks of human and non-human life. Adopting a concept like ecological grief is essential in accounting for the diverse emotional impacts of environmental change. Nevertheless, this study illustrates that ecological grief must expand to account for the historic, intersectional inequalities that shape both distribution and experiences of negative environmental change. Global environmental justice movements stress that environmental degradation and risk disproportionately burden already marginalized populations. Therefore we must situate ecological grief in contexts of broader histories of inequality that shape and sustain uneven development. Furthermore, this research illuminates how ecological grief is constituted and experienced intersectionally, as gender, race, and class, among other overlapping axes of inequality shape diverse emotional relationships and connections to more than human worlds, including access, use, and control of natural resources.

This research challenges tacit assumptions in ecological grief literature: that environmental change is distributed and experienced uniformly. By contrast, historic intersectional inequalities disproportionately burden poor, racialized communities with environmental degradation in Cabo and Ipojuca. The history of cane plantation agriculture, beginning in the 1500s, continues to contribute to profound land inequalities in Pernambuco, and sugarcane plantations overwhelmingly occupy agricultural land. Historic land inequalities mean that many fishers and marisqueiras live as *posseiros*, or squatters, on abandoned plantation lands (terra do engenho), making them susceptible to removal. Nevertheless, artisanal fishing is a way for people to avoid strenuous, low-paying work in the cane fields and maintain self-autonomy and dignity. For many people, the costs of materials for fishing are much more accessible than

the costs of establishing a small farm. Coastal fishing communities of Pernambuco have lived in this way for generations, building a sense of place, identity, and meaning around fishing and collecting. They have also established irreplaceable relationships with the ocean and mangrove species in which they work. However, communities also *depend* on these species for economic survival since they have few available work options. Their 'science of survival' is indelibly linked to more than human networks that industrial expansion is increasingly eradicating.

Because of the historic circumstances linking traditional communities to the oceans and the mangroves, the port industrial complex's expansion efforts were devastating, causing many, like Biu, to feel lost. Before the oil spill arrived, fishers and marisqueiras were grieving numerous environmental injustices, including the destruction and policing of their territories, violent removal from their homes, elders dying, and their communities and work being dismantled or becoming unsafe. They also grieved the species and more than human relational networks that they believe CIPS recklessly decimated. When the oil spill arrived late in 2019, this was another blow to an already devastating situation. Their grief from the oil spill can and should be considered ecological grief, yet that grief is inseparable from the traumatic structural socio-ecological injustices these communities *already* regularly experience.

Works Cited

Albrecht, Glenn. 2006. "Solastalgia." *Alternatives Journal (AJ) - Canada's Environmental Voice* 32 (4/5):34-36.

Albrecht, Glenn. 2020. "Negating Solastalgia: An Emotional Revolution from the Anthropocene to the Symbiocene." *American Imago* 77 (1):9-30.

Araújo, Maria Elisabeth de, Cristiano Wellington Noberto Ramalho, and Paulo Wanderley de Melo. 2020. "Pescadores artesanais, consumidores e meio ambiente: consequências imediatas do vazamento de petróleo no Estado de Pernambuco, Nordeste do Brasil." *Cadernos de Saúde Pública* 36 (1).

Basso, Keith. 1996. Wisdom Sits in Places: Landscape and Language Among the Western Apache. Albuquerque: University of New Mexico Press.

Bird Rose, Deborah. 2013. "In the shadow of all this death." In *Animal Death*, edited by Jay Johnston and Fiona Probyn-Rapsey, 1-20. Sydney: Sydney University Press.

Bird Rose, Deborah, Thom van Dooren, and Matthew Chrulew. 2017. *Extinction Studies: Stories of Time, Death, and Generations*. New York: Columbia University Press.

Buarque, Cristina Maria. 2018. "Feminino and Feminismo na Zona Canavieira: uma releitura antropológica das desigualdades de gênero em Pernambuco." Doutor, Antropologia, Universidade Federal de Pernambuco.

Bullard, Robert D. 2000. *Dumping in Dixie: Race, Class and Environmental Quality*. Third ed. Boulder: Westview Press.

Bullard, Robert D., Paul Mohai, Robin Saha, and Beverly Wright. 2008. "Toxic Wastes And Race At Twenty: Why Race Still Matters After All Of These Years." *Environmental Law* 38 (2):371-411.

Cadena, Marisol de la. 2015. *Earth beings: ecologies of practice across Andean worlds*, Durham: Duke University Press.

Caldwell, Kia Lilly. 201. *Health equity in Brazil : intersections of gender, race, and policy*: Urbana: University of Illinois Press.

Carneiro, Sueli. 2011. *Racismo, Sexismo e Desigualdade no Brazil*. São Paulo: Selo Negro.

Celermajer, Danielle, David Schlosberg, Lauren Rickards, Makere Stewart-Harawira, Mathias Thaler, Petra Tschakert, Blanche Verlie, and Christine Winter. 2021. "Multispecies justice: theories, challenges, and a research agenda for environmental

politics." *Environmental Politics* 30 (1/2):119-140. doi: 10.1080/09644016.2020.1827608.

Checker, Melissa. 2005. *Polluted promises: environmental racism and the search for justice in a southern town*. New York: New York University Press.

Cho, Sumi, Kimberlé W. Crenshaw, and Leslie McCall. 2013. "Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis." *Signs* 38 (4):785. doi: 10.1086/669608.

Cidreira-Neto, Ivo Raposo Gonçalves e Gilberto Gonçalves Rodrigues. 2018. Racismo Ambiental e a Pesca Artesanal: o caso da Ilha de Deus, Pernambuco. *Guaju*, *Matinhos* 4(2): 125-141, https://revistas.ufpr.br/guaju/article/view/58463/37273.

Comtesse, Hannah, Verena Ertl, Sophie M. C. Hengst, Rita Rosner, and Geert E. Smid. 2021. "Ecological Grief as a Response to Environmental Change: A Mental Health Risk or Functional Response?" *International Journal of Environmental Research and Public Health* 18 (2). doi: 10.3390/ijerph18020734.

Costa, Joaze Bernardino. 2013. "Controle de vida, interseccionalidade e política de empoderamento: as organizares políticas das trabalhadoras domésticas no Brasil." *Estudos históricos.* 26 (52):471.

Crenshaw, Kimberlé. 1991. "Mapping the Margins: Intersectionality, identity politics, and violence against women of color." *Stanford Law Review* 43 (6):1241-1299.

Cunsolo, Ashlee, and Karen Landman. 2017. *Mourning nature: hope at the heart of ecological loss and grief*: McGill-Queen's University Press.

Cunsolo, Ashlee, and N. R. Ellis. 2018. "Ecological grief as a mental health response to climate change-related loss." *Nature Climate Change* 8 (4):275-281. doi: 10.1038/s41558-018-0092-2.

Dabat, Christine. 2007. *Moradores de engenho: relações de trabalho e condições de vida dos trabalhadores rurais na zona canavieira de Pernambuco segundo a literatura, a academia e os próprios atores sociais*. Recife: Editora Universitária, UFPE.

DHESCA. 2018. Complexos industriais e violações de direitos: O caso de SUAPE, Complexo Industrial Portuário Governador Eraldo Gueiros (CIPS). Report for the Missão de Investigação e Incidência da Relatoria do Direito Humano ao Meio Ambiente da Plataforma Dhesca Brasil.

Dooren, Thom van, Eben Kirksey, and Ursula Münster. 2017. "Multispecies Studies: Cultivating the Art of Attentiveness." *Environmental Humanities* 8 (1):1-23.

Elmhirst, Rebecca. 2011. "Introducing new feminist political ecologies." *Geoforum* 42:129-132.

Gomes, Polyanna. 2022. "Qual a cor das pessoas que morrem e sofrem com chuvas e alagamentos?" *Brasil de Fato*, June 9, 2022. Accessed August 2, 2022. https://www.brasildefatopb.com.br/2022/06/09/qual-a-cor-das-pessoas-que-morrem-e-sofrem-com-chuvas-e-alagamentos.

Gonzalez, Lélia. 2019. "Racismo e sexismo na cultura Brasileira." In *Interseccionalidades: Pioneiras no feminismo brasileiro*, edited by Heloisa Buarque de Hollanda, Ana Cecilia Impellizieri Martins and Maria de Andrade, 24-48. Rio de Janeiro: Bazar do Tempo.

Gutierrez, Grant M., Dana E. Powell, and T. L. Pendergrast. 2021. The Double Force of Vulnerability: Ethnography and Environmental Justice. *Environment and Society* 12 (1):66.

Harrison, Faye Venetia. 1997. *Decolonizing anthropology: moving further toward an anthropology of liberation*. Arlington: Association of Black Anthropologists, American Anthropological Association.

Hemer, Susan R. 2010. "Grief as social experience: Death and bereavement in Lihir, Papua New Guinea." *Australian Journal of Anthropology* 21 (3):281-297. doi: 10.1111/j.1757-6547.2010.00097.x.

Herculano, Selene. 2006. "O clamor por justiça ambiental e contra o racismo ambiental." *INTERFACEHS-Revista de Gestão Integrada em Saúde do Trabalho e Meio Ambiente* 3 (1):1-20.

Hogan, Vijaya K., Edna M. de Araujo, Kia L. Caldwell, Sarah N. Gonzalez-Nahm, and Kristin Z. Black. 2018. "“We black women have to kill a lion everyday”: An intersectional analysis of racism and social determinants of health in Brazil." *Social Science & Medicine* 199:96-105. doi: 10.1016/j.socscimed.2017.07.008.

Hoover, Elizabeth. 2017. *The river is in us: fighting toxics in a Mohawk community*. Minneapolis: University of Minnesota Press.

Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio). 2018. Atlas dos Manguezais do Brazil. Brasília: Ministério do Meio Ambiente. Accessed Aug. 3rd 2022, https://ava.icmbio.gov.br/pluginfile.php/4592/mod_data/content/14085/atlas%20dos_manguezais_do_brasil.pdf.

Jakoby, Nina R. 2012. "Grief as a social emotion: theoretical perspectives." *Death studies* 36 (8):679-711. doi: 10.1080/07481187.2011.584013.

Johnston, Jay, and Fiona Probyn-Rapsey. 2013. *Animal death*. Sydney: Sydney University Press.

Kent, Suzanne, and Keri Vacanti Brondo. 2020. "Years Ago the Crabs Was so Plenty": Anthropology's Role in Ecological Grieving and Conservation Work." *Culture, Agriculture, Food & Environment* 42 (1):16-24. doi: 10.1111/cuag.12235.

Lacerda, Luíz Drude de, Luís Parente Maia, Leonardo Hisley Uchoa Monteiro, Guilherme Marques e Souza, Luis José Cruz Bezerra, and Marcelo Oliveira Teles de Menezes. 2006. "Manguezais do Nordeste." *Ciência Hoje* 24:24-29.

Larsen, Soren C., Jay T. Johnson, and Daniel R. Wildcat. 2017. *Being together in place: indigenous coexistence in a more than human world*. Minneapolis: University of Minnesota Press.

Loomba, Ania. 2015. *Colonialism/postcolonialism*, *The new critical idiom*. New York: Routledge.

Lugones, María. 2010. "Toward a decolonial feminism." *Hypatia* 25 (4):742-759.

Maddrell, Avril. 2016. "Mapping grief. A conceptual framework for understanding the spatial dimensions of bereavement, mourning and remembrance." *Social & Cultural Geography* 17 (2):166-188. doi: 10.1080/14649365.2015.1075579.

Marquetti, Adalmir Antonio, Cecilia Hoff, and Alessandro Miebach. 2019. Profitability and Distribution: The Origin of the Brazilian Economic and Political Crisis. *Latin American Perspectives* 47 (1):115-133.

Marshall, N., W. N. Adger, C. Benham, K. Brown, M. I. Curnock, G. G. Gurney, P. Marshall, P. L. Pert, and L. Thiault. 2019. "Reef Grief: investigating the relationship between place meanings and place change on the Great Barrier Reef, Australia." *Sustainability Science* 14 (3):579-587. doi: 10.1007/s11625-019-00666-z.

Martinez-Alier, Joan, Leah Temper, Daniela Del Bene, and Arnim Scheidel. 2016. "Is there a global environmental justice movement?" *Journal of Peasant Studies* 43 (3):731-755.

Mascarenhas, Michael, Ryken Grattet, and Kathleen Mege. 2021. "Toxic Waste and Race in Twenty-First Century America: Neighborhood Poverty and Racial Composition in the Siting of Hazardous Waste Facilities." *Environment and Society* 12 (1):108.

Mehta, Lyla. 2013. "Water and Ill Being." In *The Social Life of Water*, edited by John R. Wagner, 60-77. New York: Berghahn Books.

Mollett, Sharlene and Caroline Faria. 2013. "Messing with gender in feminist political ecology." *Geoforum* 45:116-125.

Nascimento, Elisa Larkin. 2007. *The Sorcery of Color: Indentity, Race and Gender in Brazil*. Philadelphia: Temple University Press.

Nazarea, Virginia. 2019. Remembering lost things. Lecture for the Department of Anthropology, University of Georgia, October 25th.

Nazarea, Virginia D., and Terese V. Gagnon. 2021. "Yearning and Tending Amid Change." In *Moveable Gardens. Itineraries and Sanctuaries of Memory*, edited by Terese V. Gagnon and Virginia D. Nazarea, 3-15. Tucsan: University of Arizona Press.

NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2022). Accessed Aug. 3rd, 2022, https://www.ncei.noaa.gov/access/billions/, DOI: 10.25921/stkw-7w73

Ogden, Lauro A., Billy Hall, and Kimiko Tanita. 2013. "Animals, Plants, People, and Things: A Review of Multispecies Ethnography." *Environment & Society* 4:5-24.

Pacheco, T. 2008. "Racismo ambiental: expropriação do território e negação da cidadania." *Série Textos Água e Ambiente* 2:11-23.

Paes e Silva, Lays Helena. 2012. "Ambiente e justiça: sobre a utilidade do conceito de racismo ambiental no contexto brasileiro." *e-cadernos ces* 17. doi: 10.4000/eces.1123.

Pereira, Luiz Carlos Bresser. 2013. Empresários, o governo do PT e o desenvolvimentismo. *Revista de Sociologia e Política* 21 (47):21-29.

Perry, Keisha-Khan Y. 2013. *Black women against the land grab: the fight for racial justice in Brazil*. Minneapolis: University of Minnesota Press.

Perry, Keisha-Khan Y. 2016. "Geographies of Power: Black Women Mobilizing Intersectionality in Brazil." *Meridians: Feminism, Race, Transnationalism* 14 (1):94-120.

Pihkala, Panu 2020. "Anxiety and the Ecological Crisis: An Analysis of Eco-Anxiety and Climate Anxiety." *Sustainability* 12 (7836):7836-7836. doi: 10.3390/su12197836.

Pulido, Laura. 2000. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." *Annals of the Association of American Geographers* 90 (1):12-40.

Pulido, Laura. 2017. "Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence." *Progress In Human Geography* 41 (4):524-533. doi: 10.1177/0309132516646495.

Quijano, Aníbal. 2010. "Coloniality and Modernity/Rationality." In *Globalization and the Decolonial Option*, edited by Walter D Mignolo and Arturo Escobar, pp. 22-32. New York: Routledge.

Ramalho, Christiano Wellington Noberto. 2005. *Ah, esse povo do mar! Um estudo sobre trabalho e pertencimento na pesca artesanal pernambucana*. São Paulo: Editora Polis Ltda.

Rede Brasileira de Justiça Ambiental (RBJA). 2001. Manifesto de Lançamento da Rede Brasileira de Justiça Ambiental. Niterói: Ministério do Meio Ambiente. AccessedJune 15th, https://antigo.mma.gov.br/

Rocheleau, Dianne; Slayter-Thomas, Barbara; Wangari, Esther. 1996. "Gender and Environment: A feminist political ecology perspective. In Feminist Political Ecology." In *Feminist Political Ecology*, edited by Dianne Rocheleau, Barbara Thomas-Slayter, and Esther Wangari, eds, 3-23. London and New York: Routledge.

Rogers, Thomas D. 2010. *The Deepest Wounds: A Labor and Environmental History of Sugar in Northeast Brazil*. Chapel Hill: The University of North Carolina Press.

Rosaldo, Renato. 2012. "Grief and a Headhunter's Rage." In *In Anthropological Theory: An Introductory History.*, edited by John R. McGee and Richard L Warms, 524-539. New York: McGraw-Hill. Original edition, 1989.

Rosenfeld, Jordan. 2016. "Facing down 'environmental grief'." *Scientific American*, July 21, 2016. https://www.scientificamerican.com/article/facing-down-environmental- grief/

Rovai, Andre, S. , R. Twilley Robert, A. Worthington Thomas, and Riul Pablo. 2022. Brazilian Mangroves: Blue Carbon Hotspots of National and Global Relevance to Natural Climate Solutions. *Frontiers in Forests and Global Change* 4.

Ryan, John Charles. 2017. "Where Have All the Bornonia Gone? A posthumanist model of environmental mourning." In *Mourning Nature: hope at the heart of ecological loss and grief.* A. Cunsolo and K. Landman, eds. Pp 117-143. Montreal: McGill-Queen's University Press.

Saad-Filho, Alfredo. 2020. "Varieties of Neoliberalism in Brazil (2003–2019)." *Latin American Perspectives* 47 (1):9-27.

Santos, Mariana Olivívia Santana, Aline do Monte Gurgel, and Idê Gomes Dantas Gurgel. 2019. *Conflitos e Injustiças na Instalaçao de Refinarias: Os caminhos sinuosos de Suape, Pernambuco*. Recife: Universidade Federal de Pernambuco.

Scheper-Hughes, Nancy. 1992. *Death without weeping: the violence of everyday life in Brazil*: Berkeley: University of California Press.

Schlosberg, David. 2013. "Theorising environmental justice: the expanding sphere of a discourse." *Environmental Politics* 22 (1):37-55. doi: 10.1080/09644016.2013.755387.

Silverman, Gila S., Aurélien Baroiller, and Susan R. Hemer. 2021. "Culture and grief: Ethnographic perspectives on ritual, relationships and remembering." *Death studies* 45 (1):1-8. doi: https://doi.org/10.1080/07481187.2020.1851885.

Smolen, Jenny Rose, Edna Maria de Araujo, Nelson Fernandes de Oliveira, Tânia Maria de Araújo, and Edna Maria de Araújo. 2018. "Intersectionality of Race, Gender, and Common Mental Disorders in Northeastern Brazil." *Ethnicity & Disease* 28 (3):207-214.

Souza, Margaret. 2017. "Bereavement: An anthropological approach." *Death studies* 41 (1):61-67. doi: 10.1080/07481187.2016.1257888.

Spiegel, Samuel J. 2021. "Fossil fuel violence and visual practices on Indigenous land: Watching, witnessing and resisting settler-colonial injustices." *Energy Research & Social Science* 79. doi: 10.1016/j.erss.2021.102189.

SUAPE. 2020. *Polos do Desenvolvimento do Complexo*. Webpage, (https://www.suape.pe.gov.br/pt/negocios/polos-negocios). Accessed April 11, 2022.

Sultana, Farhana. 2011. "Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict." *Geoforum* 42:163-172. doi: 10.1016/j.geoforum.2010.12.002.

Sultana, Farhana. 2015. "Emotional Political Ecology." *The International Handbook of Political Ecology*:633-645.

Tsing, Anna Lowenhaupt. 2015. *The mushroom at the end of the world: on the possibility of life in capitalist ruins*: Princeton: Princeton University Press.

United Church of Christ. 1987. Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites. New York: United Church of Christ Commission for Racial Justice. https://www.nrc.gov/docs/ML1310/ML13109A339.pdf

Welch, Cliff. 2011. "Lula and the Meaning of Agrarian Reform." *NACLA Report on the Americas* 44 (2):27-30.

Wolseth, Jon. 2008. "Everyday Violence and the Persistence of Grief: Wandering and Loss among Honduran Youths." *The Journal of Latin American and Caribbean Anthropology* 13 (2):311-335. doi: 10.1111/j.1935-4940.2008.00040.x.

CHAPTER FOUR

DIVINE ENERGY: CARING AND REPAIRING WITH AFRO-BRAZILIAN SPIRITUALITY

Introduction

The World Bank (2017) estimates that today around 80% of global merchandise travels by ocean. Nation-states must increasingly adapt to the dispersed nature of capitalist supply chains and the long journeys of global commodity goods. In the mid-2000s, Brazilian President Luis Ignácio Lula de Silva, or "Lula," implemented a comprehensive federal infrastructure development program known as the Growth Acceleration Program (or PAC—Programa de Aceleração do Crescimento) to enhance efficiencies for transnational commerce (Pereira 2013; Saad-Filho 2020; Welch 2011). Lula directed extensive state funds into the merchant marine sector to make Brazil a leading exporter of raw materials, investing heavily in expanding and modernizing Brazil's commercial ports and naval fleets (Ministério da Infraestrutura 2016). Thirty-four public ports have been created or enlarged for commercial export and trade in Brazil in the past two decades. These ports occupy the same territories as the country's vast network of coastal mangrove forests: the world's second-largest mangrove ecosystem (ICMBio 2018). Brazil's coastal mangroves fulfill innumerable critical ecosystem services from the northern state of Amapá to the southern state of Santa Catarina (ibid.). They are also culturally significant for Brazil's many "traditional communities" (*povos tradicionais*), including indigenous and African-descendent communities, whose spirituality, livelihoods, and ecological knowledge are often profoundly interconnected with these dynamic ecosystems (ibid.).

Recently, PAC development funds transformed a small public utility port between the coastal communities of Cabo de Santo Agostinho (Cabo) and Ipojuca into a mega port industrial complex (the Suape Port Industrial Complex or CIPS). Today complex occupies over 33,359 acres of territory and houses over 100 heavy industries, including national companies like Brazil's oil and gas company PETROBRAS, and numerous private global enterprises including Toyota, Coca-Cola, Unilever, Bunge, and Shineray, among other petrochemical, construction, thermoelectric energy, preform plastic, and pharmaceutical industries (Suape 2020). In coastal Pernambuco, the mega-development is exacerbating territorial conflicts between the complex and local Afro-descendant traditional communities, who are increasingly struggling to access the ancestral territories where they have lived, farmed, fished, and collected shellfish and wild fruits for generations (Santos et al. 2019). The region is well-known for centuries of sugarcane plantation agriculture dating to the 1530s (Andrade 2001; Scheper-Hughes 1992). Historic racial inequalities over land ownership mean that Afro-Brazilian communities in Cabo and Ipojuca often live as 'posseiros' or squatters on abandoned plantation land (*terras do engenho*). A human rights investigation estimated that CIPS had displaced 26,000 residents to expand industrial manufacturing and export facilities (DHESCA 2018). Around 7,000 posseiros remain within 'port territory' and regularly face violence and threats from the port complex's private security (ibid.). Many communities CIPS forced to leave were bifurcated and settled in urbanized municipalities, contributing to the *favelação* or ghettoization of many of Cabo and Ipojuca's Afro-Brazilian rural populations. Dispossession from beloved ancestral spaces and cultural practices of fishing, farming, and collecting has contributed to widespread depression and even premature death among elders of these communities. However, many Afro-Brazilian residents within these communities demonstrate an extraordinary capacity for resilience and strength.

Some have devoted themselves to community organizing, while others draw upon regional identity and cultural traditions to carve out personal moments of joy amidst overwhelming structural hardship.

Latin American and Caribbean development is widely theorized through the lens of 'coloniality' or how colonial relations of inequality have shaped legacies of trauma, extraction, dispossession, and environmental ruin in Latin America and the Caribbean (Escobar 1995; Lugones 2008; Mignolo 2010; Quijano 2010). However, Latin American and Caribbean anthropologists have recently highlighted the shortcomings of focusing exclusively on the "phantom pains of colonialism" (Drotbohm 2022; Freeman 2022; Thomas 2022). This body of work asks essential ethical and practical questions about anthropologies of Latin America: how can Latin American and Caribbean anthropology attend to the real conditions of everyday life while also honoring the full spectrum of human existence (Drotbohm 2022; Freeman 2022; Thomas 2022)? Exploring this question, I illuminate how black feminist geographies—especially creative resistances as articulated by Katherine McKittrick—can provide the epistemic space to conceptualize both the 'old imperialisms' of colonial/plantation afterlives (Thomas 2022) and the intimate, personal, and deeply emotional ways people pursue sovereignty and repair (Drotbohm 2022; Freeman 2022). Tracking geographies of creative resistance in Pernambuco through time, this research elucidates how Afro-Brazilian spiritual orientations became a creative form of subterfuge during slavery and how syncretic religious orientations continue to shape personal and communal efforts for healing and repair. I demonstrate how Afro-Brazilian religious orientations centered on creative practices of dance, music, and more-than-human sociality blend with aspects of Christianity to become an invaluable source of strength for personal and collective struggle. Ultimately I argue that syncretic spiritual practices that emphasize dance,

music, and more-than-human kinship provide vital junctures of autonomy and relationships of tenderness and care that poor Afro-Brazilians do not experience from the state. Thus, through these personal and communal, affective, and joy-making practices, Afro-Brazilians in Cabo and Ipojuca strengthen themselves to confront the structural oppression and uncertainty of state-sponsored socio-political and environmental injustices.

Theoretical Orientations

Thirty years later, anthropological post-development critiques of the 1990s continue to dominate theoretical debates about capitalist development, especially in Latin America and Caribbean contexts (Crewe and Axelby 2013; Grillo and Stirrat 2020; Mollet 2017). Inspired by Foucault's emphasis on discourse as an instrument of power with hidden motives, Escobar's *Encountering Development* (1995) critically evaluated Latin American development discourses and their veiled projects. For Escobar, Western understandings of social and economic progress have overwhelmingly shaped development discourses. Rather than modernity (the promise of development) being a pragmatic goal for all nations, Escobar believes development is a 'historically produced discourse' under which "non-European areas have been systematically organized into and transformed according to European constructs" (1995,6-7). For Escobar, intrinsic to development ideologies is colonial logic that considers Global South countries lacking or degenerate (Crewe and Axelby 2013,13). Rather than helping impoverished countries catch up to the Global North, development as a Western imperial project to control and manage the Global South (Escobar 1995). Through his detailed case study in Columbia, Escobar uncovered the 'regimes of representation' within development discourses and their veiled social and political objectives (1995,15). In his later work, Escobar joins post and decolonial scholars

in depicting modern development as a mask hiding the true face of *coloniality*, or the continued presence of colonial "logic[s] of oppression and exploitation" (Lugones 2008; Mignolo 2010, 9; Quijano 2010). They argue that colonialism (in the guise of modernity) persists in the present day in various ways, especially in Western nations' hegemonic influence over global development agendas and financial institutions (Mignolo 2010; Quijano 2010).

While necessary for illuminating how capitalist development creates both neocolonial relations and social inequalities, Latin American and Caribbean anthropology recently has reflected on the shortcomings of 'coloniality' frameworks for Latin American and Caribbean research (Drotbohm 2022; Freeman 2022; Thomas 2022). This body of work poses significant ethical and practical questions about anthropologies of Latin America: how can Latin American and Caribbean anthropology attend to the actual conditions of everyday life while also honoring the full spectrum of human existence? Drotbohm (2022), for example, points out that anthropologists have focused mainly on human suffering from the 'phantom pains of colonialism.' We have depicted Latin America and the Caribbean with "innumerable losses to mourn, with its violent history of colonialism, slavery, indigenous extinction, and plantation culture." (433). Similarly, Thomas (2022) grapples with reframing the 'new lives and afterlives of coloniality' in Latin America and the Caribbean. Thomas, herself has contributed to the corpus of anthropology on 'old imperialisms' of Latin America, including understanding the historical "legacies of conquest and colonization" through analyzing contemporary dispossession, resource extraction, and migration (2022, 242). While Thomas makes clear that these studies are critical for understanding inequality in Latin American and Caribbean contexts, such 'old imperialisms' are "not capacious enough" because "they encourage us to see the sphere of the transnational as a problem of racialized poverty," instead of a "realm of repair" (Thomas

2022, 242-243). Thus Latin American and Caribbean scholars should ask, "how can critical engagements with Caribbean contexts offer up models of liberatory imagination that take us outside of frameworks that privilege nationalism and other Western understandings of belonging and community?" (243). For Thomas, the answer to this question lies in exploring how interlocutors define and pursue sovereignty:

> " The Caribbean teaches us, therefore, that sovereignty is embodied practice, process, and dialogue. It teaches us that we must move beyond liberal juridical legal definitions to embrace the relations among the political, the spiritual, and the sensual…that belonging… cannot be reckoned through ever-greater adherence to Western norms of discipline, progress, and respectable citizenship; that crisis, creativity, and care are co-constituting; and that attunement to the affective dimensions of experience opens portals to more capacious considerations of the engagements that might arise from overlapping histories of dispossession, and ultimately, to repair." [Thomas 2022, 251-252]

Similarly, Drotbohm (2022) argues that anthropology should make an epistemic move from understanding colonial legacies to how interlocutors work to build meaningful futures and repair what is broken, including their environments (2022, 434). For Freeman (2022), Latin American and Caribbean anthropology needs more capacious exploration of the personal, emotional, and sensual/affective dimensions of 'plantation afterlives.' Though she argues that affect provides an ideal theoretical framework for engaging the plantation, as it "illuminates certain kinds of intensities, especially those embedded in collective trauma, violence, and ruptures of slavery, and in the powerful drive for freedom, sovereignty, and self-determination" (Freeman pg.). Nevertheless, affective explorations should also go beyond domination and resistance binaries (Freeman 2022). The "tender, personal spaces of individual subjects," Freeman argues, are largely left out of anthropological analyses of Latin America and the Caribbean (444). To Freeman (2022), "plantation afterlives are refracted through feelings, at once political and personal, social and subjective" (2022, 445). Thus, to fully understand Latin

American and Caribbean plantation contexts (or afterlives), scholars must expand their inquiry to include everyday life's personal, emotional, and intimate dimensions.

This project suggests that attending to black feminist geographies—especially creative resistances as articulated by Katherine McKittrick—provides the epistemic space to conceptualize both the 'old imperialisms' of colonial/plantation afterlives and the intimate, personal and deeply emotional modes of healing and repair (Drotbohm 2022). In *Plantation Futures* (2013), McKittrick conceptualizes the plantation as a 'threshold' for understanding racial violence and uneven racial geographies, but also how the plantation might be meaningful for envisioning different futures for the African diaspora. Building from Beckford's (1972) 'plantation thesis,' McKittrick reiterates how plantations "instituted an incongruous racialized economy that lingered long after emancipation and independence movements in the Americas; and the protracted colonial logic of the plantation came to define many aspects of post-slave life" (2013, 3). Despite differences, plantations exact particular circumstances of violence that have shaped contemporary black geographies, including anti-black violence, sexual assault, racial surveillance, and a racialized economy (2013, 9-10). However, plantations also demanded creative survival strategies, or 'secretive histories' (McKittrick 2013).

For McKittrick (2013), imagining a future solely linked to a brutal past leads to a hopeless future predicated on violence. Therefore, she elaborates how secret histories of creative resistance (blues music, maroon communities, garden plots, and other forms of creative subversion) can help envision a different plantation future for the African diaspora (2013). For example, drawing from Wynter's (1971) essay "Novel and History, Plot and Plantation," she illuminates how garden plots—or the small parcels of land where enslaved peoples grew their food for subsistence and income generation—became the basis for undermining the plantation

system (McKittrick 2013, 10). These plots contributed to the "growth of narratives, food, and cultural practices that materialize the deep connections between blackness and the earth and foster values that challenge systemic violence" (ibid.). It is here that McKittrick believes that alternative plantation futures are possible, recognizing how enslaved peoples challenged slavery's dehumanizing logics through innovative, resourceful practices. Therefore, plantation geographies are interlinked with geographies of creative subversion. McKittrick writes, "reading the plantation and its future as put forth here—underwritten by life, the poetic, the theoretical and the creative, and shaped by a history of violence—is guided by the hope that this discussion will, in a small way enable new discursive space. Indeed, it is precisely because the plantation has 'a built-in capacity to sustain itself' (quoting Beckford) that we do well to reimagine its future" (2013,5).

Through her exploration of how US black feminist artists reconceptualize plantations through creative practice, McInnis extends McKittrick's work (2019). Through creative reimagining of the plantation in dance, music, public art, and creative writing, McInnis illuminates how black women artists engage in practices of *reterritorialization*, or "the process by which African Americans attempt to reconcile and imagine a new relationship to land, agriculture, and the earth, outside of and directly opposed to the exploitative racial capitalist regimes engendered by the plantation, sharecropping, and debt peonage" (McInnis 2019, 744). Though McInnis and McKittrick make invaluable contributions to understanding plantation afterlives (and futures), their work draws exclusively from a North American context, where plantations are large institutions of the past. Like other parts of Latin America and the Caribbean, in Pernambuco, sugarcane plantations have persisted since the 16th century and, in many places, remain one of the few opportunities for wage labor for many poor Afro-Brazilians. This research

provides a detailed account of how creative resistance could be theorized from the perspective of *ongoing* plantation agriculture contexts of the Global South. Specifically, through exploring Afro-Brazilian creative resistances and their 'secretive histories' over time, I illuminate how African religious beliefs and practices centered on practices of dance, music, and more than human sociality, blended with aspects of Christianity to become an invaluable source of strength for personal and collective struggle.

African Diaspora and Spirituality in Brazil

In order to demonstrate how Afro-Brazilian spirituality influences personal and communal repair, it is necessary to track the 'secretive histories' of religious practice as creative resistance among the African diaspora in Brazil. Specifically, I contextualize how syncretic religious orientation that draws on music, dance, and more-than-human sociality became an essential resource for personal and communal repair among African-descendent peoples in Pernambuco. The forced transplanting of 12.5 million people during the Trans-Atlantic Slave Trade generated cultural mixture on a global scale. Whether shipped to North or South America or the Caribbean, the African diaspora carried diverse religious beliefs and practices to new cultural and ecological contexts (Cardoso 2016; Voeks 1997). While spiritual practices were diverse among the diaspora from different parts of Africa, commonalities existed about "the nature of human existence and its relationship to the universe" (Harding 2000, 19). This "shared orientation" or cosmology "explains the basic functioning of the universe; and gives meaning an order to social relations, societal institutions, and the state (or process) of being human" (ibid.). Harding argues that it is, above all, a "relational, ontological" orientation—"a way of perceiving connections and influences among all presences (material and immaterial) in the cosmos" (ibid.). While aspects

of these relational ontologies remain stable, others are more fluid, adapting to diverse contexts (Daniel 2005; Harding 2000; Voeks 1997).

Like in Haiti and Cuba, in Northeast Brazil, the over 2.6[11] million enslaved peoples arriving through the Trans-Atlantic Slave Trade had complex belief systems from Yoruba and Fon traditions of West Africa. These beliefs and practices were complex religious amalgams comprised over centuries of trade, exchange, and intermarriage in the Republic of Benin and Nigeria—evidence of what Daniel calls intra-African syncretism (Daniel 2005, 2). African religious beliefs were central to the formation of Northeastern Brazil's culture and society and, in many places, maintain strong cultural influence (Johnson 2002; Landes 1947; Góes Jr 2013; Prandi 2004). The most common Afro-Brazilian religions in coastal regions (litoral) of Pernambuco—where 70-100% of the population identifies as black or brown/mixed race—are Candomblé and Umbanda[12] (IBGE 2010a, IBGE 2010b). Initially practiced secretly, the 'African possession religion' known as Candomblé became more openly practiced after Brazilian abolition in 1888 (Cole 1994; Prandi 2004). Harding (2000) argues that Candomblé was formed as a response to the "existential situation of extraordinary personal disaggregation and oppression" among Afro-Brazilians in the Northeast (2000,77). Candomblé priests and practitioners worked to overcome social, physical, and ecological 'imbalances' they regularly experienced with the institution of slavery through "healing and cultivating axé" --- the active lifeforce that they believe sustains all life (Harding 2000, 77). Through healing and cultivating axé, practitioners could experience something they were frequently denied: the "right

[11] This number is from Slave Voyages, widely considered the most accurate database. Of the 5.8 million enslaved people transported to Brazil, Pernambuco received 824,313, while 1,545,007 enslaved people disembarked in the neighboring state Bahia. By contrast, 305,326 enslaved people arrived in the entire United States. Accessed from: https://www.slavevoyages.org/assessment/estimates

[12] Umbanda evolved from Candomblé in the 19th century and spread in the early 20th century, syncretizing Candomblé elements with indigenous and Iberian spiritism (Prandi 2004).

relationship between human beings and among humans, the natural world, and the community of spirits" (ibid.). Through healing individual and "collective imbalances," Candomblé communities carved more hopeful "alternative spaces of black being" (Harding 2000, 78).

Candomblé followers believe in the power of the Orixás or deities that are spiritual manifestations of natural forces, for example, thunder and lightning (Xangô) or freshwater (Oxún), among many different entities (Cole 1994). The Orixás are considered 'emissaries' to a Supreme Being who is the source of axé (aché in Cuban Yoruban practices). Candomblé (along with Cuban Yoruba and Haitian Vodou) is considered a dance and music religious system because the Supreme Being and spiritual transformation is accessed through ritual dance and music performances (Daniel 2005, 2). Through partially choreographed, partially improvised ceremonies, the Orixás' mount' or 'ride' dancing spirit mediums, regenerating axé for practitioners (Cole 1994; Daniel 2005). Through inciting and sustaining axé, dance and musical performances invoke the Orixás to the human realm "to give their community of followers wisdom and advice" (Daniel 2005, 85). Within the spiritual space of the Candomblé communities (terreiros), followers can generate "collective axé": a collective energy "whose value is greater than the sum of the individual energies" (Voeks 1997, 80). Thus, *mutualism* is a central feature of terreiro communities, where each practitioner contributes their axé to benefit the group (Voeks 1997, 81).

In addition to receiving divine wisdom and generating axé, Candomblé terreiros are important socio-political institutions, particularly for those marginalized from socio-economic and political power, providing necessary support networks and mutual aid to worshipers, especially women (Cole 1994; Landes 1947). They are also critical "sites of leadership, social advocacy, and economic power" (Daniel 2005, 58-59) as well as crucial spaces of joy and

pleasure for Afro-Brazilians in the Northeast (Daniel 2005; Harding 2000, 79). Daniel (2005) emphasizes that, like other African diaspora dance traditions, ritual dance performances within Candomblé terreiros provide vital embodied knowledge and "social medicine" for healing from racial inequalities:

> "Despite the incredible labor demands and resulting physical drain on the African-derived population during enslavement and the post-emancipation period, dancing and music-making have offered some relief, potential rejuvenation, and the promise of ecstasy or transcendence. In the Americas, the dancing body allowed temporary escape from the extraordinary hardships of enslavement and continued as a primary vehicle for spiritual communication and for both spiritual and artistic expression." [Daniel 2005, 61].

In addition to being dance-centric, Candomblé is innately more-than-human; Yoruba religious traditions were "fundamentally animistic" where "its gods were nature gods, personifications of physical elements: wind, thunder, water, trees, and soil" (Voeks 1997, 160). As a result, Yoruba ontologies are rooted in place because "reverence and meaning were attached to sacred spaces: towns, hills, forests, and rivers." (Voeks 1997, 160). For many Brazilian African descendant populations, plants, animals, and other natural phenomena also have axé (Pagnocca et al. 2020; Voeks 1997). Yoruba cosmologies were relational ontologies and ecological knowledge systems that included ritual, medicinal, and other practices for healing the body, mind, and broader societal imbalances (Harding 2000; Pagnocca et al. 2020; Voeks 1997). Initially, healing practices utilized ecological knowledge from the African continent—however, African priests had to adapt to new ethnobotanical contexts heavily influenced by plantation agriculture and other anthropogenic forces (Voeks 1997). Afro-Brazilian pharmacopeias centered "ethnobotany adapted and modified by fire, machetes, cattle hooves, and monoculture…the sacred leaves of candomblé are, with few exceptions, sacred shrubs, sacred weeds, sacred cultivars" (1997, xiv). Gradually, Candomblé healers' rich plant knowledge evolved to incorporate indigenous and Iberian European remedies for healing the body and spirit

(Pagnocca et al. 2020; Voeks 1997). Voeks argues that Candomblé persists because of its ability to adopt aspects of European and other belief systems:

> In Brazil, Africans and their descendants were able to forge a successful New World belief system precisely because they were willing to absorb, eagerly and without apology, relevant spiritual folk and medicinal practices from their European captors and the Amerindian coworkers. Given the limitations of geography and the harsh reality of slave existence, rigid adherence to immutable beliefs and practices was neither feasible nor advantageous... rather than a weakness, this malleability proved to be a potent defense against obliteration.[Voeks 1997, xv]

Because enslaved populations were widely illiterate, these Candomblé beliefs and practices were primarily passed down orally, through ceremonies, stories, recipes, medicines, and other information disseminated "from person to person, from generation to generation" (Voeks 1997; xv).

Afro-Brazilian spirituality is constantly evolving and looks very different today than their forebears' religious practices (Harding 2000; Voeks 1997). Today many black Brazilians consider the adoption of African religious beliefs a political act, in addition to a spiritual one (Burdick 1998; Selka 2008). The Movimento Negro Unificado (Unified Black Movement—MNU) in Brazil pushed for adopting African-derived spirituality as a radical act of racial consciousness and black appreciation (Burdick 1998; Selka 2008). Black feminist scholars and activists in Brazil consider African cosmologies and perspectives to be an epistemic departure from white, hegemonic knowledge and source they can draw from to build a new political identity based on afro-spirituality and ancestral wisdom (Carneiro 2016; Cardoso 2016; Gonzales 2020). Indeed, Cardoso (2016) suggests that Afro-Brazilian cosmologies are critical for decolonizing knowledge precisely because they are "constituted in opposition to the white Western worldview." Therefore, the collective experiences of African-descendant peoples can

serve as a "model for the reorganization of social relations in the Black diaspora" (Cardoso 2016, 4).

Still, ethnographers and historians reject that African-derived religions represent a "pure" form of spirituality that completely departs from European influences (Burdick 1998; Daniel 2005; Selka 2008; Voeks 1997). Afro-Brazilian spirituality in Northeast Brazil is inherently syncretic, and many scholars argue that African religious beliefs and practices endure partly because of their ability to adapt to and integrate aspects of Christianity (Cole 1994; Harding 2000; Voeks 1997). In places in Northeast Brazil, Candomblé Orixás became "loosely associated with Christian Saints and symbols," which the Roman Catholic Church accepted as evidence of Afro-Brazilians' status as "practicing Catholics," which enabled them to continue with their Candomblé ritual life (Cole 1994, x). Furthermore, the Iberian Catholic Church's elaborate liturgical celebrations, processions, and consecration of the Virgin Mary resonated with Afro-Brazilian ritual celebrations of the Orixás (ibid). The shared appreciation for religious "spectacle and festiveness" contributed to the "integration of Catholic and African rituals in the emergent Afro-Brazilian religions" (Cole 1994, x).

Another important reason for the syncretic nature of Afro-Brazilian religious life in Northeast Brazil, especially Pernambuco and Bahia, were black brotherhoods or *irmandades* (Harding 2000; Voeks 1997) From the 13th century onward, the Portuguese organized Catholic brotherhoods (irmandades) that to promote fraternal relationships and mutual aid among believers. In colonial and imperial Brazil, these brotherhoods were widespread and segregated by nationality, ethnicity, race, class, or even occupation (Harding 2000,122). Both enslaved and free Afro-Brazilians were able to establish or join black Catholic brotherhoods, each one devoted to the veneration of a particular saint that they honored with liturgical celebrations (Harding 2000;

Voeks 1997). However, outside of dedicating time to Catholic activities, Afro-Brazilian brotherhoods provided critical spaces "in which blacks could exercise autonomy over their affairs" (Harding 2000, 122). As long as they were outwardly adhering to Christian tenants, black brotherhoods were places where African language, traditions, and religious beliefs could be observed, and the "bonds of oppression could be temporarily loosened" (Voeks 1997, 155). Indeed, Harding (2000) argues that "African religions survived most fully in the places where ethnically or racially segregated lay Catholic confraternities were encouraged and where blacks were allowed to dance outside the churches after mass or during processions" (123). Thus, black Catholic brotherhoods were critical for the "maintenance, development and reorganization of African religious beliefs in Brazil" (ibid.).

In coastal Pernambuco, enslaved Africans established the Catholic brotherhood *Irmandade do Nossa Senhora do Rosário dos Homens Pretos* (The Black Brotherhood of Our Lady of the Rosary) and by 1630 had erected a church in Recife, *Igreja de Nossa Senhora do Rosário dos Homens Pretos* (The Church of Our Lady of the Rosary of the Black Brotherhood). The brotherhood allowed space for enslaved and free Africans and their descendants to speak in the native languages of their home nations, consult elders and healers, and perform certain ancestral or religious rites and practices in the best possible manner (Vainsencher 2009). The black brotherhoods also provided vital space for being otherwise: for expressing "charity towards their neighbor and human solidarity" so that they could "survive the pain of slavery and exile" (Vainsencher 2009).

Members of Pernambuco's black catholic brotherhood belonged to different ethnic 'nations' of Africa, including Angola, Congo, Mozambique, Carinda, Benguela, among others (Vainsencher 2009). Many of its members remained loyal to their home nations, and the

brotherhood's first documented festivity was to celebrate the coronation of the King of Congo in 1711 (ibid.). This ceremonial procession would be the first of over a century of coronation festivities for the Kings and Queens of Angola, Cabinda, Congo, and other African nations hosted by the brotherhood and documented in their records (Vainsencher 2009). These celebrations were decidedly different from traditional catholic processions, incorporating extensive drumlines and dances that were not traditionally part of the catholic liturgy (ibid.). Instead, the coronation celebrations resembled those in Africa, with rituals and processions in *maracatu*, an expressive, costumed, musical dance performance and procession (ibid.) Archival research for this study revealed that even during the height of slavery, Pernambuco's enslaved population would regularly occupy public space by dancing maracatu in the streets, much to the dismay of the wealthy planter class. Maracatu today continues to be a popular tradition during carnival, where diverse maracatu 'nations' from different parts of Pernambuco spend weeks making elaborate costumes and come from long distances to Recife to dance in ceremonial processions.

Figure 4-Maracatu performers from Araçoiaba, PE in Recife for Carnaval in February, 2020. Sign indicates the maracatu 'nation' was founded in 1914.

Leaning into Cultural Traditions: Movement, Music, and Dance

Aspects of Afro-Brazilian religiosity, particularly Candomblé, are deeply entangled with popular culture in Northeast Brazil—what Johnson (2002) refers to as "public candomblé," or the "Candomblé's expansion beyond the ethnic markers and beyond the bounds of traditional sites of ritual practice" (151). In Pernambuco, one way Candomblé has become 'public' is through axé music, which has become a popular music genre outside the sacred space of Candomblé terreiros (Goes Jr. 2013; Seabra 2022). 'Axé music' is also called 'Brega', which refers to the "low class or tacky" music associated with the popular classes (Góes Jr 2013, 37). A recent style called Brega Funk has evolved and is similar to US hip hop. In the *terreiro,* or

religious spaces, dancing serves a slightly different purpose; dance occurs as part of a ritual possession by the essence of a deity or Orixá (ibid.). However, axé music and ritual dancing are interrelated practices that serve the same purpose of "uniting the body and spirit through rhythm, chants, a physical activity meant to create an agitation through the celebration of life, sexuality and the mystical" (Góes Jr 2013, 42). For Candomble practitioners, music *is* axé, because it is produced through the body's 'ecstatic energy' (Góes Jr 2013).

Many of Brazil's white upper classes have historically discriminated against axé and Brega music because it tends to draw crowds that create public annoyances like blocking roads and plazas (Seabra 2022). It is characterized by strong percussive rhythms and repetitive refrains and today is often accompanied by synthesizers and samplers (Góes Jr 2013). The strong drumbeats and repetitive refrains paired with lyrics about sexuality, love, and positive aspects of life are intended to provoke dancing (ibid.). However, the focus on life's joys does not mean the music is not "deep" or meaningful. On the contrary, Moehn (2007) and others (Pardue 2008; Reiter and Mitchell 2008; Burdick 2013) have illustrated the importance of popular music like hip hop and Brega for promoting racial consciousness and positive racial identity in Brazil. Music also provides a crucial *audiotopia* (Kun 2005), especially for poor racialized communities. Extending Kun's concept to the Brazilian context, Moehn (2007) suggests that "popular music constitutes an alternative 'country' to which one has the right to 'exile' for a few transcendent minutes" (183). While some may "seek refuge in this space to cope, others may mobilize it for more radical change in a society of extreme social stratification" (2007, 185). Pernambuco's Brega funk movement is doing exactly that. Though it is often discriminated against and sometimes criminalized, the Brega funk scene in Pernambuco (and its financial success on digital streaming platforms) is one hopeful aspect of life for marginalized communities (Seabra 2022).

However, as one artist explained, it is also more than that: “Brega funk is an essential tool for the construction and the development of young people of the periphery’s autonomy and self-esteem, and above all, an alternative path for these same young people to stay far away from violence” (Seabra 2022).

Music and dance, whether spiritual or secular, plays an integral role in personal joy and healing, especially when doing physically demanding labor. Pernambuco’s rich history of music, from *Axé* or *Brega, Brega Funk, Frevo* (Pernambuco’s unique Carnaval dance popularized by the blocos in the nearby town of Olinda) and *Maracatu* are significant cultural resources that instill a sense of Afro-Brazilian pride and belonging. People frequently listed popular music, and even *hinos* (hymns or spirituals), as *audiotopias* (Kun 2005)—or critical mental escapes or little escapes from the generalized stress or the uncertainty of living close to the Suape Port Industrial complex. Despite all she has been through, Nadia explained that music and dance were foundational for her ability to find joy in life: “I like to dance, I like to have a beer… I like to enjoy myself… And still, today, dancing is everything to me.” [Nadia, interview, 11-25-2020]. During the interviews, we often began by asking dull questions about work, land and natural resources, and interlocuters' daily lives, but when asked about *music*, many people seemed to light up as if we were finally getting to the good part of a movie.

> Interviewer: What do you like to hear?
> J: The old music.
> Interviewer: EM: Those bregas antigas?
> J: Yes. Axé, bregas antigos.
> Interviewer: EM: Do you like to dance?
> J: I love it!
> Interviewer: And what do you dance?
> J: Oxe (expression) I dance to everything. Frevo, maracatu, reggae, whatever you have, I am dancing. [Júlia, Interview, 02-25-2021]

Some residents recall dancing into the early morning hours during the religious holidays São João, part of the *Festa Junina* summer holidays that celebrate the birth of St. John the Baptist. Others recall the blocos during Carnaval as a joyful time where stress is relieved and joy cultivated through music, dancing, and eating with the community. In a time when many poor women are working low-paid strenuous jobs as domestic service workers or in the sugarcane fields as manual laborers, the ubiquity of smartphones and personal radios allows women to listen to music to feel less overwhelmed by their exhausting jobs. Frequently after their salaried jobs, women have to go home and do the majority of the household labor. Music motivates also helps women keep going while doing housework or to even beginning housework. One woman explained that she is up at 4:30 in the morning to go walking and to listen to her music, which gives her much-needed peace before she has to start cleaning and cooking for her family at five am. Marisqueiras, whose work collecting shellfish in the mangroves and ocean prevents them from taking their cellphones or radios, often sing to themselves while working.

Another way 'public candomblé' music and dance becomes a source of healing for Cabo and Ipojucan residents is through the practice of community healing circles or *rodas*. The roda is a vestige of Afro-Brazilian religious practices, especially Candomblé ceremonies in the terreiro (Harding 2000). Practitioners often stand in a circle and move to expand and contract the circle (Daniel 2005; Harding 2000). The circle never fully closes to leave space for the energetic presence of axé (Daniel 2005). Today *rodas* have been claimed for a new purpose: women confronting injustices organize a circle and, moving together, commune with one another about their collective struggle. Similar to traditional spaces of terreiros, each individual participating in the roda contributes their presence and energy to elicit collective healing.

Community Organizing: Rádio Mulher (Women's Radio) and the Women's Center of Cabo (Centro das Mulheres do Cabo)

Like terreiros and the irmandades, the Women's Center of Cabo (Centro das Mulheres do Cabo) provides a vital space for cultivating racial and gender consciousness and 'alternative space[s] for black being and citizenship' (Harding 2000). Through educational programs, workshops, and events, the Center tirelessly works to raise political awareness among Cabo and Ipojuca residents. In a region with high rates of illiteracy, the *Rádio Mulher* radio program—whose tagline is "cheia do axé" or full of axé—has been a powerful force for helping women of Cabo and the surrounding areas raise what Paulo Freire has called 'conscientização' (or critical consciousness). Combining music and discussion of every imaginable topic, from domestic violence to politics and regional news, the radio program (also on Facebook) helps remote women gain awareness about the importance of Afro-Brazilian identity and injustices within their community. The program also normalizes frowned-upon topics about sexuality and the body, especially contraception and birth control. A persistent theme in the program is the Suape Port Industrial Complex's (CIPS) impact on traditional communities, especially women. In one episode called "Mulheres, Corpos and Resistência contra os Megaprojetos em seus Territórios" (Women, Bodies, and Resistance against Megaprojects in their Territories), the invited speakers talked about how the port complex infringes on human rights. Specifically, the gendered division of labor in traditional fishing communities means that women are most often marisqueiras or shellfish collectors, while men are primarily fishers. Men often fish from boats, whereas women have their bodies in the waters as they walk and wade around in search of shellfish. Because of this, women embody unnecessary toxic risks from CIPS's pollution of the surrounding air, soil,

and water. The Rádio Mulher discussants talk about this as a direct outcome of 'structural machismo.'

One of my last memories in Cabo de Santo Agostinho before leaving the country due to Covid-19 was attending International Women's Day (Dia Internacional das Mulheres) festivities with Centro das Mulheres. From early afternoon to late evening, women of Cabo and surrounding areas walked through the streets of the municipality of Cabo, chanting, singing, and dancing. Women's signs reflected the diversity of interests being represented: some advocated for LGBTQ+ tolerance, some wanted to end high rates of domestic violence and femicide, and others reflected the desire for sustainable communities. One particularly memorable participant was dressed as a phallus and pragmatically passed out condoms to participants and passersby. Through the diversity of signs, one common thread was visible in the numerous shirts, signs, and even headbands that seemed to comprise a large part of the messaging, the message: "Eu Voto Em Negro," or "I vote Black." In a country with the largest African diaspora population (55.9 million), historically only a small percentage of elected leaders have identified as black or "negro" (Carneiro 2016). The Centro das Mulheres do Cabo "CMC" has been at the forefront of helping black women representatives in Cabo find a voice by organizing talks with candidates at the centers. They also create social media content about the challenges black women candidates face, from inadequate funding to persistent racial stereotypes. Through their program Rádio Mulher, CMC also uses radio to encourage rural voters (who often have less social media access) to vote for black women. In addition to women, CMC has launched other programs to develop critical consciousness through their program *Meninas em Movimento*, which through classes focused on dialogue and critical thinking, to exercises such as voting simulations, among other activities geared at helping women become political *subjects* rather than victims. CMC's efforts

not only support women in their bodies and communities but help them become aware of the forces that oppress them. Furthermore, ultimately, CMC helps them become political subjects that can potentially change those oppressive forces. These initiatives are just two examples of the radical feminist politics that the Center embodies.

F**órum Suape: Politics, Art and Education for Low-Literacy Populations**

When I first visited Cabo in 2018, I came across Fórum Suape before even seeing the Centro das Mulheres do Cabo (CMC), a place colleagues at the Universidade Federal de Pernambuco told me to scope out during exploratory research in 2018. I was surprised by the subtitle on their sign that read "espaço socioambiental," or socio-environmental space. I thought the phrasing "socio-environmental" was reserved for academic circles, but a community organization using the term in rural Northeast Brazil. Forum Suape is next door to the Centro das Mulheres do Cabo, and the women there took pity on the out-of-place *gringa* when I arrived at CMC when no one was in the building. They generously invited me inside to wait, giving me coffee and cookies in typical Brazilian fashion. As we sat drinking coffee, members of Fórum Suape told me about the Suape Port Industrial Complex and all their efforts to help displaced residents and residents fearing displacement. They offered me some of their newsletter pamphlets, and the style immediately struck me. The pamphlets were printed in the traditional Northeast Brazilian printmaking style called *cordel*. However, the style was not the only striking thing about the pamphlet. Traditionally, cordel *folhetos* or pamphlets have a distinct artistic aesthetic with illustrations and poems of folktales. The Fórum Suape folhetos I was handed were in a cordel style, yet instead of a folktale the pamphlet communicated practical suggestions for dealing with violence caused by CIPS. Next to the signature illustration, the cover read: "O que

fazer em caso de violência practicada por Suape?" (basically meaning 'what do to in case Suape practices violence'). Through a series of illustrated suggestions, the document outlines what to do if CIPS is destroying home gardens, tearing down houses, threatening residents, or stealing building materials (I later learned these were all common CIPS tactics).

The illustrated pamphlet is just one of many creative resources that Fórum Suape uses to engage populations with high illiteracy rates about CIPS's environmental injustices. Most recently, they have joined the popular education group Instituto Pacs in a didactic art project, "Mulheres-Territórios: Mapeando Conflitos, Afetos, and Resistência" (Women-Territory-Mapping Conflicts, Impacts, and Resistance) that links Cabo and Ipojuca's struggles with CIPS to larger environmental injustices from mega development projects throughout Brazil. For each illustrated story, the authors illustrate how injustices arising from megaprojects disproportionately affect women, linking women's struggles throughout various Brazilian states. By connecting Cabo and Ipojuca's challenges with displacement, pollution, and violence with more significant environmental injustices linked to mega-development, Fórum Suape helps locals connect their struggles to broader injustices and not feel alone in their experiences of displacement. Linking local mega-development abuses to broader structural inequalities also helps Fórum Suape build networks of solidarity and resistance across numerous Brazilian states. Perhaps the most popular form of creative art-based resistance led by Fórum Suape is their initiatives, "Rios Livres Mangues Vivos" and "Projecto Mangue Mulher" (Free Rivers, Living Mangroves, and The Woman Mangrove Project). In these YouTube-based environmental justice initiatives, local community members tell the often untold stories of traditional communities who continue to suffer from CIPS' development initiatives through short clips and videos. Among the most devastating environmental changes to occur with the installation and expansion of Suape

was an enormous barricade blocking the flow of the Tatuoca River (Rio Tatuoca), a culturally meaningful river to quilombo communities in Cabo and Ipojuca. This barricade has degraded the river species and the quality of life of the nearby quilombo community Ilha de Mercês. Through personal interviews and video footage in the "Rios Livres, Mangues Vivos," quilombola residents use the footage to demonstrate how damaging Suape infrastructure has been for culturally important fish species and the quilombo residents who rely on those species. Through videos on social media, Fórum Suape can reach illiterate local populations and more extensive networks of environmental justice groups in Brazil and beyond.

With a slightly different intention, Projeto Mangue Mulher creates videos honoring the importance of local fisherwomen and their increasingly precarious struggles to access ocean and mangroves to fish and collect. In one recent music video set to Afro-Brazilian singer-songwriter Elza Soares's song 'Banho,' Fórum Suape shows, through detailed video clips, the depths of artisanal fishers and marisqueiras environmental knowledge and tactical skills, how strenuous their daily labor truly is, and how devoted they are to the craft and lifestyle of artisanal fishing. The video plays on to Soares' song that has become an anthem for poor fisherwomen in Pernambuco because the song accurately depicts fishers' and marisqueiras lives. For example, the song begins with the phrase "acordo maré/dormo cachoeira," or I awake (to the) tides/I sleep (to the) waterfall). As the video continues, we see these women on their strenuous daily journeys to find and process the best fish and shellfish to sell to their communities and to eat in their homes. The last message we read on the screen is from Fórum Suape, and states "As mulheres pescadoras existem, resistem, and exigem respeito" (women fishers exist, resist, and demand respect). As this message is shown, an image of CIPS lingers in the oceanscape, making explicit who should be offering respect to local fisherwomen.

More than Human Kinship with Animals, Earth, and Ancestors

Similar to their forebears, many Afro-Brazilian farmers, fishers, and shellfish collectors in Pernambuco consider themselves a small part of a comprehensive network of more-than-human relations. These individuals revere and find meaning in plants, domestic and wild species, and natural phenomena like the earth itself (*terra*) and the tides (*maré*). When asked what brings them happiness and keeps them energized to keep going, many mentioned their relationships with their gardens, crops, the forest, the mangroves, and the ocean, and caring for animals to be crucial relationships of care in their complicated lives. Augusto, a small farmer, illustrates this sentiment:

> What brings me happiness, I am content when I am in the garden and see my crops looking so pretty. And when, primarily when there are those little dolls (a nickname for ears of corn in Northeast Brazil), I take lots of photos and send them to others on Facebook, and that there gives me happiness of the things I do, and there I am in the middle of the corn, and I think: soon, soon I am going to see those dolls. If God wills it, those little dolls will come [Augusto, interview, March 9, 2021].

Others care for domestic animals, some having pigs, donkeys, chickens, and cattle. Relationships with animals are fundamental aspects of their identities and work; tending to animals allows people to express a degree of control and autonomy over their lives and express feelings of care they do not receive from CIPS. However, with local land pressures from CIPS and population increases, larger crops and space for animals are becoming less feasible. Nevertheless, women who have even a tiny land space and can acquire the seeds often still manage small garden plots called terrenos or roças that bring them joy through caring for and cultivating plants. Many mentioned their gardens as joyful spaces where they can improve and heal the land, beautify their home spaces, and cultivate essential plants for medicinal and household needs.

> L: I like to plant. I plant there, I plant here, I plant there and there, I have a pine tree full of pine cones again, more than 30 pine cones. In front of the house, I have cassava planted… There's no life without planting, understand? [Laís, interview, 10-03-2021]

Similarly, Vivian is grateful for what she considers mother nature's gifts, despite what CIPS has destroyed in recent years: "the tree, my plants, the birds singing, the garden is what makes me happy. It has already given me happiness. Another day with health, and I am grateful (Vivian, interview, 11-25-2020). Though many people had to give up their terrenos and roças with CIPS's expropriation, some still try to find more-than-human sociality by traveling to areas they can still access for fishing and collecting. Women especially genuinely rely on collecting in the ocean and mangroves for respite from familial obligation and often travel to the mangroves they can still access for the simple pleasures of collecting shellfish. Outside and doing physical activity in nature cultivates personal repair that strengthens them for dealing with structural traumas. Luana's response to the question about happiness illustrates this well:

> Interviewer: What brings you happiness?
> L: The mangroves do the most. Because with the mangroves, I am super heavy, as I was today. If you go you see the aratu (a type of crab), and I become lighter and healthier. Because I go there a litter tired, you know? The mountain of stuff you carry with you, the industry, the sadness, you just leave it there. And then, I am at peace to breathe—[Luana, interview, 02-03-2021].

For others connecting with the earth or ground (terra) is a powerful form of connecting with their ancestors who had strong connections to the land. Many learned to farm from deceased relatives; working with the earth is a way of honoring and connecting with that heritage and ancestry. Connecting with ancestry or personal 'ancestralidade' through cultivation also empowers residents of Cabo and Ipojuca to remember a time before CIPS dispossession and conflict and to keep fighting for their land. Rita, a small farmer who still has her land but is now surrounded on three sides by CIPS, explains:

> Interviewer: In difficult moments, what brings you hope?

> R: Eita (expression). This question is... (laughs) it's why I resist, you know? This is why I resist. What brings (me hope) is this here. I believe that the first thing that brings this to me is my relationship with earth (terra). This relationship with the with the earth brings me hope, and I have hope in it. All of my ancestry (ancestralidade), my experience with the earth make me hope for better days, for better moments. And for regularizing these lands, seeing people at peace, planting, and cultivating their areas. This gives me a certain sustenance, and it strengthens me to go before the context of struggle and conflict that exists. I am always searching for this mentality: it is possible, we will advance over this territory, we will move forward with the regularization of territory, move forward with our permanence in the earth, what we know how to do. These are our ways of life, and I won't go outside of this territory, like the people of Tatuoca, that lived in Tatuoca and were put in that Vila Tatuoca (urbanized community where CIPS relocated Tatuoca residents). That there is no relationship with territory. That is Apartheid. Because you are separated from what is yours, you know? From your land, from your birthplace. That was yours. [Rita, interview, 03-25-2021]

For Rita, working with the earth helps her find the strength to continue to fight for the regularization or formalization of land rights for posseiro communities. Without the formal designation of land rights, posseiros in the region continue to be at risk of removal as CIPS expands its operations. Working with the earth helps Rita remember that she was there before CIPS's occupation, as were her ancestors. Through her intimate connection to her ancestral territory and working the land, Rita fortifies herself to keep fighting for formalized land rights for her community.

Conclusions

Frameworks focused on coloniality, or colonial legacies that impinge on the present, have provided critical explorations of the historical structural inequalities that shape uneven economic development in Latin America and the Caribbean contexts (Lugones 2008; Mignolo 2010; Quijano 2010). Nevertheless, Latin American and Caribbean anthropologists are recently grappling with how to more meaningfully represent the full spectrum of human life in Latin America and the Caribbean (Drotbohm 2022; Thomas 2022; Freeman 2022). This would require

an epistemic shift from focusing primarily on suffering and 'colonial afterlives' toward more capacious exploration of healing and repair (ibid.).

In the Pernambuco case, to completely do away with coloniality feels like throwing the baby out with the bath, as many Afro-Brazilians still struggle daily with state-sponsored violence from predatory development. However, is there a way to theorize about both oppressive forces while also honoring the "glimmers of hope" (Burdick 1998, ix) in Latin American and Caribbean studies? This research suggests that black feminist geographies, especially creative resistance as articulated by Katherine McKittrick, can help Latin American and Caribbean anthropologists conceptualize how the plantation creates legacies of racial violence *and* strategies for subterfuge (2013). McKittrick (2013) utilizes the plantation as a heuristic for conceptualizing how plantation logics (or logics that normalized racial violence, surveillance, sexual assault, and a racialized economy) are reproduced over time and shape contemporary racial struggles (2013). However, plantations also demanded creative survival strategies from racialized groups, or 'secretive histories' (McKittrick 2013).

Through attending to the secretive histories of creative resistance in Afro-Brazilian contexts of Cabo and Ipojuca in Pernambuco, it becomes clear that Afro-Brazilian religious beliefs like Candomblé provided essential modes of healing and escape, providing critical spaces for cultivating caring, human and non-human relationships during and after slavery (Daniel 2005; Harding 2000; Voeks 1997). These practices involved ceremonial dancing, music, and ecological knowledge focused on healing the body and spirit (ibid.). Over time, these practices blended with indigenous and Iberian Catholic religious beliefs and orientations, creating more syncretic religious cosmologies. While Afro-Brazilians in Pernambuco may have syncretic belief systems, this does not make them less "pure" or meaningful than the Yoruban spirituality of their

forebears (Voeks 1997). Today, many residents of Cabo and Ipojuca draw upon the active life force of Axé and other spiritual touchstones in their political activism, in their music, and in their individual pursuit of joy and pleasure. Some draw upon Afro-Brazilian religiosity to organize and educate, while others still find strength in caring for and communing with the more-than-human world. Through these intimate, profoundly spiritual, creative forms of personal and communal repair, Afro-Brazilians in Cabo and Ipojuca fortify themselves to continue fighting.

Works Cited

Andrade, Manuel Correia de Oliveira. 2001. "Espaço e tempo na agroindústria canavieira de Pernambuco." *Estudos Avançados* 15 (43):267-280.

Burdick, John. 1998. *Blessed Anastacia: women, race, and popular Christianity in Brazil*. London: Routledge.

Burdick, John. 2013. *The color of sound: race, religion, and music in Brazil*. New York: New York University Press.

Carneiro, Sueli. 2016. Women in Movement. *Meridians: Feminism, Race, Transnationalism* 14 (1):30-49.

Cardoso, Cláuda Pons. 2016. Feminisms from the Perspective of Afro-Brazilian Women. *Meridians: Feminism, Race, Transnationalism* 14 (1):1-29.

Crewe, Emma and Axelby, Richard. 2013. *Anthropology and Development: Culture, Morality and Politics in a Globalized World*. Cambridge: Cambridge University Press.

Cole, Sally. 1994. Introduction-Ruth Landes in Brazil: Writing, Race, and Gender in 1930s American Anthropology. In *The City of Women*, by R. Landes.

Daniel, Yvonne. 2005. *Dancing wisdom : embodied knowledge in Haitian Vodou, Cuban Yoruba, and Bahian Candomblé.* Chicago: University of Illinois Press.

DHESCA. 2018. Complexos industriais e violações de direitos: O caso de SUAPE, Complexo Industrial Portuário Governador Eraldo Gueiros (CIPS). Relatório da Missão de Investigação e Incidência (a Relatoria do Direito Humano ao Meio Ambiente da Plataforma Dhesca Brasil).

Drotbohm, Heike. 2022. Beyond Repair: Rethinking the Future in the Caribbean. *Journal of Latin American and Caribbean Anthropology* 27 (3):433.

Escobar, Arturo. 1995. *Encountering development: the making and unmaking of the third world.* Princeton: Princeton University Press.

Freeman, Carla. 2022. "The Promise of Affect and the Enduring Economy of Emotions in Caribbeanist Anthropology." *The Journal of Latin American and Caribbean Anthropology* 27 (3):441-447. doi: 10.1111/jlca.12613.

Freire, Adriana Amaral, and Maria Salett Tauk. 2009. Rádio Comunitária, Gênero e Desenvolvimento Local: um estudo de recepção do programa Rádio Mulher. *Comunicação & Sociedade* 31 (52):241-269.

Góes Jr., Plínio Tadeu de. 2013. Axé: Multiple Meanings with a Sole Essence Found in the Unity

of Body, Nature and Spirit. *Lucero* 23:37-47.

Gonzalez, Lélia. 2020. P*or um feminismo afro-latino-americano: ensaios, intervenções e diálogos*. Edited by F. Rios and M. Lima. Rio de Janeiro: Zahar.

Grillo, R.D., & Stirrat, R.L. (Eds.). 2020. Discourses of Development: Anthropological Perspectives (1st ed.). Routledge. https://doi.org/10.4324/9781003136071

Harding, Rachel E. 2000. *A refuge in thunder : Candomblé and alternative spaces of blackness*, *Blacks in the diaspora*. Bloomington: Indiana University Press.

(ICMBio), Instituto Chico Mendes de Conservação da Biodiversidade. 2018. Atlas dos Manguezais do Brazil. Brasília: Ministério do Meio Ambiente.

IBGEa-Instituto Brasileiro Geografia e Estatística. 2010. Distribuição espacial da população segundo cor ou raça- Pretos e Pardos [map]. 2010. Brasil.

IBGEb-Instituto Brasileiro Geografia e Estatística. 2010. Religião - Cidades in Pernambuco, Brasil 2010. Accessed from https://cidades.ibge.gov.br/brasil/pe/cabo-de-santo-agostinho/pesquisa/23/22107?detalhes=true

Johnson, Paul Christopher. 2002. *Secrets, Gossip, and Gods: The Transformation of Brazilian Candomblé.* New York: Oxford University Press.

Kun, Josh. 2005. *Audiotopia: music, race, and America*. University of California Press.

Landes, Ruth. 1947. *The City of Women*. New York: Macmillan.

Lugones, María. 2008. "Coloniality and gender." *Tabula rasa* (9):73-102.

McInnis, Jarvis C. 2019. Black Women's Geographies and the Afterlives of the Sugar Plantation. *American Literary History* 31 (4):741-774.

McKittrick, Katherine. 2013. Plantation Futures. *Small Axe* 17 (3):1-15.

Mignolo, Walter D. 2010. Introduction: Coloniality of Power and De-colonial Thinking. In *Globalization and the decolonial option*, edited by W. D. Mignolo and A. Escobar. New York: Routledge.

Ministério da Infraestrutura, Brasil. 2016. *Financiamentos com recursos do FMM* Available from https://www.gov.br/infraestrutura/pt-br/assuntos/incentivos/incentivos-fiscais/financiamentos-com-recursos-do-fmm

.

Moehn, Frederick. 2007. Music, Citizenship, and Violence in Postdictatorship Brazil. *Latin American Music Review/Revista de Música Latinoamericana* 28 (2):181-219.

Mollett, S. 2017. "Irreconcilable differences? A postcolonial intersectional reading of gender, development and Human rights in Latin America." *Gender, Place and Culture* 24 (1):1-17.

Oliveira, Eduardo David de. 2006. *Cosmovisão africana no Brasil: Elementos para uma filosofia afrodescendente.* Curitiba: Gráfida Popular.

Oliveira, Marluce Tavares de , Verônica Chaves Carrazzone, Maria Aurea Bittencourt Silva, Edna Maria Malheiros, Kátia Saraiva, and Cleide Ferreira Neves. 2016. Pernambuco falando para o mundo: a cultura pernambucana e a formação de terapeutas comunitários. *RTES-Temas em Educação e Saúde* 12 (20):246-265.

Pereira, Luiz Carlos Bresser. 2013. "Empresários, o governo do PT e o desenvolvimentismo." *Revista de Sociologia e Política* 21 (47):21-29.

Pardue, Derek. 2008. *Ideologies of marginality in Brazilian hip hop*. Palgrave Macmillan.

Pagnocca, Tiago Santos, Sofia Zank, and Natalia Hanazaki. 2020. "The plants have axé": investigating the use of plants in Afro-Brazilian religions of Santa Catarina Island. *Journal of Ethnobiology and Ethnomedicine:* 16-20.

Prandi, Reginaldo. 2004. O Brasil com axé: candomblé e umbanda no mercado religioso. *Estudos Avançados* 18 (52):223-238.

Quijano, Aníbal. 2010. "Coloniality and Modernity/Rationality." In *Globalization and the Decolonial Option*, edited by Walter D Mignolo and Arturo Escobar, 22-32. New York: Routledge.

Reiter, Bernd, and Gladys L. Mitchell. 2008. Embracing Hip Hop as Their Own: Hip Hop and Black Racial Identity in Brazil. *Studies in Latin American Popular Culture* 27:151-165.

Robbins, Joel. 2013. Beyond the suffering subject: toward an anthropology of the good. *Journal of the Royal Anthropological Institute* 19:447-462.

Saad-Filho, Alfredo. 2020. "Varieties of Neoliberalism in Brazil (2003–2019)." *Latin American Perspectives* 47 (1):9-27. doi: https://doi.org/10.1177%2F0094582X19881968.

Santos, Mariana Olívia Santana, Aline do Monte Gurgel, and Idê Gomes Dantas Gurgel. 2019. *Conflitos e Injustiças na Instalação de Refinarias: Os caminhos sinuosos de Suape, Pernambuco*. Recife: Universidade Federal de Pernambuco.

Seabra, Tássia. 2022. O futuro do brega funk com a gestão Raquel Lyra. *Marco Zero Conteúdo*, 11/28/2022. https://marcozero.org/o-futuro-do-brega-funk-com-a-gestao-raquel-lyra/

Scheper-Hughes, Nancy. 1992. *Death without weeping: the violence of everyday life in Brazil*: Berkeley : University of California Press.

Scoones, Ian, Marc Edelman, Saturnino M. Borras, Ruth Hall, Wendy Wolford, and Ben White. 2018. Emancipatory rural politics: confronting authoritarian populism. *The Journal of Peasant Studies* 45 (1):1-20.

Selka, Stephen. 2008. The Sisterhood of Boa Morte in Brazil: Harmonious Mixture, Black Resistance, and Politics of Religious Practice. *The Journal of Latin American and Caribbean Anthropology* 13 (1):79-114.

SUAPE. 2020. Polos do Desenvolvimento do Complexo. Webpage, (https://www.suape.pe.gov.br/pt/negocios/polos-negocios). Accessed Dec. 1st, 2022.

Thomas, Deborah A. 2022. What the Caribbean Teaches Us: The Afterlives and New Lives of Coloniality. *Journal of Latin American and Caribbean Anthropology* 27 (3):235.

Vainsencher, Semira Adler. 2009. Igreja de Nossa Senhora do Rosário dos Homens Pretos, Recife, PE. Recife: Fundação Joaquim Nabuco. Accessed from, http://basilio.fundaj.gov.br/pesquisaescolar_en/index.php?option=com_content&view=article&id=1534%3Achurch-of-nossa-senhora-do-rosario-dos-homens-pretos-our-lady-of-the-rosary-of-the-black-men-recife-pe&catid=36%3Aletter-c&Itemid=1

Voeks, Robert A. 1997. *Sacred leaves of Candomblé: African magic, medicine, and religion in Brazil*. 1st ed. ed: University of Texas Press.

Welch, Cliff. 2011. "Lula and the Meaning of Agrarian Reform." *NACLA Report on the Americas* 44 (2):27-30. doi: 10.1080/10714839.2011.11725534.

The World Bank. 2017. *What is the Blue Economy?* Available from https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy.

Wynter, Sylvia. 1971. "Novel and history, plot and plantation." *Savacou* 5 (1):95-102.

CHAPTER FIVE

CONCLUSIONS

In this dissertation, I have investigated the interrelated themes of economic development, intersectional inequalities, environmental injustice, ecological grief, and healing and repair in Afro-Brazilian traditional communities of Cabo de Santo Agostinho (Cabo) and Ipojuca. It is worth reiterating that this is not the research I set out to accomplish. During Covid-19, I had to reorient the original project to better align with what was possible and necessary for community members during unprecedented epidemiological times. However, I firmly believe the study turned out better than it could have ever been if I had not had to rely so heavily on community partners. It began with a practical question posed by community members who wanted to understand why the state-sponsored port complex violently harms, dispossesses, pollutes, and or neglects some residents of Cabo and Ipojuca, while others benefit from access to economic opportunities. This practical problem is a fundamental conceptual issue at the heart of capitalism and development studies: why does economic development benefit some and harm others? To explore this problem, this project investigated the following research questions: how does state-sponsored marine commercial development articulate with entangled histories of plantation agriculture and slavery in Cabo and Ipojuca? How do historic, intersectional inequalities influence the social and ecological experiences of the port development complex? And finally, how do communities resist, negotiate, or heal from the port development complex's negative socio-ecological impacts?

In chapter two, *Continual Loss*, Elaine Salgado Mendonça (my community coauthor) and I explore the first question by illuminating how historic political ecologies of plantation

agriculture in the region continue to shape both access to natural resources and the kinds of economic opportunities racialized communities have in Cabo and Ipojuca. Cabo and Ipojuca's centuries of 'racial land tenure,' land-based inequalities prioritizing capital accumulation over the well-being of Afro-descendant communities, persists. However, we do not simply assume land inequalities are an unspecified "colonial legacy" of colonial and imperial Brazil. We illuminate specific cultural and historical pathways in which race-based land inequalities have persevered through different geopolitical and economic moments in Pernambuco's *longue durée*. In this way, we elucidate the historic linkages between the colonial land granting system *sesmarias* and contemporary land conflicts. We also demonstrate how racial logics continue to influence economic exclusion from the quality employment opportunities the port does offer 'skilled' individuals. Local communities were consistently told they only qualified for low-wage, short-term, or manual labor positions, which residents consider "pawn labor." This lack of opportunity meant that individuals who wanted a salaried wage (instead of fishing/collecting) continued to rely on arduous, low-paying work in sugar plantations. The lack of economic opportunities and sufficient land reform keeps these communities in the clutches of poverty, despite the vast 'economic development' surrounding them.

Chapter three, *Muda da Maré*, elucidates the intersectional, emotional landscapes of expropriation, primarily through the lens of fishers and shellfish collectors. Bringing together anthropologies of grief, multispecies studies, political ecology, and environmental justice frameworks, the chapter explores how Afro-Brazilian fishers and shellfish collectors navigate changing access to the ocean and mangroves, disappearing marine life, and increasingly polluted territories. Despite growing obstacles, many Afro-Brazilian communities still depend on the ocean and mangrove forests for emotional and economic survival, traveling long, dangerous

distances to polluted beaches and mangroves for wild fruits, fish, and shellfish. The research illustrates how biodiversity loss can constitute environmental injustice. Ecological losses—including forced removal from ancestral territories and the destruction of culturally meaningful plant and marine life—profoundly emotionally impact traditional fishing communities, contributing to widespread depression and even premature death among community elders. The study also demonstrates how ocean pollution and mangrove deforestation disproportionately impact poor, racialized communities in Brazil that depend on these ecosystems for income, subsistence, and well-being. This chapter advances debates on "ecological grief," or how societies are mourning rapidly changing environments due to climate change. The concept offers critical insights into the relationship between well-being and biodiversity loss. However, current theories of ecological grief lack meaningful engagement with environmental justice movements and scholarship and need to be expanded to account for the uneven distribution of ecological degradation in racialized and poor communities.

Finally, chapter four, *Divine Energy*, explores how residents of Cabo and Ipojuca engage in personal and communal forms of resistance and repair to fortify themselves to continue living with the port complex's habitual violence and industrial pollution. Theoretically, this chapter addresses critical debates in Latin American and Caribbean studies. On the one hand, scholars have attended to the persistence of colonial legacies in Latin America and how they shape contemporary inequalities, ecological destruction, and dispossession, among other violent outcomes (Thomas 2022; Mignolo 2010; Quijano 2010). However, scholars are increasingly grappling with what we lose when we focus exclusively on suffering and fail to meaningfully engage with personal and ecological repair (Drotbohm 2022; Freeman 2022). I illuminate how black feminist geographies can help Latin American and Caribbean anthropologies meaningfully

attend to colonial legacies *and* healing and repair. Specifically, McKittrick (2013) theorizes how plantation slavery shaped circumstances of violence but also demanded creative survival strategies or 'secretive histories'. Tracking these secretive histories through time, this chapter demonstrates how Afro-Brazilian spirituality based on Candomblé and other belief systems became an essential source of personal and collective healing. Candomblé practices—initially practiced in secret—provided critical spaces for enslaved peoples to cultivate the 'right' relationships with a spiritual community, the Supreme Being, and the natural world (Harding 2000; Voeks 1997). Today, Candomblé practices are syncretized with aspects of Christianity, creating more syncretic religious cosmologies. Nevertheless, these syncretic spiritual practices emphasize the importance of *axé*, an energetic lifeforce inherent in dance, music, and more-than-human kinship. Music, dance, and more-than-human sociality provide crucial spaces of autonomy and relationships of tenderness and care that poor Afro-Brazilians do not experience from the state. Thus, through these personal, intimate, and joyful practices of healing and repair, Afro-Brazilians in Cabo and Ipojuca strengthen themselves to confront structural oppression.

Directions for Future Development Anthropologies

A shared theme across all of my chapters is the importance of telling different development stories that complicate binaries of domination/resistance. While much of the world is in perpetual development, this is not an easy achievement when so many of our research sites and contexts fit perfectly within that framing. Instead of abandoning development because it is no longer conceptually cutting edge, scholars should consider new ways to theorize and engage with global development practice. I found drawing from theoretical frameworks from marginalized scholars was especially useful. In the Brazil case, black feminist theoretical work

from Canada and Brazil illuminated new conceptual insights for interpreting my research. Development scholars should ask themselves what similar work, perhaps outside conventional cannon, can be mobilized in their own research contexts? Moreover, what new insights could that work bring about economic development in our research sites?

This research also illuminates another potentially new way to theorize about development—how diverse populations *affectively* experience it. Engaging with multispecies studies could help development scholars understand how relational ontologies and more-than-human kinship are deeply emotional connections impacted by development practices. However, we cannot stop at affect. Environmental justice movements in the US and worldwide have made clear that the burden of ecological degradation disproportionately impacts racialized communities. Therefore we must also include in conceptualizations how interlocking forms of oppression shape the distribution of environmental risks and benefits in development contexts.

Finally, the third chapter illuminates not only how populations resist development (though they do resist) but how daily practices of healing and repair help them carry on. The notion of 'repair', and not just resistance, can help development scholars overcome the simplistic binaries of domination/resistance (Drotbohm 2022). People resist, which is important, but they also engage in creative joy-making practices that contribute to personal healing. Much like in the Candomblé *terreiros*, these personal practices of repair help fortify individuals for collective struggle. Finally, between 2016 and 2020, I made numerous trips to Brazil, and one thing I noticed was that many people shifting religious beliefs to far-right evangelicalism. Recession and austerity measures have also taken a visible toll on cities and towns. In 2021, Bolsonaro cut Higher Education spending by an additional 90% (McKie 2021). Future studies should consider how regressive economic policies and growing religious extremism influence territorial conflicts

and development agendas in Northeast Brazil. Moreover, studies should address how these development agendas impact traditional communities struggling to access basic needs. With the recent election of Lula for a third term, we should keep a close eye on whether these trends diminish.

Practical Implications

Brazil is currently experiencing growing religious racism (Gonzaga 2022), where the religious far-right trivializes and mocks Afro-Brazilian religious practices. The racism coming from leadership has incited more religious intolerance in Pernambuco, most recently exemplified by the arson of the Candomblé terreiro o Ilê Axé Ayabá Omi in coastal Pernambuco (ibid). However, as noted in chapter four, Afro-Brazilian religious cosmologies are a vital source of strength that fortify residents to keep going. Many community members noted that Pernambuco must create public education campaigns around religious tolerance.

As other scholars have indicated, the regularization of territories in Brazil has always been a complicated political process (Oliveira 2013). However, posseiro communities in Pernambuco are fighting for legal land regularization of the territories their families have lived in for generations. Bolsonaro openly opposed giving indigenous, quilombo, and landless peasants special land rights. Since racial land inequalities have existed for centuries, more pressure must be put on INCRA (the National Institute for Colonization and Agrarian Reform) to regularize posseiro communities' land rights in Pernambuco. Bolsonaro's blatant misogyny, homophobia, racism, and anti-environmentalism emboldened others to question whether posseiros are worthy of land rights, leading to violence, murder, and displacement. With the recent election of Lula for

a third term, we must diligently advocate for more equitable distribution of and respect for land rights.

Works Cited

Drotbohm, Heike. 2022. Beyond Repair: Rethinking the Future in the Caribbean. *Journal of Latin American and Caribbean Anthropology* 27 (3):433.

Freeman, Carla. 2022. "The Promise of Affect and the Enduring Economy of Emotions in Caribbeanist Anthropology." *The Journal of Latin American and Caribbean Anthropology* 27 (3):441-447. doi: 10.1111/jlca.12613.

Harding, Rachel E. 2000. *A refuge in thunder : Candomblé and alternative spaces of blackness*, *Blacks in the diaspora*. Bloomington: Indiana University Press.

Gonzaga, Vanessa. 2022. Terreiro é incendiado no litoral sul de Pernambuco: "Querem apagar nossa história." Brasil de Fato, January 5, 2022. Accessed March 29, 2022, https://www.brasildefato.com.br/2022/01/05/terreiro-e-incendiado-no-litoral-sul-de-pernambuco-querem-apagar-nossa-historia

Oliveira, Gustavo. 2013. Land regularization in Brazil and the global land grab. Development and Change 44 (2):261-283.

McKie, Anna. 2021. Brazilian Science in Danger. Inside Higher Ed, November 11. Accessed March 29, https://www.insidehighered.com/news/2021/11/11/brazil-cuts-federal-science-

McKittrick, Katherine. 2013. Plantation Futures. *Small Axe* 17 (3):1-15.

Mignolo, Walter D. 2010. Introduction: Coloniality of Power and De-colonial Thinking. In *Globalization and the decolonial option*, edited by W. D. Mignolo and A. Escobar. New York: Routledge.

Quijano, Aníbal. 2010. "Coloniality and Modernity/Rationality." In *Globalization and the Decolonial Option*, edited by Walter D Mignolo and Arturo Escobar, 22-32. New York: Routledge.

Thomas, Deborah A. 2022. What the Caribbean Teaches Us: The Afterlives and New Lives of Coloniality. *Journal of Latin American and Caribbean Anthropology* 27 (3):235.

Voeks, Robert A. 1997. *Sacred leaves of Candomblé: African magic, medicine, and religion in Brazil*. 1st ed. ed: University of Texas Press.