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## Race, Migration, and Labor

Suggested film clip: Goodyear's "Island of Yesterday" (1920) https://archive.org/details/Islandof1920

These people have lived as they live [now] through generations for thousands of years. While their ancestors were eating with chopsticks or with their fingers, the boiled rice and the curries which have been their diet for centuries, our ancestors were probably tearing apart with their hands and their teeth, raw meat; if they were not as some claim swinging from trees with the monkeys. These people are the product of a dead civilization, or rather an unchanging civilization. We, on the other hand, are advancing by leaps and bounds to the 100% efficiency point in thinking and living.<sup>1</sup>

Thus did Goodyear Tire and Rubber Company introduce rubber plantations to employees in the United States in 1919. While it sounds ridiculous today, this short passage actually says much about North American and European assumptions regarding what was often called a mystical, unchanging, and timeless "East" or "Orient." Although the comment on monkeys can be read as a bizarre swipe at Darwin's theory of evolution, Goodyear's broader point is fundamentally Social Darwinist and imperial. In the perceived competition among "races," "these people" of the "East" had stagnated with a "civilization" either dead or static, while "we" (meaning "Westerners" or, to be more direct, "whites") had moved forward and would continue to progress toward a perfect "efficiency." Here Goodyear briefly laid out a key justification for empire. Europeans (and

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Americans of European descent investing and working in European colonies) could undertake what the French called the "civilizing mission [*mission civilisatrice*]" by making the colonized more efficient and thus more productive.

This chapter explores issues of race and imperialism in colonizers' management of people and land from the late nineteenth century through the first half of the twentieth. For background, it begins with an account of the "wild" rubber "discovered" and exploited in the Amazon and the Congo, especially once nineteenth-century inventors fashioned various useful (and marketable) products out of rubber. Yet, for many Europeans the shocking abuses perpetuated by management on labor in those two mighty river basins did not necessarily point to the exploitative nature of imperialism itself. In their eves imperialism was not to blame; bad imperialists were. The same line of thinking unfolds when we go on to consider the imposition of British, Dutch, and French rubber plantations in Southeast Asia, where Europeans firmly controlled the land as well as the laborers. Here "pioneering" Europeans were to put "unproductive jungle" to good use. (Today, Americans and European citizens decry comparable actions on the part of Indonesian planters and Brazilian ranchers as abusive labor practices and the wanton destruction of the rainforest.) Simultaneously, the European planters billed their efforts as benevolent, in that they were helping indigenous people by "civilizing" them, lest they continue in their present "lazy" state, with no sense of time or "efficiency" in their (as Goodyear put it) "thinking and living." The chapter concludes with a look at the hierarchies of race on Southeast Asian plantations as well as in European and American factories.

#### "Wild Rubber" and Early Industry

No one ever used the term "Wild Rubber" until the development of rubber plantations at the end of the nineteenth century. Several trees and other plants that bore harvestable latex grew "in the wild," long before they were cultivated on plantations. The resultant rubber varied widely in both quality and cost of production, depending on the source. Indigenous peoples in the Americas and Africa were well aware of the elastic quality of the "latex" that oozed out of certain plants for many years before the arrival of Europeans. In the late fifteenth and sixteenth centuries, Columbus and other Europeans "discovered" rubber, much as they "discovered" so much of the flora of the Western Hemisphere and sub-Saharan Africa: indigenous people introduced it to them. For centuries, Mesoamerican societies had harvested latex from what later became known as *Castilla elastica*, a tall tree found in what are today southern Mexico and Central America. Latex's most important use, as described by the Spanish, was in fashioning balls for ritual games. Columbus himself saw what we would call a rubber ball, so unusual for a European at the time that there was no Latin or Spanish word to describe the substance of which the ball was made. At Moctezuma II's court in Tenochtitlan (today's Mexico City), Spanish conquistadors watched the complex game, especially marveling at the bouncing ball, so much so that they hauled both players and balls all the way back to Spain to serve as live exhibits for the Spanish court.

There does not appear to have been significant ongoing trade in latex or rubber objects between the Mexica and the Incas or other groups on the South American continent, so it is likely that the inhabitants of the Amazon river basin learned independently of Central American peoples how to tap what Europeans later dubbed rubber trees, including Hevea brasiliensis, or simply hevea. Tupi-speaking Indians in what is now Brazil called the tree *cahuchu*, literally "wood that weeps," variants of which became the word for "rubber" in several European languages: *caucho* in Spanish, caoutchouc in French, and Kautschuk in German, Amazonians fashioned coagulated latex into a series of products, notably boots, which were obviously very useful in the tropical rainforest where the cahuchu tree thrived. Little by little, over the next two centuries Europeans on scientific expeditions learned more about the mysterious substance, seeing the actual latex-bearing trees, how they were tapped, and how Indians transformed the latex into objects. The Frenchman who first described a rubber tree, Charles Marie de la Condamine, had led an expedition to the equator in order to conduct measurements and verify the shape of the globe, gathering and describing specimens of plants and animals along the way. While in South America, he saw a rubber tree tapped and named the whitish sap-like substance "latex" (Latin for liquid or liqueur) and the smoke-cured result *caoutchouc*.

Although we generally associate the desire to find, name, and control global fauna and flora with the eighteenth-century Enlightenment, it had a much longer history. As early as the fifteenth century, Europeans gathered objects, transported them back to Europe, and tried to figure out commercial uses. The "age of discovery" was fundamentally about profits. Initially, rubber seemed much less profitable than other "discoveries" such as cocoa, tobacco, corn, tomatoes, potatoes, or cinchona bark (from which the anti-malarial drug quinine could be produced, which in turn enabled yet more imperial expansion). However fascinating rubber might have been, well into the eighteenth century the substance was not an industrial commodity. At the end of the century the

Montgolfier brothers in France used a sort of rubber sealant on their hot air balloons, and the British inventor Joseph Priestley used a nub of the substance to erase or "rub out" pencil marks, naming it "India Rubber," a designation that eventually became simply "rubber."

In the nineteenth century, rubber, a product of empire, became a product of industry. In the 1820s, the British chemist Charles Macintosh used coal tar naphtha to dissolve solid rubber (and then apply it to canvas to make effective raincoats, henceforth called "Macintoshes"). When combined with Briton Thomas Hancock's patented "masticator." which could chew up solid balls of cured rubber shipped from South America (later, plantations would produce crepe sheets), the manufacture of rubber products became possible outside rubber-growing regions. Up to this point, the latex had generally been smoke-cured into objects, such as boots or balls, on site in South America, then shipped to Europe or North America. Now, however, solid balls of smoked rubber could be broken down, easily dissolved, and made into objects in the Northern Hemisphere. Like cotton manufacture, which the British empire largely removed from India over time and installed in Britain, the base of rubber manufacture would similarly move from South America to Europe and the United States.

By the late 1830s, American inventor Charles Goodyear had found that the addition of sulfur to heated masticated rubber would keep the resultant rubber products from melting in the heat and cracking in the cold. In traditional histories of the Industrial Revolution, which inevitably focus on Britain, much space is devoted to explaining the strength of the British patent system. Yet, much like British free trade (which was not always free outside Europe, notably in nineteenth-century India and China), the British patent system worked well for British subjects and less well for others. Goodyear got a US patent for the process he had discovered, which he named vulcanization after the Roman god of fire. However, the British did not recognize US patents, and Hancock freely patented the same process in Britain before Goodyear did so. (As a result, Goodyear never made much money from his patent, even though many small nineteenth-century rubber companies paid homage by using Goodyear in their companies' names; tellingly, the eventually huge and profitable American tire firm Goodyear Tire and Rubber Company did not belong to Charles Goodyear or his heirs.)

In 1851 in London, at the first world's fair, the Crystal Palace Exhibition, rubber manufacturers exhibited a host of rubber goods in an effort to build a market. There Thomas Hancock and other British manufacturers showed toys, Macintosh cloaks, capes, pillows, cushions, life preservers, model pontoons, and assorted other rubber products. Charles Goodyear set up a large stand with myriad articles called "Goodyear's

Vulcanite Court." He displayed walls, furniture, jewelry, household goods, and medical instruments of ebonite (hardened rubber later used for telephone casing and other products before the development of modern plastics). For a comparable rubber exhibit at the first international exposition in Paris in 1855, Goodyear received the cross of the Legion of Honor from French Emperor Napoleon III.

Less noticed at the time were the industrial—as opposed to what we today would call the consumer—uses of rubber. In the steam engines that powered the factories that built weapons, the steamships that carried European troops and indigenous laborers back and forth across empires, and the railway engines that moved men, women, and material in Europe and increasingly in European colonies, rubber was the raw material for a host of industrial parts. Washers, gaskets, buffer and bearing springs, rolling pistons, plug valves, hoses, belts, motor mounts, and other unseen rubber parts became key components of both advanced industry and the imperialism it made possible. Much like the rubbery substance gutta percha, a related natural product that protected transoceanic submarine telegraph cables from water, rubber underlay the expansion of European empires in the nineteenth century. Rubber made empires possible, and empires ensured increased supplies of rubber.

#### "Wild Rubber" and Empire

The 1880s and 1890s witnessed two developments that in hindsight we often view as separate, but were in fact inextricably tied. First, industrialization intensified after the start of what historians refer to as the Second Industrial Revolution, during which ever more manufactured goods found their way to ever larger numbers of Americans and Europeans who could afford to purchase them. Second, these same years saw the emergence of the era of European empires, as strongly nationalist Europeans scrambled to expand their own country's control of Africa and Asia, where they clashed at times with the colonizers of other European nations. Two key consumer products born of the Second Industrial Revolution were bicycles and, increasingly, automobiles. Both machines needed tires, first solid rubber ones, which required a considerable amount of energy to turn (as on a tricycle today), and then pneumatic ones, which rolled along much more smoothly (as on a bicycle today, with a rubber inner tube and a rubber tire as separate components). In 1888, Briton John Dunlop marketed a pneumatic tire for the safety bicycle, the newer version of the original bicycle, which, rather than a giant wheel in front and a considerably smaller one at the back, had two equally sized wheels that made it much easier to ride. Frenchmen Edouard and André Michelin introduced a pneumatic tire for early automobiles in 1895, with the rubber tube and rubber tire replacing the solid tire. With the global demand for rubber exploding at the end of the nineteenth century, a rapid increase in global production ensued.

While most of the world's rubber came from Brazil. the African rubber trade grew dramatically in the 1890s, with European imperial powers attempting to profit from it. On that continent native species of latexproducing plants included the tree Funtumia elastica (sometimes known as Lagos silk rubber) and the woody Landolphia vines that grew into the branches of other trees. In some regions, such as the Kongo area of what is today Angola, Africans remained almost entirely in control of trade in rubber.<sup>2</sup> More notoriously, in the Congo river basin, particularly in Belgian King Leopold II's personal domain known as the Congo Free State, state-sponsored companies received land as concessions for exploitation, where they forced Africans to gather rubber. Leopold's men oversaw an armed force of African troops, called the Force Publique, to enforce rubber collection; poorly paid and brutalized by white superiors, they in turn treated local Congolese horribly. Congolese workers who did not meet rubber quotas, in the form of smoked balls of coagulated rubber of the required weights, were whipped. Because intense tapping of the Landolphia vine killed it, Congolese men were forced to go deeper and deeper into the forest in order to find enough rubber. Women and children were taken as hostages until the men met the rubber quotas. The Force Publique burned villages to the ground, and Africans abandoned fields to hide and scavenge in the forest. Much like the practice of scalping in the American West, when the Force Publique suppressed so-called rebellions they gathered butchered hands, supposedly only of those who had resisted, although numerous pictures of children, women, and men without their right hand serve as evidence of the indiscriminate maiming of the Congolese. While we have no census data for nineteenth-century Africa, estimates of deaths of indigenous peoples gathering rubber in the Congo Free State range as high as 10 million, a number that does not even include some comparable abuses in the French Congo to the north.<sup>3</sup>

As the stories of the abominable treatment of human beings in Africa at the hands of Leopold and his operatives hit the papers, the atrocities reminded many Americans and Europeans of slavery. While the term "human rights" was not widely used until the mid-twentieth century, the struggle to expose the abuses in the Congo ranks among the great humanitarian movements of the nineteenth century, alongside abolitionism. The Americans George Washington Williams and William Henry Sheppard, and Britons E. D. Morel and Roger Casement, led much of the charge, which ultimately resulted in the Belgian Parliament removing the Congo Free State from Leopold II's direct control. The Congo became a colony of Belgium in 1908. Soon thereafter, Roger Casement, as British envoy in Brazil, would expose similarly horrific abuses of the Indian rubber gatherers (*seringueiros*) in the Amazon at the hands of fellow Brazilians, as well as Portuguese and other Europeans.

Nevertheless, the success of the Congo reform movement lay in what it never jeopardized: imperialism itself. Although Casement would later champion Irish nationalism and thus question English hegemony there, the reformers who led the charge against the Belgians in the Congo did not effectively question the idea of empire or any particular European empire other than Leopold's. Rather, British, Dutch, and French advocates of empire could—and did—comfortably assume that Leopold II and even the Belgians did not understand how to run an efficient and humane empire focused on bringing "civilization" to the "uncivilized," instead of resorting to the brutal exploitation of the colonized in the name of profit. At times, they placed the blame on the indigenous police force in the Congo, or on businessmen traders in Brazil and Peru who failed to stop abuses in the Amazon. In short, the branding of the "bad imperialists" did nothing to undermine the legitimacy of the "good imperialists" bent on undertaking the "civilizing mission."

Joseph Conrad's novella *Heart of Darkness* (1899) relays a fascinating microcosm of widely held assumptions about Africa at the time of its writing, which helps to explain both how the atrocities in the Congo could take place and why their exposure did not fundamentally undermine the commonly held belief that empires brought progress. Much of the action in the story takes place in the Congo, and Conrad is clearly critical of the abuses of company officials and mocks other Europeans for the indiscriminate shooting of Africans. Nevertheless, throughout the narrative he also implies that the crux of the problem was that the Europeans involved in the colonial trade (in the case of the story, that in ivory) had "gone native," as if the atrocities were African, and by extension "primitive," in origin. Like so many other Europeans at the end of the nineteenth century, Conrad assumed that the heat, humidity, tropical diseases, and moral "darkness" of the "Dark Continent" rendered formerly rational European men completely mad. Heart of Darkness has long been part of the canon of English literature, so when Nigerian writer Chinua Achebe described Conrad as "racist" in 1975, more than one English professor expressed surprise at the apparent harshness of the charge. Yet, if Achebe's point was to get Europeans and Americans to understand just how thoroughly Conrad reflected widespread European notions of race, which were most certainly racist by our standards, his critique was a resounding success. Those same notions go a long way toward helping us to understand how the Congo Free

State and Leopold II could be so roundly and widely condemned even as imperialism could remain alive and well.

In short, reformers did not doubt that empire was a good thing, if done properly. In the case of rubber, the building of new plantations in Southeast Asian colonies seemed like an effective way to meet the growing demand for rubber. In this endeavor the use of domesticated and transplanted trees would replace the harvest of "wild rubber" and with it the abuses and "inefficiencies" of the Congo and Amazon concerns. The new Southeast Asian plantations would be orderly, efficient, and directly managed by Europeans who claimed to know vastly more about how to run an empire—namely the British, the French, and the Dutch. In Southeast Asia. colonial authorities granted, at very low cost, huge tracts of native land for plantations, much as the American government had granted Native American lands to individual white settlers in the Homestead Acts. Assumed to be uncultivated "wasteland" but often thinly populated areas where local people practiced swidden or "slash and burn" agriculture, such "jungle" forest lands effectively passed from local to European control. Carefully monitored Asians could provide the labor, while white managers and assistants could run the show, ensuring its, and their own, prosperity.

#### **Plantations' Progress: "Rationality** and Efficiency"

In the nineteenth century, colonial powers honed systems to encourage the economic exploitation of their empires. Agricultural development was central, and plants moved to and fro across the globe. For example, Clements Markham had already transferred specimens of the cinchona tree from Peru to India so that Britain would have its own source for producing quinine-thus could Britain prevent and treat malaria, further enabling the expansion of its imperial control into tropical, and mosquito-invested, lands. Among the many efforts to gain control over global plant life, the British Royal Botanic Garden at Kew (the largest in the world and a model for botanical gardens everywhere) contracted with several Britons with contacts in Brazil to gather hevea seed. In 1876, Henry Wickham took a shipment of some 70,000 hevea seeds from Brazil to Kew and presented them to the director of the garden, Joseph Dalton Hooker. Kew was literally a hothouse from which plants were disseminated to other, smaller botanical gardens of the empire. In a sense, Kew was the hub, and the smaller gardens the "spokes," of an elaborate system of government-subsidized agricultural science and production.<sup>4</sup> Eventually seeds from Kew resulted in seedlings sent to Asia, some of which ended up at the Singapore Botanical Garden.

And it was in Singapore that botanist H. N. Ridley studied and propagated hevea trees. In Brazil, each hevea tree grew in isolation, only about two per acre, a naturally occurring spacing that prevented the tree-to-tree transmission of a microscopic fungus widespread in the country. Ridley found, however, that the hevea trees could grow on plantations in Southeast Asia, where the fungus was not a major threat, ideally spaced some 16 feet apart (later planters would experiment with different spacing), in huge symmetrical grids. He found that latex production could be maximized if the trees were tapped every other day. along the trunk, moving from top to bottom. Diagonal cuts worked best, with latex flowing downward into a container. Moreover, Ridley claimed that trees could only be tapped on one side at a time (or the tree would die), but that once tappers reached the bottom of one side, they could commence on the top of the trunk on the other side. He also learned that, properly cared for, a tree could begin yielding latex in about six years, after which it could be tapped for about thirty. Ridley thus led an effort to develop a science of the rubber tree, asserting that the hevea was the most economically viable source for the latex needed to make the high-quality rubber that industrialists increasingly demanded. In essence a colonial agricultural extension agent, he promoted rubber trees to planters, insisting on the trees' long-term profitability. By 1899, more than a million seedlings had been planted on the Malay Peninsula. His persistence earned him the nickname "rubber Ridley" and fame among planters.

Hevea trees proved an ideal plantation crop in Southeast Asia. Requiring tropical heat and some 70 inches of rain per year in order to thrive, the trees seemed perfect for the huge tracts of rainforest that colonial governments had been granting planters as virtually free concessions, with long-term leases for coffee, tapioca, sugar, pepper, tea, tobacco, and now rubber cultivation. Colonial governments also offered planters subsidized loans. In European eyes, the "jungle" was essentially vacant land, even in areas where it had long been used for swidden agriculture, in which farmers burned an area of the rainforest, farmed it until the light soil was depleted, then moved to another location and repeated the process. (As in North America, most lands that Europeans saw as deserted were in fact used, if not intensely farmed, by indigenous populations.) Colonial authorities envisaged ongoing, intensive cultivation as in Europe or as on European coffee, sugar, and tobacco plantations in the Western Hemisphere.

Southeast Asian plantations enjoyed two other advantages. Nearby shipping lanes facilitated the transportation of rubber back to Europe then, during and after World War I when rubber shipments could not go through the Suez Canal, directly to North America. There also were the



**Figure 1.1** Tapping Rubber Trees. From Firestone, *Rubber: Its History and Development* (Akron, OH: Firestone, 1922), p. 15. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.

Describe the arrangement of trees. How could symmetrically spaced trees (all planted at the same time and thus the same size) suggest order, efficiency, modernity, progress, and the "West" in an area that had been a "disorderly jungle"?

nearby sources of what advocates inevitably called "cheap, abundant labor," from China, the Indian subcontinent, and Java. By the turn of the century. British planters had imposed rubber plantations on the Malay Peninsula in what is today Malaysia, using Chinese and Tamil laborers, the latter usually of lower caste from the southeastern Indian region then known as the Madras presidency (roughly today's province of Tamil Nadu)—thus hauling people from one part of the British empire to another along a well-established sea route. The Dutch East Indies encouraged international investment, so British, American, and other nationalities joined the Dutch in founding plantations in what is today Indonesia, particularly on the island of Sumatra, notably in the area known as Deli; here most laborers were Javanese and Chinese. As in Malaysia, on Sumatra Chinese people had traded and labored for centuries. Many Chinese plantation laborers came from the Chinese mainland as contract laborers. Planters heavily recruited such workers from the more densely populated Java to work in the Sumatran wilderness. The French followed suit in Indochina, creating plantations in southern Vietnam (the colony of Cochinchina at the time) and Cambodia, employing laborers shipped down from the densely populated northern Vietnamese province of Tonkin.

Relatively quickly, plantation rubber all but replaced "wild rubber" in world markets. In 1900, of the 59,326 tons of rubber produced in the world, only 3 tons originated in Asia. In 1919, of the 465,845 tons produced in the world, 420,046 tons came from Asia, almost all from rubber plantations.<sup>5</sup> Given the costs of clearing, planting, and then awaiting the first harvest, rubber plantations were capital intensive, and big firms signed leases on huge tracts of land. Investors owned most plantations in the form of shares, and many plantations were actually managed not by owners directly but by agency houses, such as the British firm Harrisons & Crosfield. As late as 1956, Harrisons & Crosfield managed some 135,000 acres in Indonesia and 225,000 in Malaysia, employing the staff and overseeing operations.<sup>6</sup> Some of the largest rubber plantations were owned by tire companies, which wanted to ensure a steady supply of affordable rubber, whatever the price fluctuations for the commodity in global markets.

Plantations began huge and grew larger. In 1910, Dunlop acquired 50,000 acres in Malava and added another 10,000 or so by 1917. Even after World War II. its Malava plantations remained the single largest private landholding in the entire British Commonwealth.<sup>7</sup> American firms preferred Sumatra because the Dutch encouraged international investment in order to use foreign capital to "develop" the island. In 1910, the American rubber and tire conglomerate US Rubber took over the leases on 88.000 acres in Sumatra and controlled more than 110,000 acres in Sumatra and Malaya in 1926, and 135,000 acres in 1937.8 In 1917, Goodyear had 16,700 acres, and 54,700 in 1932.9 By 1927, the French-owned Michelin Tire Company's plantations of Dâu Tiêng and Phú Riêng in southern Vietnam consisted of some 21.750 acres and 13,750 acres, respectively (out of about 417,500 acres of rubber plantations in French Indochina generally) and employed more than 4,000 laborers.<sup>10</sup> The very size of the plantations required corporate bureaucracies that considered plantations rational and efficient, veritable oases of order in the disorderly jungle.

Of course, there was a gap between the much-vaunted "rationality" and "efficiency" that supposedly characterized the plantations and the reality on the ground. Certainly, trees were exactingly spaced in perfect rows, seemingly making an efficient use of land; plantations seemed organized rationally in order to maximize production and eliminate "waste"; and laborers were ordered about to maximize their productivity. However, we are talking here about the costs of production—and the potential for high profits—not necessarily the human costs. Although Europeans worried a great deal about the perils to their health in "the tropics,"

developing an entire medical subfield of "tropical medicine," it was Asians who died en masse on the colonial plantations. Particularly in the early days of the concerns, during the clearing of the land for planting, laborers' death rates were shockingly high. In 1900 in Sumatra, mortality rates briefly ranged as high as 23.8 percent per annum.<sup>11</sup> In 1926, the mortality rate on the Société Indochinoise des Cultures Tropicales' Budop plantation was 47 percent per annum.<sup>12</sup> Even once tapping began, mortality rates of plantation workers, while falling, seem to have remained close to those of nearby rural populations. Given their demographics, plantation death rates should have been much lower. The sick and weak were filtered out during recruitment; workers were young, in their prime, and overwhelmingly male (thus mortality rates hardly reflect death in childbirth). In essence, imperial notions of race determined longevity, and the deaths of workers and native peoples mattered less to planters than the deaths of whites. "Efficiency," it seems, lay in the eye of the beholder.

#### **Plantation Hierarchies**

Like the symmetrically spaced trees on rubber plantations, order reigned in the careful hierarchy from plantation manager, to European assistants, to office clerks and overseers, to the laborers known as "coolies." who actually did the physical work of clearing the forest, planting trees, tapping trees, hauling latex from the trees to processing areas, and constant weeding. Managers could be quite brutal with assistants, seasoned assistants with new assistants, assistants with overseers, and especially overseers with laborers. Pay scales reflected one's place on the totem pole. Managers lived the dream of European plantation staffs, in that they earned enough in salaries and bonuses to retire to an uppermiddle-class lifestyle in Europe after their stint in the colonies. On Michelin rubber plantations in the late 1930s, the plantation manager earned about five times more than assistants and about two hundred times more than laborers.<sup>13</sup> Laborers often ended their contracts owing more than when they arrived, which of course served as a strong incentive to re-up. The logic of empire assumed that Asian workers were inferior workers as well as inferior beings "with fewer needs," thus ideologically justifying much lower wages than for Europeans. Symbolically, even walking on the plantation could reveal the overall hierarchy: in the 1920s in Deli, mandors or mandurs (overseers) normally walked two steps behind the European assistants, while laborers walked two steps behind mandors.

Clothing similarly revealed status. Outside their bungalows Europeans were usually dressed in white. White not only reflected the hot sun but



**Figure 1.2** Boy on Plantation: "Native Rubber Collector." Photograph (2073) dated July 24, 1915, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.



**Figure 1.3** Goodyear President Litchfield Tapping a Rubber Tree. Photograph (Dolok 905b) dated August 23, 1935, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.

What do these two photos tell us about hierarchies on plantations? Presumably the boy in the first image taps rubber trees, as the original caption refers to him as a "native rubber collector." The second image shows CEO Paul W. Litchfield on a visit to one of the Goodyear plantations in Sumatra. Is it relevant that the boy's name does not appear while Litchfield is identified? How would you compare their clothing and headwear? How would you describe Litchfield's stance beside the tree? Does he appear to know how to tap a rubber tree?



**Figure 1.4** Goodyear Whites on Wingfoot Plantation. Photograph (42 gc) dated January 15, 1935, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.



**Figure 1.5** "A Group of Newly Arrived Javanese Laborers." *Wingfoot Clan* (March 8, 1919): 8, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.

What do these two photos tell us about those employed on Goodyear plantations? Which group was called "labor" and which "staff"? Which were "employees" as opposed to "laborers"? Is it significant that one group crouches while the other stands for a photograph? Can you imagine which received pensions when they retired? How was the hierarchy of the plantation easily visible to all who worked on one?

also reflected a white power structure: it showed who had the power and resources to have others clean the white suits worn everywhere, every day, on the plantation. Among laborers, women wore sarongs while men often wore loincloths or sarongs. As in other imperial contexts, Europeans and Americans arriving on plantations commented endlessly on naked men (meaning those in loincloths or sarongs, not complete nudity), often suggesting that lack of clothing made Asians more "primitive" or "childlike."

Housing, too, mirrored the plantation hierarchy. The manager's house was the largest and generally stood apart from the others. Those of European assistants formed the next level, and they were larger and better built all the time. The size of household staffs reflected one's status on the plantation. Domestic workers had distinctly separate quarters, away from the main house. In the 1930s, an American working in Sumatra marveled at the arrangement:

a family of two people usually have about five servants in the house. The cook and the house boy do the kitchen work, the boy also cleans the house and runs errands. A house woman takes care of the bedrooms and the laundry, and the chauffeur drives and cares for the car. The gardener is usually kept busy mowing the lawn.... The servants' quarters are in a separate building in the back of the house, but connected to it by a sheltered concrete walk.<sup>14</sup>

Field laborers, by contrast, usually lived in barracks or contiguous huts known as "coolie lines." By the early twentieth century, coolie lines often consisted of a line of twenty 10-foot-by-10-foot rooms, one for each family or for several bachelors. There was a common verandah running along the line, where inhabitants cooked their meals.<sup>15</sup>

Even naming reflected the hierarchy of the plantation. Government reports refer to the full names of managers and European assistants, and usually the first names of overseers. Laborers did not always get the same privilege. As late as 1936, in a long description of a workers' protest in response to the unwarranted beating of a colleague, a work inspector in Cochinchina reported that "folio 14,436 of village 6" apparently bled after "overseer Thanh" hit him. "Folio 13,988" told the inspector that he had received blows with a rattan cane. "Folios 13,985, 13988, 13966, and 13,459" were accused of leading the march and received five days of prison each. Thus, even when charged with breaking the law by encouraging a work stoppage, laborers remained numbers—no doubt those they received when shipped down from Tonkin to work on the plantation.<sup>16</sup>

Male plantation laborers, like African-American men in the United States at the time, were often called "boys" whatever their age, especially when they were domestic help. "Coolie" was more often used for tappers, although they were equally infantilized. Their shorter stature, due to inadequate nutrition, was not the reason. (Contrary to widespread assumptions then, as now, there is no link between "race" and height.



**Figure 1.6** Plantation workers' barracks at Goodyear Wingfoot Estates. Photograph (42dw) dated January 15, 1935, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.

Initially, plantations had rudimentary "coolie lines" or barracks, which improved in construction quality over time. This image shows Goodyear laborers' barracks from the 1930s. Even then several had no rooms or partitions, serving instead as huge dormitories for male workers.

Rather, better-fed children tend to grow into taller adults, depending on individual genetic backgrounds.) European men consistently called Asians "little," reinforcing the notion of colonized peoples as "children." Echoing the lines "half-savage and half-child" of Rudyard Kipling's description of the colonized in his famous imperial poem "The White Man's Burden" (1899), one author of a book on rubber plantations described Malaya as

a land of little brown men.... The country will ere long come to its own as a rich and most valuable asset to the British Empire, even as today she is the very youngest, the latest born, of her children.... They are simple, jungle-bred children, half-savage and half-child. They have much that we cannot, or do not, understand. And they look upon the white man as... a superior being.<sup>17</sup>

"Savage" and "child-like," workers presumably required strong discipline and had no "self-control" without European order. Reminiscent of the ways in which white Americans routinely referred to Native Americans, planters in Southeast Asia repeatedly claimed that the simple "coolies" had a strong penchant for gaming, one that kept them from getting ahead. Like children, "coolies" lived "for the moment," with no thought for the future. Yet, gambling served the interests of planters, who knew how to use it to their advantage. On days off, companies extended lines of credit to workers as the latter gambled; indebtedness bound them to the estate, so that when their contracts came up for renewal, they had little choice but to re-engage. Gambling thus helped to save estates the cost of training new laborers.

Discipline was tight. The workday essentially lasted from sunup to sundown, as elsewhere near the equator, from reveille before 6 a.m. to dismissal by 6 p.m. (workdays were generally shorter by the 1930s). At the morning assembly, overseers took attendance and formed the day's work groups. Trees were tapped early in the morning, when the latex flowed best; gathering and processing were done later. While we usually associate careful attention to time with the steam-powered industrial factory, earlier sugar plantations had already been intricately organized operations with tightly controlled slave workforces-this well before the appearance of British textile mills at the height of the Industrial Revolution. Not only were organization of labor and attention to time necessary to bring in sugar cane, they were also critical for operating the boilers and producing sugar. Similarly, rubber plantations were at least as well regimented as American and European rubber factories, with a more disciplined workforce and far greater surveillance, at least until the 1920s.

Michelin was a European champion of "Taylorism." Named after the American Frederick Winslow Taylor and associated with time-motion studies and the time clock generally, the method of industrial management known as Taylorism defined the importance of the "one best way" of efficient manufacture. It has been argued that Michelin took Taylorism from its French and American factories and applied the technique to its plantations. Yet plantations had Taylorist efficiency before most European factories did. The organization of Michelin plantations mirrored the well-established British, Dutch, and American ones in Malava and the Dutch East Indies, which were highly disciplined organizations before Michelin began advocating Taylorism in France. Michelin was also a champion of Fordism in Europe, but Henry Ford's implementation of the assembly line was accompanied by the famous \$5 day. However intrusive the latter (involving surveillance over home life), it encouraged working-class consumption. Michelin did not fully apply Fordism to its French or American operations. It was completely out of the question in the colonies, where an exploited labor force was not supposed to consume Michelin products. While consumption was partly based on class in Europe (with the well-off consuming and workers producing), it was largely based on race in the colonies (with Europeans consuming and Asians producing). The \$5 day had been designed to reduce worker turnover in Ford factories. Tightly enforced labor contracts fulfilled that role in Southeast Asia.

In return for a small advance on their eventual pay and their passage from southern India to Malaya, from Java to Sumatra, or from northern to southern Vietnam, laborers had signed recruitment contracts, usually for three years, an arrangement akin to indentured servitude. In 1910, the British replaced that practice with the "kangani system," in which a Tamil "kangani" (overseer) recruited Indian laborers, then became their foreman on the plantation. Still, there was strong continuity over time, and among British, Dutch, and French colonies, even after the change. In areas with three-year contracts, laborers who had signed the contract and then refused to work, ran away, or broke other rules could be imprisoned, fined, or have the length of their contracts extended. In a sense, their lives were no longer their own. In British Malaya under the kangani system, kanganis had enhanced power over "their coolies" and could literally "force" their reliability; the fate of the laborers was not necessarily better than before the reform.

In the nineteenth century, European assistants had often managed laborers directly. Over time, however, planters found it more effective to use overseers (kanganis in Tamil, mandors in Malay, caïs in Vietnamese) as go-betweens. Retaliatory attacks on managers and assistants, at least on European ones, were supposed to decline as a result of the institution of overseers, as workers could now direct their anger at fellow Asians. By the 1920s, European assistants often received instructions not to manage the laborers directly, and not to undertake beatings themselves. There were notable exceptions, as on the Michelin plantations into the 1930s, and the colonial government of Indochina repeatedly complained to Paris and the Michelin management in Europe about the inadequacies of its assistants and overseers.

Just as Europeans and Americans at the time distinguished among European "races" (English, Dutch, and French were assumed to be essentially different), they also created typologies of "race" among Asians. British and Dutch planters regularly claimed that "Hindoo" Tamils from southeastern India were the most pliable and peaceable, the easiest to manage. Sometimes Hinduism got the credit, as Tamils were presumed to be always gentle, with insects as well as animals. Muslim Javanese were supposedly "touchy," easily offended, and treacherous. The Chinese were presumed to be very "hard working," no doubt because Chinese labor gangs often cleared forest for the plantations. The Chinese were also "entrepreneurial," as their families had for several centuries been small merchants in Southeast Asia, trading and running many small shops. Come the 1930s the Chinese were often also dubbed "political," as Chinese nationalist and communist movements on the mainland influenced ethnic Chinese in Southeast Asia. In French Indochina, "Annamites" (coastal Vietnamese) were supposed to be "diligent" while the mountain peoples (*montagnards*) were "primitive." In what is today Malaysia and Indonesia, people from Malaya and Sumatra (Malays) were generally assumed to be "lazy" because they did not want to work on European plantations and could not be bound to do so. Of course, different groups did have different historical and cultural experiences. European planters, however, attributed what we would call cultural differences to "race" in much the same way that Europeans and Americans generally threw that word around before World War II.

European assistants needed to learn some rudimentary market Malay (generally not the more complex Javanese) on Sumatra, some Tamil in Malaya, or a bit of Vietnamese in Vietnam, with which to communicate with the overseers, even when the latter in turn gave many of the orders to the actual laborers. There were even phrasebooks for European assistants. The key expressions that one book lists inadvertently reveal much about the dynamics of plantation work for laborers, and the role of overseers. Expressions were blunt and direct:

Come here! Go there! Sir, a coolie is dying in the lines. –All right, I will come at once. You must send a coolie quickly! Each coolie must take a basket. Yes, kangani, I know that, but the Assistant Superintendent does not believe it. Kangani, look at these boys who are doing nothing! Hurry up, run! Be quick, it is late! Kangani, shout for the coolies to come! Stop talking there! Take your tools, you lazy fellow! Are you a man, or a woman?<sup>18</sup>

Obviously, orders and insults were the most important of the expressions, not to mention apparently oft-needed words to describe a laborer in danger of soon dying. Perhaps the most telling insult, accusing a man of color of being a "woman," allowed the speaker to assert both racial and gender hierarchies at the same time, putting both groups in their presumed places. There is of course no little irony in the fact that those who did most of the actual physical labor on the plantation were the ones consistently labeled as lazy.

Although there were more labor inspectors and increased inspections in the interwar years (largely as a result of the labor inspections required by the newly created League of Nations), these still had severe limitations in reining in abuses. When Vietnamese laborer and later communist leader Tran Tu Binh complained that "the contract forbids beatings," Michelin overseers proceeded to beat him until he passed out, after which he was shackled and imprisoned for three days. He confided this to the government labor inspector (a post created to deal with reports of abuse and to meet League of Nations requirements) E. Delamarre, who decided to question other shackled laborers as well and reported the abuses on the Michelin plantation to the governor of Cochinchina.<sup>19</sup> Although government officials in the colony complained privately to each other and to Michelin management, the company could afford to ignore local officials. In short, companies were run by Europeans, and European officials handled the European personnel of plantations with kid gloves, even when privately resenting companies' actions. When labor inspector Jean-Pierre Rougni arrived at the Michelin plantation for an inspection, the plantation manager M. Planchon told him that the

administration [of the colony] needed to remember the power of Michelin.... The administrators and labor inspectors have the governor [of the colony of Cochinchina] as their boss. The governor has, above him, the general governor [of all Indochina], and above the general governor is "Michelin and Co. in Paris." Be sure to remember that the Michelin company can ruin a bureaucrat, just as it can sponsor one with whom it is satisfied.

These remarks enraged not only the inspector, but the governor of Cochinchina and the governor general, who reported the outrage to the Ministry of Colonies and received authorization to file criminal charges against Planchon. That did not, however, discredit Planchon in any way with Michelin. He remained in his position as plantation director for seven more years.<sup>20</sup>

# Race and Industry in the United States and Europe

Domestically, European and American assumptions about race mirrored those held by the far-off managers of the empires. In rubber factories and their surrounding cities, supposed "natural" differences between and among "races" justified careful distinctions of status. Jobs, pay, housing, and access to public services depended directly on wellestablished, and repeatedly asserted, notions of race.

In the early twentieth century, Akron, Ohio, was to tires what Detroit, Michigan, was to automobiles, the overwhelmingly dominant center of production in both the United States and the world. In Akron. the treatment of laborers resulted above all from perceived notions of racial difference. As the rubber industry grew exponentially in the early twentieth century (resulting in a threefold increase in the population of Akron from about 69,000 to 210,000 inhabitants between the 1910 and 1920 censuses), rubber industry titans faced an acute shortage of workers and undertook repeated recruitment drives. When possible, companies favored Appalachian "whites" over "immigrants" (only in the 1930s and 1940s would Irish and Italian immigrants in the United States be considered fully "white," just as the British had dubbed the Irish and South Asians "black" rather than "white"). Largely poor rural folk from West Virginia, many of the migrants attracted to the rubber factories had no familiarity with trade unionism or the leftist politics associated with recent immigrants from Europe; in the United States at the turn of the century, unions sometimes had socialist and internationalist positions resembling those of their European counterparts, and factory owners believed that poor, rural whites would be less likely to unionize than the ethnic whites from Europe. While clearly not perceived as the equals of the White Anglo-Saxon Protestants (WASPS) who led most of the major rubber companies (the Catholic Irishman William O'Neil founded a much smaller firm, General Tire), these rural migrants were initially politically conservative and as racist in their worldviews as were their employers.

In addition, many African Americans had migrated from the South to the North in search of work. Clearly "free" laborers, meaning that they could legally leave their jobs while contract laborers could not, the former were driven by the same destitution and hope for something better that led Tamil, Javanese, and northern Vietnamese farmers to sign contracts to work on rubber plantations. And just as it did for plantation laborers, racial discrimination severely limited African Americans' options, leaving them few choices but to accept menial jobs and lower pay. Working upstairs in the multistoried tire factories, tire builders were exclusively white until after World War II. Meantime, some African Americans worked in the mill room, where noxious chemicals were mixed with raw rubber, or the hellishly hot "pit," where the tires assembled upstairs were cured, or "vulcanized," in extreme heat. Other African-American rubber workers normally emptied spittoons, swept floors, hauled trash, and cleaned toilets. During the economic crises, especially the Great Depression, African Americans were the first to be laid off and the last to be rehired, regardless of seniority or quality of work. White workers called male African Americans of all ages "boys."

Their jobs were lower in the factory hierarchy, and so was their pay. Needless to say, managerial and executive jobs were out of the question, even for well-educated African Americans, until well after World War II. More symbolically, African-American workers could not eat in the main cafeterias in either the Firestone or Goodyear factories, as cafeterias were segregated. Even entertainment isolated and belittled African-American employees: the Goodyear company's Theatre featured minstrel shows beginning in 1916; upper management clearly approved, as glowing accounts of the shows regularly appeared in the company newsletter.

Of course, it should be noted that racial segregation also reigned outside the workplace. During the rapid expansion of the rubber industry in the 1910s and 1920s, companies struggled to end the rapid turnover of their workers. Both Goodyear and Firestone adopted a host of employee benefits, known as "company welfare" among American historians. The most significant form of company welfare was the creation of whole neighborhoods near rubber factories, where workers could buy their own homes through company purchasing plans. Designed to tie workers to a given company, Goodyear Heights (which had a street named Sumatra, a reminder of the Goodyear plantations there) offered well-built houses with indoor plumbing, central heating, garages, and other conveniences, designed by architects and different from each other (with nineteen different models, they were a cut above the later post-World War II tract housing of Levittown). However, the realty company handling the sales of the homes in Goodyear Heights specifically excluded African Americans, even those employed by Goodyear, as potential buyers. Banned from other neighborhoods as well, many African Americans in Akron lived in poor-quality housing near the Cuvahoga river and the Ohio and Erie canal (thus prone to flooding). The racial hierarchy was clear. White executives and managers lived on the northwest side in neighborhoods like Fairlawn Heights, where the deeds forbad reselling to "any person or persons of African descent or belonging to any other branch of the Ethiopian race"<sup>21</sup> (at the time whites often used the term "Ethopian" to refer to all people of African descent); white workers lived in quality housing in places with names such as Goodyear Heights and Firestone Park near the factories; and African Americans, whether employed in the same factories or not, lived in ramshackle housing, some of it on the flood plain.

Ostensibly free, as compared to plantation laborers, African-American factory workers resisted the status quo only at their own risk. While there is a tendency in the United States to attribute racism to white southerners, like those who migrated from Appalachia to Akron, in fact housing segregation had widespread support. In 1913, William Anderson, the second African American to buy a house in the North



**Figure 1.7** "Minstrel Show Practice Has Started." *Wingfoot Clan* (January 13, 1917): 3, Goodyear Collection. Photo reprinted with permission of Archival Services, University Libraries, University of Akron.

How does this image reinforce the idea that there was a global racial hierarchy, at least in the eyes of Goodyear executives, who permitted this cartoon in the company newsletter and opened the Goodyear Theatre to minstrel shows?

Hill neighborhood north of downtown Akron, opened his front door to find 150 people on his doorstep. One of their leaders, Dr. L. B. Clark, made it clear that "we do not want a colored colony on the hill, and that is what they are trying to establish." Clark's language reveals much about some whites' secret fears. He evoked the idea that whites could eventually be *colonized* by blacks as a reason for denying equality to blacks (a sentiment expressed by racists in the United States as late as the election of Barack Obama in 2008: "What if they [blacks] do to us [whites] what we did to them?"). A concerned Akron attorney, F. D. Shannon, told the local *Akron-Beacon Journal* that he would use extralegal means to keep blacks out of North Hill: "We refuse to have them in our midst.... We cannot eject them under the law, but we will do without the law if necessary." The quotation is astonishing from a member of the bar sworn to uphold the law.<sup>22</sup>

Conditions had not improved by the 1920s. Although there were only about 5,000 African Americans out of a population of around 210,000 inhabitants in Akron in 1920, the city had one of the nation's most active Ku Klux Klan (KKK) chapters. Claiming a Summit County membership of more than 50,000 in 1925, the Klan controlled the Akron school board and the city council. "The mayor, the sheriff, county prosecutor, [and] clerk of courts were all reputed to be Klan members."<sup>23</sup> Tellingly, the rubber companies that essentially ran the city of Akron in the 1920s did not condemn the KKK. Many migrants from West Virginia may have joined the Klan, but we have no evidence that they were preponderant. Long ridiculed in the Akron area, West Virginians did serve as a convenient scapegoat much later in the twentieth century, when few Akronites or Americans generally wanted to admit the widespread, endemic racism of early twentieth-century Akron or the United States in general.

A comparable, if different, racial hierarchy existed in Europe. Although Michelin's tour-guide business was headquartered in Paris, its tire production remained in Clermont-Ferrand, in the province of Auvergne in south central France. For the quite conservative Michelin family, the factory's location had the distinct advantage of a large, rural labor force nearby. Some of the workers moved into Michelin housing while others took Michelin buses to and from work, remaining part-time peasant farmers. To a much greater extent than urban labor forces, the inhabitants of Auvergne would presumably be immune to trade unionism and the call of socialist and communist political parties after World War I. During the war, however, Michelin had also hired ethnic Kabyles (Berbers) from the French colony of Algeria as well as a fair number of Spanish immigrants.

Like elsewhere in Europe, the Michelin factories experienced considerable labor agitation just after the war. Beginning on May Day 1920, strikes interrupted production. Michelin asked for, and received help from, local troops to end demonstrations in front of the plant by those workers blocking the entry of others. Like other rubber factory owners in Clermont-Ferrand, Edouard Michelin claimed that it was the Kabyles and the Spanish workers who were responsible for the strikes; Michelin fired them, setting a clear example of what would happen to other workers who agitated for change. Perhaps the Kabyles and the Spanish were disproportionately involved in the strikes, as their ranks were composed largely of single men, who thus may have believed they had less to lose. Nevertheless, they also made for easy scapegoats as outsiders (European settlers of Algeria were citizens at the time, but the indigenous Muslims were colonial subjects—not citizens). Without ties to Auvergne or France, they were easily dismissed as an example to other workers, then deported, garnering much less public sympathy than had workers from Auvergne who had been let go.

Like American tire companies attempting to maintain a stable workforce in the interwar years, Michelin had elaborate benefit schemes that included company-owned housing (for which Kabyles were not eligible) and generous benefits designed to encourage their workers to have big families by paying monthly stipends that increased with the number of children a couple had. Michelin widely advertised its "family allowances" (allocations familiales) in pamphlets that both reminded tire buyers of Michelin's concern about the future of the French birthrate, but also pressured other manufacturers to follow suit. In one such pamphlet, "An Experience with Natality," Michelin remarked that France would soon be "a desert or a colony." Noting the declining birthrate among its own employees as among French generally, the company wrote that "if this continues, our factory will slowly become empty or we will have to fill it with foreigners. And since we are no exception, either France will become a desert, or it will become a colony."24 Apparently readers were supposed to fear France becoming a "colony," potentially one with people of color, or at least southern Europeans, in charge. The notion is fascinating when one remembers that Michelin was a huge investor in rubber plantations in French Indochina. However much French imperialism was supposed to be a "civilizing mission," there was still a tacit omission that imperialism was above all about dominance on the part of the colonizer and submission on the part of the colonized. Needless to say, Michelin did not pay the family allowances to foreigners or Kabyles.

Of course, this is not to suggest that working or living conditions in Europe or the United States and in Southeast Asia, let alone the Congo or the Amazon, were in any way comparable. Instead, it is enough to remember that the dynamics of industrialization and empire building were never "neutral" or exclusively economic, isolated from the cultural assumptions of race—or gender, or class, the subjects of the next two chapters. In Europe, in European settler colonies such as the United States and Canada, and in empires generally, well-off white men controlled the flow of commodities, labor, and the resultant products. There were clearly important lines of distinction, based on pervasive ideas of race—in the empire, in the metropole, and in the settler colonies. Colonizers were often preoccupied with maintaining what they called "white prestige" in the colonies, but, as we shall soon see, this also meant the maintenance of elite white *male* prerogatives at home.

#### READING

#### Working and Living on the Mimot Plantation in Cambodia

The following excerpt comes from French Labor Inspector Delamarre's inspection of the Mimot plantation in Cambodia in the wake of the desertion of nearly three hundred laborers. Intended for his superiors in 1927, Inspector Delamarre's report was leaked to the press and appeared in 1928 in *La résurrection* [The Resurrection], a French-language news-paper reporting events in French Indochina.

- What can you glean about working and living conditions on the Mimot rubber plantation?
- How about the gap between what managers said and what actually happened?
- Why does the inspector include laborers' testimonials of hours worked, but then calculate their workdays on the basis of what the plantation management told him?
- Why do you suppose that colonial authorities, charged with maintaining stability, became frustrated with Mimot's management?
- To what extent were their concerns about political stability?
- Can you imagine why colonial administrators demanded that Mimot improve working and living conditions?

When I [Delamarre] asked about work hours, the director of the Mimot plantations told me that the wake-up call took place at 5:30; the departure from the barracks was about 6:00, and that work ended at 11:00, then began again at 12:30 and lasted until 5:00 pm, with coolies taking their midday meal right there.

But the statements of coolies that I gathered were all in agreement in affirming that the working hours are the following: reveille at 3:00 am, assembly at 4:00 am. Because there are one thousand coolies to assemble, it is certain that the departure cannot take place before 4:30; the midday

rest does indeed last an hour and a half, but that the coolies cannot return [to the barracks] until nightfall.

Even in accepting the hours indicated by M. d'Ursel [the manager], one gets the following:

From 5:30 to 11:00	5½ hours
From 12:30 to 5 pm	4½ hours
Total	10 hours

In addition to the ten hours, the coolies [must] walk 5 to 6 kilometers [3 miles] from the barracks, it is necessary to add one hour and a half of walking, assuming a pace of 4 kilometers an hour. The coolie thus spends, at work, or en route to the worksite, 11 to 11½ hours...

According to the terms of the contract, the work day for men is paid at the rate of .40 piastres [less than US\$.10 in the late 1920s]<sup>25</sup> per day for men, and .30 piastres for women. Days of rest and days laid off are not paid, unless there are more than 6 per month.... The coolies who signed up to earn .40 piastres daily did not realize that much of their pay would be withheld to pay for rice, to reimburse the advance [that is, for the cost of transporting them to the plantation], days laid off, and fines, so that they are far from earning 18 piastres each month.

Here is, in fact, what they have earned since their arrival at Mimot, according to the figures taken from the account books of the company. The numbers reflect the situation of the average coolie, not including reductions in pay, absences, or illnesses.... They in fact earn 3 piastres [less than \$1] every two weeks. And these 3 piastres are further reduced, down to 2 piastres for most coolies, as a result of the fine applied by order of the [plantation] director.

This fine of 1 piastre has greatly upset the Tonkinois [the contract laborers were from the northern region of Tonkin] because it is applied almost across the board and is excessive. Moreover, it was inflicted on coolies who have neither hats nor raincoats (hats made of latanier [palm] are too expensive and raincoats of woven hatch [*paillotte*] are nowhere to be found at Mimot) and had left their work places during a storm. But it would only be fair if the Mimot company is going to make the coolies work in the rain—and during the rainy season, it will be inevitable—that the company furnishes, at no cost, hats and indigenous raincoats [of woven straw, not rubber], since they are necessities given the nature of the work demanded.

The director of Mimot has understood, and he has ordered hats and coats of woven thatch, which apparently have just arrived, but he is now taking the cost out of the salaries of the coolies.

With a salary of 3 piastres every two weeks and 4 piastres once the advance [for his transport from Tonkin] is reimbursed (which should take about one year), can a coolie buy, on or near the plantation, sufficient food, as well as clothing and indispensable items?

That's the big question, the most important of all, because a coolie with insufficient food will be less resistant to illness, notably malaria, and will be demoralized. The exhortations of overseers will not be enough [to get them to work], leading to frustration and blows.

In this case the work teams have only three solutions, flight, rebellion, or falling victim to disease. In a normal day's work, an agricultural worker uses up about 45 calories per kilo [2.2 lb] of body weight. Since a Vietnamese man [an Annamite] in good health weighs on average 65 kilos [143 lb], it is thus necessary to ensure that those working on plantations receive 2925 calories, 3000 when rounding up, taking into account the fatigue due to the climate and the long work hours. Moreover it is essential that, as part of his food supply, he gets an adequate amount of fresh foods containing necessary vitamins....

The coolies employed on the Mimot plantations receive, from the company, a [rice] ration of one sack of 100 kilos every two weeks, on pay day, for *eight people* [emphasis in the original].

Before 280 coolies deserted in February, the same size sack was given to 10 men; 100 kilos of rice for 10 men over 15 days represents a daily ration of 666 grams of rice, giving 2297 calories. There was thus a deficit of 3000 - 2297 = 703 calories, and, as one will see later, food is rare and expensive at Mimot, so the coolies found themselves insufficiently nourished. They were correct in their claims on this point.

But a coolie is not an agricultural machine fueled by rice; he needs other foods and items of basic necessity. The Mimot company had not considered this question, and M. d'Ursel, whom I questioned about the purchasing power of the salary distributed to his coolies, simply declared to me that they earned enough to buy "disgusting bits of pigswill [*petites cochonneries*]" that they added to their rice.

Coolies unanimously complained about the lack of water. The plateau on which the quarters are established overhangs, above a rather steep grade, a valley where there is, about 60 meters away, a well that supplies all of the water.... The hauling of water is done in the morning and the evening after work, when the coolies have to go get the water they need. But, because it is late when they get back [from work] and because of the long hours they have worked, it is easy to understand that they avoid climbing down and back up the hill.

The coolies, lacking water for washing which they cannot do without going to the well, at the base of the hill, are dirty, suffering in large numbers from scabies, covered with vermin, on their heads as well as their bodies. If morale were better and they had a little more free time, they would make an effort to keep themselves clean, but it is noteworthy that when work teams are put in unfavorable and discouraging conditions, they neglect to keep clean and let themselves fall into a repugnant filthiness, as is the case at Mimot....

[In addition], the cases of dysentery that I documented at Mimot make one wonder whether the water from the well, which is downhill from the quarters and unprotected, is contaminated; to do their business, the numerous coolies in the camp have only holes in the ground on the grade that leads down to the well.<sup>26</sup>

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