

## REVIEW ESSAY

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### Commodity Production and the Sociology of Work: Ideologies of Labor and the Making of Globalization

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Greg Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City*. New York: Picador, 2009. 432 pp. \$16 paperback.

Gary Okihiro, *Pineapple Culture: A History of the Tropical and Temperate Zones*. Berkeley: University of California Press, 2009. 272 pp. \$17.95 paperback.

Andrew Zimmerman, *Alabama in Africa: Booker T. Washington, the German Empire, and the Globalization of the New South*. Princeton: Princeton University Press, 2010. 416 pp. \$35 hardcover.

A common feature in almost any world atlas is the colorful, symbol-driven commodity maps that identify national and global regions by the production of specific types of crops or the extraction of natural resources found there. Oranges grow in the state of Florida in the United States; copper is mined in the northern region of Chile; perhaps tiny representations of sheep indicate that Australia is a major producer of wool. These visual productions of space are both compelling and misleading, implying that access to the world's bounty is as simple as knowing where things are located within a larger division and ordering of the world. Yet oranges are not indigenous to Florida, and their contemporary mass production is made possible largely by the employment of undocumented migrant workers and the legal exclusions that make them a cheap source of labor. Without well-funded and meticulously crafted campaigns urging residents living in temperate climates to purchase and consume oranges year round, oranges' profitable hold in Florida would likewise not be sustainable. Such complexities raise the question, where are the maps that illustrate the dynamic cultural, labor, and political relationships between the commodities and the places where they are produced?

Greg Grandin's *Fordlandia*, Gary Okihiro's *Pineapple Culture*, and Andrew Zimmerman's *Alabama in Africa*, all map—discursively, that is—historic relationships between commodities and labor on a global scale.<sup>1</sup>

It has been instructive, for this reviewer at least, to imagine how these three authors might construct their own historical atlases, based on the three commodities that provide their focus: rubber, pineapples, and cotton, respectively. All three authors emphasize how government and private interests employed ideologies of labor management and control—social technologies that ascribed to labor a meaning that transcended economics—in order to exploit these resources.

An atlas based on Okihiro's exploration of the pineapple, for example, might use the fruit to signify tropical regions that, through the ideological production of European colonialists, were marked as excessively fecund and fertile and therefore unable to inspire industrious habits among native populations. In an atlas inspired by Zimmerman's work, deceptively beautiful cotton bolls, hiding the thorns that pickers got to know intimately, would not only signify areas of the world where the crop could grow but also racialized regions where whites argued that the cultivation of cotton would discipline "Negros," whether American or African, and incorporate them into the industrial economy. For Grandin, an atlas of the Brazilian Amazon in the 1920s might show the leaf of the *Hevea brasiliensis*, or rubber tree, and the Model T, side-by-side. Both signified Henry Ford's desire to prove to the world that capitalist industrialism and agricultural production could benefit each other and coexist in harmony under the supervision of a paternalistic company. Historical atlases designed to highlight the discursive meanings that commodities carried, and the sociologies of labor relations on which they relied, would give a more abstract, yet, at the same time, accurate understanding of their larger significance.

In all three books, it is clear that economic liberalization and the creation of free labor were both at odds with and essential to the goals of commodity production on a massive scale. The era initiated by the end of slavery and the abolition of feudal privileges and serfdom created new forms of mobility and the distinct possibility that workers, if given the option, would opt out of producing commodities altogether. The desire to control mobility and to fix workers' identities and the labor they performed offers a common theme in all three books. Mass produced and subject to disciplinary labor regimes, global commodities—whether under imperial forms of political governance or the freedom that allegedly characterized liberal democracies—paid little heed to local agricultural practices and cultures of labor. Plantations, sharecropping, and company towns were neither especially idiosyncratic, nor were they attuned to local needs and desires.

In an argument that is applicable to all three books, Zimmerman states that "Capitalism produced not only the stability of biosocial identities" around race, gender, culture, and class, but also "the fixity of fields and households that ensured the predictable flow of cotton and other crops to the commodity markets of the global North" (18). Yet at the same time, "the routines of capitalist production often allowed, often impelled, individuals to leave family and home, as seasonal or permanent migrants" (18). Uprooting workers made

them dangerous in their very mobility. The sociological theories of labor that governments and companies developed around commodity production encouraged the “productive” mobility of the global market, while trying to limit the “negative” mobility and autonomous activity present in workers’ self-determination. The plight of laborers producing commodities for consumption in distant and removed regions offers an important lesson in this regard.

Despite its title, only a small portion of *Alabama in Africa* is devoted to the specific historic episode where the German Colonial Economic Committee, a private group that worked closely with the German colonial administration, recruited a group of African American students and graduates of Booker T. Washington’s Tuskegee Institute to educate residents of the African colony of Togo on how to plant and cultivate cotton. Between 1901 and 1908, the Tuskegee men established and operated in Tove an experimental farm comprised of six villages. John H. Robinson, one of the original members of the expedition, created a cotton school that offered industrial education. In 1908, Robinson drowned during a trip to the northern region of Togo, where he had planned to open an additional school. His death effectively ended the direct involvement of representatives of the Tuskegee Institute in Togo, although the farm, school, and the seeds from the expedition all lived on much longer. Zimmerman structures his book in such a way so as to demonstrate that the exchange was neither anomalous nor insignificant, despite its brevity. “The expedition is a mere curiosity, its narrative little more than a colonial adventure story,” he acknowledges, “unless it is understood in its connection to the three regional histories it brought together” (1). The confluence of these regional histories, and the transferable nature of sociological theories of race and labor that operated in Germany, colonial Africa, and the American South, gives the narrative meaning.<sup>2</sup>

The abolition of slavery during the United States Civil War forced planters and their allies in the former Confederacy to rework their racialization of American blacks since they could no longer monopolize their labor through slavery. Following the defeat of Reconstruction, white Southern intellectuals like Henry Grady, who popularized the phrase “The New South,” and black advocates of industrial education such as Washington argued that black agricultural workers represented a superior race of manual laborers. In their attempts to assuage white planters, New South boosters argued that emancipation was not incompatible with the South’s prosperity.<sup>3</sup> Although blacks were allegedly less intellectually and culturally advanced than their white counterparts, with attention and supervision they could nonetheless be put to productive use.

Whereas controls on the mobility of labor were explicit under slavery, Zimmerman shows that sharecropping tenancy, which “utilized the mechanisms of the free market and the appearance of family farming” (37), was an equally capable tool of labor discipline. Sharecropping in the South bound African Americans to the former estates where they had worked as slaves, requiring them to rely on creditors for cash, supplies, and other necessities to grow cotton as a cash crop in order to repay their debts. Sharecroppers, who faced

not only market conditions weighted against their success, but fraudulent landowners and creditors as well, were legally prohibited from leaving the land they had farmed while still in debt to the landowner.

Washington, with his maxim that demands for political and social equality had to follow the economic and cultural advancement of blacks, was of obvious interest to aspiring colonial powers such as Germany in the 1880s. Zimmerman documents that German colonial officials were interested in transforming discrete African ethnic groups, representing a range of different cultural practices, into uniform “Negro” laborers modeled after the cotton economy of the New South. Zimmerman also dissects however, W. E. B. Du Bois’s influence on Max Weber and the *Verein für Sozialpolitik*, the society of German sociologists who opposed both laissez-faire capitalist economics, which they felt provided workers with too many freedoms, and social democracy, which was too radical and too invested in democracy.

As a student at the University of Berlin, Du Bois wrote a PhD thesis in 1893 that compared small and large agricultural holdings in the United States and, in all likelihood, further contributed to his budding argument that sharecropping, under the guise of independent family farming, actually represented a system of racial subordination. Although his thesis no longer exists Zimmerman speculates that Du Bois’s German colleagues deployed his knowledge and research on the conditions of blacks in the American South not as cautionary lessons about economic marginalization, but in order to create a sociology of racial control, aimed a sociology of racial control, aimed initially at Polish workers farming sugar beets in eastern Germany, and then at Africans in Togo. Weber’s argument, for example, that there existed a culturally-based “psychophysics” of labor, later refined in his theory of a (white) Protestant work ethic, treated both blacks in the United States and Poles in Europe as equally applicable case studies. While white Southerners expressed anxiety over black autonomy and political participation in the United States, leading German social scientists such as Weber invoked fears about the Polonization of Germany. In 1886, the Prussian Settlement Commission received one hundred million marks to subsidize leased farms for relocated Germans and ethnically German returnees from Russia, so as to lessen the impact of Polish migrant workers. Zimmerman argues that in the same way that sharecropping in the South controlled both white and black farm laborers, the Settlement Commission used anti-Polish sentiment and a nationalist agenda to limit the autonomy of Germans.

Polish nationalists and anti-Polish all beet farmers, regardless of their nationality, by promoting patriarchal family farms that they could more easily control were in agreement that young male and female Polish workers, housed in virtually unsupervised dormitories, represented a dangerous type of sexual and familial liberation that was anathema to conservative values. Zimmerman argues that patriarchal concerns sought to constrain the revolutionary culture of migratory Polish laborers that disrupted gendered, class, and generational hierarchies. He extends this analysis to Togo, where prior to the

introduction of cotton, and the reinvention of palm oil as a colonial cash crop, local tribes practiced polygamous relationships and economic production not organized around a single family unit. In Togo, a local varietal of cotton (that would be replaced by the American Upland varietal of cotton, which could withstand industrial production), was cultivated and spun solely by women and provided them with economic independence within an interdependent polygamous family structure. In Togo, Zimmerman argues that German colonialism, even ignoring the brutality and warfare it relied on, did not bring a better standard of living or “progress” to the native African population. Rather, the introduction of cotton as a commodity brought downward mobility among the Togolese. Exported to distant manufacturers in Bremen and other industrial German cities, cotton was a strictly colonial commodity, transplanted to meet the colonizers’ needs. Under German colonial rule and the supervision of the Tuskegee graduates, patriarchal farms, with male household heads ostensibly loyal to colonial authority, became the new social order.

A myth grew around the Tuskegee expedition in Togo and the imitative programs that followed. The industrial education it represented was portrayed as a humane alternative to the brutal labor exploitation practiced in places like the Belgian Congo. *Alabama in Africa* ends with Robert Ezra Park, the founder of the Chicago School of Sociology, introducing into American academic life the racial sociology that he had learned as a PhD student in Germany. Framing race in a global context, Park believed that American blacks demonstrated and provided “an opportunity to study primitive man in all the states of progress from the lowest to the highest” (224). Park, who served as a professor at Tuskegee before arriving at Chicago, viewed Northern blacks with a deep suspicion, questioning whether they were culturally fit to survive in the urban areas where they had relocated. Just as the European sociologists he studied with lambasted Europeanized Africans, whom they claimed had lost their will to work through a type of false assimilation, Park was equally cynical in regard to urbanized black Americans transplanted from rural areas. In this sense, Zimmerman’s examination of how sociologists concerned with black bodies interpreted their mobility, both economically and physically, returns full-circle.

Whereas *Alabama in Africa*’s focus is on the global circulation of sociological discourses that linked free labor, commodity production, and race, Gary Okihiro is concerned with the movement of colonial imagination and desire, and how these ideas are inspired by commodities. *Pineapple Culture*, a sequel to Okihiro’s *Island World*, is the second book in a planned trilogy examining historical constructions of space and time. *Island World* explored islands and continents, in particular Hawai’i and the United States, and the different cultural meanings produced by these landforms. Okihiro argued in *Island World* that white Americans saw Hawai’i as an object that had to be brought into the realm of continental sovereignty and cultural, political, and economic practices. Colonialism remade Hawai’i’s economy and culture, while its agents suggested that the purportedly inevitable annexation of the islands by the continental United States was the only history that mattered.

Picking up this theme, Okihiro begins *Pineapple Culture* by revisiting a central point: Although “space and time are human conventions,” a point that many historians would readily acknowledge, most historical narratives continue to proceed in a linear fashion and focus on human agents in the context of their perceived successes and failures over the commodities, labor, and states that they have sought to shape. *Pineapple Culture* utilizes an alternative “historical formation” that privileges the pineapple and how an exploration of the fruit’s story might challenge “glib assumptions of solid space and inexorable time,” and, in turn, narratives of modernity.<sup>4</sup> “*Pineapple Culture* interrogates the tropical and temperate zones through the discursive and material career of the pineapple,” (1) Okihiro explains, and how the fruit helped to transform inchoate and fluid representations into discrete concepts and geographic regions. Okihiro maps the myriad ways that the pineapple traveled as an object of colonial desire, material and political fetishism, botanic wonder, and, eventually, as a driving force behind global labor migration, industrial commodity production, and the consumption of the exotic “other” in American supermarkets.<sup>5</sup> The pineapple’s importance, which cannot be reduced to a discussion that simply labels the fruit a colonial commodity, is perhaps most evident in where it has historically appeared. As the book’s beautiful photos and images show, the pineapple has festooned everything from the European hothouses in which it was grown to Hawaiian tourist brochures.

As noted earlier, in the age of European expansion, the mapping of the tropics relied on what Okihiro describes as race and gender “isotherms.” Sexually, areas that fell within the tropical isotherms were feminine and fertile, bursting with wild and untamed vegetation. Europeans expressed amazement over bananas and pineapples that had never been actively cultivated—they assumed incorrectly—yet littered the ground. Native populations, spoiled by an abundance of the vegetation that surrounded them, existed indolently without the knowledge of labor, since all was given to them. Writing in the early-nineteenth century, the German naturalist Alexander von Humboldt, as Okihiro points out, not only sought to document the fecundity of tropical South America, but to further “lift the veil” and expose its “unsubdued, virgin nature” (36) to masculine, European exploitation. Okihiro quotes Walter Raleigh, sailing up the Orinoco River in an earlier century, making the point in even more sexually explicit terms: “Guiana is a country that hath yet her maidenhead, never sacked, turned, nor wrought” (81). By the end of the nineteenth century, the feminization of both tropical habitats and their populations would take an explicitly political form within the production of imperial knowledge and sociological explanations. The white man’s burden did not extend to fellow men, but rather to childlike and womanly creatures, who lacked the fitness to govern and the discipline to labor under terms that were productive to imperial interests.

While the exact origins of the pineapple remain uncertain, wild species of the fruit are thought to have been spread through human migration from the region where modern-day Argentina, Brazil, and Paraguay intersect. By the

time of Christopher Columbus's arrival in the Americas, pineapples could be found on both coasts of South America, in the Caribbean, and in Central America. Prior to the nineteenth century, the pineapple migrated to Europe with great difficulty unless it was preserved. Initially, the only Europeans who had a chance to taste pineapples were sailors using the fruit to ward off scurvy. Around 1690, pineapple plants were successfully introduced to European hothouses, where botanists under the service of different royal and national commissions competed with each other to see who could grow the largest and most tasteful fruit. Landscape paintings and botanical images are put to good use by Okihiro, who shows how images of pineapples were important visual cues that allowed people in temperate zones to make sense of the tropics that most would never see firsthand. As Okihiro notes, both members of the English elite and the wealthy Americans who followed their leads, used the pineapple as a design motif in furniture, textiles, cutlery, and china. Where possible, pineapples entered fashionable dessert recipes as well. Thomas Jefferson and his family, for example, served a pineapple pudding recipe to distinguished guests of Monticello.

By the first half of the nineteenth century, the speed of passage across the Atlantic and from Africa had increased to a rate where fresh pineapples could reach markets in Europe before spoiling, making plantations in tropical regions a feasible and profitable venture. Plantations, Okihiro notes, migrated with European expansion from the Mediterranean to the Atlantic, and then to the Pacific. Botanists found that the Cayenne varietal of the fruit proved to be the best suited for growth in disparate tropical areas. As plantation economies moved, they drew from new sources of labor.

James Dole arrived in Hawai'i in 1901 and was immediately able to take advantage of his familial connections. A transplanted New Englander, Dole was the first cousin once-removed of Sanford Dole, the first (and only) president of the Republic of Hawai'i. Sanford Dole was a lead conspirator first in the creation of the 1887 "Bayonet Constitution," which stripped the Hawaiian King Kalākau of most of his sovereign power, and then in the 1893 coup that overthrew Queen Lili'uokalani, the late King's sister. As Okihiro notes, James Dole arrived in Hawai'i enamored with empire, and the "romantic" pineapple that he could build plantations to harvest. The United States' annexation of Hawai'i in 1898 provided island-grown pineapples with a competitive advantage in that producers did not have to pay the tariffs required of shipments originating in the Bahamas and West Indies. In 1903, Dole's Hawaiian Pineapple Company, capitalized by the islands' leading white missionaries and businessmen, produced 70 tons or 1,893 cases of pineapple; by 1908 it was producing 225,320 cases. The invention of the Ginaca machine by one of Dole's engineers allowed producers to skin, core, and size pineapples uniformly (giving rise to the ring-shaped fruit still used today), making the production of the fruit greatly more efficient. Dole's pineapple plantations relied on the employment of Chinese, Filipino, Japanese, and Portuguese laborers (and their descendents), who had first been brought to the island in the 1880s during the sugar boom,

to replace the native population that had been decimated by diseases introduced by white colonizers.

In many respects, the creation of the Hawaiian pineapple industry followed a familiar pattern. Whereas initially small Japanese farmers were able to supply fruit to the local canning industry, by the 1920s the Hawaiian Pineapple Company and other larger producers monopolized virtually all of the islands' land where pineapples could be cultivated, as well as the system of canning. Since the history of plantations in Hawai'i and their reliance on migrant labor is told elsewhere, Okihiro instead provides new focus on the cultural production of commodity markets.<sup>6</sup> Improved canning techniques and faster shipping made the pineapple less exotic and more readily available in American supermarkets, and the industrial production techniques brought to Hawai'i drastically transformed the islands' pre-annexation modes of life. Nonetheless, marketers were keen on exploiting an illusion and created elaborate depictions of the fruit's tropical origins and its "sensory allure of sight, taste, and smell emanating from Paradise" (152). As Okihiro concludes, mass-produced pineapples—no longer grown in Hawai'i, where, as Moon-Kie Jung has shown, an interracial labor movement in the middle part of the twentieth century successfully won higher wages and better working conditions for laborers but ultimately contributed to the flight of capital as well—bear little resemblance to the fruit that Europeans first encountered during the early years of colonization.<sup>7</sup>

It is somewhat ironic that in these three books, Henry Ford, an industrialist obsessed with the sociology of work, was the least concerned with theories of racial and cultural difference (in regard to labor, that is, not discounting his well-known anti-Semitic views). Ford's assumption was that advanced management and production technologies could trump racial and cultural divisions. In *Fordlandia*, Grandin details the efforts of the Ford Motor Company to export its labor ideology to the Amazon. Although Henry Ford's designs to create a massive rubber plantation along the Tapajós River, a branch of the Amazon, was ostensibly about importing the commodity for use in Ford's factories, as Grandin documents, in many respects this quickly became a secondary concern. Published in 2009 to much popular acclaim and aimed at a more general audience, *Fordlandia* challenges the many prevailing myths that have sought to characterize what happens when "civilized" men enter the sprawling and untamed environment of the jungle. While *Fordlandia* does not ignore or downplay the power and immensity of the Amazon, like the more theoretically oriented *Alabama in Africa* it also asks: Can labor and the various forms of discipline used to control labor be replicated in ways impervious to both geography and local custom? Could the Ford brand, which in the early part of the twentieth century was as much about promoting certain methods of production as it was about consumption, convince workers in Brazil that the company's interests were their own?

"The Amazon is a temptress," Grandin writes, and "its chroniclers can't seem to resist invoking the jungle not as an ecological system but as a metaphysical testing ground, a place that seduces man to impose his will only to expose

that will as impotent" (7). Grandin anticipates that his readers may have been drawn to his topic through the popular tropes that surround books like *Heart of Darkness*—and its more contemporary film adaptation, *Apocalypse Now*—where men are made mad by the jungle and ultimately surrender to its chaos. Grandin does include a chapter on the exploits of Mr. Johansen and Mr. Tolksdorf, two Ford men who briefly established their own rubber seeding operation outside the boundaries of Fordlandia, all the while using the company's money "drinking and whoring." Yet he points out that they ultimately earned the wrath of Ford not because they had gone off on their own, but rather because they bartered to secure the labor of local Mundurucú Indians, rather than compensating them in cash, a central tenet in Ford's efforts. As such anecdotes reveal, and Grandin addresses, the jungle was not a wild adventure for Ford but rather "the terminus for a lifetime of venturesome notions about the best way to organize society" (8).

In the United States, Ford built his reputation on both the innovations to the assembly system that he had created, and on his willingness to buy the loyalty of his workforce. When he first introduced his "five-dollar day" in 1914, essentially doubling the standard rate that autoworkers were being paid at the time, the *Wall Street Journal* accused him of "class treason." Yet Ford obsessed over worker turnover rates and absenteeism, and the five-dollar day resolved these problems (temporarily, at least). The halcyon days created by Ford's perceived generosity were never a stable feature of labor relations, and his high wages did not achieve the goal of total control and acquiescence of his workforces at Highland Park or later, River Rouge. Under the leadership of Harry Bennett, a boxer with extensive connections to Detroit Mafia, Ford also had at his disposal a three-thousand man squad of "persuaders" who cracked heads, spied on workers outside the factory, and used other forms of coercion until the United Auto Workers finally succeeded in unionizing the Ford Company in 1941. Ford's animosity toward labor unions was matched by his anti-Semitism and his belief that the Jewish financiers and the United States government conspired against his programs. In 1927, Aaron Sapiro, an activist who organized farm cooperatives in the Midwest and Canada, sued Ford for defamation after Ford used his newspaper to try to link Sapiro's efforts to an imagined Jewish conspiracy. In July 1927, Ford was forced to publish a retraction and apology in order to avoid a trial. "In this context of domestic constraint, contraction, and compromise," Grandin notes, "Ford sought out a new space of freedom" (96): Fordlandia.

From its beginning, Fordlandia was undermined by a significant economic obstacle—it would have to compete against established rubber plantations already in existence in British and Dutch colonies in Southeast Asia. In the early 1920s, rubber prices had increased dramatically due to production limits imposed by the British government. Vulcanized rubber was essential not only to the manufacture of automobile tires, but also of the tubing, valves, and gaskets that comprised automobiles' engines, as well as the machines that produced them. By the 1920s, the vast majority of rubber was grown and harvested

in Asia, and not in the Amazon. Henry Wickham, “an imperial rogue” as Grandin describes him, had facilitated the crash of the rubber industry in Brazil after he smuggled nearly 70,000 rubber seeds out of the Brazilian Amazon in 1876, donating them to the Royal Botanic Gardens, which in turn used the seeds and their descendants to bring rubber to Asia. Even during its heyday in the nineteenth century, the production of rubber in the Amazon region had been chronically plagued by blight and insect infestations. These conditions were absent in Asia, allowing planters to grow raw rubber in much denser concentrations since they did not have to worry about the spread of illness between trees.

The Ford Company and managers of Fordlandia were not unaware of the ecological conditions and imperial history that had led to the virtual abandonment of the rubber industry in the Amazon. Instead they chose to blithely ignore these lessons. Ford’s claims that his attempt to grow rubber in the Amazon region would liberate American manufacturers from their reliance on British and Dutch rubber plantations proved overly jingoistic even before the first rubber was being exported from Fordlandia. Production limits were eased, and rubber prices again dropped. Other attempts to secure returns from the vast land that the Ford Company purchased in Brazil failed as well. The Company had anticipated exporting lumber from the clear-cut forests of Fordlandia, while the rubber trees it had planted matured, yet the Amazonia softwood snarled machines designed for cutting Michigan hardwood, and the Brazilian ports on the Amazon were poorly equipped for transporting the wood they could salvage.

While the Brazilian state was for the most part not intimately concerned with the plight of the workers enlisted to build Fordlandia, especially those recruited from indigenous populations, it did seek to profit from the endeavor. Unlike Hawai’i or Togo, where colonial powers were able to win desired concessions through coercion and questionable treaties, in Brazil, Ford could not remove the Brazilian state from the picture. The Ford Company acquired 2.5 million acres of land in the state of Pará for what amounted to a total of only \$125,000, since nearly half the tract was public land that was granted for free. Yet when it began building the homes, plants, and infrastructure of Fordlandia, Ford found itself in a dispute with the Brazilian government over paying duties on equipment that it had imported. The Brazilian government argued that Ford had to pay duties on all machinery not directly related to rubber cultivation, a distinction that the Ford Company claimed was nearly impossible to make since rubber was the fundamental purpose behind Fordlandia. In March 1931, however, nearly sixteen thousand tons worth of Ford goods—ranging from paint and stationary to hospital equipment—sat in limbo in a customs warehouse in the port city of Bélem, waiting for Ford money to secure their release.

Even more importantly, Ford’s attempts to create Dearborn in the Amazon revealed one of the fundamental flaws of the type of commodity production he sought to introduce. Unlike in the United States, where well-paid laborers in

theory would buy the goods they were manufacturing, in Fordlandia, there was nothing to absorb the earnings of workers, who would either return to their original communities upon completing a job (something that was antithetical to the Ford Company's concerns about mobile labor forces and the choices they could exercise), or spend their earnings at the bars and brothels, which operated on an island in the middle of the Tapajós River so as to avoid the attempts of Ford managers to shut them down. The Ford Company managers in the Amazon explained the workers' refusal to remain on the job clearing land and constructing Fordlandia's buildings in racial terms, in many ways internalizing local attitudes about Indians who had been recruited to work. As Grandin argues, however, resistance to the time clock and the constant speed-ups demanded in places like River Rouge had been a hallmark of American resistance to Fordism as well. Similarly, campaigns against vice in Brazil were as poorly received as campaigns against vice in Michigan. These issues came to a head in December 1930, as Grandin describes in the revealingly titled chapter "Kill All the Americans," when a full-scale worker-led riot broke out in Fordlandia. The violence originated in an overheated mess hall, where servers dispensed food in a maddeningly slow fashion—an issue that became fundamentally one of labor, since workers had meal expenses automatically deducted from their pay. The riot pitted Brazilian laborers against their American managers and left much of Fordlandia destroyed, simultaneously laying waste to the myth that Ford's "benevolence" had traction in Brazil. In 1931, with the Great Depression in progress, Fordlandia was forced to start over.

Extensive attempts to grow a blight-resistant variation of the rubber tree, under the supervision of the noted plant pathologist James Weir also proved unsuccessful. In 1935, when a crop of healthy rubber trees had apparently been brought to maturation, fungi moved between the overlapping crowns of the trees and quickly devastated the plantation. In 1936, with large portions of Fordlandia beyond agricultural repair, the Ford Company relocated its operations downriver to the area surrounding the city of Belterra. Ford's managers in Brazil advocated for a decentralized company town in Belterra better suited to workers' customs, although Ford personally insisted on creating an infrastructure to keep the workforce local. In 1940, the plantation in Belterra also suffered from leaf blight, and in 1942, many of the trees that remained were killed off by a horde of caterpillars. Although some rubber was eventually tapped at both Fordlandia and Belterra, it never equaled anything close to what peasants—bereft of all of Ford's capital investment—could tap in Sumatra. In 1945, both the Fordlandia and Belterra plantations were sold to the Brazilian government.

Throughout the book, Grandin calls specific attention to the parallels that existed between Ford's strategies in the Amazon and the tactics that he had employed in the Upper Peninsula of Michigan, where the Ford Company had established company towns in Pequaming and Iron Mountain, in order to cut and supply lumber for his automobile factories. In addition, prior to creating

Fordlandia in Brazil, Ford had made a big show about his (fantastical) desire to create a narrow, seventy-mile-long city abutted by fields in Muscle Shoals, Alabama, in the Tennessee River Valley. The city would create hybrid farmer-industrialists, who would split their time between agriculture and hydropower-driven manufacturing (a much scaled-down version of this project, minus the emphasis on agriculture, was accomplished under the auspices of the New Deal). The unrealized project in the Tennessee River Valley illustrates that Fordlandia was not the only location where Ford obsessed over what Grandin describes as his industrial-agricultural ideal, in which agriculture products might have a profitable outlet in industrial uses. Long before today's biotech firms looked to soy for use in plastics, for example, Ford was creating business suits made out of soy, soybean cars, and hosted dinner banquets where he served soybean coffee and ice cream. These projects never took off, however. Ford's Greenfield Village, his historic village in Michigan that sought to highlight and display the values and craft aesthetics of a bygone day, was more successful. Greenfield Village's artificial world embodied the central paradox that haunted Ford throughout his life: His machines and production methods—the system of Fordism that bore his name—destroyed the lifestyles that he felt should be valued and celebrated the most.

Despite the starkly different surrounding flora and fauna, Grandin shows that the abandoned facilities of Ford's empire in the Upper Peninsula bear a striking and haunting resemblance to abandoned facilities in Fordlandia. Both demonstrate the failure of company towns, founded on motives that ostensibly went beyond the imperatives of capitalism, to survive the evolution of capitalism that rendered the original business ventures no longer profitable. "Fordlandia is indeed a parable of arrogance," Grandin writes near the conclusion of his book. "The arrogance, though, is not that Henry Ford thought that he could tame the Amazon but that he believed that the forces of capitalism, once released, could still be contained" (356).

This final point has many contemporary implications and is an applicable lesson to be derived from all three books reviewed here. Zimmerman, who explicitly condemns current development practices in Africa, argues that "the dense networks of empire that have shaped the global South are not systems, but rather parasitic growths on the spontaneous economic and political activities of multitudes; they are neither the causes nor the results of economic freedom but are rather reactions and obstacles to economic freedom" (250). Systems of development have not only failed to cultivate local knowledge and expertise, but have also actively sought to suppress practices that exist outside capitalism's basic sociological ideology. Whereas Grandin would in all likelihood be hesitant to praise the spontaneity of the multitudes—seeing how cattle ranching, the charcoal industry, and soy agriculture have contributed to the widespread deforestation of the Amazon—he argues that even though the Ford Company has long since left the region, its production methods, its relentless pursuit of efficiency, and its stalwart belief in "the forces of capitalism," are ever-present memes in the exploitation of

Brazil's resources and in the production facilitated by its "free-trade" zones. The sociology of labor, when applied to the production and trade of commodities on a global scale, show historical formations, to use Okihiro's term, that are both incredibly fluid yet nonetheless affect places and people in incredibly tangible and specific ways.

## NOTES

I am grateful for the comments and thoughts provided by the editors of the journal, and to Carolyn Brown in particular for encouraging me to write this review essay. I would also like to thank Aaron Windel for his initial feedback and conversations on this topic.

1. All three books owe a debt to anthropologist Sidney Mintz's pioneering work on the history of sugar and the role that sugar plantations played in the slave trade, settlement of the Americas, and in both transforming consumption practices and in being transformed by them. Mintz's integration of social, cultural, and economic history around a single commodity clearly informs these works. See Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York, 1986).

2. Citing sociologist Robert Miles, Zimmerman argues that "racism functions . . . as part of the labor process—not merely as an ideology—because it shapes the way work is organized and exploited" (14). See Robert Miles, *Capitalism and Unfree Labor: Anomaly or Necessity?* (London, 1987). Similarly, as Howard Winant has suggested, the foregrounding of race is important because scholars have often failed to theorize how race was a "constitutive element" and a "key causative factor in the creation of the modern world" rather than a "manifestation of some other, supposedly more profound or more 'real' social relationship." Howard Winant, *The World is a Ghetto: Race and Democracy Since World War II* (New York 2001), 19.

3. Something that Zimmerman does not address is the fact that in the immediate aftermath of the Civil War, some Southern planters embraced the idea of replacing freed black slaves with "coolie" Chinese labor, based on their belief that the manumission of slaves meant that they would be impossible to control as ostensibly free laborers. For this history, see, Moon-Ho Jung, *Coolies and Cane: Race, Labor, and Sugar in the Age of Emancipation* (London and Baltimore, 2006).

4. In this respect, Okihiro follows the lead of Timothy Mitchell, who examined how histories of development projects in Egypt omitted or otherwise silenced narratives that exposed the failure of experts to ultimately control the natural environment and its agents, such as the malarial mosquito and excessive sediment from river damming. As Mitchell argues, these environmental agents did not conform to the narrative of modern progress that colonial and native technocratic experts espoused. Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley, 2002).

5. Oddly, Okihiro does not explicitly address the theory of Bruno Latour (or for that matter, Mitchell, cited in the previous note), which in some respects challenges his argument that pineapples represent historical formations in that they carry human ideas about the relationship between the temperate and the tropical. Latour might suggest that pineapples need to be understood as having an ontological "realness" that exists outside human constructions of their meaning. Okihiro's "historical formations," for example, still privilege how human epistemologies make sense of the pineapple in a social context. Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (New York, 2005).

6. See, in particular, Ronald Takaki, *Pau Hana: Plantation Life and Labor in Hawaii, 1835–1920* (Honolulu, 1983), which focuses on sugar plantations.

7. Jung's important book argues that Filipino, Japanese, and Portuguese plantation workers were successfully able to incorporate racial and ethnic difference into the movement to organize laborers, even though the planter elite sought to pit these different groups against each other. Jung, *Reworking Race: The Making of Hawaii's Interracial Labor Movement* (New York, 2006).