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# The Plantationocene: A Lusotropical Contribution to the Theory

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In this article, I contribute to theorization of the modern era as the Plantationocene, a concept grounded in life on the land and centered around the role of the plantation in sustaining a racialized elite, propelling colonial exploration, creating a core and a periphery, sanctioning forced labor, and shaping both the cultures we consume and the cultural norms we inhabit and perform. I draw on empirical work conducted in the lusotropics (Brazil, Mozambique, and Portugal) as well as on theoretical work in agrarian studies, critical development studies, and political ecology to elaborate on three aspects I argue are necessary to a complete understanding of plantation influences within and beyond its physical borders: the plantation as a concrete set of social relations, the plantation form as a historically specific imperative in the modern world system, and the plantation landscape as a discursive ideal. *Key Words:* Brazil, land, Mozambique, Plantationocene, plantations, Portugal.

In the short story “How Much Land Does a Man Need,” by Tolstoy ([1886] 2010), the main character, an honest peasant named Pahom, goes from poverty to relative prosperity, building his land-holdings through hard work and luck. Over time, he becomes well off, planting his plots of land rationally and efficiently, but he is driven by the insatiable need for more and more land. One day he hears of a not-too-distant region ruled by an indigenous people, where good land is available if only one can seduce the chiefs with trinkets and toys. Pahom travels to the land and is told that he can have as large a property as he can walk around in one day. Giddy with delight, sure that he has hoodwinked the naive Bashkirs, Pahom takes off at a run, flagging slightly by midday, but determined to enclose as large a piece of land as possible. As the sun begins to set, Pahom pushes himself too far, his heart bursts, and he falls to the ground. Pahom’s servant buries his master and the story ends, solemnly if not surprisingly, “Six feet from his head to his heels was all the land he needed.”

This little-known story serves as a parable of the modern era, an era in which the magnificent variety of lives and livelihoods on the land is increasingly overrun and undermined by a deadly drive for ever larger fields, oriented toward large-scale, efficient production and justified by an ideology disguised as

universal reason, limited to those with souls, rights, and capital. At the heart of this drive is the plantation, and a growing number of scholars argue that the modern era is best described as the Plantationocene (Haraway 2015; Haraway et al. 2016; Aikens et al. 2017; Mitman 2017; Davis et al. 2019; Carney 2020).<sup>1</sup> Building on classic work detailing the particularities of “plantation economies” (Beckford 1972; Stoler 1985; Mintz 1986; Woods 1998), the concept of the Plantationocene suggests that large-scale, export-oriented agriculture dependent on forced labor has played a dominant role in structuring modern life since the insertion of European power in the Americas, Asia, and Africa.

In this article, I defend and deepen the concept of the Plantationocene by drawing on empirical work conducted over the past three decades in the lusotropics (Brazil, Mozambique, and Portugal) as well as theoretical work in agrarian studies, critical development studies, and political ecology to elaborate on the ways in which the plantation has influenced social and political life, shaped the global economy, and colonized our understanding of productive landscapes. I argue that grounding our analysis and theory of modernity in the plantation in turn helps to refine the theoretical fields just mentioned by centering the violence of racialized enslavement as “the” original sin, recovering the political relevance

of scale, and holding in productive unity the oft-invoked dualisms of agriculture–industry, nature–society, and country–city. Ultimately, although I do not go into this in depth, thinking with and against the plantation suggests alternatives that are rooted in other ways of being on the land: agrarian reform, agroecology, and noncompulsive markets embedded in local communities and fields.

## The Plantationocene: On the Ground and in Theory

The tellingly named “Age of Discovery” represents what Carney (2020) called a “watershed moment”: the move to large-scale, monocrop or single-product production units dependent on enslaved labor, geared for extraction, dominated by the logic of market exchange, territorially possessive and highly mobile. There were plantations before the modern era, of course, but only in the last 500 years has the logic of the plantation crystallized into a coherent way of organizing the world. The plantation has propelled colonial exploration, sustained an elite, perpetuated a core–periphery dualism within and between countries, organized a highly racialized labor force worldwide, and shaped both the cultures we consume and the cultural norms we inhabit and perform. Plantations are generally associated with agriculture and rural areas, but resources extracted from colonial exploration underwrote the birth of industry and urban settlement and arguably provided the impetus and even model for factory production (Mintz 1986). Today the plantation lives on in the idealization of rationally ordered, large-scale, extractive landscapes across the rural–urban divide. Not all agriculture is in plantations, of course, but large farms control most of the world’s arable land (Lowder, Skoet, and Raney 2016), and large-scale commodity production for export (or extraction, whether to local, regional, or international markets) shapes the conditions of possibility for most producers, whether they participate, resist, or reject.<sup>2</sup> The dynamics of the plantation define the social, ecological, and political characteristics of new commodity frontiers across the globe (Rasmussen and Lund 2018). Through contracts, competition, government preferences, and naked power, plantations dominate a not-so-level playing field.

Plantations themselves have long been the subject of study, but the Plantationocene as a concept

emerged only in the past few years from a collective discussion edited and published in the journal *Ethnos* (Haraway et al. 2016) to describe the long-distance simplification of landscapes; alienation of land and labor; and transportation of genomes, plants, animals, and people. This discussion is still emerging and has thus far been fairly tentative, but Davis et al. (2019) argued that the environmental humanities approach has to date sidelined the core issue of race, emphasizing ecological disruption rather than focusing on the violence of enslavement and the construction of a new, race-based world order. Aikens et al. (2017) drew on critical literary theory and classic work across the Black Atlantic (Gilroy 1993) to argue for greater attention to the intersection of race and colonialism wherein “plantation ideologies, iconographies and narratives continue to structure everyday life.” Carney (2020) incorporated Wynter’s (1971) work into the idea of the Plantationocene to illustrate both the devastation of the plantation-based slave trade and the possibilities for resistance in the cultivation of small garden plots for cultural and physical sustenance. The plantation serves, in McKittrick’s (2011) words, as a “very meaningful geographic prototype that not only housed and normalized (*vis-à-vis* enforced placelessness) racial violence in the Americas but also naturalized a plantation logic that anticipated (but did not twin) the empirical decay and death of a very complex black sense of place” (951). Given that the plantation is a race-based social system at its founding and its core, the concept of the Plantationocene is well positioned to help center race in the analysis of modernity and coloniality (Escobar 2007).

The concept of the Plantationocene also has advantages over (or in conversation with) more well-known descriptions of modernity such as the Anthropocene and the Capitalocene, which I discuss only briefly here. The Anthropocene, a concept first articulated by Crutzen and Stoermer (2000), has gained wide traction as a way of marking the epoch-making changes wrought by humans on the natural world. The term has been useful for focusing causal attention on the role of humans in inducing climate change, but it has been justly critiqued for the Malthusian focus on population numbers as the critical driver of change and on humanity as a homogeneous mass undifferentiated by wealth power or race (Castree 2014; Swyngedouw 2014; Lövbrand et al. 2015; Davis et al. 2019). In her manifesto to redress

White Geology, Yussoff (2018) named this purview of the Anthropocene a “view from nowhere” (1), which fails to address indigenous dispossession of land, settler colonialism, slavery, and racialized impacts of climate change. Against the notion of an Anthropos, Moore (2017, 2018) and others have proposed the Capitalocene, delineating the modern era as one dominated by a world system of markets, industry, and the quest for profit through extraction of labor from human and nonhuman nature. The Capitalocene is useful for its attention to the material and social forces of production, but capitalism alone is “too recent” (Haraway et al. 2016), too abstract (Latour et al. 2018), and too incomplete given its inability to account for alternative forms of production, such as socialism.<sup>3</sup> In fact, Vergès’s (2017) suggestion of a “racial Capitalocene” might point us exactly in the direction of the Plantationocene, examining the present through a lens of environmental justice and the future from a place of possibility, taking the lead from Afro-futurists. The power of the Plantationocene concept lies precisely in the failures of both the Anthropocene and the Capitalocene: Plantations are inherently power-laden social structures found in every modern economic system. They embody both racial violence and resistance, straddling or bridging the divide between rural and urban, agriculture and industry, town and country, and local and global.

In this article, I argue that in addition to environmental humanities and Black geographies or southern studies, three fields—agrarian studies, critical development studies, and political ecology—help to provide us with a deeper understanding of the Plantationocene. All three have produced insights into daily life on the land, not least because of the rich ethnographic detail from across the globe that highlights the importance of context, relationships, and agency. At a local level, the wealth of case studies from these fields underscores the centrality of land throughout social life. At a macrolevel, the cumulative insight is that the cases play out across a time and space defined by 500 years of plantation-based rule, a colonial form and logic that transforms the organization and orientation of social, economic, and political life, even (or especially) in those communities that resist or reject it.<sup>4</sup> Agrarian studies shed light on the communities that were (and are) destroyed by and emerged from plantations;

critical development studies provide the macro political economy explanation for how plantations came to be seen as an imperative, fueling the workshops of the world through colonial and post-colonial forms of appropriation, control, and knowledge; and political ecology illustrates the power of plantation ecology in satisfying a Western ideal of nature as rationally organized, propertied, and large scale, whether in agriculture, mining, industry, or urban landscapes.

At the same time, a focus on the plantation contributes in critical ways back to these theoretical fields. First, locating the origins of modernity in the plantation centers race and naked force in accounts of dispossession, displacing expropriation and the creation of a “free” peasantry as capitalism’s “original sin” (Marx 1977, 873). One of the most important and enduring contributions of Marx’s labor theory of value was to oppose the liberal idealization of the transition to capitalism as “natural” and to emphasize the prolonged and bloody enclosure of land and subsequent alienation of peasants, which together provided private property and a labor force “free” to work for a wage. This focus on commodification, however, arguably generated an artificial separation between colonization (with its reliance on slave labor) and capitalism (with its reliance on commodified land and labor). Locating the origins of modernity in the plantation moves modernity itself to the margins, as Escobar (2007) argued in his introduction to the Latin American modernity and coloniality research program. The cradle of modernity is no longer the enclosures, Enlightenment, and the Industrial Revolution (Watts 2003), but conquest, colonization, and forced labor in the New World, Asia, and Africa. For agrarian studies, this decentering means that ongoing primitive accumulation includes not just processes of peasant dispossession but processes of racialized dispossession such as impoverishment, red-lining, dehumanized police treatment, incarceration, and so on.<sup>5</sup> For critical development studies, centering race means relocating the “classic” case of modernity (on which all others are modeled in contemporary development thinking) from England to the colonies such that the goal is not the commodification of the factors of production but “slavery by any other name” (Alina 2012). The blueprint for development is as much the West Indies’ experience with sugar and rum as it is the British experience with industrialization. For

political ecology, this decentering means that ecology is not just political, it is racialized—recognizing this would bring the traditions of environmental justice and political ecology closer together (Pulido 2017). The Plantationocene requires that all three fields take up race as a central analytical concept.

The second contribution of the Plantationocene to agrarian studies, critical development studies, and political ecology is a critical politics of scale. Although there are rich debates on scale within these fields, perspectives that derive political purchase from scaling down rather than reconfiguring the social relations of production, particularly through the wage relation, tend to be dismissed (to wit, Marx's famous attacks on Proudhon and the disagreement between Chayanov and Kautsky/Lenin; see Brass 1997). Critical political economists have tended to see small-scale alternatives as romantic or doomed (Bernstein 2014), although the surprising strength of the peasantry as a radical political actor has softened this disregard somewhat (Levien, Watts, and Hairong 2018; Borrás 2020). Centering one's analysis in or from the plantation highlights the role of scale in enabling domination (McCarthy 2005): As relatively large-scale production units, plantations deploy their power through the alienation of land and labor, monopoly of local markets, domination of nearby communities, and connection to generalized circuits of capital (for exports) and governance (for political authority). A planter's power does not come from the size of their landholdings, and small-scale, local spaces are not inherently oppositional, just potentially so. Thus, on plantations, resistance has tended to be vested in small-scale plots, hidden from the overseer's gaze and oriented toward local communities and self-sustenance. As Marx wrote, freed plantation slaves in the West Indies enraged the plantation class by avoiding wage labor and instead becoming "self-sustaining peasants working for their own consumption" (Marx 1857, 249). This was not populism, *per se*; it was a rejection of the plantation, countering alienation required embedding in intimate, small-scale relationships with land and people. Resistance will not always be small-scale, of course, and not all small-scale initiatives work against the structures of oppression, but centering the plantation in our understanding of the modern political economy suggests that dismantling one of the plantation's key characteristics—that of operating at a large scale—opens up important emancipatory possibilities.

Third, and finally, a focus on the plantation lends support to one of the core principles and objectives of all three fields by helping to trouble the boundaries between dualisms such as nature–society, developed–developing, rural–urban, industry–agriculture, city–country, and more (Mitchell 1990). Plantations straddle artificial distinctions between agriculture and industry—organizing agriculture in industrial conditions of uniformity, efficiency, and order; locating fields next to distilleries and factories; and merging natural resources and industrial production. Plantations are both agricultural plots and small towns in and of themselves and so bridge countryside and the city, not belonging fully to either but allowing traffic between the two. Plantations often contract with outgrowers who deliver raw materials to the associated mill or distillery; in this way plantations sit at the center of larger settlements, pulling in growers, laborers, and local residents who draw from the company store. Finally, plantations highlight the co-constitution of nature and society. They are organized around the extreme manipulation of nature, even as they teem with an abundance of natural life: Disease, decay, and disorder are known unknowns that not even ruthless manipulation can control. Given that agrarian studies, critical development studies, and political ecology all work against these same dualisms, the contribution the Plantationocene makes here is more to reinforce that objective than to reposition.

## The Plantationocene: Social System, Imperative, and Ideal

Although a focus on the plantation centers enslavement and a critical politics of scale and troubles dualisms at the heart of modernity, the emerging field of Plantationocene studies is grounded by work in agrarian studies, critical development studies, and political ecology. Bringing the analytical force of these three fields together highlights three elements central to understanding the Plantationocene:

- The concrete, empirical relations inside plantations around the world.
- The historically specific role that plantations have played in the construction of the world system.
- The discursive power the plantation has as an idealized landscape of production, profit and property, and orderly nature.

In other words, plantations are important not just as a “certain, historically specific, way of appropriating the land” (Latour et al. 2018, 591). Plantations were and are intimate multispecies communities that span generations and cross national borders. They are both fixed and flexible, located in a set of specific places and globalized placelessness. As McKittrick (2011) argued in a brilliant article in *Social and Cultural Geography*, plantation economies simultaneously held enslaved workers in place, confining them to the grounds of the plantation, and rendered them placeless, displacing colored bodies from their land, communities, and histories. In the time of the plantation and beyond, social relations are sustained as much by bonds of coercion and loyalty as by visions of efficiency and control. In what follows, I elaborate on the plantation as a set of social relations, an imperative, and an ideal that has endured around the world over the past 500 years. I do so with reference to my empirical research from the lusotropics, principally Brazil and Mozambique. Portugal’s early innovations at sea left behind a long legacy of plantation cultures, one that is clearly evident today in the construction of deeply hierarchical communities, dependence on the “green anchor” of plantation agriculture, and the idealization of the plantation as the landscape of productivity and progress.

Over the past twenty years, I have worked in rural communities in southern Brazil, northeastern Brazil, and northeastern Mozambique. These are all plantation economies and societies in one sense or another. In southern Brazil, migration was fundamentally shaped by coffee and cattle plantations and national land settlement policies were written to accommodate the need for agricultural labor on large-scale estates (Stein 1986; Lesser 1999). In northeastern Brazil, slavery tied the rural poor to sugarcane plantations for more than 500 years. Brazil was the last country in the western hemisphere to outlaw slavery, in large part because of the country’s dependence on plantation exports (Viotti da Costa [1985] 2000). In northern Mozambique, the colonial state contracted out vast regions to what were essentially large-scale corporate plantations and local populations were reorganized to provide labor (Newitt 1995; Alina 2012). Prospects for the future are in turn colonized by this ongoing fantasy of a thriving agro-industrial commodity export sector. In all three cases, rural populations sustained states built on massive export agriculture regimes.

## The Plantation as a Social System

The interdisciplinary field of agrarian studies has highlighted the importance of community to an understanding of rural life. The original “agrarian question” in the early 1900s (Kautsky 1899) asked what kind of economic and political actors landed classes would become as countries underwent dramatic agricultural and industrial transformations (cf. Lenin [1899] 1964; Chayanov 1966). Given the weight of small-scale agriculture in Europe at the time, peasants were of particular political concern. From Germany to Russia, Italy, and the United Kingdom, scholars asked how peasants would make the “transition” to modern life, whether under capitalism, socialism, or colonial rule (Shanin 1976; Bernstein 1996). How would rural livelihoods be transformed and what sort of political subjects would emerge as state or imperial rule took hold (Watts [1983] 2013)? Surprised by the persistence of the peasantry, scholarly analysis came to focus on micro-level analyses, investigating the dynamics of everyday life and moral economies (Thompson 1971), intrarural alliances (Shanin 1972), and communities shaped by the relationship between elites, the rural poor, and state actors in the context of very different colonial histories and land tenure regimes (Wolf 1969; Paige 1978; Viotti da Costa [1985] 2000; McCarthy 2002; Bobrow-Strain 2007; Boone 2014).

Although we often think of the agrarian question as a peasant one, turning it on its head, it is the question of the Plantationocene: How has the imposition of plantation agriculture around the world shaped rural livelihoods, relations, and communities? There are many different sorts of communities tied to plantation production (Mintz 1986) but there are clear commonalities.<sup>6</sup> Plantations are often family-owned and produce relationships of fixity where workers make small pieces of land into homes and gardens (Besky 2017) and of flexibility where landowners might choose to disconnect from, sell, or abandon the land as their profit margins dictate (Ofstehage 2018). Modern labor relations developed together and within plantations; migration routes that were originally oriented toward conquest and trade became the supply wagons of the new plantation economy; laboring bodies and families were placed in row houses, settlements, villages, reservations, and company towns; factories in the form of mills, distilleries, and processing plants were designed to work in tandem with plantations.<sup>7</sup>

The imposition of plantations around the world was (and is) predicated on the removal or absorption of preexisting community ties and reconfiguration around commodity production, as described in Watts's ([1983] 2013) classic, *Silent Violence*:

In colonial and postcolonial Africa, I argue, famines were and are organically linked to the rupture of the balance between peasant subsistence and consumption precipitated by the development and intensification of commodity production. The effect of the particular form of capitalist development in northern Nigeria was to rupture the cycle of peasant production, to expand commodity production and to individuate peasant society. (xx)

With the incorporation or destruction of local communities, European rule across the New World, Africa, and Asia tried to fix local populations in villages, settlements, reservations, or towns (Cooper 1982). Settlement equated to civilization, because it allowed for “honest” labor, education, evangelical services supported by agricultural surplus, and the acquisition of proper manners (Cooper and Stoler 1997; Chichava 2013). Even as plantation societies transformed preexisting communities, they brought with them new community ties, communities spatially and socially organized around hierarchical labor relations, often with a family at the head.

Sugarcane plantations in northeastern Brazil were constructed through the not-unique conditions of slavery, export production, and colonial rule (Schwartz 1986). They were microcosms of this broader world system, imposed on existing societies by some of the earliest landlords who settled in the new world, the second and third sons of Portuguese elites who established moderately successful properties along the coast (Sigaud 1979). Plantation communities were stratified by task-specific, highly hierarchical, and racialized labor relations oriented around the Big House (the *Casa Grande*) and the slave quarters that were reluctantly transitioned into housing for “free” laborers in the late 1800s (Wolford 2010). Deliberately unequal and racialized labor relations turned northeastern Brazil into the poorest and least developed region of the country, a legacy that haunts the country to this day (Pereira 1999).

Pronounced labor segmentation on the plantations between skilled and unskilled workers created thin community ties, with laborers moving frequently in search of “good bosses” who defined the margin between life and death because they dictated the way the land would be used. When prices for

sugarcane were high, the cane would be planted on every viable piece of plantation land; when prices were low, workers were often allotted plots in front of their houses to plant garden crops. They were prohibited from planting tree crops or other species with “long roots,” however, because these plants might give them a legal or moral claim on the land (Stolcke 1988; Wolford 2010). Access to these plots of land, as indicated by other scholars (Wynter 1971; Carney 2020), is a key aspect of both survival and resistance. In northeastern Brazil, sugarcane workers mounted historic mobilization in the 1960s to fight for their two hectares of land, and they drew on memories of this protest when they joined the historic Landless Movement in the 2000s (Wolford 2010).

Yet, for all the violence that characterized plantation communities, people in northeastern Brazil invested them with notions of honor: There were good bosses and good crops, all shaped by the logic of propriety and profit. A good boss guaranteed a floor under his workers, a chicken at Christmas, a ride to the hospital in the event of sickness, and a coffin in the event of death (Schwartz 1986). This moral economy (Thompson 1971; Scott 1976; Wolford 2005) of patronage, provision, and poverty was the visible hand in those regions, and it is still evident today throughout Brazil in the clientelistic distribution of jobs and resources from those who hold political office (Wolford 2010).

Outside of Brazil, Portuguese territorial ambition was always predicated on the capacity (and the right) to extract labor from both land and native peoples. Portuguese officials and local administrators argued that controlling native labor was the key to unlocking the riches of southern Africa; as long as the natives could be made to work, the long-envisioned fields of coconut trees, sisal bushes, and cotton and tobacco plants would—it was believed—magically bear fruit. The Portuguese empire self-consciously depicted itself as multicultural and democratic when projected on the map (see Freyre 1986), but it was deeply hierarchical in practice, held in place by a set of political technologies that included violence and threat (the “law of the Colt 44” as one landowner in Brazil once said), forged titles, religious proclamations on the importance of a soul for avoiding enslavement, mercantilist export regulations, and, perhaps most important, forced labor requirements (Isaacman 1996). A lingering dislike of plantation labor shapes

development possibilities today; in Mozambique, the one-party state continues to propose large-scale agro-industrial operations and the forcible establishment of rural villages, and local people resist through flight, disengagement, and protest (Chichava 2013; Wolford 2015).

These are some of the very concrete social relations produced on and through the plantation—and there are echoes of them in large-scale agricultural properties today, taken to an extreme on farms in the United States that deploy undocumented laborers who are not allowed to leave the property for fear of not only being on someone else's land but in someone else's country (Fox et al. 2017). Plantations in the U.S. South have shaped race relations in the country since emancipation, from the Great Migration (DuBois 2007; Wilkerson 2010) to the contemporary prison system (Woods 1998; McKittrick 2013). Class, gender, and racial divisions were not invented for the plantation but in many ways they were perfected there—strict hierarchies were laid down, justified, and often internalized (James 1963; Stoler 1985; Schwartz 1986; Isaacman 1996; Cooper and Stoler 1997; Curley 2019).<sup>8</sup> Studying plantation communities around the world provides some insight into the prevalence of patronage politics in rural areas today and lingering desires for strong rulers and “good bosses.”

One could also argue that many other production communities replicate the plantation model or are integrated into the broader plantation food regime (Friedma and McMichael 1989). The prioritization of scale, segmentation, hierarchy, clearly defined boundaries, and an extractive relationship with the local community (however local is defined) are features of plantations and replicated in industrial seasteading platforms, mines, factory sweatshops, export processing zones, Millennium Villages (an unfortunate parody of villagization efforts across colonial Africa), and collective farms. At the same time, other productive forms such as smallholder farming communities, land reform settlements, indigenous territories, and urban peripheries are better characterized as integrated into the plantation food regime, supporting large-scale production through the supply of cheap labor and commodities (often through contracts), or through the demand for cheap food. University campuses founded under the land grant model have supported plantation production in the United States and abroad through faculty research,

teaching, and extension, sometimes with bona fide on-campus plantations of their own (Goldstein, Paprocki, and Osborne 2019).<sup>9</sup>

### The Plantation as an Imperative

The preceding section attempts to analyze the plantation as a particular social space. Critical development studies, though, also help us to understand the plantation as a historical imperative, a mode of expansion, production, and domination that gave birth to the world system as we know it today.

Historians and geographers (Moore 2017, 2018) have told the story of the modern world through the rise of various key commodities, from sugar (Mintz 1986), rice (Carney 2001), and cotton (Beckert 2015) to corn (Warman 2003). The first wave of colonialism, dominated by the Spanish and Portuguese, introduced plantations—primarily sugarcane—in the New World, long before the large-scale productive property became the norm in Europe.

European feudalism might not have been inherently expansive, but it became so, as Seed (1995) argued, when married to rights-bearing narratives of manifest destiny, facilitated through a common language, and legitimated through technologies of agricultural extraction. The boundary of the nation-state was not the national border; rather, the boundary was the commodity frontier that nations laid claim to and protected with an ever-more elaborate set of rules (Moore 2017, 2018). In Portuguese territories, the *Lei da Sesmarias* technically privileged productive use of the land, but in the context of seemingly vast, empty areas, great inequality, a feudal mindset, and a focus on navigation and “discovery” as the basis for a legitimate claim, this law had the perverse effect of ensuring that enormous land areas would fall under the control of single families. These claims were anchored by younger sons blocked from land ownership in Portugal due to feudal inheritance laws based on primogeniture. Initial possessions were legitimized—often, but not always, legalized—by the passage of time (what legal scholar Peñalver [2011] referred to as the path dependence of land law), the blending of property and politics, and forceful possession (Holston 1991). Whiteness, too, conferred legitimacy of land claims, along with the subjugation of black people as property and the invalidation of indigenous land claims, uses, and relationships,



creating what Bhandar (2018) termed “racial regimes of ownership.”

Plantations reordered space and scale. Capital-intensive mills were necessary to process sugarcane soon after cutting, and so plantations went hand in hand with increasingly industrial means of processing. The early factories in the Industrial Revolution were similarly located near the source of raw materials (as well as fuel sources), particularly wool from the British countryside. It was not until the second wave of colonialism, in Asia and Africa, that technologies existed to allow the separation of source materials from production. This allowed for factories to be sited in European capitals and plantations for raw materials in the colonies. This was the metabolic rift of colonial agriculture. Today, the ratio has turned on its head, although arguably driven by the same logic: Plantations are increasingly located in the core with factories (sweatshops) in the former colonies (Lowder, Skoet, and Raney 2016).<sup>10</sup>

Expeditions sent out to discover and then control new land for plantation crops provided the building blocks of new scientific disciplines, from geography to economics, plant science, and medicine. European social theory came into being during the transition from feudalism to capitalism in Europe, with the majority of social theorists—many of whom became the “fathers” of new disciplines, such as sociology, economics, and geography—praising the gains from specialization, scale, and concentration in agriculture while recognizing the potential dark side of each (Ricardo 1817; Weber 2009; Smith 2010; Durkheim 2014). The young discipline of economics was rooted in assumptions about the comparative advantage of scale in agriculture, even as political economists from Smith to Ricardo voiced contempt for traditional, parasitic landlords, estate owners who did not use their property well.<sup>11</sup> This antilandlord perspective was entirely compatible with the embrace of well-organized large-scale plantations that produced crops for export or for industrial production (Hodge 2007).<sup>12</sup> With the exception of Marx ([1867] 1976), those who fought against this theoretical embrace, such as anarchists (Proudhon 1876) and the early English socialists (Owen 1813), were condemned to experiment in the margins.

Alongside economics, plant science also began as the investigation of particular plantation crops (Brockway 1979), directed toward improving the capacity to plant at unnatural scales and densities.

This is nowhere more clear than in the tropics, where botany and agronomy journals are filled with scientific analyses and comparisons of commodity crops across the colonies (Tilley 2011; Pritchard, Wolf, and Wolford 2016). In Mozambique, what passed for agricultural science throughout the twentieth century was really the search for three or four products that the territory would provide to the metropole (Wolford 2019). Plant scientists and agronomists combed the records of colonization in other territories to see what crops might be feasible in their own colony. Plantation logics and the proliferation of plant diseases on monoculture crops shaped both disease ecologies and the study of plant pathology (Mitman 2017). The crowded spaces of plantation cultures gave rise to epidemics in both human and nonhuman species; they also provided the ideal laboratories and populations for the study of medicine, infectious biology, entomology, and plant pathology.

In the 1950s, development economists actively modeled plans for former colonies on the dynamics of “primitive accumulation,” or the experience of dispossession from the land and separation of small-scale agriculturalists from the means of production (Lewis 1954; Paprocki 2018).<sup>13</sup> The goal of early modernization theory was to mimic the British model of industrial transformation, particularly in enabling the creation of land, labor, and capital as commodifiable, alienable factors of production (Lewis 1955; Staatz and Eicher 1998). Land enclosures were deemed necessary, once again, to creating a mobile wage labor force and efficient, large-scale agriculture. In the decades that followed, critical development scholars deployed Polanyi’s ([1945] 2001) analysis of the so-called double movement to analyze the uneasy and uneven articulation of market society (whether capitalist, socialist, or in between) and rural communities (Stoler 1985; Verdery 2003; Chari 2005; Li 2007, 2014; Gorman 2014; Wolford and Nehring 2015).

Despite concerns that large-scale agriculture is ecologically unsustainable, plantations and plantation crops still dominate agricultural production around the world. The six most widely produced crops (cotton, wheat, rice, corn, sugar, and soy) are often grown in large-scale, input-intensive farms, although they are also grown on small-scale farms, often with a contractual relationship to the lead large estate or company. Many other widespread crops are popular because they were food sources for those who were forced to labor on plantations, such as corn

(Warman 2003) or manioc (Isaacman and Isaacman 1983). Almost all public or charitable funding goes to those crops and agricultural policy and scientific networks (e.g., the Consultative Group on International Agricultural Research network) support their expansion around the world (Pingali 2015). A movement has arisen to identify “orphan” or neglected crops to try and balance the focus on such a limited number of crops, but this search is often oriented toward turning these crops into global ones grown at scale. Quinoa, for example, is unlikely to become a plantation crop, but encouraging Central and South American farmers to plant it, as well as farmers in Australia, Colorado, England, and France, is alienating it from the place, people, myths, and soils of the Altiplano (Ofstehage 2012; Walsh-Dilley 2013).

At the same time, plantations inspired resistance. People, plants, and microbes fled the site of the plantation, in both a physical and social sense; people crossed social norms within plantations and without, smuggling everything out from seeds to human bodies. As surely as plantations bred new crops and new diseases, they also bred rebellion (Cooper and Stoler 1997). Plantation boundaries were and are porous. They are literally teeming with life, some of which will be captured as labor but all of which resist complete control by external compulsion (even when internalized). Even within the wreckage of monoculture plantations, microbes, animals, and plants flourish, and emergent ecologies express possibility (Kirksey 2015). The irony is that resistance against the system (in this case, the state system) requires legibility and so programs for organic food, land distribution, national parks, or indigenous territorial governance often get entangled in plantation logics. Organic food is thus grown at scale and sold in Walmart and Target (Guthman 2004). Land redistribution programs intended to redress historical grievances generate contract farmers who feed into the agro-industrial system (Wolford 2010; Moyo 2011). Monocrop commodity production is supported as a means to spare other land for conservation (Perfecto and Vandermeer 2010). Indigenous territories reflect modern state governance and negotiate space alongside plantation production to stay afloat (Galeana 2020).

### The Plantation as an Ideal

Third, and finally, I argue that the plantation serves to this day as the ideal for organized, rational,

and efficient production and governance. Drawing on qualitative and historical methodologies, political ecologists highlight the way in which a certain ideal of managed, “productive” landscapes leads to the categorization of all other land (and people) as jungle (Slater 2001), Terra Nullius (Feldman and Geisler 2012; Makki 2014), wilderness (Neumann 1995; Sundberg 2003; Hennessy 2019), degraded (Fairhead and Leach 1996; Blaikie and Brookfield 2015), or wasteland (Baka 2017). The privileging of some landscapes over others is a means to alienate entire landscapes and recruit resources into areas that the market can control.

To many urban readers, the term *plantation* might seem anachronistic, and even romantic. In the United States, the presentation of the plantation South as noble and grand has made former slave plantations popular destinations for weddings and other ritualistic events (Murphy 2019). The recent rush to acquire new land—the so-called global land grab (or what some have called the second scramble for Africa) suggests that plantations are still the commonsense response to questions of crisis, scarcity, or uncertainty (Chung 2019).<sup>14</sup>

The global land grab has garnered a significant literature in the past fifteen years. This most recent land grab is often traced back to the mid-2000s when multiple markets collapsed and commodity prices for basic food crops, including wheat, corn, and rice, rose dramatically (Borras et al. 2011). Decades of falling commodity prices came to an end, pushing record numbers of people into severe food insecurity. As widespread social unrest rippled across the globe, international leaders focused on food production as the remedy and called for a “doubling of world food production” by 2050 (United Nations 2009). As prices continued to demonstrate variability, businesses, states, and nongovernmental organization pursued a two-headed solution. First, investors of various kinds, from nation-states to hedge funds and corporations, sought out new land for the production of agricultural commodities (far away from shaky Wall Street markets). Second, aid organizations, multilateral institutions, and bilateral lenders deepened work on a “green revolution” in agriculture that would improve yields on low-performing land (McMichael 2012). This dual strategy was an attempt to meet demand by closing what the World Bank defined as a “high yield gap” where production levels were lower than those obtained under ideal,

input-intensive conditions in the highest yielding regions of the world (Wolford 2015).

As public and private partners came together to expand and intensify agricultural production, new concerns emerged: Activists from around the world, particularly in Africa and Asia, began to protest what they saw as a new colonialism: not only land dispossession but a reorientation of farming systems as food for export markets (Borras and Franco 2012). Activists dubbed this search for land a global land grab and highlighted the negative impacts of land deals on local populations, many of whom were in danger of losing their access to land to feed consumers through regional food networks (GRAIN 2008; Wolford et al. 2013).

Although the scale, effects, and causes of the global land grab are debated (Scoones et al. 2013), it is clear that large-scale land acquisitions, or new plantations, have become one of the most attractive investments available worldwide, with brokerage companies and institutional investors boldly declaring that investing in land will yield over 20 percent annual rates of return. Videos abound on the Internet explaining how to acquire desirable land from the Ukraine to Mozambique or Brazil (Fairbairn 2015). Although some argued that the solution for the food crisis was rebuilding local food systems, deploying national food production strategies, and building international support for food sovereignty (de Schutter 2014), the dominant narrative centered around increasing productivity. Pingali (2015) wrote, “Policy actions taken after the 2008 food price crisis make it clear that most countries still interpret food security as staple grain self-sufficiency” (587). Multilateral organizations such as the World Bank, the United Nations, and the Food and Agriculture Organization, as well as national governments, argued that private investment or public-private partnerships were needed to access land, create large-scale properties, and produce with the most modern, efficient, and intensive methods available (Deininger and Byerlee 2011).

The return of the plantation is perhaps nowhere so evident as in Mozambique, where the governments of Brazil, Mozambique, and Japan announced an ambitious new plan to transform Mozambican agriculture in 2010. The goal was to modernize farming in the northern Nacala corridor, drawing on Brazilian expertise, Japanese aid, and Mozambican land and labor. Drawing on the successful example of Brazil justified the ambitious promotion of large-

scale export-oriented agriculture in a country made up predominantly of very poor subsistence producers who depend on agriculture as one of their many meager sources of support. It was a powerful narrative, full of promises to reproduce the so-called other Brazilian miracle of large-scale soy, corn, cotton, and sugar production in the Brazilian Center West (Wolford and Nehring 2015). This plan for transformation made sense to the Brazilians because the northern region of Mozambique was described as a wasteland, a region not used effectively by the native population, with a landscape that had soils similar to the Brazilian Cerrado and so instantly recognizable to Brazilians (Shankland and Gonçalves 2016).

ProSavana’s so-called master plan also (importantly) involved the distribution of “empty” or available land to investors who commanded the financial and scientific resources to make the land productive. As the original documents make clear, the architects of ProSavana created a development strategy in which large-scale plantations would generate a modern agro-industrial export sector, allowing smaller production units to insert themselves in as out-growers or contract farmers and input suppliers. At its core, ProSavana is a particular vision for large-scale investment on the land (Patel 2012; Wise 2014), but it is undergirded by scientific notions of productivity, efficiency, and security. ProSavana was possible because of the much more general role played by Western science and technology transfer. Calls to rapidly increase food production by exploiting high yield gaps turned on the ability of industrial methods and agricultural science, both of which serve to render disparate environments equivalent, providing technological fixes to address low productivity and unequal resource endowments. Building on a long history of colonial and postcolonial practices (Mosca 1999), claims to scientific expertise legitimize and facilitate the contemporary rush to acquire land (Nehring 2016).<sup>15</sup>

The World Bank argues that Brazilian agricultural knowledge, forged on the large-scale plantations of the Center West, should be “easily adaptable” to Mozambique because Brazil and “African landmasses” were physically connected during the Jurassic Era and thus “share similar geological and climatic conditions” (World Bank 2011, 47). This understanding of farming as adhering to certain universal principles—“principles true in every country” (Mitchell 2002, 54)—is a signature characteristic of a plantation imaginary predicated on abstractions or

generalizations (Fairhead and Leach 1996; Peet and Watts 1996; Bassett and Zuéli 2000), reducing complexity for the purpose of standardization and the application of first principles (Fitzgerald 2003). By abstracting cultivation from the particularities of place, agricultural sciences work with the support of the nation state to build plantation landscapes, “rationalizing and standardizing what was a social hieroglyph into a legible and administratively more convenient format” (Scott 1998, 3). Such abstraction and equivalence have contemporary relevance in new conditions of South-South development, as it is exactly the uncovering of historical “similarity” that undergirds scientific transfers between Brazil and Mozambique (Shankland and Gonçalves 2016).

### Conclusion: Alternatives in the Era of the Plantation?

It is difficult to avoid the plantation today. Pahom lies dead but his desires live on: The plantation is in your cereal, orange juice, and peanut butter. It is visible in daily life throughout Africa, where new plantations go hand in hand with recycled notions of villagization and modernization. It is evident in the poverty and inequality that shape weak patronage states (with institutions like the electoral college in the United States founded in a pro-slavery system) and overstuffed urban peripheries or slums from Latin America to Asia and Africa. It lives on in racism and racial violence around the world. It is viewable from space in increasingly sophisticated models of land use and climate change. It is made visible in urban centers like São Paulo where the smoke from distant Amazonian fires fanned out over the skyline in August 2019.

This article makes three key arguments about the Plantationocene. First, plantations should be understood not just as a form of production but also as a distinct and enduring form of community, one characterized by inequality, violence, and insularity. The social relations of plantations shaped the moral economy of an entire era, one dominated by colonial extraction and large-scale agriculture. Second, the need for raw materials wedded to a “rights-bearing discourse” that justified overseas exploration and the claiming of new lands spilled out of feudalism and characterized the expansive impulse of market economies, whether capitalist or socialist. This imperative to extract and produce undergirds economies around

the world. Third, and finally, if we are to understand the power of the Plantationocene, we need to analyze the plantation as a discursive ideal, one that gets to the heart of Western ideals for organizing nature, economy, and society.

It is not simply a theoretical exercise to ask whether Plantationocene might be the best way to describe the modern era. What is at stake is an understanding of contemporary crises, many of which, I would argue, trace their roots back to the plantation as a social system, an imperative, and a mentality. Climate change and global warming are due, in part, to land transitioning to large-scale livestock and commodity production and greenhouse gas emissions from large-scale agriculture (Mahowald et al. 2017). Plantations with their emphasis on scale, precision, and extraction inherently promote the monocropping, input-intensive agriculture that feeds climate change (Baird and Barney 2017). Inequality at the national and global levels has been shaped by colonial land policies that captured the best areas for white settlers, leaving only forced labor, marginal lands, or outmigration as options for indigenous or slave populations (High Level Panel of Experts 2013). In Brazil and Mozambique, one of the most significant forms of inequality is in land ownership. At the same time, historically high rates of migration are set into motion by land degradation and dispossession, both of which are associated with large-scale agricultural claims, from colonization to the green revolution to the global land grab.

The plantation was the language and the letter of colonial exploration and rule, and its legacy of violence, racism, inequality, and extraction continues to shape North–South relations today. The plantation fed the first and second Industrial Revolutions, fostered the creation of a world market, and state-organized collective plantations fueled a deadly transition to socialism in the former Soviet Union and in China. The rise of the industrial world food system was dominated by the plantation: A handful of crops organized into large-scale production units pushed smallholders out of the countryside and pulled them into urban areas, leading to successive waves of rural to urban migration. The financialization of land has allowed financial markets to continue expanding even during recession (Fairbairn 2020). Reliance on these crops and this form of production continues to foster rapid urbanization, as more and more people are removed from the means,

meaning, and materiality of agriculture production. Reliance on plantations as racialized forced labor systems has left a legacy of racial discrimination, tension, and structural violence.

The question is this: If plantations are the defining feature of modernity, how can we think against them? How do we avoid Pahom's fate, as individuals and as humanity? As McKittrick (2011) said, plantations are good to think with, because they suggest what an alternative future might look like as long as "the brutalities of racial violence are not descriptively rehearsed, but always already demand practical activities of resistance, encounter, and anti-colonial thinking" (955). If plantations are large-scale, capital-intensive, agro-industrial extractive production sites dependent on forced, usually racialized labor, then alternatives might logically be small-scale, labor-intensive, participatory, and diverse. Political and policy support for such alternatives would need to provide resources and space for them to flourish without enabling the nativist or exclusionary philosophies that sometimes accompany a romance of the local.

As I write, from the ledge of a global pandemic, I wonder whether the coronavirus hasn't exposed all of the contradictions of the Plantationocene—with its long global agro-industrial commodity chains that cannot feed people anymore, let alone nourish them; the fetish of densely populated cities as the pinnacle of Development (with a capital D) and the neglect of rural areas; and the neglect of or harm to Black and Brown bodies that make them disproportionately vulnerable to infection. All around me, people are responding to the pandemic by tending to their own plots: New gardens have popped up all over the neighborhood and a sharing economy—a steady stream of free items for the taking—has flourished. People who are lucky enough to stay home and keep their jobs leave their house to join protests of Black communities everywhere, fighting racism that flowed from plantation to prison. As messages and offers of aid flow in from friends down the road and across the planet, there is a celebration of life that feels both grounded in the local and affirmative of a global solidarity. This is not life as we knew it, but it might be what we pull together as the plantation recedes.

## Notes

1. I do not engage in discussions as to the stratigraphic signature of the Plantationocene, although such signatures have been the basis of determining and

defining past use of such scientific terms. Instead, I follow the Geological Society of America in suggesting that the Plantationocene, like

The Anthropocene, as currently popularized, is fundamentally different from the chronostratigraphic units that are the charge of the ICS. It is the present and future versus the past. ... In spite of this detachment of the Anthropocene from the concept and use of chronostratigraphic units, the term Anthropocene may have utility. It is popular among a diverse scientific community, social scientists, and the media. It does raise awareness that, as with anthropogenic climate change, the human impact on the Earth system is global, and that human impact may have initiated a cascade of events that will greatly alter Earth's surface, oceans, and atmosphere. (Finney and Edwards 2016, 4)

2. The data on farm size and land access are incomplete and debated, but the article just cited gives a thorough overview of the trends and suggests that although farms under 2 ha account for the vast majority (over 80 percent) of farms worldwide, they account for only approximately 12 percent of land use. "Otherwise stated, only 16 percent of the world's farms are larger than 2 ha, but they represent 88 percent of the world's farmland" (Lowder, Skoet, and Raney 2016, 26).
3. In a conversation between Tsing, Stengers, Latour, and Bubandt (Latour et al. 2018), Latour used the concept to describe the increasing distance between people and earth and said,

The "Plantationocene" is therefore for me a more productive concept than the "Capitalocene," as coined by Moore and others (Moore 2017, 2018) even though it [the Capitalocene] was at some point a nice alternative to the Anthropocene. Plantationocene is productive because it refers to a certain, historically specific, way of appropriating the land, namely an appropriation of land as if land was not there. The Plantationocene is a historical "de-soilization" of the Earth. And it is striking how much analytical work is now needed to re-localise, to re-territorialise and re-earth, to "re-ground," basically, practice. (591–92)

4. Most of the literature in these three fields focuses on case studies of resistance to this logic. These stories of resistance are crucial to understanding the cracks in the plantation system even as they underscore its influence.
5. My own work, firmly grounded in these three fields, would have been improved if I had attended better to racial dynamics in the agrarian societies I studied (Wolford 2010). I take this up in my current work on the politics of agricultural research in Mozambique.

6. As Mintz (1986) said, “There are great differences between families using ancient wooden machinery and iron cauldrons to boil up a quantity of sugar to sell to their neighbors in picturesque loaves, and the massed men and machinery employed in producing thousands of tons of sugar cane (and, eventually, of sugar) on modern plantations for export elsewhere” (xxii).
7. Safransky’s (2018) work details the irony of the migration of African Americans from former slave plantations in the U.S. South to the northern city of Detroit, only to be subject to new forms of plantation in visions for greening and gentrifying the inner city.
8. Curley’s (2019) work shows how coal mining has come to be seen as legitimate work within the Navajo Nation despite its extractive relationship with the local community.
9. Land grant universities have a complicated history that internalizes the push for large-scale, fuel-dependent agriculture as well as the search for alternatives, as Goldstein, Paprocki, and Osborne (2019) pointed out. The privileging of plantation ideals is apparent on these campuses, however. At Cornell University, for example, the botanic gardens were officially named “the Plantations” and were only recently renamed because the association with slavery and extraction generated so many difficult questions, according to the current director (see <https://news.cornell.edu/stories/2016/08/rebranding-cornell-plantations-better-reflect-mission-vision>).
10. Although plantations have been the mode of colonial occupation for the past 500 years, exported as ideas or aspirations from Europe to—and perfected in—the rest of the world (see Mintz 1986), farm sizes over the past thirty years have risen in wealthy countries and fallen in developing ones; empirical evidence suggests that plantations have been moving from poor countries to rich ones (Lowder et al. 2016, 16).
11. Ricardo (1817) illustrated the liberal disdain for traditional, large-scale absentee landlords who played a “feudal” role in rural society. He argued that these landlords were the enemies of progress because (1) they kept many more people on their lands and in their retinues than required, solely for social prestige; (2) they exerted upward pressure on wages, by providing land and minimal support, but also (3) lessened available labor supply by retaining people, (4) did not innovate on their land, and (5) did not invest their surplus productively. Large farms that avoided these faults were the ideal.
12. In *Triumph of the Expert*, Hodge (2007) argued that development in British colonies did not begin after World War II but rather that development changed. Beforehand there was a laissez faire period with the independent yeoman (Indian) peasant as the ideal, in part because of European tropes against parasitic landowners, then state-led Fabian-inspired large estates (Chamberlain) agriculture with emphasis on primacy of science, then concern with development of colonies for their own sake during the late development period.
13. Paprocki’s (2018) work illustrates the way in which development strategies purportedly designed to improve resilience or adaptation to climate change in Bangladesh were based in long-standing understandings of development as synonymous with export-led, industrial growth.
14. Chung’s (2019) work illustrates the relationship between nation-building and large-scale land enclosures in contemporary Africa.
15. Nehring’s (2016) work analyzes the relationship between agricultural research, capital, and the internationally connected state in fostering large-scale export agriculture in Brazil.

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