

Forgotten Paths of Empire: Ecology, Disease, and Commerce in the Making of Liberia's Plantation Economy

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President's Address

Abstract

This essay follows the journey of a 1926 Harvard expedition to Liberia and also the more recent journey of its remains—nearly six hundred photographs and more than two hours of motion picture footage. My goal is to make visible the forgotten paths of empire that led to widespread economic, environmental, and cultural change in the West African republic of Liberia. In tracing the transnational flows of capital, knowledge, commodities, and microbes associated with the rise of industrial plantations instrumental in advancing American economic and political interests across the globe, I offer a materialist approach to the history of scientific ideas and objects that takes both epistemology and environmental change seriously. The transformation of landscapes on an industrial scale was critical, I argue, in bringing ecological and evolutionary understandings of disease into being. And the photographs and film footage left behind have the potential to acquire new agency and meaning as they bring forth stories from Liberians that reanimate places and give voice

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to ancestors, who were much more than laboring bodies, reservoirs of biological specimens, or objects of a scientific gaze.

INTRODUCTION

July 7, 1926. Krutown, on the outskirts of Monrovia. Children and adults gather round, many staring intently back at the camera pointed toward them, behind which Loring Whitman, a first-year Harvard medical student, is recording on film the unfolding events. Others curiously watch as the ear of a young boy is pricked and a blood sample is taken by Harvard physician George Shattuck. Behind him, a gentleman dressed in a suit and tie takes off his hat, and wipes the sweat off his brow with a handkerchief (figure 1). These remnants of a scientific expedition—sediment, if you will, that has settled out as visible remains of encounters with empire—have troubled me for some time.

More than a decade ago, I learned of a private collection of digitally restored expedition film: nearly four hours of raw footage



Figure 1. A still from motion picture footage taken by Loring Whitman of a Harvard expedition clinic set up in Krutown on the outskirts of Monrovia, July 7, 1926. Courtesy of Indiana University Liberian Collections.

documenting the exploits of an eight-member scientific team from Harvard University moving through the interior regions of Liberia and the Belgian Congo. Disease and rubber had brought the Harvard African expedition to Liberia. In 1926 Firestone Tire and Rubber Company had secured a ninety-nine-year lease for up to a million acres of land from the Liberian government to establish one of the world's largest rubber plantations. But Firestone faced significant challenges in transforming the tropical rain forest into an industrial plantation. Endemic human and plant diseases threatened labor production and the survival and growth of imported rubber trees. The biological and medical survey of Liberia undertaken by the Harvard scientists on behalf of Firestone, and ecological ideas of disease arising from their encounters with life in the tropics and work on industrial plantations, aided in altering the economy of nature and a nation. The expedition, together with the film and photographic collection it left behind, are thoroughly entangled in the structures of political economy, power, social relations, and scientific knowledge that were transforming landscapes across the world in the global reach of American capital after the First World War.

But while the ghosts of American empire haunt this footage, they are not the only spirits that live there.¹ The footage embodies more than the objectifying gaze of science; it is more than an indictment of anthropology—or, we might say, all field science—as “the eldest daughter of colonialism” in the words of French anthropologist and filmmaker Jean Rouch.² In the reaction between chemicals and light, material traces of life in movement and abundance are left. These traces are what haunt me: of landscapes to be transformed; of people, commodities, and diseases set in motion; of a contested path to development; and of a film never made. The shooting and later viewing of this expeditionary footage altered landscapes and lives—physically, economically, and socially. Footage of road crews, women working on government farms, and portage of district commissioners, for example, became part of the increasing weight of documentary evidence amassed by Harvard expedition leader Richard P. Strong to convince US government officials to take a more active stand against labor abuses in Liberia. At the same time, scenes of traditional performances, glimpses of recognized ancestors and loved ones long since departed, and views of everyday life among different ethnic groups in Monrovia and throughout the interior of Liberia spark memories and stories that connect the past to the present.

So I found myself, in January 2014, in Grand Cess, a small Liberian coastal village, 250 miles southeast of Monrovia. I had planned the journey for two years. My Liberian friends tried to dissuade me: fourteen years of civil wars from 1989 to 2003 had left the country's roads in ruins, and the trip would be all but impossible during the rainy season. But January was dry enough. Three hours' drive outside

Monrovia, the pavement ended. For the next two days we traveled on logging roads, raft ferries, and jungle footpaths through customary lands of the Bassa, Sapo, and Kru peoples—lands quickly being lost to a new wave of logging and mining concessions in the name of development.³ As we neared Grand Cess, the muddy red clay roads of the tropical rain forest gave way to sandy dirt paths of the coastal lowlands. 5

I had come with three Liberian colleagues, seeking the history and memory of Plenyono Gbe Wolo. He is the man with the sweat-drenched brow whose fleeting appearance is serendipitously captured on film in the scene with which I opened this essay. He was also, perhaps, Grand Cess's most famous son. We drove past a school named in his honor. We walked through the graveyard populated by those who died in battle during the 1915 Kru rebellion. When this revolt, one of the most significant indigenous uprisings in Liberian history, was brutally suppressed by a US destroyer and an American-commanded Liberian Frontier Force, Wolo, the son of a Kru paramount chief and a student at Harvard University, spoke out. Wolo met with Senator Henry Cabot Lodge and Assistant Secretary of State William Phillips to argue for fair treatment for Liberia's "aboriginal inhabitants."⁴ It was Wolo, who at the request of Harvard president Abbot Lawrence Lowell brokered many of the arrangements in Liberia for the 1926 Harvard expedition.⁵ And, yet, of the nearly six hundred photographs and more than two hours of motion picture record taken in Liberia on the expedition, Wolo appears in just two photographs and a fleeting second on film. Like many go-betweens critical to the production of scientific knowledge, Wolo was largely written out of the official Harvard expedition record.⁶ 10 15 20 25

In Grand Cess, we hoped village elders might expand Wolo's story, but little knowledge of him remained. The fourteen years of Liberian civil wars took a heavy toll; many elders living in Grand Cess were killed or died in the 1990s. Indeed, by 2003, at war's end, life expectancy in Liberia had declined to forty-seven years of age.⁷ 30

We left reprints of expedition photographs of Wolo with the local town chief and the school. Soon, reports of our journey began circulating on Liberian Facebook sites. Some posts claimed that elders fabricated Wolo to inspire local youth. Others countered, posting photographs of Wolo that I had never seen. Crowdsourcing was filling the oral history gap created by war. 35

The Liberian civil wars severed generational links in the telling of Liberia's indigenous history. It also left the country's archives in ruins. The war led to other acts of forgetting as more than a decade of civil conflict overshadowed the ties that intimately bound Liberia to the United States. The reach of American business, science, medicine, and the state transformed the landscapes and peoples of Liberia. But Liberia has occupied little more than a footnote in the scholarship on 40 45

the history of American empire.⁸ For almost half a century, Liberia served as a laboratory for American visions of development, from dollar diplomacy in the 1920s to technical training and assistance programs in agriculture, engineering, science, and public health, all of which formed the backbone of President Harry Truman's Point Four program, initiated in 1949, as a means to win the hearts and minds of the developing world.⁹ The vast uniform straight-lined rows of rubber trees and roads that mark the Firestone plantations in Liberia today are material substantiations of these past visions of development. 5

This essay follows the journey of a 1926 Harvard expedition to Liberia and also the more recent journey of the photographs and film footage that remain to make visible the forgotten paths of empire that led to widespread economic, environmental, and cultural change in the West African republic of Liberia. In tracing the transnational flows of capital, knowledge, commodities, and microbes associated with the rise of industrial plantations instrumental in advancing American economic and political interests across the globe, I offer a materialist approach to the history of scientific ideas and objects that takes both epistemology and environmental change seriously. The transformation of landscapes on an industrial scale was critical, I argue, in bringing ecological and evolutionary understandings of disease into being. 10

But the archival photographs and film footage that open this essay are also sediments of empire, visible remains of paths followed and opened up by American capital and science. They, like the industrial rubber plantations themselves, have materiality and substance. Fragments of Liberia's past, fractured and forgotten by war: what purpose might they serve? How might we think about these "ruins of empire" and "attend," as anthropologist Ann Stoler suggests, "to their appropriations within the politics of the present?"¹⁰ 25 30

INDUSTRIAL PLANTATIONS, DISEASE ECOLOGIES

In 1914 Richard P. Strong, recently appointed director of Harvard's new Department of Tropical Medicine, told a reporter from the *Boston Evening Transcript* that "the troubles to be feared from the spread of tropical diseases by traffic through the Panama Canal are rather heavy financial losses through disturbance of trade [rather] than any great loss of life."¹¹ Strong expressed utmost confidence in modern medicine's ability to limit human deaths from cholera, yellow fever, and plague, should they reach American shores. He was less confident of medicine's ability to keep goods moving freely should the need for quarantines arise. The Panama Canal, Strong recognized, had the potential to transform the economic and geopolitical fate of 35 40

nations through the worldwide redistribution of disease. Anticipating the increased trade relations and movement of disease that the Panama Canal would bring, and influenced by the recommendations and financial backing of Harvard alumni such as Philippine governor Gen. William Cameron Forbes and patrons such as Edward Atkins, who were making their wealth in the banana and sugarcane industries, Harvard hired Strong, then head of the Philippine Bureau of Science's Biological Laboratory, and personal physician to Forbes, to establish the second Department of Tropical Medicine in the United States (Tulane University established the first). Strong and Forbes both left Manila for Boston in 1913. Strong began assembling a team of researchers and a course of instruction to take advantage of the increasing overseas presence of US firms. Forbes became an overseer to Harvard University and a director of United Fruit Company, the agricultural products marketing conglomerate best known for its extensive holdings of banana plantations throughout Central America.¹²

We know far too little about the importance of American multinational firms, like United Fruit, to the funding and shape of international health efforts in the early twentieth century. We know a great deal more about philanthropic organizations like the Rockefeller Foundation in launching international health campaigns.¹³ Yet it was precisely the infrastructures of multinational firms like United Fruit Company, Firestone Tire and Rubber Company, and American petroleum companies overseas that Strong regarded as ideal assets for pursuing the kind of integrative, interdisciplinary, and itinerant research he envisioned.

In 1914, just one year after the creation of Harvard's Department of Tropical Medicine, Strong took on an additional assignment that cemented the ties between his department and American business interests abroad. As newly appointed director of the Laboratories of the Hospitals and of Research Work of United Fruit Company, he set sail in July 1914 to United Fruit plantations in Cuba, Guatemala, Honduras, Costa Rica, and Panama. The varying climatic conditions, distinct flora and fauna, and differing incidence and characteristics of disease across these different locales offered an ideal opportunity for understanding the environmental determinants and biological relationships through which tropical diseases emerged and might be controlled.¹⁴ Strong emphatically rejected the idea of building a central research station located in the tropics in favor of a research infrastructure built on expeditionary science. Such a method, he wrote, "promises far better results than one in which laboratories are situated in a tropical country, where the location will obviously not be central, where the work must be largely confined to the surrounding districts, and where the members of the staff of such an institution remain continually in that climate for long periods of time."¹⁵ Itinerant

research brought the geography and mobility of disease—issues that became all the more important with the opening of the Panama Canal—into sharp relief, much more than looking outward to the world from a research laboratory fixed in a single locale ever could.

In 1912 United Fruit controlled over 300,000 acres of land in the tropics and had a net revenue of more than \$5 million annually, holdings and profits that rapidly escalated over the next decade.¹⁶ With access to eight stations in different locales, free transport on company steamships, exposure to a wide variety of clinical conditions, and a ready supply of biological samples taken from the company's hospitals and surrounding plantations, Strong boasted that no "tropical school of medicine in the world . . . had such an asset." "It is something of a victory for Harvard," he argued. "We could not for a million dollars procure such advantages."¹⁷ Over the next two decades, he established a research funding model reliant on the medical and biological services the Harvard department could provide US-based multinational firms in enhancing their overseas production and trade in coffee, bananas, rubber, oil, and other tropical commodities. In turn, the department gained unrivaled access to new diseases, species, and diverse habitats throughout the world facilitated by the transportation and communication networks of American commercial firms abroad. Those transportation networks also supported a grueling schedule of scientific travel, with annual expeditions, some lasting as long as eight months, from the upper reaches of the Amazon to the interior of Liberia.

The expedition journeys of Strong and his colleagues loosely followed the passages of people, commodities, and disease enmeshed in the transatlantic slave trade that sustained an earlier era of plantation economies. It is a historical perspective not lost in coming to understand the ecology and evolution of disease formulated by the likes of Strong, Hans Zinsser, and other members of Harvard's Department of Tropical Medicine. In this newer era of industrial plantation agriculture, with its concomitant demands for labor, the large-scale transformation of landscapes helped make visible the interrelationships among people, plants, and parasites—relationships that had to be managed to turn nature into profits. Nearly all of the department's expeditions were to industrial plantations in the making. It is not by coincidence that Strong characterized the department's work as industrial hygiene. Harvard's Department of Tropical Medicine was thoroughly entangled in the material relationships—transportation infrastructure, labor regimes, and commodity production—that were instrumental in advancing the interests of firms like United Fruit, Firestone Tire and Rubber Company, and the American Chicle Company as they transformed landscapes across the globe. Ecological ideas of disease were born of these economies and material transformations. In turn, emerging ecological and evolutionary understandings

of disease, whereby pathologies increasingly came to be seen as the outcome of a dynamic assemblage of parasite-vector-host interactions, altered landscapes and lives.

It was American demand for rubber that set in motion widespread environmental, economic, and cultural change in Liberia. During the early 1920s, Americans owned 85 percent of the world's automobiles and consumed 75 percent of the world's rubber. Eighty percent of the rubber Americans consumed was used to make automobile tires. But Britain controlled nearly 77 percent of the world's rubber production while only 1 percent grew under the US flag. Through its imperial possessions, Britain had a virtual monopoly on the industry after the First World War. In 1922 its hold over American automobile and tire manufacturers tightened further when, in an effort to control widely fluctuating market prices, Britain implemented the Stevenson Plan that restricted the flow of crude rubber exports. Prices for latex, also referred to as white gold, soared.¹⁸

As a shareholder in two British rubber plantations, Strong was acutely aware of the threat that Britain's rubber monopoly posed to America's economic interests. Strong approached Harvey Firestone, chief executive of the tire and rubber-processing conglomerate that bore his name, in December 1925 with a proposal to conduct an extensive biological and medical survey of the interior region of Liberia.¹⁹ Strong found a receptive ear. Firestone had negotiated tentative agreements in 1925 with the Liberian government for rights to a 2,000-acre plantation for experiments in rubber production, as well as a 99-year concession to optionally lease up to a million acres of Liberian land for rubber plantations.²⁰

Nevertheless, serious obstacles posed risks to Firestone's success in Liberia. Most significantly, endemic plant and human diseases threatened both the survival and growth of rubber plants imported from Southeast Asia and the health and well-being of Liberians that Firestone needed as a labor force. Within six months of meeting Firestone, Strong put together an eight-member team that included some of the best minds in medical entomology, tropical medicine and botany, mammalogy, and parasitology, and he gathered a supply of the latest experimental drugs for treating tropical diseases. As the expedition set sail for Monrovia, Strong wrote in his diary that he hoped their efforts would push the United States to "exert a more stimulating influence upon the development of the . . . country and its people" as it had in the Philippines, Panama, and Puerto Rico.²¹

The work of the expedition—recorded in reams of reports, personal journals, hundreds of still photographs, and hours of film—produced ways of seeing and knowing that both depended on and facilitated the development and industrialization of life in the tropics into new forms of biocapital. The vision was deeply embedded in an ecological and economic understanding of people, landscapes, and disease,

whereby tropical pathologies would have to be overcome for Liberia's natural resources to be fully realized. Strong saw the luxuriousness of life in Liberia—in particular, its exceptional capacity for reproduction, growth, and development—as the country's greatest asset. Yet life, in his view, was also Liberia's greatest impediment to progress. 5 Indeed, Strong regarded the high rate and severity of malaria infection along the coast, and the prevalence of tropical diseases such as yellow fever, schistosomiasis, onchocerciasis, and others to be some of the greatest obstacles to development. Understanding tropical relations that led to diseased landscapes and people was but a first step, 10 Strong believed, in reordering those relationships to generate a new economy of nature and nation.

The Firestone plantations became an important node in a network of industrial plantations visited by Strong and his colleagues. Their journey to West Africa completed the circuitous route by which people, goods, and microbes had moved across the Atlantic world in the era of the slave trade. As global travelers who witnessed and partook in the redistribution of life through industrial plantations, imperial conquest, and world war, these Harvard scientists were among the first to render disease in ecological and evolutionary terms.²² 15 20

Consider, for example, onchocerciasis, a tropical disease also known as river blindness. It came into being as a scientific object on the industrial coffee and rubber plantations of Central America and West Africa. At a 1924 conference in Kingston, Jamaica, sponsored by the Medical Department of United Fruit, Strong learned that up to 70 percent of Guatemala coffee plantation workers were infected with a parasitic nematode. Such high rates of infection launched a decade-long Harvard study that spanned two continents, four countries, and four expeditions, and it was aided by the commodity flows of coffee, rubber, and cotton in a period of rapidly expanding American economic globalization. 25 30

In Liberia, Strong, together with medical entomologist Joseph Bequaert, began to map out the ecology and life cycle of a species of the parasitic nematode similar to the one observed on the coffee plantations in Central America. Noting the prevalence of a biting black fly, later identified as *Simulium damnosum*, in the country's interior, the researchers began to suspect the fly as a disease vector. But it was just a first step in mapping out the ecology and geography of a disease.²³ 35

In Guatemala, with the aid of United Fruit coffee growers, the team extended its epidemiological and ecological investigations to the coffee plantations in southwestern Guatemala, where onchocerciasis was endemic to the region. Through such studies, Strong and his colleagues became convinced that the life history and habits of humans were far more important than the natural history of the fly in the ecology of onchocerciasis. The seasonal nature of work on the coffee 40 45



Figure 2. A map showing the high degree of endemicity of onchocerciasis (gray shaded area) in the region of Guatemala where coffee plantations prevailed based on the work of Richard P. Strong, Joseph Bequaert, Jack Sandground, and Miguel Muñoz Ochoa. Richard P. Strong et al., *Onchocerciasis, with Special Reference to the Central American Form of the Disease* (Cambridge: Harvard University Press, 1934).

plantations, which brought transient and permanent residents together during times of harvest, created environmental conditions ripe for infection and spread. Poor living conditions and crowded housing created a concentrated biological reservoir of human hosts carrying the parasite and blood on which adult female *Simulium* nourished. “It is evident,” Strong concluded, “that the coffee industry in Guatemala has played an important role in the dissemination of the disease.”²⁴

The nature of work on Guatemalan coffee plantations made visible how the large-scale physical transformation of the country’s rain forest in pursuit of a commodity, that is, the making of industrial landscapes, impacted the ecology of disease. In determining that the African parasite found in the interior of Liberia and the one found in Central America were actually the same species, the Harvard team embarked on a path of historical speculation. Had the parasite, Strong wondered, come from Africa to Central America through humans by way of the slave trade? The question is indicative of how ecological and human history were coming together in disease narratives in the interwar years, entangled in the expanding economic reach of American corporate interests across the globe and the

knowledge disciplines they helped to support and on which they relied. Such ideas would receive their fullest, most widely read expression in the 1935 classic *Rats, Lice, and History*, written by Strong's close colleague Hans Zinsser, which introduced a microbe, typhus, and its host, the louse, as actors in world history long before the emergence of actor-network theory or debates about the agency of nature within environmental history.²⁵

NEW PATHS OUT OF OLD RUINS

The paths of empire that sustained the transoceanic exchange of biological specimens, commodities, and knowledge in the growth of industrial plantation economies reached across the Atlantic and extended deep into Liberia's hinterland. Nowhere is this more apparent than in the expedition footage. Traveling by motorboat up the Du River to the site of the Firestone plantations, traversing the interior by foot with the aid of hundreds of porters, and journeying on roads in the making, all project the reach and anticipatory future of Firestone's operations in Liberia. The routes the Harvard expedition followed were not drawn on any official Liberian map, but they were ones well known by Mandingo traders, nineteenth-century explorers and missionaries, and the Bassa, Kpelle, Mano, and Vai peoples, among others.²⁶ The trade routes that had long transported slaves, kola nuts, and other commodities from Liberia's interior to coastal markets would in the early twentieth century become the paths of conquest used by Liberia's Frontier Force and district commissioners to subdue Liberia's indigenous population.²⁷ Within two decades, the expedition path would become the rubber corridor of Liberia: a 100-mile stretch of road, initially built with corvée labor, that reaches from Harbel, the center of the Firestone plantations, to Gbarnga, the hub of Bong County and the Kpelle people.²⁸

Roads built to foster Firestone's connectivity to indigenous labor served to heighten land alienation. The first major land rupture in Liberian history came when free blacks from America settled the West African coast in the 1820s, bringing with them a Western system of private property ownership alien to the customary practices and cultural beliefs of the sixteen ethnic groups that made up Liberia's indigenous population. The second major land rupture came with the arrival of Firestone, first through large-scale clear-cutting and then through road building.²⁹ By the 1950s, three decades after Harvard scientists traversed the interior by foot and motorboat, Firestone had built nearly a thousand miles of primary public-use and private-access roads that extended into the Liberian interior. Land along roads, which had been managed according to customary traditions wherein land was held in common, became vulnerable to enclosure.

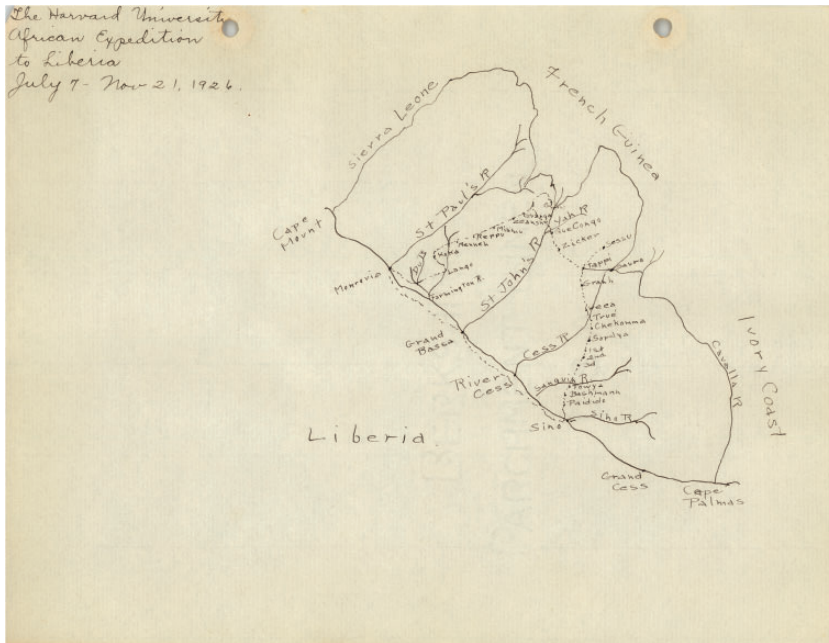


Figure 3. A hand-drawn map made by Loring Whitman of the Harvard expedition route. The dotted line from Monrovia to Gbarnga is the path that would become Liberia's rubber corridor. Courtesy of Indiana University Liberian Collections.

When Firestone began distributing free rubber seedlings and promoting independent rubber farms, land along the rubber corridor gave way to family-settler ownership. The result, as a 1960s development study noted, was “economic and social disruption of established tribal communities.”³⁰

Roads also became the corridors through which profits flowed. In 1951 more than 79 million pounds of raw latex, valued at more than \$48 million, moved along the former expedition path. Firestone owned 94 percent of that latex and paid the Liberian government \$3.8 million plus six cents per acre for the pleasure of doing business in Liberia; that year, Firestone rubber accounted for 91 percent of Liberian exports.³¹ Liberia may have been one of the largest per capita recipients of US aid in the early 1950s as part of Truman's Point Four program, but the \$275 million in grants and loans given to Liberia by the American government between 1944 and 1971 pales compared to the estimated \$410 million in profits reaped by Firestone from Liberia during roughly the same period.³²

Over time, the paths of empire, aided by science and medicine, would become well worn, solidifying Firestone's presence and reach



Figure 4. A view of the Harvard expedition on Firestone plantation no. 3 and the large-scale land clearing that took place to make way for rubber trees. Loring Whitman, July 25, 1926. Courtesy of Indiana University Liberian Collections.

in the Liberian landscape. But what new paths might be opened by the imperial debris of the Harvard expedition? What use could the material remnants left by an expedition on the move—an archival ruin of nearly six hundred photographs and more than two hours of motion picture footage shot in Liberia—serve?

Until recently, image content has been at the core of much scholarship on visual culture and the environment within environmental history.³³ But such images are also physical material artifacts, mediated, as Jennifer Tucker notes, “by past and present forces.”³⁴ As objects, photographs and films are constituted through a set of relations that give them agency in the world. To imbue photographic and film documents with agency is to look on them through the dynamic social interaction among people and things. Photographs and films are constantly acquiring new meanings, becoming part of a dynamic social fabric as we use them to relate to each other, the past, and the future. “Once unleashed from their historical moment and original intention,” Faye Ginsburg suggests, films and photographs “often promiscuously violate social and epistemological boundaries; they

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can move rapidly from the domain of scientific records to that of legal evidence or to the realm of personal narrative, accumulating a kind of biography in the process.³⁵ Anthropological film, often enmeshed in the economic, material, and social relations of colonialism and empire, now provides an active site for reanimating imperial matter into new, vital reconfigurations. Such film is capable of becoming, of circulating within and acting on the world in both the present and some unimagined futures. 5

Strong had mobilized the expedition photographs and footage taken of forced government labor to help set in motion the 1930 League of Nations investigation into slavery in Liberia that would threaten Liberia's sovereignty and ease Firestone's difficulties in obtaining a steady supply of plantation workers.³⁶ But Liberians with whom I shared this footage for the first time imagined quite different paths built out of this archival ruin. The imperial debris of the Harvard expedition offers an opportunity to begin to gather the perspectives and voices of ethnic peoples whose lives were transformed with the arrival of Firestone and the major land rupture that ensued. It is a history that resonates in Liberia today as large-scale agricultural, mining, and logging concessions are swallowing up customary tribal lands, severing cultural traditions rooted in land and place, and exacerbating land insecurities that threaten postwar peace and reconciliation.³⁷ 10 15 20

Over the past four years, a team composed of myself, cinematographers, sound recordists, a security officer, and a University of Wisconsin graduate student, most of whom are Liberian, have purposefully retraced the itinerary of the Harvard expedition, accompanied by the photographs and films it left as remains. Previously, the expedition photographs and footage only circulated within the networks of American empire—at luncheons of the Harvard Traveler's Club, trustee meetings of the American Museum of Natural History, and private gatherings of the Round Table in St. Louis—but never among the subjects who were the objects of its scientific gaze.³⁸ Then, for almost seventy-five years, these images were forgotten. In putting the expedition photographs and film footage in circulation again, we seek to unleash them from the shackles of empire that had bound their movements, to give them a second life. By triangulating motion picture records with the expedition diaries, we began retracing the paths on which expedition members and their Liberian porters and guides trekked. Everywhere we traveled, paramount chiefs, clan chiefs, elders, and local villagers clamored to watch the footage and share their stories with our team. Flomo Barwolor, a paramount chief in Gbarnga, for example, on seeing footage of his father, Chief Gboveh, dancing, remarked, "My heart is like my face (smiling)." We met women educators, like Reverend Yatta Young, motivated on seeing the only known photographs and footage of the great woman 25 30 35 40 45



Figure 5. Emmanuel Urey, a University of Wisconsin graduate student and member of our team, invites stories from his father Yarkpowolor Taylor about building roads by hand after watching the expedition footage. His father was sixteen years old at the time the expedition passed near his village of Gomue. Still from *The Land Beneath Our Feet*. Photo credit: Sarita Siegel.

chief and Zoe healer, Madam Suakoko, to recollect memories of this mythic hero, now an inspiration and symbol of women's empowerment in post-conflict Liberia. In Queezahn, a Bassa place name meaning "the civilized or whites pushed us away," elders—on watching traditional dances performed by their great-grandfathers and great-grandmothers—spoke painfully of the still-open wounds sustained when Firestone displaced them from their ethnic homelands. 5

Through a partnership with George Mason University's Roy Rosenzweig Center for History and New Media, Indiana University Liberian Collections, and the Center for National Documents and Records Agency (CNDRA) in Liberia, we developed and launched a public history website, *A Liberian Journey: History, Memory, and the Making of a Nation* that makes these materials publicly available for the first time in Liberia and the rest of the world. The website features a pilot exhibit on Madam Suakoko—along with digital collections containing nearly six hundred photographs, more than two hours of motion picture footage, oral histories, and documents linked to an interactive map. *A Liberian Journey* is meant to inform, raise questions, and invite crowdsourced stories about a transformational moment in the history of land and people in Liberia. Grounded in the core principles of new media and digital history that embrace public history based on nonhierarchical and nonlinear exploration, *A Liberian Journey* seeks to reconstruct a historical record and its meaning from the widest possible demographic base, by and for a people whose land, cultural traditions, and disease burdens became a focal point of American scientific research and an opportunity for American commercial development abroad. 10 15 20 25

DISMANTLING EMPIRE

Four years ago, when I visited CNDRA on my first trip to Liberia, the national archive was just getting back on its feet. During the civil war, CNDRA was in a heavy fighting zone. Dilapidated infrastructure, destroyed buildings, and damaged documents—scattered, burned, and lost in the chaos of war—posed serious challenges to the rebuilding of a national archive. But CNDRA director-general P. Bloh Sayeh has been determined in her resolve to rebuild the archive, speaking passionately about the importance of history to postwar reconciliation in Liberia. A transformational moment came two years ago when two rusty safes were discovered in an abandoned government building. An acetylene torch burned through the heavy plates of iron. Inside, the original 1847 Constitution of Liberia and land deeds, in which indigenous chiefs granted free blacks from America access to land to settle and establish new homes on the West African coast, were found. “I felt the day when we saw the documents, the war was completely over,” remarked Director-General Sayeh.³⁹ Those feelings were echoed once again in March 2016 at the official launch of *A Liberian Journey* at CNDRA. Speaking before Liberian government officials, including President Ellen Johnson Sirleaf, legislators, and cabinet ministers, as well as the Liberian press, Director-General Sayeh spoke about the importance of the website as “the beginning of a recollection of Liberia’s lost history” and as a means of obtaining “additional historical information to produce an inclusive history of Liberia.”

We do not yet know where this new life of the expedition photographs and footage will lead. But we do know that in this next life, these remains will generate stories, many told for the first time, by the descendants of ancestors whose voices might resonate again. They are ancestors who were much more than laboring bodies, reservoirs of biological specimens, or objects of a scientific gaze. In these acts of remembering, ghostly traces of lives once lived are reclaimed and transformed, given new meaning in the search for peace and reconciliation in postconflict Liberia.

Ideas and images matter in the world. They have biographies, as Lorraine Daston notes, “heavy with the consequences for everyday experience.”⁴⁰ The ideas and images that the Harvard expedition gave birth to, nurtured, and sustained weighed heavily on the peoples and landscapes of Liberia. In a moment when landscape change and the political ecology of a disease and its aftermath—namely, Ebola—are once again reshaping the economy and culture of Liberia, let us not forget the paths of empire on which the present rests.⁴¹

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University of Wisconsin-Madison. He recently directed and produced with Sarita Siegel The Land Beneath Our Feet (2016, 60 min.), a film that weaves together the archival footage from the 1926 Harvard expedition with the story of a young Liberian man seeking to understand how the past has shaped land rights issues in Liberia today; and In the Shadow of Ebola (2015, 23 min.), an intimate story of a family and a nation torn apart by the Ebola outbreak in Liberia, which aired online on PBS/Independent Lens and is available through Films Media Group.

Notes

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1. On "cinema's collusion with colonialism," see Paula Amad, "Cinema's 'Sanctuary': From Pre-Documentary to Documentary Film in Albert Kahn's 'Archives de la Planète' (1908–1931)," *Film History* 13 (2001): 138–59. 10
2. Quoted in Mike Eaton, ed., *Anthropology-Reality-Cinema: The Films of Jean Rouch* (London: BFI, 1979), 33.
3. On the impact of palm oil concessions on community land rights in southeastern Liberia, see, for example, Forest Peoples Programme, *Hollow Promises: An FPIC Assessment of Golden Veroleum and Golden Agri-Resource's Palm Oil Project in South-Eastern Liberia* (Moreton-in-Marsh: Forest Peoples Programme, 2015). 15
4. "Confidential: Memorandum for Conference with Hon. William Phillips," n.d., p. 2., Folder 1, P. G. Wolo Papers, HUG 4879.405, Harvard University Archives (hereafter PGWP). On the Kru rebellion, see Jo Sullivan, "The Kru Coast Revolt of 1915–1916," *Liberian Studies Journal* 14, no. 1 (1989): 51–71; Ibrahim B. Sundiata, *Black Scandal: America and the Liberian Labor Crisis, 1929–1936* (Philadelphia: Institute for the Study of Human Issues, 1980), 18–19. 20
5. Biographical information on Wolo's life has been gathered from the PGWP. See also "Plenyono Gbe Wolo," *Harvard Class of 1917: 25th Anniversary Report* (Cambridge: Harvard University Press, 1942), 1018–20. 25
6. On go-betweens, see, for example, Simon Schaffer, Lissa Roberts, Kapil Raj, and James Delbourgo, eds., *The Brokered World: Go-Betweens and Global Intelligence, 1770–1820* (Sagamore Beach: Science History Publications, 2009). 30
7. On life expectancy rates during the Liberian civil wars, see Sharon Abramowitz, *Searching for Normal in the Wake of the Liberian Civil War* (Philadelphia: University of Pennsylvania Press, 2015), 24.
8. The subject of American empire is immense. For a thoughtful historiographic overview, see Paul A. Kramer, "Power and Connection: Imperial Histories of the United States in the World," *American Historical Review* 116 (2011): 1348–91. Important collections include Alfred W. McCoy and Francisco A. Scarano, 35

eds., *Colonial Crucible: Empire in the Making of the Modern American State* (Madison: University of Wisconsin Press, 2009), and Ann Laura Stoler, ed., *Haunted by Empire: Geographies of Intimacy in North American History* (Durham: Duke University Press, 2006). The role of science, technology, and medicine in US imperial expansion and development has been the subject of numerous works including Michael Adas, *Dominance by Design: Technological Imperatives and America's Civilizing Mission* (Cambridge: Belknap Press, 2006); Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006); Laura Biggs, *Reproducing Empire: Race, Sex, Science, and US Imperialism in Puerto Rico* (Berkeley: University of California Press, 2002); Nick Cullather, *The Hungry World: America's Cold War Battle Against Poverty in Asia* (Cambridge: Harvard University Press, 2010); and Mariola Espinosa, *Epidemic Invasions: Yellow Fever and the Limits of Cuban Independence, 1878–1930* (Chicago: University of Chicago Press, 2009), among others. Commodities, too, have been an important entrée into the history of American business and empire. See, for example, Mona Domosh, *American Commodities in an Age of Empire* (London: Routledge, 2006); Bartow J. Elmore, *Citizen Coke: The Making of Coca-Cola Capitalism* (New York: Norton, 2015); Greg Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City* (New York: Picador, 2010); John Soluri, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States* (Austin: University of Texas Press, 2006); and Richard Tucker, *Insatiable Appetite: The United States and the Ecological Degradation of the Tropical World* (Berkeley: University of California Press, 200). Nevertheless, the geographic focus of all these works is largely centered on US relations with Asia, Latin America, and Southeast Asia, ignoring Africa to a large extent.

9. The subject of dollar diplomacy and American empire was first taken up by William Appleman Williams and his students at the University of Wisconsin in the 1960s and 1970s. See, for example, the classic study by William Appleman Williams, *The Tragedy of American Diplomacy*, rev. ed. (New York: Delta, 1962). Frank Chalk, a Williams student, was the first to explore the history of American foreign relations in Liberia from this perspective. See Frank Chalk, "The Anatomy of an Investment, Firestone's 1927 Loan to Liberia," *Canadian Journal of African Studies* 1 (1967): 12–32; idem., "The United States and the International Struggle for Rubber, 1914–1941" (PhD diss., University of Wisconsin-Madison, 1970). See also David Kilroy, "Extending the American Sphere to West Africa: Dollar Diplomacy in Liberia, 1908–1926" (PhD diss., University of Iowa, 1995). On Liberia as an important pilot for Truman's Point Four program, see "US Economic Mission to Liberia," July 28, 1949, Folder 10. 1949. General Economic Reports – Liberia, RG 59. Lot 56D 418, Records of the Office of African Affairs Subject File, 1943–1955, Box 1. State Department, National Archives; David McBride, *Missions for Science: US Technology and Medicine in America's African World* (New Brunswick: Rutgers University Press, 2002).
10. Ann Laura Stoler, "Imperial Debris: Reflections on Ruins and Ruination," *Cultural Anthropology* 23 (2008): 191–219, quote on p. 196. See also Ann Laura Stoler, ed., *Imperial Debris: On Ruins and Ruination* (Durham: Duke University Press, 2013).
11. Benjamin Baker, "Panama as a Disease Spreader," *Boston Evening Transcript*, April 15, 1914. On the importance of commerce in shaping public health ideas

and interventions, see Mark Harrison, *Contagion: How Commerce Has Spread Disease* (New Haven: Yale University Press, 2013).

12. On various stages of Strong's professional career, see Anderson, *Colonial Pathologies*; Marco Cueto, "Tropical Medicine and Bacteriology in Boston and Peru: Studies of Carrión's Disease in the Early Twentieth Century," *Medical History* 40 (1996): 344–64; Eli Chernin, "Richard Pearson Strong and the Manchurian Epidemic of Pneumonic Plague, 1910–1911," *Journal of the History of Medicine and Allied Sciences* 44 (1989): 296–319; Kristine A. Campbell, "Knots in the Fabric: Richard Pearson Strong and the Bilibid Prison Vaccine Trials, 1905–1906," *Bulletin of the History of Medicine* 68 (1994): 600–38. 5
13. Historical scholarship on the place of the Rockefeller Foundation in international public health efforts is vast. See, for example, Anne-Emmanuel Birne, "Eradication, Control or Neither? Hookworm Versus Malaria Strategies and Rockefeller Public Health in Mexico," *Parassitologia* 40 (1996): 137–47; Marco Cueto, *Missionaries of Science: Latin America and the Rockefeller Foundation* (Bloomington: Indiana University Press, 1994); John Farley, *To Cast Out Disease: A History of the International Health Division of the Rockefeller Foundation, 1913–1951* (Oxford: Oxford University Press, 2003); and Stephen Palmer, *Launching Global Health: The Caribbean Odyssey of the Rockefeller Foundation* (Ann Arbor: University of Michigan Press, 2010). 10 15 20
14. "Given to Arnold for his Annual Report to the President," Oct. 31, 1914; Office Files: Tropical Medicine, Department of (Diploma - End), United Fruit (Actual Morbidity – Bequaert); Reports on Organization, 1913–1914 to 1923–24; Box 33, Richard Pearson Strong Papers, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University (hereafter RPSP). 25
15. "An Institution Devoted to the Medical and Economic Interests of Tropical and Exotic Countries," p. 2, January 1915, Office Files: Tropical Medicine, Department of (Diploma - End), United Fruit (Actual Morbidity – Bequaert); Reports on Organization, 1913–1914 to 1923–24, Box 33, RPSP.
16. United Fruit figures are from "Report to the Faculty," October 1914, Office Files: Tropical Medicine, Department of (Diploma - End), United Fruit (Actual Morbidity – Bequaert); Reports on Organization, 1913–1914 to 1923–24, Box 33, RPSP. See also Jason Colby, *The Business of Empire: United Fruit, Race, and US Expansion in Central America* (Ithaca: Cornell University Press, 2011). 30
17. Strong to Shattuck, July 31, 1914, Office Files: Persons, Colleagues, Staff Continued (Sandground - Shattuck, G.C.); Shattuck, Frederick; Box 23, RPSP. 35
18. Harvey Firestone, *Men and Rubber: The Story of Business* (Garden City: Doubleday, 1926); *Crude Rubber, Coffee, Etc.: Hearings Before the Committee on Interstate and Foreign Commerce House of Representatives on H.R. 59, 69th Cong., 1st sess., January 6–22, 1926*; Silas Bent, "Rubber—A New 'Gold' in World Finance," *New York Times*, March 31, 1925. 40
19. Strong began considering an expedition to Africa in the summer of 1924, with the intent of testing "Bayer 205," a German preparation against sleeping sickness, whose secret formula had recently been discovered by the French pharmaceutical firm Poulenc Frères. See Strong to Forbes, June 23, 1924, bMS AM 1364, Folder 279, William Cameron Forbes Papers. On his meetings with Firestone, see Strong to Joseph Grew, January 19, 1926, African Expedition—Correspondence. State Department & White House Folder, Box 2, RPSP. 45

20. On the Firestone agreements, see Chalk, "The Anatomy of an Investment;" idem., *The United States and the International Struggle for Rubber*; Kilroy, *Extending the American Sphere to West Africa*; Gregg Mitman and Paul Erickson, "Latex and Blood: Science, Markets, and American Empire," *Radical History Review* 107 (210): 45–73. 5
21. Richard Pearson Strong Diary (hereafter RPSD), 4, typescript, 1926–1927, GA82.4, Center for History of Medicine, Francis A. Countway Library of Medicine, Harvard University.
22. Indeed, Strong chose "The Importance of Ecology in Relation to Disease" as his subject for the 1935 Maiben Lecture to the American Association for the Advancement of Science. See Richard P. Strong, "The Importance of Ecology in Relation to Disease," *Science* 82 (1935): 307–17. For other historical perspectives on the emergence of disease ecology, particularly in the context of the British empire, see Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895–1945* (Cambridge: Harvard University Press, 2002); Warwick Anderson, "Natural Histories of Infectious Disease: Ecological Vision in Twentieth-Century Biomedical Science," *Osiris* 19 (2nd series, 2004): 39–61; idem., "Postcolonial Ecologies of Parasite and Host: Making Parasitism Cosmopolitan," *Journal of the History of Biology* 49 (2016): 241–59; Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870–1950* (Chicago: University of Chicago Press, 2011). 10 15 20
23. Richard P. Strong, ed., *The African Republic of Liberia and the Belgian Congo, Based on the Observations Made and Materials Collected During the Harvard African Expedition, 1926–1927* (Cambridge: Harvard University Press, 1930), 242–52.
24. Richard P. Strong et al., *Onchocerciasis: With Special Reference to the Central American Form of the Disease* (Cambridge: Harvard University Press, 1934), 48. 25
25. Hans Zinsser, *Rats, Lice, and History* (1935; repr., New Brunswick: Transaction, 2008). In *Rats, Lice, and History*, Zinsser argued, for example, that "the establishment of the Haitian Republic, though usually attributed to the genius of Toussaint l'Ouverture, was actually brought about by yellow fever" (p. 160), foreshadowing later ecological imperialism arguments. Strong's colleague, George Shattuck, also did extensive epidemiological studies in the Yucatan in collaboration with archaeologist Alfred Kidder in the late 1920s and early 1930s to help determine whether disease contributed to the collapse of the Maya empire and whether syphilis was an Old or New World disease. See, for example, George Shattuck and collaborators, *The Peninsula of the Yucatan: Medical, Biological, Meteorological, and Sociological Studies* (Washington, DC: Carnegie Institute of Washington, 1933). Such studies are suggestive of the ways in which ideas of disease ecology, which were later refashioned into the notion of ecological imperialism, were deeply embedded in the material, economic, and social relations of American empire that opened up one path through which disease ecology and its scientific objects came into being. 30 35 40
26. See, for example, James Fairhead, Tim Geysbeek, Svend E. Holsoe, and Melissa Leach, eds., *African-American Explorations in West Africa: Four Nineteenth-Century Diaries* (Bloomington: Indiana University Press, 2003). 45
27. On the conquest of the interior, see Yekutiel Gershoni, *Black Colonialism: The Americo-Liberian Scramble for the Hinterland* (Boulder: Westview Press, 1985).
28. The use of forced labor by the Liberian government became the subject of an official 1930 inquiry by the League of Nations that threatened Liberia's status

- as a sovereign nation. See Cuthbert Christy, Charles S. Johnson, and Arthur Barclay, *Report of the International Commission of Inquiry into the Existence of Slavery and Forced Labor in the Republic of Liberia* (Washington, DC: GPO, 1931). See also Nnamdi Azikiwe, *Liberia in World Politics* (Westport: Negro Universities Press, 1934); Charles S. Johnson, *Bitter Canaan: The Story of the Negro Republic* 5 (New Brunswick: Transaction Books, 1987); and Ibrahim Sundiata, *Brothers and Strangers: Black Zion, Black Slavery, 1914–1940* (Durham: Duke University Press, 2003).
29. For an early historical perspective on different valuations of land and economies at work among settler and indigenous societies in Liberia, see George W. Brown, *The Economic History of Liberia* (Washington, DC: Associated Publishers, 1941). 10
30. Robert W. Clower, George Dalton, Mitchell Harwitz, and A. A. Walters, *Growth Without Development: An Economic Survey of Liberia* (Evanston: Northwestern University Press, 1966), 99. 15
31. Figures are from Clower et al., *Growth Without Development*, pp. 146, 154, 170. F. P. M. van der Kraaij, *The Open Door Policy of Liberia: An Economic History of Modern Liberia* (Bremen: Bremer Afrika Archiv, 1983) puts the Firestone 1951 tax figure at \$5.6 million.
32. See D. Elwood Dunn, *Liberia and the United States During the Cold War: Limits of Reciprocity* (New York: Palgrave Macmillan, 2009), 49, 83, and Kraaij, *The Open Door Policy of Liberia*, 64. 20
33. See, for example, Finis Dunaway, *Seeing Green: The Use and Abuse of Environmental Images* (Chicago: University of Chicago Press, 2015); idem., *Natural Visions: The Power of Images in American Environmental Reform* (Chicago: University of Chicago Press, 2005); Gregg Mitman, *Reel Nature: America's Romance with Wildlife on Film*, rev. ed. (Seattle: University of Washington Press, 2009). 25
34. Jennifer Tucker, "The Historian, the Picture, and the Archive," *Isis* 97 (2006): 112.
35. Faye Ginsburg, "Archival Exposure: Disability, Documentary, and the Making of Counternarratives," in *Documenting the World: Film, Photography, and the Scientific Record*, ed. Gregg Mitman and Kelly Wilder (Chicago: University of Chicago Press, 2016), 153. 30
36. For a more extended discussion of this incident, see Gregg Mitman, "A Journey Without Maps: Film, Expeditionary Science, and the Growth of Development," in *Documenting the World*, ed. Mitman and Wilder, 124–49. 35
37. While estimates vary, approximately 25 percent of Liberian land has recently been granted to multinational companies for large-scale oil palm, logging, and mining concessions. These figures were calculated from Land Commission of Liberia, *Land Inventory and Land Management Planning in Sinoe County*. Prepared with the support of EU Project FED/2011/270957 (September 2012). On its implications for human rights, see, for example, Alioune Tine, "Liberia Must Learn to Honor the Rights of Rural Residents to Manage Their Own Land," *Los Angeles Times*, August 29, 2016, accessed September 13, 2016, <http://www.latimes.com/world/global-development/la-fg-global-liberia-human-rights-oped-snap-story.html>. 40
38. See, for example, George Shattuck to Richard Strong, September 29, 1927, E. Mallinckrodt to Richard Strong, December 15, 1927, African Expedition—Correspondence, State Department & White House Folder, Box 2, RPSP. 45

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39. Quoted in *The Land Beneath Our Feet* (2016), a documentary film by Sarita Siegel and Gregg Mitman.
40. Lorraine Daston, "The Coming Into Being of Scientific Objects," in *Biographies of Scientific Objects*, ed. Lorraine Daston (Chicago: University of Chicago Press, 2000), 3.
41. Gregg Mitman, "Ebola in a Stew of Fear," *New England Journal of Medicine* 371, no. 19 (2014): 1763–65; Annie Wilkinson and Melissa Leach, "Briefing: Ebola—Myths, Realities, and Structural Violence," *African Affairs* 2015 (114): 136–48.