Assembling an Afro-Brazilian Economy

It is as if one had taken a cutting of Africa and rooted it in Brazilian soil, where it bloomed again.

- Roger Bastide, 19601

African oil palms (*Elaeis guineensis* Jacq.) have thrived in rainforest communities in West and Central Africa for millennia. In biodiverse forests, dense groves, and isolated stands, traditional oil palm landscapes stretch from the Senegambia to Angola and deep into the Congo Basin. Africans began extracting and processing oils from the palm's fruit at least five thousand years ago, and when transatlantic slave traders began stealing away people for profit and colonization, the African oil palm joined an immense human and botanical diaspora.² The enslaved Africans that survived the brutalities of the Middle Passage arrived in the New World with diverse and sophisticated knowledge systems including those related to the African oil palm and other tropical plants – which they relied on to survive in, and reshape, colonial environments.³ Palm Oil Diaspora describes how partnerships of people and palms transformed an Atlantic World connecting western Africa to South America, from prehistory to the present, and offers insights for building healthier and more viable relationships within and among human societies and earthly environments.

¹ Bastide, African Religions of Brazil, 224.

² Corley and Tinker, Oil Palm, 3; Carney and Rosomoff, Shadow of Slavery.

³ Watkins, "African Oil Palms."

This book tells the story of Benta, a Black woman born into the cruel realities of Brazilian slavery in the eighteenth century. Benta lived and worked on a colonial sugar plantation in the heart of the Bahian Recôncavo - the fertile hinterlands surrounding the vast Bay of All Saints that lent the region its name. We know precious little about Benta's life, but according to a probate inventory taken in 1790, she sold to her captors goods she produced on the plantation grounds, including beans and palm oil.⁴ Buried in an archived account ledger, that mundane transaction recorded an enslaved "Creole" woman of African descent engaging in cultural creativity, economic accumulation, and environmental change. Woven throughout this book, Benta's story opens a window into the palm oil cultures, landscapes, and economies that emerged in Bahia, as well as the broader networks and processes of exchange that coalesced to form an Atlantic World. Born in Brazil, Benta descended from ancestors torn from the African continent and trafficked in the transatlantic slave trade – an immense crime against humanity fundamental in the formation and ongoing reproduction of the modern world. By producing and distributing palm oil, a meaningful and nourishing food with deep roots in African cultures and landscapes, Benta actively participated in a global network of people, plants, places, and power to exercise a measure of self-determination and improve her conditions despite the violence and oppression of the colonial slave system. Her story provides a resounding illustration of African contributions to cultural and environmental change in the colonial Americas.

Benta's legacy endures, and today palm oil remains fundamental in countless Afro-Brazilian cultural-ecological forms. In Bahia, a centuries-old, biodiverse landscape supplies the region, along with much of Brazil, with distinctive red palm oil for ancestral culinary and religious expressions. Developed in dialogue with Afro-Brazilian cultures, Bahia's palm oil landscapes stand as living monuments to the African diaspora as well as vital sources for local livelihoods. Derived of plants and knowledge systems transplanted from Africa and nurtured in the Americas, the oil palm groves that Benta tended in coastal Bahia helped to form an intricate transatlantic economy of cultural-environmental exchange and innovation.

⁴ Inventory of Felix Alves de Andrade, Cachoeira, 1791, APB, SJ, 2/706/1168/3. I am grateful to B. J. Barickman for this reference.

⁵ Lody, Tem dendê; Lody (ed.), Dendê.

⁶ Watkins, "Dendezeiro"; Watkins, "Landscapes and Resistance."

In sharp contrast to the traditional economies enduring in Bahia and their native Africa, palm oil has become a global source and symbol of capitalist extraction and social-environmental degradation.⁷ By the early twenty-first century, oil pressed from the fruit of Elaeis guineensis outpaced soy to become Earth's most produced, traded, and consumed oilseed.8 Agro-industrial oil palm plantations blazed into tropical rainforest biomes supply massive international markets but with devastating costs in deforestation, biodiversity erosion, land grabbing, and greenhouse gas release.9 The global industry now centers on Southeast Asia where plantation monocultures in Malaysia and Indonesia produced 84.4 percent of the world's palm oil in 2019, but production continues to expand in Latin America. 10 Historically a minor player in international agro-industrial production, Brazil has recently renewed initiatives to subsidize palm oil development in its Amazon region, which according to government figures, has dominated national production since the 1980s. The remainder of Brazil's palm oil comes from the northeastern state of Bahia, where it emerges from a complex mix of polycultural

- ⁷ Pakiam, "Palm Oil's Journey"; Komolafe, "Problems with Palm Oil"; Zuckerman, *Planet Palm*. To be clear, agro-industrial palm oil development schemes and plantation systems are pervasive in Bahia and Africa as well where they have long threatened traditional landscapes and economies.
- 8 For the twelve-month period ending in November 2020, global production of palm oil amounted to 75,188 million metric tons, while its nearest rival, soybean oil, registered 60,142 MMT; see *Table 11* and *Table 09*, respectively, in the monthly reports on world oilseed production published by USDA. www.fas.usda.gov/data.
- ⁹ Fitzherbert et al., "Oil Palm Expansion"; Rival and Levang, *Palms of Controversies*; Linder and Palkovitz, "Threat of Industrial Oil Palm"; Li, "After the Land Grab"; Chao, "Shadow of the Palm."
- ¹⁰ FAS, *Table 11*; Potter, "Managing Oil Palm Landscapes"; Castellanos-Navarrete et al., "Development without Change"; Mingorría, "Violence and Visibility"; Latorre, Farrell, and Martínez-Alier, "Commodification of Nature"; Marin-Burgos, "Oil Palm Expansion"; Romero and Albuquerque, "Impactos Socioambientales"; Taussig, *Palma Africana*; Hervas, "Land, Development and Contract Farming"; Johnson, "Roundtable on Sustainable Palm Oil"; Castellanos-Navarrete et al., "Impact of Oil Palm."
- Hartley, "Oil Palm in Latin America," 359–60; Balick, "Amazonian Oil Palms"; Villela et al., "Status and Prospects"; Backhouse, "Green Grabbing"; Córdoba et al., "Family Farming." According to Brazil's Agrarian Census of 1980, Bahia led the country in palm oil production, but by 1988, the first year for which annual palm oil production data are available, Pará state had overtaken Bahia and by then accounted for 60 percent of national production. Since then it has steadily increased its share. See IBGE, Censo agropecuário de 1980, ... Pará; IBGE, Produção agrícola municipal, "Tabela 1613."

family farms, a few agro-industrial plantations, and the region's distinctive biodiverse palm groves.

Despite its global prominence and its fundamental relationships with Atlantic and Afro-Brazilian histories and cultures, we lack a comprehensive understanding of Bahia's palm oil economy. A common trope in academic, technical, and popular writing in and on Brazil holds that the oil palm "was brought from Africa," erasing with passive voice any trace of human-environmental agency and transatlantic exchange. 12 The details of the palm's diffusion to the Americas and the political-ecological development of its complex cultural landscapes remain unclear. Drawing on ethnography, landscape interpretation, archives, travelers' accounts, and geospatial analysis, Palm Oil Diaspora unravels the long and complex development of Bahia's palm oil landscapes, cultures, and economies in the context of an interconnected Atlantic World - from their prehistoric emergence in western Africa to their establishment in Brazil and their roles in ongoing modernization campaigns of the twentieth and twentyfirst centuries. In so doing, this book reconstructs an environmental history of the African diaspora; connects Afro-Brazilian knowledge and cultural landscapes with ecological-commercial exchange in the Atlantic World; and scrutinizes the long-term politics of race, environmental change, and agricultural development in Brazil.

Fundamentally, *Palm Oil Diaspora* examines relationships among humans and environments and the communities and economies they nurture across time and space. Centering palm oil as an analytical motif and material agent, this book maps the formation of a complex cultural-ecological-economic system – what I call an Afro-Brazilian economy – within an Atlantic World linking people, plants, places, and power. To conduct this interdisciplinary analysis, I convene a variety of otherwise disparate conversations and concepts. Among them, this study builds on assemblage and complexity thinking to analyze cultural landscapes and economies shaped by relational power and resistance. Bridging interdisciplinary literatures on Black geographies; Afro-Brazilian and Atlantic studies; political ecology; and decolonial theory and praxis, I argue that only by connecting across these concepts and disciplines can we fully

¹² See, for example, Peixoto, Breviário da Bahia, 80; Cardoso, Contribuição ao estudo do dendê, 10; Carneiro, Ladinos e crioulos, 72; Amado, Bahia boa terra Bahia, 139; "Dendê, fruto estratégico," Veja, March 26, 1969, 22; Homma and Furlan Júnior, "Desenvolvimento da dendeicultura," 197–200.

appreciate the power, complexity, and knowledges that constitute Bahia's palm oil economy.

This introductory chapter unpacks and integrates those and other concepts, theories, and fields to situate the analyses laid out in the subsequent chapters. It devotes detailed attention to the inextricable and co-constitutive relationships linking societies, environments, and power. Along the way, this chapter introduces the real and conceptual places involved in the study, and their interrelatedness, especially Bahia, the Atlantic World, and the African diaspora. It then concludes with a discussion of methods and methodology and an outline of the book's structure.

PLACING AFRO-BRAZIL

Bahia's Afro-Brazilian economy is diasporic. Derived of ancestral ecologies in western Africa, it roots in the Atlantic shores of tropical South America.¹³ Scholars from W. E. B. Du Bois to Paul Gilroy to Katherine McKittrick have long emphasized the multiplicity and simultaneity of the African diaspora – at once commemorative and innovative, connected to both histories and futures, and emerging from relations of power.¹⁴ As Patricia de Santana Pinho's study of Blackness in Bahia makes clear, "culture is political." Landscapes and economies are political, too; woven from the symbiotic networkings of humans and environments, in and across places.

The Afro-Brazilian cultures, landscapes, and economies analyzed in this book manifest as African-inspired philosophies, ecologies, politics, materials, and ways of life refracted through prisms of Indigenous American and European knowledge and practices, among others. They emerge from (post)colonial power configurations and lived experiences in the transatlantic slavery economy and the construction and reproduction of Brazilian society. ¹⁶ In Bahia, they contribute to what McKittrick deems a "Black sense of place" – African diasporic spaces and ways of life

¹³ Walker (ed.), African Roots/American Cultures; Carney and Voeks, "Landscape Legacies."

¹⁴ Du Bois, Souls of Black Folk, 3; Gilroy, Black Atlantic; McKittrick, Demonic Grounds.

¹⁵ Pinho, Mama Africa, 3, emphasis in original.

¹⁶ Reis and da Silva, Negociação e conflito; dos Santos, "Diaspora"; Fraga Filho and Albuquerque, História da cultura Afro-Brasileira.

shaped by racial entanglements, anti-Black violences, resistance, and creativity.¹⁷

The northeastern state of Bahia is the heart of Afro-Brazil.¹⁸ Popular maxims such as the "Black Rome of the Americas" and "Mecca of Brazilian Blackness" place Bahia at the center of African diasporic creation and manifestation.¹⁹ Among the more salient materials and symbols of Afro-Brazilian expression is palm oil – known in Bahia and throughout Brazil as *dendê*, or more precisely *azeite de dendê*, derived by combining the Arabo-Iberian word for olive oil with a Central African Kimbundu term for the fruit of the African oil palm.²⁰ Following the Portuguese convention, the palm that yields the oil became the *dendezeiro* in Bahia.²¹ Today, locally produced palm oil remains the lifeblood of many Afro-Brazilian culinary and religious traditions. In many parts of Bahia, "*azeite*" refers only to palm oil, while *azeite doce* (sweet oil), *óleo* (oil), or *óleo de gallo* can connote olive oil.²² Palm oil has become a popular symbol of both Afro-Brazilian culture and the state of Bahia as a whole. To say something is "of dendê" is to qualify it as absolutely Bahian and

¹⁷ McKittrick, "On Plantations," 949.

¹⁸ Carneiro, Candomblés da Bahia; Kraay, "Introduction: Afro-Bahia, 1790s–1990s"; Afolabi, Afro-Brazilians; Jorge Amado, Bahia de Todos os Santos; Dawson, In Light of Africa; Dixon, Afro-Politics.

¹⁹ Quotes in Sansone, Blackness without Ethnicity, 70, and Pinho, Mama Africa, 43, respectively. Roma Negra remains a popular term for describing the deep connections between Bahia and Africa, but according to Bahian anthropologist Vivaldo da Costa Lima, the original expression, as coined by Candomblé and community leader Mãe Aninha in the 1940s, was Roma Africana, see Pinho, Mama Africa, 48–49. On Bahia within the African diaspora, see Pierre Verger, Trade Relations; Mann and Bay (eds.), Rethinking the African Diaspora; Polk, Conduru, Gledhill, and Johnson (eds.), Axé Bahia

²⁰ Schneider, Dictionary of African Borrowings, 129, 131, 220, 253, 261-62.

I refer to the "dendezeiro," "dendê," and "azeite de dendê" to signify the African oil palm and its fruit and oil as established and produced in Bahia. "African oil palm" and "palm oil" refer to the tree and the oil more generically. While the *Elaeis guineensis* found in Africa and Bahia remain genetically and biologically identical, the nominal distinction employed here attends to the intertwined social and ecological histories that define dendê as a specific Afro-Brazilian creation rooted in Bahia, the African diaspora, and the Atlantic World. Brazilian government agencies assert a similar distinction. Brazilians refer to palm oil used in cooking unconditionally as "dendê," or "azeite de dendê," yet the Brazilian government's recent palm oil development project refers to the more internationally recognized term in its title, "Programa de Produção Sustentável da Palma de Óleo [Program for Sustainable Production of the Oil Palm]"; see Brasil, *Diagnóstico da produção*.

²² Gallo refers to the iconic Portuguese rooster, a national symbol emblazoned on a popular tin of olive oil.

with fundamental connections to Africa and its diaspora.²³ A recent example is Vale do Dendê, a celebrated startup accelerator and consulting firm supporting entrepreneurs from neglected neighborhoods around Bahia's capital city, Salvador. Launched in 2016, the firm's name combines a reference to California's Silicon Valley with a nod to the distinctive symbol and flavor of Afro-Brazil.

Brazilians refer to traditional foods cooked in dendê simply as Bahian food, or comida baiana. Bahians themselves often celebrate their Creole cuisine as comida de azeite, invoking dendê oil as the definitive component. Like its antecedents in West Africa, the viscous red palm oil produced and enjoyed in Bahia contrasts from the industrially refined, bleached, and deodorized palm oils traded internationally. Locally produced, unrefined dendê oil invigorates many of Bahia's most revered recipes with E vitamins, antioxidant provitamin A carotenoids, and metabolismboosting medium-chain fatty acids.²⁴ Popular Afro-Brazilian dishes such as carurú, vatapá, farofa de dendê, xinxim de galinha, and especially the ubiquitous seafood and fish moquecas are unimaginable without azeite de dendê.25 And yet the relevance of dendê oil transcends food cultures, filtering through many diverse and popular expressions. For example, Afro-Brazilian religions venerate the oil as a sacred sacrament, it is celebrated in many traditional sambas, and the Afro-Brazilian martial art Capoeira recites dendê in many of its corridos - the ritual choruses sung during matches.26

Evocative works by the versatile Bahian artist Ayrson Heráclito emphasize these connections, especially the role of dendê within Afro-Brazilian spirituality, materiality, and cultural histories. See his videos on vimeo.com; a catalog of his works, Ayrson Heráclito: Espaços e ações; and his 2017 installations at UCLA's Fowler Museum, published in Conduru, "Ayrson Heráclito."

²⁴ Mba, et al., "Palm Oil."

²⁵ Carurú is a spicy stew of greens, okra, and palm oil; vatapá is a mash of manioc flour, peppers, palm oil, and either fish, shrimp, or animal fat; farofa de dendê is toasted manioc flour seasoned in palm oil; xinxim de galinha is a chicken fricassee seasoned with palm oil; and perhaps the signature Bahian dish, moquecas are stews of fish or seafood seasoned in palm oil, olive oil, coconut milk, and peppers. See Querino, Arte culinaria; Amado, Damm, and Carybé, Bahia boa terra Bahia; Costa, Comida baiana; Lody, Santo também come; Lody, Brasil bom de boca; Fajans, "Can Moqueca"; Câmara Cascudo, História da alimentação.

Common corridos include "Capoeira tem dendê," "Vou tirar dendê," "dendê maré," "Lá na Bahia côco de dendê," and "Bahia que tem dendê." Traditional samba de roda groups – such as Samba Chula de São Braz, Rua da Palha, Suspiro do Iguape, Aparecida, and Barlavento – all sing about dendê. See Assunção, Capoeira; Browning, Samba; Iyanaga, "O samba de caruru da Bahia."

Those Afro-Brazilian expressions emerge from the social, economic, and environmental histories and geographies of the African diaspora to reveal creativity and resistance amidst violence and dispossession.²⁷ Enslaved Africans began arriving in Brazil by the 1560s, and by the end of that century captive women, men, and children had become central to Bahia's burgeoning colonial economy and society.²⁸ Whether on sugar plantations in the bayside Recôncavo, subsistence farms on the Southern Coast, or as porters in the urban capital, Salvador, enslaved Africans built the region's export and domestic markets.²⁹ Over nearly three hundred years, the transatlantic slave trade abducted and trafficked an estimated 5.5 million Africans to Brazil, and 1.7 million of them, nearly one-third of the total, disembarked in Bahia. That means roughly 14 percent of all enslaved Africans that arrived in the Americas did so in Bahia (Table 1.1).3° Along with Indigenous Americans and Europeans, Africans and their descendants transformed the demography, cultures, and landscapes of Bahia - as elsewhere in the Americas – despite the mundane brutality and oppression of the transatlantic slave economy.31

Transformations began in the first decades of Bahia's colonization. Already by the 1580s, Portuguese Jesuit Fernão Cardim estimated the population of enslaved Africans in São Salvador da Bahia de Todos os Santos and its rural environs at "three or four thousand," enough to exceed the approximately three thousand households of Portuguese colonial settlers.³² Subsequent visitors to Bahia's capital were routinely astonished at the prevalence and mobility of Black people, traits that distinguished that city from almost any other in the colonial Americas.³³ As the transatlantic slave trade to Bahia was finally coming to a close in the second half of the nineteenth century, German physician Robert Avé-Lallemant described Salvador as a Black city. "If one didn't

²⁷ Gilroy, Black Atlantic; Thornton, Africa and Africans; McKittrick, "On Plantations"; Carney and Rangan, "Situating African Agency"; White, Freedom Farmers.

²⁸ Emory University, "Estimates Database," www.slavevoyages.org.

²⁹ Schwartz, Sugar Plantations; Schwartz, Slaves, Peasants, and Rebels; Mattoso, To Be a Slave; Barickman, Bahian Counterpoint.

³⁰ Emory University, "Estimates Database," www.slavevoyages.org.

³¹ Carney and Voeks, "Landscape Legacies"; Klein and Vidal Luna, Slavery in Brazil.

³² Cardim, Tratados, 288.

³³ Pinho, Mama Africa, 191–97. Early racialized impressions of Salvador include Dampier, Dampier's Voyages, 386.

TABLE 1.1 Estimated number of enslaved Africans by zone of disembarkation during the transatlantic slave trade

	1501-1600		1701-1800	1801–1866	All years	% Brazil Total	% Total	
Brazil	29,275	784,457	1,989,017	2,061,625	4,864,374	100	45	
S.E. Brazil	4,770	221,083	756,561	1,281,500	2,263,914	47	2.1	
Bahia	5,647	313,473	815,904	415,331	1,550,355	32	14	
Pernambuco	18,571	246,522	329,336	259,404	853,833	18	8	
Amazonia	0	1,096	71,738	69,397	142,231	3	1.3	
Br. unspecified	287	2,282	15,480	35,992	54,041	I	0.5	
British Caribbean	0	310,477	1,813,323	194,452	2,318,252		22	
Spanish Americas	169,370	225,504	145,533	752,505	1,292,912		12	
French Caribbean	0	38,685	995,133	86,397	1,120,215		10	
Dutch Americas	0	124,158	295,215	25,355	444,728		4	
Mainland N. America	0	15,147	295,482	78,117	388,746		4	
Danish West Indies	0	18,146	68,608	22,244	108,998		I	
Africa	0	3,122	2,317	150,130	155,569		1.5	
Europe	640	2,981	5,240	0	8,861		0.1	
TOTALS	199,285	1,522,677	5,609,868	3,370,825	10,702,655		100	

Source: Emory University, "Estimates Database," www.slavevoyages.org.

know the city was in Brazil, one could take it, without much imagination, for an African capital; seat of a powerful Black prince, through which passes practically unnoticed a population of white foreigners. It seems everyone is Black."³⁴ Centuries of population figures corroborate those travelers' accounts, and people of at least partial African descent have held majorities in Bahia since the first censuses distinguishing race and legal status appeared in 1775 (Table 1.2).³⁵

Today Bahia remains the cultural and demographic epicenter of Afro-Brazil.³⁶ Combining the official census categories for Black (*pretalo*) and Brown (*pardalo*), Brazilians of African descent accounted for 76 and 79 percent of the populations in Bahia and Salvador, respectively, in 2010, and 85 percent of the rural populations at the heart of this study (Table 1.3). According to that inclusive Afro-descendant composite – known in Brazil as *população negra* or *afrodescendente* – Brazil as a whole is now home to the largest concentration of Black people outside of the African continent.³⁷ Such a uniform accounting of race, however, masks differences across the broad range of phenotypes and experiences encapsulated in the *pardalo* and *pretalo* signifiers, reminding us of the "inevitable slipperiness of racial categories," in Brazil as elsewhere.³⁸

Still, Blackness persists as a valid and revealing social category in Brazil where unjust racial hierarchies and anti-Black violences remain deeply entrenched. As Keisha-Khan Perry demonstrates in her study of racial and environmental justice in Bahia, ambiguous framings of race in Brazil risk obscuring the racialized experiences of Brazilians who code or identify as Black or Afro-descendant. "It has not been difficult for poor Black people in Brazil to decipher who is Black in Brazil, since they see and feel race and class structures in their everyday lives *na pele* (in the skin). Nor do policy makers, development agents, and the police have much difficulty deciding who is Black."³⁹ Contemporary relationships between Bahia and Blackness emerge from the racialized brutality of the transatlantic slave economy, honed and reproduced in (post)colonial structures and

³⁴ Avé-Lallemant, Viagem pelo Norte I, 20. ³⁵ Reis, Rebelião Escrava, 22–24.

³⁶ Boxer, Race Relations; Schwartz, Sugar Plantations.

³⁷ The term "Afro-descendant" includes Africans and their descendants in the Americas, and is used here as a cognate to its Brazilian form, *afrodescendente*; see Reiter and Simmons (eds.), *Afro-Descendants*.

³⁸ Pinho, Mama Africa, 15. On race and skin tone in Brazil, see Telles, Race in Another America; Bailey, Legacies of Race. For a comparison of race and the census in Brazil and the United States, see Nobles, Shades of Citizenship.

³⁹ Perry, Black Women against the Land Grab, xix; see also Smith, Afro-Paradise, 13-15.

TABLE 1.2 Historical demography in Salvador and surrounding areas, 1775-1940

	1775	%	1807	%	1808	%	1835	%	1890	%	1940	%
Salvador	35,253	100	51,112	100			65,500	100	174,412	100	290,184	100
Whites	12,720	36	14,260	28			18,500	28	52,425	30	101,892	35
Enslaved Blacks & Mulattos	14,696	42					27,500	42				
Free Mulattos	4,207	12						•				
Free Blacks	3,630	10										
Total free Afro-descendants	7,837	22					19,500	30				
Total Blacks			25,502	50					46,007	26	76,472	26
Total Mulattos			11,350	22					61,243 ^a	3.5	111,674 ^b	38
Total Afro-descendants	22,533	64	36,852	72			47,000	72	107,250	61	188,405	65
Salvador & 13 rural parishes ^c					249,314	100						
Whites					50,451	20						
Free Blacks & Mulattos					104,285	42						
Enslaved Blacks & Mulattos					93,115	37						
Total Afro-descendants					197,400	79						

^a Combines "prêtos" and "mestiços," but excludes "caboclos," a term used for Indigenous and Euro-Indigenous persons.

b Represents "parda." In the 1940 Census, Brazil's Census Agency (IBGE) began collecting and classifying ethno-racial data using a series of "color" (côr) types: branca (white), parda (brown or mestiço), amarelo (East Asian), and indígena (Indigenous). As of 2010, that system has remained the standard; see IBGE, Censo demográfico 2010. Despite those rigid categories, relationships among skin color, race, and identity remain highly complex and contingent in Brazil; see for example IBGE, "What Color Are You?"; Pinho, Mama Africa, introduction.

^c Excludes Cachoeira, Santo Amaro, and all of southern Bahia, districts with relatively large enslaved populations during that period. Sources: Reis, Rebelião escrava, 20–24; Brazil, Sexo, raça e estado; IBGE, Recenseamento geral, 1940. All percentages are of the total population for the indicated place and time.

TABLE 1.3 2010 population and racial data for each municipal district (município) in the study area

	2010 Total Population	White branca	Black preta	Asian amarela	Brown parda	Indigenous indígena	Total Afro- descendants ^a	% Afro- descendants
Salvador	2,675,656	505,572	743,559	35,781	1,382,304	7,563	2,125,863	79
Recôncavo	514,047	64,630	146,545	7,282	294,361	754	440,906	86
Candeias	83,158	8,261	22,584	1,289	50,960	44	73,544	88
São Francisco do Conde	33,183	2,239	13,278	711	16,878	77	30,156	91
Madre de Deus	17,376	2,063	2,757	225	12,302	29	15,059	87
Santo Amaro	57,800	4,398	22,190	1,411	29,690	66	51,880	90
Saubara	11,201	831	3,926	284	6,098	ΙI	10,024	89
Cachoeira	32,026	3,311	12,948	695	14,747	131	27,695	86
São Felix	14,098	1,507	4,124	238	8,159	70	12,283	87
Maragogipe	42,815	7,291	9,629	487	25,396	12	35,025	82
Salinas da Margarida	13,456	760	5,396	232	7,003	65	12,399	92
Nazaré	27,274	3,938	6,155	226	16,917	38	23,072	85
Muniz Ferreira	7,317	1,290	1,605	37	4,384	I	5,989	82
Santo Antônio de Jesus	90,985	20,256	21,010	700	48,788	108	69,798	77
Jaguaripe	16,467	1,675	4,314	192	10,285	I	14,599	89
Aratuipe	8,599	905	2,017	158	5,485	34	7,502	87
Vera Cruz	37,567	3,966	10,035	246	23,237	41	33,272	89
Itaparica	20,725	1,939	4,577	151	14,032	26	18,609	90

Source: IBGE, Censo demográfico, 2010. In Brazil, as in the United States, census racial categories are self-identified.

^a Here and throughout, census racial categories designating *preta* (Black) and *parda* (Brown) are combined to form an "Afro-descendant" composite; see also Da Costa, *Reimagining Black Difference*. Other studies refer to those composites as "Black" and "Afro-Brazilian"; see Kraay, "Introduction"; Piza and Rosemberg, "Color in the Brazilian Census"; Sansone, *Blackness Without Ethnicity*.

struggles unfolding since its abolition in the late nineteenth century.⁴⁰ Understanding how anti-Black racism shapes and constrains modern politics even in Brazil's "Black Rome" reveals the transnational pervasiveness of white supremacy and how its deep-seated ideologies and mechanisms continue to obscure and disregard the contributions and wisdom of Black people, including the human-environmental relationships and landscapes analyzed in this book.

RACIAL DEMOCRACY IN AN AFRO-PARADISE

Brazil finally abolished slavery in 1888, and the next year a military coup ushered in a nominally democratic government. Under the official motto "order and progress," elites sought to reorganize Brazilian society in ways that prioritized economic development while maintaining the hierarchies of race and class established under colonial rule and the transatlantic slave economy.41 Within this framework the Afro-Brazilian social, political, and intellectual projects of the twentieth century began to emerge. Following abolition, scholars in Bahia began to turn their attention to Afro-Brazilian histories and cultures.⁴² Academic Afro-Brazilian studies coalesced over the subsequent decades, culminating in a series of academic conferences chaired by Brazilian social scientists. The second Congresso Afro-Brasileiro, held in Salvador in 1937, launched several noteworthy studies of Afro-Brazilian identities and expressions.⁴³ Edison Carneiro, Aydano do Couto Ferraz, and other scholars joined forces with popular religious leaders such as Mãe Aninha to lay the intellectual groundwork for Afro-Brazilian cultural and political movements. The 1930s and 1940s saw an explosion of interest in Afro-Brazilian expressions, led by the now iconic prose of Jorge Amado, the music of Dorival Caymmi, the sculpture and public art of Carybé, and the photographs,

⁴⁰ Butler, Freedoms Given, Freedoms Won; Kraay (ed.), Afro-Brazilian Culture and Politics; Fryer, Rhythms of Resistance; Albuquerque, Jogo da dissimulação; Mariano, Invenção da baianidade; Pinho, Mama Africa; Romo, Brazil's Living Museum; Ickes, African-Brazilian Culture; Da Costa, Reimagining Black Difference; Sterling, African Roots; Fischer, Grinberg, and Mattos, "Law, Silence, and Racialized Inequalities"; Barton, "Now You're Eating Slave Food!"; Ickes and Reiter (eds.), Brazil's Black Mecca.

⁴¹ Viotti da Costa, Brazilian Empire; Butler, Freedoms Given, Freedoms Won.

⁴² Rodrigues, *Africanos no Brasil*; Querino, *Costumes africanos*; Guridy and Hooker, "Currents in Afro-Latin American"; Ickes and Reiter (eds.), *Brazil's Black Mecca*.

⁴³ Carneiro and Ferras, "O Congresso Afro-Brasileiro da Bahia"; Romo, *Brazil's Living Museum*, chapter 2; de la Fuente and Andrews, "The Making of a Field," 5

ethnographies, and historical scholarship of Pierre Verger.⁴⁴ While those movements and the perspectives they advanced remain deeply influential in Bahian and broader Brazilian societies, national political projects managed to limit their progress toward social and racial justice.

Ruling from 1930 to 1945 and again from 1951 to 1954, the authoritarian regime of Getúlio Vargas enforced a myth of "racial democracy" to consolidate power and control under a facade of national Brazilian unity.45 Vargas's propaganda ministry promoted the ideas of Brazilian sociologist Gilberto Freyre - who framed Brazil as a "racial paradise" inhabited by a single mixed race - in attempts to construct a "tropical mulatto republic" based on disingenuous myths of racial equality. 46 The regime outlawed political parties and movements that spoke out against racial inequities and ordered that all reference to race be removed from textbooks, censuses, and official discourse. By sterilizing and promoting certain forms of Afro-Brazilian culture, the state and its powerful social and corporate interests moved to appropriate and commodify the innovative expressions of Black Brazilians while falsely proclaiming its society free of racial bias.⁴⁷ Two decades later, the United Nations commissioned an ambitious study of race relations in Brazil that found widespread discrimination and inequities at all levels of society.⁴⁸ Then, just as discussions of race-based inequities began finally to filter into mainstream debates and movements, a military dictatorship seized control of the country in 1964, squashing dissent and organization and forcing many of the most prominent academics and activists into exile. Only in the late 1970s, as the military regime began to crumble, did the Afro-Brazilian movement begin to regain its momentum.⁴⁹

Since then, social movements in defense of Afro-Brazilian lives, contributions, and communities have emerged in Bahia and elsewhere in Brazil. Yet despite increased racial solidarity and some hard-won successes, anti-Black racism remains deeply embedded in all levels of Brazilian society, obstructing substantial socioeconomic or electoral gains among Bahia's

⁴⁴ Amado, Bahia de Todos os Santos; Amado, Damm, and Carybé, Bahia boa terra Bahia; Castillo, "Entre a oralidade e a escrita"; Ickes, African-Brazilian Culture.

⁴⁵ Nascimento, "Myth of Racial Democracy"; Ickes, African-Brazilian Culture, 5-9.

⁴⁶ Freyre, Casa grande e senzala quoted in Reiter and Mitchell, "New Politics of Race," 4; Alberto and Hoffnung-Garskof, "'Racial Democracy.'"

⁴⁷ Hanchard, Orpheus and Power; Araujo, Public Memory; Da Costa, Reimagining Black Difference; Bledsoe, "Negation and Reassertion"; Collins, Revolt of the Saints.

⁴⁸ Wagley, Race and Class in Rural Brazil.

⁴⁹ Covin, *Unified Black Movement*; Reiter and Mitchell, "New Politics of Race."

"Afro-Mestiço working class majority." ⁵⁰ Following Christen A. Smith, Bahia has maintained its version of racial democracy through a performative myth of "Afro-paradise." ⁵¹ In Bahia's Afro-paradise, the state simultaneously appropriates and commodifies Afro-Brazilian expressions while using terror to discipline Black bodies and communities. Smith demonstrates how Bahia's racialized structures of power both derive from and reproduce the simultaneous celebration and oppression of Blackness and Black people – how "Bahia as a space of Black fantasy and Bahia as a space of death for Black people are two sides of the same coin." ⁵² The state-sponsored promotion of cultural-historical connections to Africa therefore serves to (re)enforce a socioeconomic and political hierarchy of race and class that violently subordinates people of African descent, even as they provide creative outlets for Afro-Brazilian expression. ⁵³

Black communities in Bahia resist this official exploitation in myriad ways, from the mundane to the spectacular. For instance, popular street festivals including the annual pre-Lenten Carnival, São João and the *festas juninas*, the Lavagem do Bonfim, and the Dois de Julho independence celebration have become prominent platforms for the public recognition and performance of Afro-Brazilian contributions to Bahian cultures, histories, and identities.⁵⁴ Many Afro-Brazilian carnival groups, known as *afoxés* and *blocos afros*, now convene throughout the year and often operate as mutual aid organizations with ambitious cultural and sociopolitical objectives.⁵⁵ Everyday manifestations of Afro-Brazilian creativity and resistance include the religions Candomblé and Umbanda and their various sects and denominations, several musical forms including

⁵⁰ Quote from "Preface" in Ickes and Reiter (eds.), Brazil's Black Mecca, ix; Reichmann, Race in Contemporary Brazil; Sansone, Blackness without Ethnicity; Telles, Race in Another America; Pinho, Mama Africa; Da Costa, Reimagining Black Difference; Mitchell-Walthour, Politics of Blackness; Fischer, Grinberg, and Mattos, "Law, Silence, and Racialized Inequalities"; Wylie, Party Institutionalization.

⁵¹ Smith, Afro-Paradise. 52 Ibid., 20.

⁵³ On the development of this fundamental tension over the twentieth century, see Santana, Alma e festa; Pinho, Mama Africa; Romo, Brazil's Living Museum; Ickes, African-Brazilian Culture.

⁵⁴ On Carnaval, see Butler, "Carnival, Culture, and Black Citizenship." The feast day of São João highlights the popular June Feasts, or *festas juninas*, that punctuate Bahia's harvest season; see Packman, "Carnavalização of São João." The Lavagem (washing of) Bonfim is a ceremonial inter-faith parade culminating at one of Salvador's most celebrated Catholic basilicas; see Reis, *Death Is a Festival*, chapter 2; Ickes, "Adorned with the Mix." On Dois de Julho, see Kraay, *Bahia's Independence*.

⁵⁵ Da Costa, "Anti-Racism in Movement"; Da Costa, Reimagining Black Difference.

Samba and Axé, the martial art Capoeira, and of course Afro-Brazilian foodways – and their distinctive dendê oil. ⁵⁶ Derided and prohibited in the early twentieth century, these popular cultural forms celebrate African-Bahian expressions and practices developed over the preceding centuries, and together help to shape and foment a Bahian regional identity – *baianidade*. ⁵⁷ Still, the myths of racial democracy and Afroparadise endure, and relatively few Afro-descendants themselves benefit socially or economically from the national and regional commemorations and commodification of Afro-Brazilian culture. Black movements and communities nevertheless continue to leverage Afro-Brazilian creative

57 Fryer, Rhythms of Resistance, chapter 2; Pinho, Mama Africa; Ickes, African-Brazilian Culture.

According to J. Lorand Matory, "Candomblé is an Afro-Brazilian religion of divination, sacrifice, healing, music, dance, and possession-trance. The only rival to its beauty is its complexity"; see "The 'Cult of Nations.'" According to Stefania Capone, there remain at least nine "nações (nations)" of Candomblé, with Nagô-Ketu (Yoruba), Jeje (Fon and Adja-Ewe), Angola (Bantu), and Caboclo remaining the most common; Searching for Africa, 269; see also Harding, Refuge in Thunder and Omari-Tunkara, Manipulating the Sacred. Those nations are derived of ethnonyms used in the transatlantic slave trade, but now represent loyalties to Afro-Brazilian liturgical traditions more so than African ethnic or geographic derivatives. Respective pantheons of deities differ with each ethnolinguistic liturgical group. Nagôs revere Orixás, Jejes revere Voduns, and Angolas revere Nkisis. Bahians considered "Jeje" the ethnicity of peoples coming from the "Gbe-speaking area," i.e., "the southern region of present-day Togo, Republic of Benin, and southwest Nigeria, where live the peoples traditionally labeled as Adja, Ewe, Fon, or a combination of these terms such as Adja-Ewe"; Parés, Formation of Candomblé, xii. According to conventional understandings, speakers of Gbe founded terreiros (places of worship) devoted to the Jeje nation of Candomblé; Yoruba-speaking Africans and those with ancestral links to Yoruba cultures, known by the umbrella ethnonym Nagô in Bahia, founded terreiros devoted to Nagô, Ketu, or Nagô-Ketu nations of Candomblé; people connected to various Bantu languages and traditions founded groups dedicated to Candomblé Angola. Yet for all their distinctions, the various denominations retain much in common, as well as with other forms of African-inspired spirituality including Umbanda and Macumba, and all fall under a broader umbrella of African-Brazilian expressions and practices of spirit possession and intercession. Recent scholarship, including the works cited in this note, challenges rigid interpretations of "purity" and "tradition" to portray all forms of Candomblé as hybrid, contingent, and fluid. For more on Candomblé nations, see Costa Lima, "O conceito de nação"; Johnson and Palmié, "Afro-Latin American Religions." Following Parés in Formation of Candomblé, the capitalized "Candomblé" refers to the religion in general, while "candomblé" refers to a specific meeting or congregation of people engaged in worship. On samba, capoeira, and other popular expressions, see Fryer, Rhythms of Resistance; McCann, Hello, Hello Brazil; Assunção, Capoeira; Pravaz, "Hybridity Brazilian Style"; Romo, Brazil's Living Museum; Finn, "Soundtrack of a Nation"; Lody (ed.), Dendê.



FIGURE 1.1 A Baiana fries *acarajé* in dendê oil in the Largo do Pelourinho, at the heart of Salvador's historic city center (2009).

expressions to construct powerful political symbols and hold space in the ongoing struggles for social, racial, and environmental justice.⁵⁸

Among the more prominent purveyors of Afro-Brazilian culture are the Baianas de acarajé spread throughout Salvador, elsewhere in Bahia, and many other states – notably Rio de Janeiro, São Paulo, and Pernambuco (Figure 1.1).⁵⁹ These traditional, mostly Black women vendors of *acarajé* and other delicacies sell their wares from stands placed strategically about town, and in Salvador the dendê oil sizzling in their pans wafts through practically every gathering place, square, bus stop, and crossing to dominate the urban smellscape. Their signature dish is a dumpling made from peeled and mashed black-eyed peas deep fried in azeite de dendê and garnished with dried shrimp, okra-based *carurú*, creamy *vatapá*, and fiery

⁵⁸ Carneiro, Ladinos e crioulos; Mariano, Invenção da baianidade; Romo, Brazil's Living Museum; Dixon, Afro-Politics; Dawson, In Light of Africa; Perry, Black Women against the Land Grab; Smith, Afro-Paradise.

⁵⁹ Cruz, "Narratives, Characters, Performances."

pepper sauce. ⁶⁰ Gastronomic roots of *acarajé* lie with *akará*, the original Yoruba version of the fritter still popular across West and Central Africa and the diaspora. ⁶¹ The Afro-Brazilian name for the fritter comes from a Portuguese portmanteau of the Yoruba phrase "*akará je*," meaning "*akará* to eat." ⁶² Its Brazilian name therefore memorializes not only the foodways of western Africa but also the many generations of Baianas who kept its traditions alive in the diaspora. In Bahia *acarajé* became a ubiquitous material and symbolic anchor of Afro-Brazil, and Brazil's Ministry of Culture officially declared Baianas de acarajé and their crafts among the country's "intangible cultural heritage" in 2004. ⁶³

Acarajé represents much more than just a traditional street food. Along with other Creole dishes cooked or seasoned in dendê oil it endures as a consecrated sacrament of Afro-Brazilian religions linking food, spirituality, ancestors, and landscapes in Bahia. ⁶⁴ Devotees of Candomblé, Bahia's central Afro-Brazilian faith, revere dendê as a vital ritual and symbolic element. Fronds cut from young palms (màrìwò) adorn the entrances to places of worship known as terreiros, and many religious communities continue to cultivate dendezeiros on their grounds as living vessels and symbols of Afro-Brazilian spirituality. ⁶⁵ Azeite de dendê remains an essential liturgical material, especially as an offering to the temperamental deity Exú. ⁶⁶ Dendê oil distinguishes ritual foods prepared for many deities including carurú for Xangô, Iansã, Obá, and Ibêji; ipeté (oiled yams) for Ogum; and acarajé for Xangô and Iansã. ⁶⁷ On a fundamental philosophical level, followers of Afro-Brazilian religions revere dendê as a

⁶⁰ Lody, Brasil bom de boca; Costa Lima, Anatomia do acarajé.

⁶¹ Câmara Cascudo, História da alimentação, 835.

⁶² Bascom, "Yoruba Cooking," 134; Walker, "Everyday Africa," 65.

⁶³ Mendonça et al., Ofício das Baianas de acarajé.

⁶⁴ Voeks, Sacred Leaves of Candomblé; Pessoa de Barros and Napoleão, Ewé Òrisà.

⁶⁵ During fieldwork from 2009 to 2019, I observed dendezeiros growing in and around Terreiro Caxuté in rural Valença, Aldeia e Senzala Zinguê in rural Ituberá, and Terreiro do Bogum in urban Salvador. For cultivation of dendezeiros on the grounds of a formative terreiro in the nineteenth century, see Castillo, "O Terreiro do Alaketu," 234, 252. The Bahian Secretariat for the Promotion of Racial Equality published a report containing photographs of 107 terreiros, dendezeiros were clearly visible in forty-nine of these; see SEPROMI, Mapeamento dos Espaços.

⁶⁶ Lody, Tem dendê, 9–12; Verger, Ewé, 237–39. Deemed an "African Hermes" by Brazilian anthropologist Luís da Câmara Cascudo, Exú in the Yoruba pantheon is closely related to Legba in Fon-based traditions and to Mpambu Nzila in the Bantu-based Candomblé Angola. See Câmara Cascudo, Made in Africa, 109.

⁶⁷ Lody, Santo também come; Lody, Tem dendê; Mãe Beata de Yemonjá, Caroço de dendê.

materialization and proponent of $ax\acute{e}$ – the vital force of existence, "the life giving nutrient of the material and spiritual realms." Indeed, the very word itself, dendê, now serves as a metonym for Afro-Brazilian spirituality, its devotees known interchangeably as *povo do santo* (people of the saints) and *povo do dendê*. ⁶⁹

In Brazil, dendê oil represents a complex variety of social meanings and functions. As such, it refuses to fall neatly into reductive theoretical categories such as "African survivals" or wholly independent "Creole" innovations. To Instead, dendê has become a material and symbolic essence of Afro-Brazilian identity and expression, simultaneously providing a direct connection to Africa and a fundamental component of Bahianess, or *baianidade*. As Brazilian anthropologist Raul Lody explains, "for the Afro-Brazilian cultural world, dendê is a distinct symbol and an attestation of the memory, action, production, creation, and re-creation of a heritage based in Africa, absorbed and reinvented in Brazilian space." Thus to comprehend this absorption and reinvention, *Palm Oil Diaspora* analyzes the transatlantic human-environmental relationships that produce and embody dendê in Bahia.

CULTURAL LANDSCAPES IN ATLANTIC ECONOMIES

To supply the dendê oil demanded by Afro-Brazilian gastronomic, religious, and popular expressions, Brazilians rely on dendezeiros rooted in Bahia's Atlantic Rainforest – known there as the Mata Atlântica. African oil palms dot landscapes of coastal Brazil from Amazonia to Rio de Janeiro, but nowhere outside of their native continent do they grow as dense or productive as along Bahia's Southern Coast. Stretching south

⁶⁸ Voeks, Sacred Leaves of Candomblé, 73.

⁶⁹ Lody, Tem dendê, 13; Matory, Black Atlantic Religion, 233.

These categories represent the poles of a long running historiographical debate on the roles of Africa and Africans in the transformation of the Americas during and after European colonization. On survivals, the fundamental text is Herskovits, Myth of the Negro Past; on creolization, Mintz and Price, Birth of African-American Culture is formative. I agree with Kristin Mann that "the opposition that has emerged between proponents of the Africanist and creolist models has reached the limits of its usefulness. Surely, the goal is not to prove that Old or New World influences were more important in shaping the experiences of slaves, but rather to understand the relationship between them in specific historical contexts"; Mann, "Shifting paradigms," 6, emphasis mine. Karl Offen explained how geographers have long obviated that false dichotomy with analyses of transatlantic cultural-environmental interactions; Offen, "Environment, Space, and Place," 494–96.

⁷¹ Gilroy, Black Atlantic; Pinho, Mama Africa. ⁷² Lody, Tem dendê, 1.

approximately 150 kilometers from the Island of Itaparica in the Bay of All Saints to the base of the Maraú Peninsula that frames the Bay of Camamu, dendezeiros dominate local ecosystems and economies as the region's most symbolic and prolific cultural-economic species. There dendê palms flourish in a variety of agroecological settings including family farms, backyards, pastures, and a few plantation monocultures. Most pervasive and characteristic, however, are the vast biodiverse groves and secondary forests distinguished by unplanted or "semi-wild" African oil palms – conditions botanists refer to as "subspontaneous," Bahian farmers term "native," and what Anthropologist Thiago Cardoso describes as "feral, brought about by human engineering but not obeying the dictates of its human landlord."

In a formal nod to those ancestral groves of African palms, Bahia's state government designated the eight municipalities at the heart of Bahia's palm oil economy as the Costa do Dendê, or Dendê Coast, in 1993.⁷⁵ That official designation nevertheless came with little recognition and no material support for local dendê producers and the landscapes they nurture; rather it serves merely to attract tourists to the region's picturesque beaches. The government's official branding therefore represents yet another commodification of Afro-Brazilian and Indigenous creativity with little benefit for local communities or environments. Considering this an unjust appropriation of intellectual innovations and

⁷³ IBGE, Produção agrícola municipal, "Tabela 1613."

⁷⁴ Azevedo, "Algumas notas sobre o dendezeiro"; Zeven, Semi-Wild Oil Palm; Cardoso, "Multispecies Life of Feral Dendezeiros."

⁷⁵ As one of seven tourism zones encompassing major destinations in Bahia, the Dendê Coast includes, listed from north to south, the municipalities of Valença, Cairu, Taperoá, Nilo Peçanha, Ituberá, Igrapiuna, Camamú, and Maraú (see also Table 1.3). Various agencies categorize much of that region as Bahia's Baixo Sul, or "Southern Lowlands"; see Bahia, Programa de desenvolvimento turístico and Roteiros ecoturísticos da Bahia. I refer to that area before the 1990s as the "Southern Coast" and thereafter as the Dendê Coast; see Schwartz, Sugar Plantations; Barickman, Bahian Counterpoint. Three important and detailed social-ecological histories of this area are Flesher, "Explaining the Biogeography"; DeVore, "Cultivating Hope"; and da Silva, Comunidades negras. While those seven municipalities represent the core of Bahia's dendê economy, Brazil's agrarian censuses have recorded dendê production in thirty-eight municipalities throughout the state, from metropolitan Salvador, around the Recôncavo, and down the Southern Coast all the way to the state border with Espírito Santo. During fieldwork from 2009 to 2019, I observed dendê production in several other municipalities that do not appear in the official statistics, including the bay island of Itaparica, Mata de São João north of Salvador, Jandaíra on the border with Sergipe state, and the Remanso quilombo community near the Chapada Diamantina park deep in the semi-arid interior.

agrarian labor, I work to valorize the diasporic communities, landscapes, cultures, and economies at work on Bahia's Dendê Coast.

Drawing on more than a century of geographical scholarship, this book frames the Dendê Coast as a *cultural landscape* formed and reproduced through transatlantic interactions of people and places. Developed, critiqued, and adapted by generations of geographers and other scholars, versatile concepts of cultural landscapes contribute to the production of knowledge in multiple ways – among them scales of analysis, methodologies of fieldwork, and social-territorial meaning and material. Here I view cultural landscapes as material and discursive embodiments of the physical-biological-cultural processes that we simultaneously analyze and inhabit. Rather than sterile bio-physical environments, or static renderings of commodified expressions, cultural landscapes provide us a way of seeing and relating to places and environments as both opportunities for and reflections of social-ecological creativity.⁷⁶

Sarah Whatmore points out how core concepts developed in early studies of cultural landscapes mesh with current "more-than-human" and "multispecies" approaches placing humans in lively networks of social-bio-physical interaction.⁷⁷ The interactive cultures, landscapes, and economies examined in this book therefore coalesce as *assemblages*, which is to say "*processes* through which different entities come together, form relations, and operate as provisional 'wholes.'" This focus on processes of human-environmental interaction draws on the concepts and analyses of *political ecology* – an interdisciplinary field and community of scholarship that examines the co-constitutive relations of politics, power, and environmental change.⁷⁹ Building on the interconnected

On cultural landscapes, see Sauer, "Morphology of Landscape"; Duncan, City as Text; Jackson, Discovering the Vernacular Landscape; Mitchell, Lie of the Land; Offen, "Environment, Space, and Place." Scholarly debates related to cultural landscapes are summarized in Mathewson, "Classics in Human Geography." On intersections of landscape and race, see for example Schein (ed.), Landscape and Race; McKittrick and Woods (eds.), Black Geographies; Crutcher, Tremé; Reese, Black Food Geographies; Giancarlo, "Spatializing Black Culture." For a geographical theorization of landscapes and colonization, see Sluyter, Colonialism and Landscape. For a sweeping treatment of landscape within geography, see Wylie, Landscape.

⁷⁷ Whatmore, "Materialist Returns"; Barad, Meeting the Universe Halfway; Tsing et al. (eds.), Arts of Living.

⁷⁸ Kinkaid, "Can Assemblage Think Difference?," 458–9, emphasis added. While acknowledging their different but overlapping genealogies, I use "network" and "assemblage" interchangeably throughout this book.

⁷⁹ On the community, traditions, and approaches of political ecology, see Robbins, *Political Ecology* and Perreault, Bridge, and McCarthy (eds.), *Routledge Handbook of Political*

approaches and traditions of cultural landscapes, assemblage thinking, and political ecology, I use the term *socioecological* to invoke relations, inter/intra-actions, and assemblages among the social, cultural, political, physical, chemical, and biological constituents and processes that coalesce as landscapes and economies in fluid states of becoming. The socioecological analyses in this book examine how multiple beings and species (including humans) collaborate in and with environments to create and reproduce Bahia's Dendê Coast. Distinguished by a palm and socioecological relations of African origin, Bahia's dendê landscapes help to form an Afro-Brazilian economy – at once a source of nutrition and livelihoods in Northeast Brazil, an ecological base for Afro-Brazilian cultural forms, and a living monument to innovation and perseverance in the African diaspora (Figure 1.2). 81

While rooted in South America, the socioecological processes that shape Bahia's Afro-Brazilian economy emerge from transatlantic histories and geographies. Those processes interact at multiple and overlapping scales, from the households and landscapes of coastal Bahia to the global

Ecology. On the origins of landscape studies within nature-society geography since the nineteenth century and their connections to political ecology, see Turner, "Nature and Society in Geography"; Neumann, "Political Ecology III"; Pries, "A Geographer Looks." For an insightful and sweeping review of the study of human–environment relations in geography, see Zimmerer, "Geography and the Study."

- Any attempts to separate "nature" from "society," whether theoretical or material, rely on modernist ontological fabrications. Reductive categories such as "social," "biological," and "physical," remain useful for classification and specialized analysis, but cannot withstand scrutiny as pure or unequivocal types; see Haraway, Simians, Cyborgs, and Women; Latour, We Have Never Been Modern; Whatmore, Hybrid Geographies. Karen Barad has developed the concept of "intra-actions," in contrast to interactions, to demonstrate how agency, causality, and indeed matter derive from iterative relationships among components within assemblages. While I use the term "interaction" for editorial clarity, I mean to invoke her complex notion of intra-action; Barad, "Posthumanist Performativity." Some writers prefer the hyphenated "social-ecological," but like Haila and Mansfield et al., I use the unhyphenated compound "socioecological" to signal the full integration of Earth's constituents in "power-laden, negotiated relationships"; see "Environmental Politics after Nature," 285; Haila, "Beyond the Nature-Culture Dualism." On assemblage thinking, see Deleuze and Guattari, A Thousand Plateaus; DeLanda, Assemblage Theory.
- I use the terms "dendê economy" and "Afro-Brazilian economy" interchangeably. While this book emphasizes Afro-Brazilian contributions, a diverse range of peoples including Indigenous Brazilians and migrants from throughout Europe, the Levant, and East Asia, among other places have long settled and transformed Bahia's Southern Coast (as with other Brazillian regions); see for example Ribeiro, *Memória e identidade*, 35, 123, 145. In the twentieth century, Japanese migrants in particular contributed many botanical species and agroecological techniques that remain highly influential in coastal Bahia; see DeVore, "Cultivating Hope," especially chapter 4.



FIGURE 1.2 An emergent grove of dendezeiros on Bahia's Dendê Coast, in the Sarapuí district of Valença, Bahia (2012).

networks that enmeshed the Atlantic Ocean following the European encounter with the New World. ⁸² This book therefore joins the growing community of scholarship broadening colonial and diasporic analyses beyond state borders to analyze an interactive, transnational Atlantic World. ⁸³ Combining transatlantic conceptions of African-American history conceived by W. E. B. Du Bois and Carter G. Woodson with Fernand Braudel's transnational interpretations of social, ecological, and economic relations, an Atlantic framework integrates western Africa, the Americas, and much of Europe into a single, networked unit of analysis. ⁸⁴

Beginning in 1492, transatlantic circulations of flora, fauna, and knowledge coalesced to radically reshape demographics, cultures, politics, and environments across the Old and New Worlds – processes Alfred

⁸² On socioecological processes (and social movements) rooted simultaneously in particular territories and multiple scales of analysis, see Rocheleau, "Rooted Networks" and Cantor et al., "Putting Rooted Networks into Practice."

⁸³ Gilroy, Black Atlantic; Thornton, Africa and Africans; Bailyn and Denault (eds.), Soundings in Atlantic History; Alencastro, O trato dos viventes; Canny and Morgan (eds.), Oxford Handbook.

⁸⁴ Woodson, African Background Outlined; Du Bois, Souls of Black Folk; Du Bois, Black Folk Then and Now; Braudel, Mediterranean World.

Crosby dubbed the Columbian Exchange. 85 While his initial studies focused on European influence in the transformation of Atlantic land-scapes and communities, more recent environmental histories and geographies present more thorough and inclusive interpretations of those Atlantic circulations. 66 These interdisciplinary Atlantic studies combine decades of discerning postcolonial analyses with conceptual tools and methodological innovations developed in cultural geography, political ecology, environmental history, and other fields to clarify the myriad contributions of Afro-descendants, Indigenous peoples, and other marginalized groups to Atlantic landscapes, cultures, and economies. 87

Rather than isolating individual people, events, or places, scholars such as Andrew Sluyter are analyzing networks of interactive processes to "reconceptualize the Atlantic from a dead space of separation into a living space of flows."88 This relational approach seeks to understand how interactions of diverse peoples, environments, and knowledge coalesce to transform landscapes and societies. The Black geographies emerging from Bahia's Dendê Coast therefore represent fundamental "spaces of encounter" that, following McKittrick and Woods, "[bring] into focus networks and relations of power, resistance, histories, and the everyday."89 I argue that any analysis of socioecological interaction and change must account for the fundamental workings of power - how power flows through interactive, multiscalar networks to energize landscapes, cultures, and economies, Atlantic and otherwise. To that end the following multipart section connects various theoretical conversations related to landscapes and power to frame the socioecological and economic analyses taken up in this book.

⁸⁵ Crosby, Columbian Exchange.

⁸⁶ Voeks, Sacred Leaves; Carney and Rosomoff, Shadow of Slavery; McNeill, "Envisioning an Ecological Atlantic"; Sluyter, Black Ranching Frontiers; Cabral, Presença da floresta. Elaeis guineensis is not mentioned in Crosby's Columbian Exchange.

⁸⁷ Fanon, Wretched of the Earth; Said, Orientalism; Wolf, Europe and the People; Blaut, Colonizer's Model; Denevan, "Pristine Myth"; Offen, "Historical Political Ecology"; Sharp, Geographies of Postcolonialism; Perreault, Bridge, and McCarthy, Routledge Handbook of Political Ecology; Soluri, Leal, and Pádua, A Living Past.

⁸⁸ Sluyter, Black Ranching Frontiers, 3; Steinberg, "Of Other Seas."

⁸⁹ McKittrick, "On Plantations," 950; McKittrick and Woods, "No One Knows the Mysteries," 7.

THEORIZING POWER AND LANDSCAPE

The recovery of African contributions in the (trans)formation of the Atlantic World connects to long-running academic debates related to agency – that is, the extent to which enslaved and otherwise marginalized peoples could exercise power or self-determine their own lives and conditions. While early debates tended to polarize into distinct academic camps, more recent treatments are dissolving theoretical binaries to recognize enslaved peoples as "both agent and subject; persons and property; and people who resisted and accommodated - sometimes in one and the same act."90 Scholars from across the disciplines now frame enslaved peoples as complicated beings involved to varying degrees in the creative and intellectual networks and processes that transformed cultures, economies, and environments in the Atlantic World. While colonizers often co-opted African knowledge and practices in service of their own objectives, many New World transformations reflected the preferences and ingenuity of Afro-descendants, despite the disorienting and brutal atrocities of the Middle Passage and prolonged colonial oppression. People enslaved and otherwise oppressed in the Americas countervailed and redirected colonial power on a regular basis and as part of their everyday lives. 91 They determined many of their own experiences, and contributed to the development of novel creations in the Americas - among them foodways, arts, religions, communities, and landscapes.92 Theories of historical agency and resistance must therefore account for power in ways that transcend rigid binaries.

Network or assemblage thinking maps power through diverse webs of relationships rather than oppositional binaries. Such relational

⁹⁰ Quote in Camp, Closer to Freedom, 1; Major works related to that debate include Du Bois, The Negro; Genovese, Roll, Jordan, Roll; Blassingame, The Slave Community. Mattoso, To Be a Slave; Schwartz, Slaves, Peasants, and Rebels. The historiographical debates are analyzed in Camp, Closer to Freedom; See also note 70.

⁹¹ On "everyday forms of resistance," see Scott, Weapons of the Weak.

⁹² Influential examples include Voeks, Sacred Leaves; Thornton, Africa and Africans; Carney, Black Rice; Walker (ed.), African Roots/American Cultures; Bennett, Africans in Colonial Mexico; Sweet, Recreating Africa; Andrews, Afro-Latin America; Carney and Rosomoff, Shadow of Slavery; Hawthorne, From Africa to Brazil; Sweet, Domingos Álvares; Ferreira, Cross-Cultural Exchange; Reis and Azevedo (eds.), Escravidão e suas sombras; Voeks and Rashford (eds.), African Ethnobotany; Van Norman, Shade Grown Slavery; Woods, Development Arrested; de la Torre, People of the River; Duvall, African Roots of Marijuana. Three succinct and insightful reviews are da Silva and Misevich, "Atlantic Slavery and the Slave Trade"; Ferreira and Seijas, "The Slave Trade to Latin America"; and Offen, "Environment, Space, and Place."

approaches to power follow the dynamic flows and fluctuations of influence that coalesce to generate agency and change. ⁹³ We might then, following Dianne Rocheleau, comprehend landscapes, communities, and economies as interlinked socioecological assemblages, rooted in and across particular places and "all shot through with power." ⁹⁴ Yet even as relational power reveals a diffusive range of political possibilities, Eden Kinkaid reminds us how colonized social hierarchies always already condition these assemblages, guiding particular flows of power to activate and reinforce racialized processes of social difference. ⁹⁵

To elucidate these entanglements of race and place, Katherine McKittrick grounds the African diaspora in "interlocking workings of dispossession and resistance" forged on the colonial plantation. ⁹⁶ Building on the work of George Beckford and Sylvia Wynter, she insists that the violence and oppression of slave plantations *demanded* resistance through innovative acts of survival and fulfillment. ⁹⁷ Afro-descendants and others resisted the brutalities and ostensible restrictions of colonialism and transatlantic slavery by participating in socioecological collectives of agency, power, knowledge, and environments. Theorizing the complexities of agency within Brazilian slavery, João José Reis and Eduardo da Silva have articulated resistance along a spectrum of

- ⁹³ Scholars increasingly find agency "distributed across an ontologically heterogeneous field, rather than being a capacity localized in a human body or in a collective produced (only) by human efforts"; Bennett, quoted in Bergmann, et al., "Thinking through Levees," 844. See Stengers, Power and Invention; Whatmore Hybrid Geographies; Escobar, Territories of Difference; Bennett, Vibrant Matter; Crane, "Other Spaces"; Mullaney, Geopolitical Maize; Müller, "Assemblages and Actor-Networks"; DeLanda, Assemblage Theory. Assemblage thinking builds on post-structural theories that framed domination and resistance as entangled, ubiquitous, and co-constitutive functions of power; see Foucault, Discipline and Punish and History of Sexuality; Butler, Excitable Speech. On "circulations of power" and the "countless processes of domination and resistance which are always implicated in, and mutually constitutive of, one another," see the introduction and various chapters in Sharp et al. (eds.), Entanglements of Power, 1; and Rose, "Seductions of Resistance."
- 94 Rocheleau, "Rooted Networks," 225; Rocheleau, "Roots, Rhizomes, Networks and Territories," 70–88; Rocheleau and Roth, "Rooted Networks"; Cantor et al., "Rooted Networks into Practice."
- 95 Kinkaid, "Can Assemblage Think Difference?" By this I mean to foreground "how categories of 'race,' 'gender,' and 'sexuality' become perceived as identities through a particular operation of power when they in fact describe a set of social relations and transpersonal forces," 460.
- ⁹⁶ McKittrick, "Plantation Futures," 3.
- 97 McKittrick, "Plantation Futures," 5; Beckford, Persistent Poverty; Wynter, "Novel and History."

"negotiation and conflict." They juxtapose armed insurrection and flight with more routine forms of bargaining and subterfuge to recognize enslaved humans as calculating and inventive actors. Resistance was not always direct or violent, more often it was subtle, patient, and mundane. Treatments that recognize the complexities of power circulating within colonialism and the transatlantic slave economy in no way reduce the magnitude of their atrocities. On the contrary, such works reveal the myriad ways that enslaved people, despite deadly oppression, proclaimed their humanity and participated in cultural, economic, and environmental change. Recognizing the potential for resistance in routine acts of daily life reconfigures the historical and geographical agency of enslaved people, allowing us to recover their innumerable contributions to societies and environments.

More inclusive framings of resistance also expose the gendered contours of power in the Atlantic World, as well as its histories and geographies. Any implication that resistance occurred only through physicality or direct confrontation reinforces masculinist tropes of subjugation while diminishing everyday strategies of subversion and survival common among all enslaved people, including women. If enslaved women were less likely than men to engage in violent confrontations, treatments that disregard more subtle and mundane forms of resistance disproportionately elide the agency of women.⁹⁹ From Benta's eighteenth-century dendê enterprise to the sacred wares sold by today's Baianas de acarajé, the everyday forms of resistance enacted by socioecological collectives of Black women and landscapes in Bahia and beyond have long helped to shape the cultures and environments of the Atlantic World. Too Drawing on a relational framing of power in the African diaspora, this study follows agency as it flows through complex socioecological assemblages to form and intertwine cultures, landscapes, and economies. Applying this frame of everyday resistance, we can recognize how even mundane human-environmental interactions such as gardening and foodways breached the ostensible domination of colonization and enslavement.

⁹⁸ Reis and da Silva, Negociação e conflito.

⁹⁹ Gaspar and Hine (eds.), More than Chattel; Camp, Closer to Freedom; Campbell, Miers, and Miller (eds.), Women and Slavery; DeLoughrey, "Yam, Roots, and Rot." Women's resistance to enslavement was, however, diverse and complex, and along with their more subtle forms of everyday resistance, some also participated in violent, militarized revolts; see for example Brown, Tacky's Revolt, especially chapter 4.

¹⁰⁰ McKittrick, Demonic Grounds; Carney and Rosomoff, Shadow of Slavery.

Socioecological Resistance

Slaveholding plantations serve as the socioecological and economic foundations of colonialism and modernity. To Seeking to maximize profits, colonizers enslaved Indigenous and Afro-descendant people and forced them to construct monocultures of a single commodified crop. Yet even as colonial systems served this singular purpose, enslaved peoples carved out distinct and diverse forms of agriculture, foodways, and ecological management systems across the Atlantic World. Scholars have documented an impressive range of settings where enslaved people collaborated in and with landscapes to shape environmental change and agricultural development in the colonial Americas. These spaces included doorvard gardens, subsistence plots, provision grounds, and maroon communities where enslaved people exercised varying degrees of control, as well as the plantations, ranches, and small farms that enslaved them. To 2 Stephanie Camp has theorized such environments as "rival geographies" where enslaved peoples practiced "alternative ways of knowing and using plantation and southern space that conflicted with planter's ideals and demands."¹⁰³ Among those various landscapes of resistance, provision grounds and subsistence plots - the physical spaces where planters allowed or forced enslaved people to grow their own foods and medicines - became prominent sites of socioecological change and diasporic

Wynter, "Novel and History"; Beckford, Persistent Poverty; Schwartz, Sugar Plantations; Shiva, Monocultures of the Mind; Woods, Development Arrested; Schwartz (ed.), Tropical Babylons; Edelson, Plantation Enterprise; Gilmore, Golden Gulag; McKittrick, "On Plantations"; McKittrick, "Plantation Futures"; Tsing, The Mushroom; Haraway, Staying with the Trouble; Davis et al., "Anthropocene, Capitalocene, ... Plantationocene?"

¹⁰² Câmara Cascudo, *História da alimentação*; McClure, "Parallel Usage of Medicinal Plants"; Price, "Subsistence on the Plantation Periphery"; Berlin and Morgan (eds.), *Cultivation and Culture*; Carney, *Black Rice*; Carney and Voeks, "Landscape Legacies"; Carney and Rosomoff, *Shadow of Slavery*; Sluyter, *Black Ranching Frontiers*; Voeks and Rashford (eds.), *African Ethnobotany*; Morgan, "Internal Economy"; van Andel, van der Velden, and Reijers, "Botanical Gardens"; Twitty, *The Cooking Gene*; Voeks, *Ethnobotany of Eden*; de la Torre, *People of the River*. Debates over a "peasant breach" of enslaved workers in Brazil producing and marketing their own foodstuffs are summarized in Cardoso, "Peasant Breach" and Schwartz, *Slaves, Peasants, and Rebels*, 8, 49–50, 82–84. Maroon communities, known as *quilombos* in Brazil, are (semi)autonomous settlements founded by enslaved or formerly enslaved people and the contemporary communities that descended from them. See Chapters 3–6 and Price (ed.), *Maroon Societies*; Diouf, *Slavery's Exiles*; Farfán-Santos, *Black Bodies*, *Black Rights*; Bledsoe, "Marronage"; Wright, "Morphology of Marronage."

¹⁰³ Camp, Closer to Freedom, 7.

cultural creativity. ¹⁰⁴ Richard Price points out how subsistence and spirituality emerged in tandem to resist colonial domination and help to shape the African diaspora.

Cooking and eating were core areas of cultural resistance and persistence, as well as foci of ongoing creativity and dynamism. Wherever slaves and, especially, maroons [fugitives] had the physical and psychological space to cultivate their own gardens without external interference, subsistence activities (and the beliefs and values associated with them) became central not only to the physical well being of these Afro-Americans but to their spiritual and moral life as well.¹⁰⁵

By virtue of feeding and sustaining themselves and their communities, Afro-descendants and Indigenous peoples, both separately and in collaboration, adapted ancestral knowledge and practices to transform and create productive landscapes throughout the New World.¹⁰⁶

Judith Carney and Richard Rosomoff show how subsistence plots became "botanical gardens of the Atlantic World's dispossessed." ¹⁰⁷ In these ostensibly humble plots enslaved people experimented with "subaltern archipelagos of agrobiodiversity" that combined plants and techniques from around the world to help sustain and transform colonial societies and environments. ¹⁰⁸ Sylvia Wynter explains how folk cultures cultivated in the plot "recreated traditional [African] values" to become "a source of cultural guerilla resistance to the plantation system." ¹⁰⁹

Much more than a site of historical agency, the plot endures as a powerful analytic and model with broad transformative potential. Janae Davis and her collaborators locate within the plot "relational modes of being, multiple forms of kinship, and non-binary ways of engaging the world that foster ethics of care, equity, resilience, creativity, and sustainability [...] forged in and articulated through grounded racial–political struggles." By steadying our focus on Black ecological knowledges and practices, they excavate not merely the differentiated and multifaceted violence inherent to plantation societies, but the aspirational concepts and methods of "socioecological justice and multispecies kinship" that Black communities and thinkers have long mobilized to unravel and neutralize

¹⁰⁴ Barickman, "A Bit of Land"; Carney and Rosomoff, Shadow of Slavery.

Price, "Subsistence on the Plantation Periphery," 107.

¹⁰⁶ On collaborations of Indigenous and Afro-descendant peoples in Bahia, see Miki, Frontiers of Citizenship.

¹⁰⁷ Carney and Rosomoff, Shadow of Slavery, 135.

¹⁰⁸ Carney, "Subsistence in the Plantationocene," 20 of 25.

¹⁰⁹ Wynter, "Novel and History," 100.

them.^{IIO} Their work therefore situates burgeoning concepts of the Plantationocene – that is, "the historical and socio-ecological residues of plantation capitalism that contemporary patterns of conflict, racism, land concentration, and species extinctions make visible" – within a politics of social difference informed by Black geographies.^{III} Thus in the land-scapes of the African diaspora, we find embedded the collaborative tensions of violence and resistance.

As intellectual-ecological legacies of the plot, landscapes such as Bahia's Dendê Coast reveal and situate "terrains of political struggle," rather than domination or submission. 112 This book demonstrates how biodiverse palm groves, as legacies of African knowledge and practice, came to distinguish Bahia's dendê landscapes despite centuries of colonial mandates and modern development schemes that sought to impose and enforce austere monocultures. Recognizing the interactions of multiple species (including humans) in and with environments and mediated by colonial power relations, I use the phrase socioecological resistance to invoke the networked agency of Afro-descendants and other marginalized peoples in driving or participating in cultural-environmental change. Here the efforts of Benta and millions of other enslaved and otherwise marginalized people come to life. The formative contributions of enslaved people ensured that the socioecological compositions and consequences of plantation life remained more complex and multiple than the colonizers had designed. Toiling in their plots and other such landscapes of resistance, they combined biological, material, and intellectual resources to resist the monotonous, inadequate, or unsuitable diets and cuisines of the colonizers; realize some of their own culinary, spiritual, and medicinal preferences; and help to transform the Americas with knowledge and ecologies descended from Africa. The Black geographies they developed both derived of and resisted the socio-spatial order enforced on colonial plantations.

Complex Landscapes

Monoculture represents just one among infinite possibilities for productive landscapes. In contrast to the settler colonial plantation, Indigenous

Davis et al., "Anthropocene, Capitalocene, ... Plantationocene?," 10 of 15; see also Williams, et al., "Race, Land and Freedom."

Carney, "Subsistence in the Plantationocene," 20 of 25.

¹¹² McKittrick, Demonic Grounds, 6.

and other ancestral communities have long constructed complex *polycultures* of diverse plants, livestock, insects, and microorganisms – production systems scholars and practitioners now generally describe as *agroecological*. Relying on ecological processes and knowledges to manage and sustain production, traditional agroecosystems emerge from iterations of intimate human-environmental relationships developed and adapted across generations. They facilitate multispecies interactions to amplify and maintain yields; manage pests, soil fertility, and water availability; and when integrated within local cultures, politics, and markets, agroecology can support and sustain regional food sovereignty. The resulting landscapes are typically more abundant, resilient, and over the long-term, more productive than monocultures, especially in the tropics where fragile soils and fluctuating weather conditions routinely threaten yields. 114

Recognizing traditional agrarian landscapes and economies as intricate, interactive assemblages invites insights from multi- and interdisciplinary *complexity* thinking. The sciences and theories of complexity afford us a theoretical framework and functional lexicon for comprehending systems of interactive components. Complexity analyzes relationships – those among individual components and those created by a system as a whole. In this book, I use complexity thinking to theorize how power and agency flow through the interactions of people, plants, and places to co-constitute landscapes and other socioecological assemblages at multiple scales – from smallholder agroecosystems, to Bahia's dendê economy, to the Atlantic World.

Classic examples of complex systems include ecosystems, stock markets, ant colonies, and the human brain. Complex systems exhibit a

Harris, "Traditional Systems," 313, 324-25; Gliessman, Agroecology; Hecht, Morrison, and Padoch (eds.), Social Lives of Forests; Rosset and Altieri, Agroecology.

Zimmerer, Changing Fortunes; Altieri and Toledo, "Agroecological Revolution"; Holt-Giménez and Altieri, "Agroecology, Food Sovereignty"; Martínez-Torres and Rosset, "Diálogo de Saberes." For a discussion of colonial monocultures and indigenous polycultures in Brazil, see Cabral, Presença da floresta. On the proven resilience of agrobio-diverse landscapes in the African diaspora, see Carney, "Subsistence in the Plantationocene," 17 of 25.

Smuts, Holism and Evolution; Harris, "Traditional Systems," 313; Strogatz, "Exploring Complex Networks"; Goodwin, Nature's Due; Vandermeer and Perfecto, Ecological Complexity and Agroecology.

Haila and Dyke (eds.), How Nature Speaks; Perfecto, Vandermeer, and Wright, Nature's Matrix; Liu et al., "Complexity of Coupled"; Christian, Maps of Time; Steinberg, "Of Other Seas"; Filotas et al., "Viewing Forests"; Winkler, "Embracing Complexity and Uncertainty."

distinctive property known as *emergence*, a type of synergistic relationship often described with the familiar adage "the whole is different from the sum of its parts." Instead of a centralized, hierarchical command structure, the individual agents (i.e., organisms, traders, ants, and neurons, respectively) *self-organize* and adapt to the flows and patterns of power that filter through their networks. Together, constituents of complex systems co-produce *emergent properties* – collective effects, meaning, or direction. As the "unexpected results of particular patterns of interaction between components in complex systems," emergent properties emanate not from the *a priori* attributes of the individual agents, but rather their collective interactivity.

Complexity thinking therefore provides us the material mechanisms through which power and agency relate, flow, and interact. Yet we must proceed cautiously here, as Kinkaid warns, because preoccupation with the non-hierarchical "flatness" of complex assemblages can lead us to overlook the social inequities embedded in them. Feminist analyses of power and race reveal how socioecological assemblages both reflect and reproduce modernist / colonial hierarchies of social difference. "The racializing operations of assemblages - how they sort and differentiate human bodies and ascribe symbolic / material value accordingly – is thus a critical element in understanding the formation of any socio-spatial order and the manner in which its elements gather, relate, cohere, disperse, and endure." In this way, race and processes of racialization become, rather than strictly outcomes of a given assemblage, fundamental in the ways that complex socioecological systems coalesce (i.e., selforganize) in the world. In conversation with feminist theories and commitments, complexity thinking allows us to comprehend and analyze the relations, interactions, and synergies of agroecosystems and agrarian economies such as those comprising Bahia's Afro-Brazilian dendê economy as well as the broader networks of transatlantic and global exchange they connect out to.

¹¹⁷ Boulton, Allen, and Bowman, Embracing Complexity, 8.

¹¹⁸ Rocheleau, "Rooted Networks"; Rocheleau, "Roots, Rhizomes, Networks and Territories"; Alida Cantor et al., "Rooted Networks into Practice."

¹¹⁹ Kim, "Making Sense of Emergence." Goodwin, Nature's Due, 36.

¹²¹ Kinkaid "Can Assemblage Think Difference?," 465. See also Sundberg, "Placing Race"; Mollett and Faria, "Messing with Gender"; Lave, "Reassembling the Structural"; Heynen, "Urban Political Ecology II."

Ancestral production systems such as Bahia's dendê landscapes represent longstanding "emergent ecologies." 122 Within such complex agroecosystems, diverse components - including plants, animals, insects, soil, microorganisms, climates, and ancestral knowledge - self-organize in power-laden networks to create agency and socioecological change. Their interactions coalesce to generate emergent properties such as diversified yields, food security, biodiversity, and cultural meaning. As such, these complex agrarian-ecological systems build on synergies of interactions to sustain multispecies collectives of humans and other beings while mitigating social and environmental risk. These multiscalar complex systems are at once rooted in discrete territories and embedded in broader, more complex systems. Palm Oil Diaspora analyzes how complex mosaics of agrobiodiverse landscapes emerge and interact to synergize a regional dendê economy, which in turn connects out to the vast cosmopolitan systems of the Atlantic World. In sharp contrast, the reduction of biologically and socially diverse landscapes to plantation monocultures works to disarticulate complex interactions, thereby precluding synergism and emergence while exacerbating agroecological, socioeconomic, and public health vulnerabilities. 123 Yet despite centuries of devastating consequences for laborers, farmers, biodiversity, and agrarian communities, monocultures – the kind developed on colonial plantations – remain the prevailing model for modern agricultural development. 124

Decolonial Landscapes

Despite their demonstrated efficacy, complex agroecological landscapes remain mostly *illegible* to public development authorities prioritizing short-term revenue and extraction over livelihoods and justice. James C. Scott shows how modern states maintain the extractivist logic of the plantation to systematically reduce and homogenize the complex and diverse landscapes and societies in their charge, rendering them *legible* to hierarchical bureaucracies of regulation and revenue.¹²⁵ Encountering

Rocheleau, "Rooted Networks," 209.

¹²³ Denevan, "Prehistoric Agricultural Methods"; Manson, "Simplifying Complexity"; Lin et al., "Effects of Industrial Agriculture"; Civitello et al., "Biodiversity Inhibits Parasites"; Mansfield et al., "Environmental Politics after Nature"; Zimmerer et al., "Biodiversity of Food and Agriculture" and "Indigenous Smallholder Struggles."

¹²⁴ Shiva, Violence of the Green Revolution; Blaut, Colonizer's Model; Patel, "Long Green Revolution"; Khoury et al., "Increasing Homogeneity."

¹²⁵ Scott, Seeing Like a State.

vibrant polycultures in West Africa, Latin America, Asia, and beyond, colonial managers generally dismissed such traditional landscapes as irrational, despite their demonstrated productivity, resilience, and multivalence. This ideological project gained momentum in the mid-twentieth century as states pushed to "modernize" their agricultural sectors. Early critics including Carl Sauer warned of stark "ecological unbalances" and erosions of biodiversity and cultural knowledge that would follow widespread conversion to monocultures. ¹²⁶ "We present and recommend to the world a blueprint for what works well with us at the moment," he cautioned, "heedless that we may be destroying wise and durable native ways of living with the land." ¹²⁷ Prescient in its time, Sauer's rebuke denounced not only the ecological devastation of plantation monocultures, but also the unjust social relations they continue to reproduce. ¹²⁸

Plantation monocultures are just one of the countless social, economic, and ecological legacies of colonialism. 129 Just as monocultures of a single crop disintegrate biodiverse landscapes, the singular promotion of colonial / Western ways of life forecloses any potential for social and epistemological complexity. The forms of knowledge, values, social order, and environmental ethics developed and enforced by European imperialism - what Anibal Quijano and other scholars have dubbed coloniality - continue to contour and constrain global politics, economies, and environments long after the decline of colonial governance. 130 For Alexandre Da Costa, coloniality "orders peoples, worldviews, and cultures to legitimate, include, and institutionalize certain histories, forms of thought, and ways of being as ideal, superior, and universal, while colonizing, devaluing, unequally incorporating, and / or excluding others."131 Key to this now globalized pattern of "Euro-centered colonial / modern world power" is, according to Quijano, "the idea of race, a mental construct that expresses colonial experience and that pervades the most important dimensions of world power, including its specific rationality: Eurocentrism."132 Enforcing unjust hierarchies of social difference,

Sauer, "Retrospect," 1133. Sauer, "Agency of Man," 68.

¹²⁸ On Sauer and the "Green Revolution," see Jennings, Foundations of International Agricultural Research.

¹²⁹ Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene"; Davis et al., "Anthropocene, Capitalocene, ... Plantationocene?"

¹³⁰ Quijano, "Coloniality of Power"; Mignolo, *Idea of Latin America*; Maldonado-Torres, "Coloniality of Being," 243.

¹³¹ Da Costa, Reimagining Black Difference, 3.

¹³² Aníbal Quijano, "Coloniality of Power," 215.

mythical ethno-racial constructions, and violent human-environmental relationships, coloniality privileges Western assumptions and practices – for example, plantation monocultures and associated logics of extraction – at the expense of infinite other possibilities for reproducing worlds.

An interdisciplinary project of decolonization, or *decoloniality*, has emerged to disassemble Eurocentrism, white supremacy, and other colonized patterns of power within scholarship, development, and everyday life. 133 A "decolonial and critical cosmopolitanism" promotes complex and multiple ways of knowing and being. 134 Decolonial scholarship allies with more than a century of Black studies, and more recently, Black geographies to "locate and speak back to the geographies of modernity, transatlantic slavery, and colonialism." 135 Those and other critical theories and analyses work to disrupt the casual violence of modernity by restoring nuance, resistance, and hybridity to social and environmental narratives and representations. They mesh with theories of environmental justice that seek to enact a genuine "recognition" of social difference based in the universal rights of "cultural respect and self-determination, [...] and to alternative ways of thinking and doing."136 These decolonial efforts remain crucial not only as correctives to colonized, Eurocentric accounts of our past, but for what they stand to contribute to more just and abundant socioecological futures. 137

In reconstructing the emergence of an Afro-Brazilian economy and analyzing its fundamental roles in the networked formation of the Atlantic

- 133 This field is vibrant and diverse. Some influential examples include: Escobar, Territories of Difference; Mignolo and Escobar (eds.), Globalization and the Decolonial Option; Smith, Decolonizing Methodologies; da Costa, Reimagining Black Difference; Radcliffe, Dilemmas of Difference; Mignolo and Walsh, On Decoloniality; Ybarra, Green Wars; Daigle and Ramírez, "Decolonial Geographies"; Oslender, "Geographies of the Pluriverse."
- ¹³⁴ Maldonado-Torres, "Coloniality of Being," 261; Bledsoe, "Negation and Reassertion"; Derickson, "Knowledges."
- ¹³⁵ Quote in McKittrick, Demonic Grounds, 7; Du Bois, Souls of Black Folk; Fanon, Wretched of the Earth; Wynter, "Unsettling the Coloniality"; "Plantation Futures," 3; Lewis, "Releasing a Tradition."
- ¹³⁶ Martin, Just Conservation, 17; Schlosberg, Defining Environmental Justice; Martin, Guire, and Sullivan, "Global Environmental Justice."
- 137 Simpson, "Anticolonial Strategies"; Collard, Dempsey, and Sundberg, "Manifesto for Abundant Futures"; Eaves, "Black Geographic Possibilities"; Davis et al., "Anthropocene, Capitalocene, ... Plantationocene?"; Hawthorne, "Black Matters"; Zimmerer et al., "Biodiversity of Food and Agriculture"; Van Sant, et al., "Historical Geographies."

World, Palm Oil Diaspora offers an array of empirical and theoretical contributions. It examines human-environmental relations too often overlooked in the histories and geographies of the African diaspora, and uncovers the formative influence of people and ecologies of African descent in the societies and environments of the (post)colonial Americas. This book remembers Benta, who like millions of other enslaved Afrodescendants, helped to transform cultures, landscapes, and economies with their intellect and labor but whose stories remain far too often unknown or ignored. Recognizing the value and wisdom of an Afro-Brazilian economy, this book demonstrates how people of African descent, enslaved and free, collaborated in and with their environments to resist colonial violence and white supremacy and create new ways of living and thriving in Bahia. It reveals and appreciates the complex landscapes and ecological knowledge systems behind so many Afro-Brazilian cultural and economic expressions renowned throughout the world but under constant threat of appropriation.

This analysis of Bahia's dendê economy builds on pathbreaking studies of African agency and environmental change to theorize cultural landscapes as complex socioecological networks shaped by resistance to the political-epistemological forces and legacies of colonialism. 138 It maps power as a process of diffusion through transatlantic cultural, ecological, and economic interactions. This relational approach facilitates deeper and more nuanced understandings of historicalgeographical change by recognizing the ubiquity and lasting influence of everyday resistance within a colonial society defined by slavery and racial violence. Thus this book identifies and examines landscapes of resistance as environments shaped by mundane strategies of survival and fulfillment, and often steeped in transatlantic environmental knowledge and multispecies collaborations. Palm Oil Diaspora presents Bahia's dendê economy as a vibrant socioecological achievement of the African diaspora and a model of decolonial agricultures, environments, and communities with much to teach us. Accordingly, to assemble and analyze the iterative, transatlantic politics and ecologies that coalesced on Bahia's Dendê Coast, this project relied on a plural and inclusive approach to methods and methodology.

¹³⁸ For example, Carney, *Black Rice*; Carney and Rosomoff, *Shadow of Slavery*; Sluyter, *Black Ranching Frontiers*; Voeks and Rashford (eds.), *African Ethnobotany*.

NOTES ON MIXED METHODS

Analysis of colonized, socioecological networks such as those rooted in Bahia provokes methodological challenges and opportunities. 139 As Kim Butler makes clear, "the many voices of Afro-Brazilians are rarely found in documents. Instead, it is necessary to turn to their actions."140 Eurocentric documentation, modernist discourse, and other legacies of colonialism join forces to obscure the contributions of enslaved, subaltern, or otherwise marginalized people. The caste system imposed by European imperialism and the transatlantic slave economy permeates the documents locked away in colonial archives, and therefore contours the studies emerging from them. TAI And while Bahia's Afro-Brazilian economy represents a remarkable human achievement, comprehending the cultural-environmental interactions at its core requires systematic attention to relational networks of people, plants, places, and power. 142 So to analyze the socioecological agency of marginalized people and their relationships with environments, we must amplify sources and methods beyond text and beyond humans. This study of Bahia's dendê economy therefore called for a plural, agile, and decolonial methodology benefiting from diverse voices and techniques - "a generosity toward methods" that allows us to comprehend and address "our self-evidently more-thanhuman, more-than-textual, multisensual worlds."143

Methods and sources included archives and other texts, various forms of ethnographic inquiry, landscape interpretations, and geospatial analysis iterated across urban, rural, and digital contexts. Textual analysis interrogated archived documents, travelers' accounts, historical periodicals, rare secondary historical and scientific works, and government reports held at archives and libraries in Bahia, Rio de Janeiro, Lisbon, and the United States. Online repositories including Memória Estatística do Brasil, the Brazilian Digital Library at memoria.bn.br, Google Books, archive.org, and others provided access to troves of searchable texts.

¹³⁹ For more on the methods and methodology used in this study, see Watkins, "The Field and the Work."

¹⁴⁰ Butler, Freedoms Given, Freedoms Won, 7.

¹⁴¹ Trouillot, *Silencing the Past*; Sluyter discusses methodological innovations used to study colonial landscape change in *Colonialism and Landscape* and the African diaspora in *Black Ranching Frontiers*.

¹⁴² Bennett, Vibrant Matter; Rocheleau, "Roots, Rhizomes, Networks and Territories."

¹⁴³ DeLyser and Sui, "Qualitative-Quantitative Chasm," 304; Lorimer, "Cultural Geography," 83.

Ethnography and landscape interpretation concentrated mainly in the towns, fields, and forests of Bahia's Dendê Coast, the Recôncavo, and the capital Salvador. Ethnographic methods included semi-structured and unstructured interviews, life and oral histories, informal focus groups, participant observations, and landscape interpretations. 144 From 2009 to 2019 I conducted 371 interviews with 453 different people. I sat down and walked with dendê producers, processors, and harvesters; officials with rural workers' unions and cooperatives; industry executives; public and private agronomists; Baianas de acarajé; local academics; and a host of others. 145 I accompanied farmers, agronomists, wageworkers, and others through a variety of interlinked landscapes - from plantation monocultures and publicly subsidized nurseries to unplanted, biodiverse groves and complex agroecosystems. Of those interviews, most focused at least in part on life or oral histories, and nineteen became impromptu focus groups of three to six people. 146 Interviews were transcribed, coded, and otherwise analyzed by hand and using qualitative analysis software.

Conducted off and on from 2009–2019 – including the full year of 2012, ethnographic and other fieldwork moved through forests, farms, mangroves, villages, homes, markets, libraries, government offices, public institutes, Candomblé *terreiros*, churches, beaches, buses, restaurants, and bars, mainly but not always in Bahia's coastal Atlantic Forest biome. While Salvador hosted the great bulk of archival research, it also served as a setting for interviews and landscape interpretations (Figure 1.3). Fieldwork and observations outside of the main study area, on Bahia's northern, southern, and extreme southern coasts and in the states of Rio de Janeiro, São Paulo, Sergipe, Alagoas, Pernambuco, Paraíba, Rio Grande do Norte, Ceará, Piauí, Maranhão, Pará, Minas Gerais, and Goiás, along with the Federal District around Brasília, also informed the analysis. 147

Bahia's dendê landscapes represent living documents of culturalecological relationships and power relations over vast expanses of time and space. Landscape interpretation and other fieldwork were therefore

¹⁴⁴ Crang and Cook, Doing Ethnographies.

¹⁴⁵ Here and throughout this study, "producers" refer to those who cultivate oil palm fruit and "processors" refer to those who derive oil from the fibrous mesocarp of fresh palm fruit. These categories are not mutually exclusive as many people on the Dendê Coast continue to both produce and process, however, most processors augment their supply with fruit purchased from other producers.

¹⁴⁶ Jackson and Russell, "Life History Interviewing."

¹⁴⁷ Bahian microregions according to IBGE, Censo demográfico 2010.

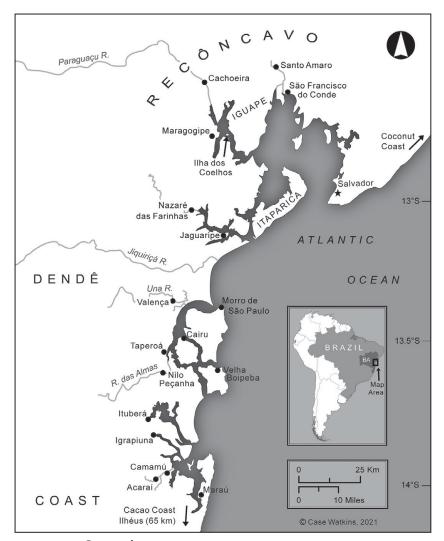


FIGURE 1.3 Core study area.

fundamental for this book, especially since colonial documentation of those landscapes is sparse and often indirect. Drawing on a rich tradition among geographers, landscape interpretation refers to mixed-method fieldwork that analyzes the long-term human-environmental collaborations that shape landscapes and places. "Landscapes [can be] seen as palimpsests (documents partially erased and overlain with newer forms and patterns) holding a wealth of information and clues to their

histories." ¹⁴⁸ Rather than a single method, I see landscape interpretation as a broader methodological approach. Effective interpretations rely on a variety of methods and perspectives – as many as possible – to craft solid and heterogeneous understandings of research sites and subjects. ¹⁴⁹ The landscape interpretations informing this book derived from iterations of ethnographic, archival, and geospatial methods – each of them helping to shape each other. ¹⁵⁰

Observations and interpretations of landscapes and ethnographic sites were recorded in field notes and georeferenced using a handheld GPS (Figure 1.4). Those 314 locations and related qualitative data were overlaid on satellite imagery from China Brazil Earth Resources Satellite (CBERS) and the US Landsat program using geographic information systems (GIS) based on Google Earth and ArcGIS software platforms. 151 Geospatial techniques included map overlay geoprocessing, field mapping, "grounded visualizations," and digital cartography. 152 Grounded visualizations combined field notes and location data with remotely sensed imagery to compile a mixed-method geospatial database. Loaded in a GIS on a laptop computer, those data situated oil palm fields and groves, mangrove ecosystems, palm oil processing facilities, transport routes, maroon communities, and other agrarian and rural environments and communities. Conducting these geospatial analyses in the field broadened perspectives and understandings of land use, vegetation patterns, and other human-environmental relationships, and helped to identify new sites for subsequent fieldwork and interpretation. 153

For me, fieldwork means mixing, moving between, and interacting with multiple methods and beings in situ. Data and analysis derived from the different methods variously supplemented, superseded, honed, contradicted, and corroborated findings and ideas. I find it helpful to think of the various methods as self-organizing into a complex system. The result was an interactive and iterative research strategy that placed observations from various sources into dialogue, generating new insights that could

¹⁴⁸ Duncan and Duncan, "Doing Landscape Interpretation," 228.

¹⁴⁹ Pred, "Place as Historically Contingent Process"; Rodman, "Empowering Place"; Fairhead and Leach, Misreading the African Landscape; Raffles, "Intimate Knowledge"; Friess and Jazeel, "Unlearning 'Landscape."

¹⁵⁰ See also Offen, "Historical Geography II."

¹⁵¹ Brasil, "China Brazil Earth Resources Satellite" (2012); USGS, "Landsat 7 GLS" (2010).

¹⁵² Cope and Elwood (eds.), Qualitative GIS; Hawthorne et al., "Critical Reflection Mapping."

¹⁵³ Knigge and Cope, "Grounded Visualization and Scale."

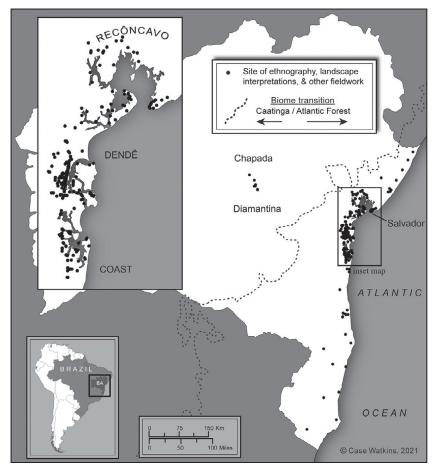


FIGURE 1.4 314 locations of ethnographic methods, observations, and other fieldwork in Bahia, 2009–2019.

Continental biome boundaries drawn from IBGE, Biomas continentais.

then be tested and challenged with subsequent fieldwork and analysis. This is what I have elsewhere referred to as a "hybrid approach to fieldwork." ¹⁵⁴

Ethnographic and other fieldwork nourished the study with placebased knowledge and ecological evidence, yielding insights often useful in subsequent archival queries. At the archives, probate inventories, customs records, ship manifests, and republican agricultural documents

¹⁵⁴ Watkins, "The Field and the Work."

offered historical context, which I could discuss and examine in returns to the field. Geospatial analysis provided a wide-aperture aerial perspective that framed the specific socioecological relationships of Bahia's dendê economy as a cohesive whole. This allowed me to analyze the constituent parts while never losing site of the broader assemblage. Mixed in the field, these iterative exchanges of ethnographic fieldwork, landscape interpretation, archives, and geospatial analysis eventually revealed how the contemporary economy emerged from a culmination of centuries of historical-geographical processes.

Finally, the uneven flows of power that co-constitute and link places with fieldwork invite political and ethical considerations. In Bahia, stark socioeconomic inequities provide persistent reminders of its colonial past and neoliberal present, and any attempt to ignore these unjust conditions serves only to endorse the status quo. 155 It is therefore crucial to recognize my own identity and positionality as a particular researcher embedded in a particular field. 156 Within the swirling sociopolitical contexts of (post) colonial South America, I the researcher am an invasive species a "gringo ethnographer." 157 As a married, able-bodied, cisgender, heterosexual white male gringo I wandered through mangroves, farms, and fields without much concern for confrontation or hostility. My light complexion, blue eyes, thinning blonde hair, and foreign accent, along with my notebook, camera, and GPS, represent and convey significant social meaning and privilege. Most people I encountered assumed I was a sanctioned professional, rather than a meddlesome interloper. I benefit from coloniality, patriarchy, heteronormativity, and racial privilege in the United States, Brazil, and everywhere else. These layers of privilege must be acknowledged from the outset. 158

Even as I work to undo social privileges and their destructive infrastructures in academic and personal practice, I benefit from them constantly. During fieldwork, my privileged identities granted me essentially unfettered access to government agronomists, union leaders, and other powerful people. I set up meetings generally without fear of dismissal, (excessive) condescension, or harassment. My work seeks to dismantle these colonized caste systems through generosity, deep listening and

¹⁵⁵ Finn and Hanson, "Critical Geographies in Latin America."

¹⁵⁶ Rose, "Situating Knowledges." Veissière, "Making a Living." Sundberg, "Masculinist Epistemologies"; Sundberg, "Ethics, Entanglement and Political Ecology"; Faria and Mollett, "Critical Feminist Reflexivity."

learning, and commitments to justice and empowerment. I remain careful to fully disclose my intentions as a researcher and person, empathizing with my collaborators and their communities. 159 Informed consent is an ethical code fundamental to this project, both as individual agreements to participate and as a collective accord of cultural learning and sharing wisdom - "sabedoria da roça." 160 Thus in my fieldwork I commit to walking with collaborators / informants. As a reflection of positionality and reflexivity, walking with incorporates solidarity and activism into research designs and practices to support local struggles for democracy, autonomy, and justice. 161 Maintaining a "listener's framework," I stand in solidarity with the social, political, and environmental objectives of small-scale farmers, dendê oil processors, and their agrarian communities, and work to amplify their voices in everything I write. 162 Rather than a bias to be overcome, those commitments guide the project and its products as endeavors toward social and environmental justice. 163

STRUCTURE OF THE BOOK

The chapters that follow detail and analyze the many and messy socioecological relations and interactions comprising Bahia's dendê economy from the early colonial period to the turn of the twenty-first century and in the broader contexts of the Atlantic World. They mobilize relational and complexity thinking to comprehend the inner workings and interconnections of cultural landscapes, trans-oceanic commerce, and agroenvironmental development.

¹⁵⁹ Massey, "Imagining the Field."

Rural agrarian wisdom, literally "wisdom from the fields"; described in an interview with a small-scale dendê producer and processor of February 23, 2012 in Serra Grande, Taperoá.

Following Juanita Sundberg, this approach was inspired by a declaration from the Zapatista Movement in 2005; see her "Decolonizing Posthumanist Geographies" and Collard, Dempsey, and Sundberg "Manifesto for Abundant Futures." On reflexivity and positionality within assemblage thinking, see Kinkaid "Can Assemblage Think Difference?" 467–69.

Penniman, Farming While Black, 304; Whatmore, "Generating Materials"; Wright, "The Public Is Intellectual"; Rocheleau, "Roots, Rhizomes, Networks and Territories,"
A small part of this commitment was writing and posting online two open-access Portuguese-language research reports; see Watkins, Paisagem afro-brasileira, dendezeirodabahia.wordpress.com.

¹⁶³ Cantor, et al., "Putting Rooted Networks into Practice."

Chapter 2 connects primary accounts with ecological analyses to construct an environmental history of the African oil palm on its native continent and through the early modern Atlantic World. Detailing the emergence of African oil palm ecologies and economies across western Africa, the chapter demonstrates how complex multispecies assemblages coalesced to form palm oil landscapes and cultures, setting the stage for their subsequent diffusion across the continent and later through the Atlantic World. It discusses the early and prominent roles of palm oil and related African knowledge systems in the transatlantic slave trade and the palm's initial dispersal through the Neotropics. Each subsequent chapter builds on the previous to elaborate the development of Bahia's Afro-Brazilian economy.

Chapter 3 charts the diffusion of the African oil palm to Bahia in the contexts of South Atlantic exchange and creolization. Through a close reading of rare and primary sources, it analyzes how Afro-descendants adapted environmental and botanical knowledges to new species and landscapes despite the brutalities of the transatlantic slave economy. It reinterprets the Columbian Exchange to demonstrate how the Luso-Brazilian colonial endeavor relied on biota and environmental knowledge from throughout the Atlantic World, with an emphasis on those from Africa. The chapter culminates by contextualizing the arrival and establishment of the African oil palm in Bahia.

Once in Bahia, the dendezeiro proliferated within local environments and agroecologies. Chapter 4 reconstructs the development of Bahia's Afro-Brazilian landscape. Iterating colonial archives and travelers' accounts with ethnography, landscape interpretations, and geospatial analysis, the chapter maps the emergence of Bahia's dendê landscapes. It follows flows of power through complex assemblages of people, biota, and environments as they collaborated to transform the New World.

^{164 &}quot;Western Africa" refers to a combination of West Africa and West Central Africa, including each of the Sub-Saharan culture regions and contemporary countries along Africa's western coasts from the Senegambia south through Angola.

This historical and economic conception of the South Atlantic combines western Africa with the eastern coast of South America; while Europe, the British Isles, and their North American colonies comprise the North Atlantic. This grouping approximates hydrographic distinctions of the South Atlantic that extend to the northern edge of the Equatorial Counter Current around 9° N. See also Philander, "Atlantic Ocean Equatorial Currents," Mann and Bay (eds.), Rethinking the African Diaspora; Alencastro, O trato dos viventes.

It demonstrates how resistance and resilience have enabled and enacted vibrant Black geographies on the margins of the colonial plantation economy since the earliest days of American colonization.

The development of interdependent Afro-Brazilian cultures and landscapes emerged from networks of transatlantic exchange between Bahia and several West and Central African societies. Drawing on rare customs records, ship manifests, travelers' accounts, periodicals, and other primary documents, Chapter 5 details and analyzes historical commerce in the South Atlantic. Situating African palm oil within the "legitimate" and "clandestine" trades to Bahia, the chapter demonstrates how transatlantic exchanges helped to construct a cultural economy for authentically African palm oil in Brazil, how Afro-descendants leveraged that trade to achieve social and economic mobility, and finally, how Bahia became an Atlantic entrepôt for stocks and transshipments of palm oil in the South Atlantic.

Aside from their social and economic effects, those transatlantic exchanges amplified demand for domestic dendê, which in turn contributed to the socioecological development of palm oil production in and around Salvador, on the Bay Island of Itaparica, and down the Dendê Coast. Chapter 6 examines probate inventories and other archived documents to chart the development of landscapes and markets for domestically produced dendê in nineteenth-century Bahia. The chapter elaborates the transition from enslaved to free labor in Bahia's dendê economy. It connects traditional dendê landscapes with the early development and integration of Afro-Brazilian religions and the first efforts at industrial palm oil processing in post-abolition Bahia.

After centuries of colonial landscape transformations set the socio-ecological foundations for Bahia's Afro-Brazilian economy, an official campaign of agricultural modernization moved in to appropriate and direct its development. Chapter 7 details and analyzes international public-private development efforts imposed on the Dendê Coast beginning in the early twentieth century. The chapter combines evidence from archives and other primary documents with ethnography and landscape interpretations to demonstrate how top-down interventions continue to fall short of their goals and produce effects unforeseen by the elite agronomists and industrialists behind them. It uses complexity thinking to comprehend how successive modernization campaigns have worked to amplify Bahia's traditional dendê landscapes, rather than reduce them to agro-industrial monocultures, as intended.

Finally, the book concludes with a forward-looking epilogue that summarizes the multiscalar complexity and potentials of Bahia's Afro-Brazilian dendê economy. It argues for the power of inclusive histories and geographies to enact more equitable, viable, and decolonial futures, and highlights current efforts toward social and environmental justice emanating from the region.