1998

Central American Encounters with Rockefeller Public Health, 1914-1921

Steven Palmer
University of Windsor

Steven Palmer

Central American Encounters with Rockefeller Public Health, 1914–1921

In April 1914, Costa Rica became the first Latin American state to welcome to its territory a Rockefeller Foundation program, in this case an International Health Commission (IHC) project for the eradication of hookworm disease. Over the following two years, anti-hookworm missions were established in Panama, Guatemala, Nicaragua, and El Salvador. The Rockefeller Foundation, which was created in 1913–1914 as the international extension of philanthropic work that had originated in the United States, chose to initiate operations in these countries and in the British Caribbean colonies. According to the foundation's official historian, this was because, "like the West Indies, Central America offered opportunity for a beginning in which experiments could be tried out on a small scale and in a comparatively quiet way." Moreover, she added, "its geographical position and political relations with the United States gave the Board an interest which it felt in no other country." [1]

Ominous imperial imagery: Central America as a secret biomedical laboratory and undifferentiated zone of geopolitical importance for, and close control by, the United States. As it transpired, however, the foundation's anti-hookworm program in Central America became many programs that varied widely in scope, strategy, and achievement. These programs were sometimes appropriated, often partially rejected, and occasionally dismissed by the host societies and governments. What follows is an analysis of the reception and transformation of the Rockefeller Foundation's public health mission in Costa Rica, and a preliminary comparison of Costa Rica's experience with those of the other Central American republics.

In 1914 Costa Rica was a tiny country with a population of a mere 400,000. Its political economy was dangerously reliant on the export of coffee and bananas, this latter crop produced in an enclave on the Caribbean coast overseen by the United Fruit Company. In geopolitical terms, the country was being squeezed by the expanding power of the United States: to the south was Panama and the U.S. canal; to the north was recently occupied Nicaragua. Precisely because of these general traits of hyperdependency, Costa Rica's is an interesting story about the com-

plexity and ambiguity of the link between imperial institution and subject polity, and about the possibilities for those subject polities to shape their own destinies in their inevitable encounters with emissaries from the metropole.

Many scholars of the Rockefeller Foundation's international work have forcefully argued that its public health programs mapped and processed peoples of the Third World in the service of U.S. imperial expansion, the labor needs of agrarian capitalism, and the global hegemony of a style of scientific medicine that was finding its modern institutional and commercial form in the United States. If a general view of these programs is taken, such a characterization can hardly be disputed. Once the perspective shifts away from the grand institutional or geopolitical unities of the Rockefeller Foundation or the United States of America—and particularly if the experience of host countries comes into view—an entirely new set of questions and issues is raised about the effect of these public health ventures. What other scholars have taken to be ultimate conclusions about the Rockefeller Foundation programs are here bracketed as a given, as a point of departure for beginning what I think are more interesting and revealing studies on the many ways that these ventures affected political configurations and everyday life in a wide variety of Latin American settings.[2]

Instead of focusing on the Rockefeller Foundation itself, then, this essay explores the extent to which some Costa Rican individuals, intellectual groups, and institutions were able to transform the foundation's venture into a vehicle for realizing an already existing public health project of local making. It proceeds by calling into question a series of assumptions and stereotypes common to the literature on the Rockefeller Foundation programs, and on the spread of biomedical public health models in general. The essential argument is that, once the anti-hookworm mission was successfully established in Costa Rica, it ceased to be reducible to the ideological or institutional unity of the Rockefeller Foundation, and was reconfigured as a vital component of a local strategy and of an institutional matrix designed to advance social medicine; it also became the node of a community of public health professionals with desires and allegiances that transcended the boundaries of Rockefeller philanthropy, the nation-state, and the informal empire of the United States.

Peripheral Precedence

Latin America occupies an awkward place in the recent proliferation of studies on disease, medicine, and empire.[3] Pointing to a dramatic imposition of alien medical models coincidental with the encroachment of British and later U.S. imperial power is complicated by Latin America's prior colonial experience of transculturation. In effect, "Western medicine" was grafted onto American healing traditions from the Conquest onward. Scientific medicine and public health, as consolidated in Western Europe and the United States in the second half of the nineteenth century, were not in any direct sense arms of the imperial penetration of Latin America. Rather, this consolidation was replicated or anticipated by political and medical leaders throughout the Americas, and was to some extent refashioned to meet their own conditions and needs. Furthermore, by the time of the bacteriological revolution and the triumph of professionalism, Latin America no longer had any coherent autochthonous systems, ancient and customary, capable of waging an epistemological battle with Western medicine that might coincide, sometimes self-consciously as in the cases of Ayurvedic or Unani medicine in India, with anti-imperialist dissent. Though in Latin America scientific medicine and public health programs propelled by the germ theory were still largely confined to cities, and were accepted by only a thin stratum of society, they were by 1914 as Latin American as anything else.[4]

The Rockefeller Foundation programs in Central America have been represented by some scholars as an integral part of an asymmetrical, overwhelming imposition of alien medical and public health models. The most recent study of the evolution of health care in Costa Rica—rather a good one, too, it should be said—proposes the following picture of that process: "Two wealthy and powerful U.S. organizations, the United Fruit Company and the Rockefeller Foundation, poured money, equipment, people and technological know-how into Costa Rica. In the process, they gradually transformed the health infrastructure and dominant models of medical care along the lines of the germ-theory model of disease etiology, using disease-eradication techniques perfected during the Spanish-American war." [5]

This claim is simply wrong. The error can be illustrated by a brief look at the Central American—and particularly the Costa Rican—history of research on, and treatment of, hookworm disease. When compared to the U.S. and the Rockefeller experience with the disease, the entire isthmus

becomes an excellent example of what I have chosen to call "peripheral precedence." Hookworm disease had been identified in El Salvador in 1887 and in Guatemala in 1889 by a physician of German origin, Helmut Prowe. Between 1889 and 1914, four theses had been written on the disease at the medical schools of El Salvador and Guatemala. Although Costa Rica had less than one hundred physicians at the turn of the century and no medical school, it was not without an active nucleus of medical scientists, most of them trained in Western Europe, some in other parts of Latin America, and some in the United States. As early as 1896, the patriarch of this group (and a former president of the republic), Dr. Carlos Durán, along with a research colleague, Dr. Gerardo Jiménez, had identified ancylostomiasis as endemic to certain regions of Costa Rica. Even physicians in the Central American periphery, then, discovered hookworm disease well before Charles Wardell Stiles in the United States and Bailey Ashford in Puerto Rico made their "American" discoveries of the disease in 1900.[6]

Aside from a brief program to treat Salvadoran troops, neither the Salvadoran nor the Guatemalan governments initiated programs to combat hookworm disease. In Costa Rica, however, on Durán's urging in 1907, the government sponsored a tour by two ambitious young physicians, Luis Jiménez and Carlos Alvarado. Their mandate was to determine the extent of hookworm infection in the country, and to design a treatment strategy. Based on their findings, in 1910 the government approved a not insignificant annual appropriation equivalent to U.S. $10,000 for the systematic testing and treatment of the populace. By 1913, the program was responsible for the treatment of almost 20,000 sufferers annually. The Costa Rican program actually predated the first Rockefeller campaign to treat hookworm disease in the South of the United States, which began only in 1909, after Stiles convinced the directors of Rockefeller philanthropy that the extent of affliction in the U.S. South warranted their concerted attention.[7]

In Costa Rica, the motives for undertaking this and other programs of popular hygiene were broadly similar to those that led the Rockefeller Foundation into the crusade against the hookworm. At the most basic level, hygiene was yet another realm in which to educate the popular classes in fundamental notions of reason and science. The treatment of hookworm disease was a particularly good vehicle for this, since there was an effective, quick, and relatively simple method of treatment, and the rapid relief from an acutely felt illness was an excellent form of propaganda. Obviously, a question of political economy was involved: hookworm disease, colloquially known as *cansancio* ("fatigue"), was as-

sociated with low productivity in workers. This concern, however, was merely one element in a broader hygiene project that acquired leverage by equating itself with the destiny of the nation, the purity of the race, the health of the economy, and the attainment of modernity.

The state commitment to public health programs, visible from the turn of the century onward, was advanced under the curious banner of "auto-immigration." The country's preeminent groups had long been concerned with a historical shortage of labor power. Costa Rica also had extremely high levels of infant mortality, due in large measure to amebic dysentery and other parasitic afflictions. In the official nationalist rhetoric, Costa Rica's Hispanic population had been declared homogeneous, near-white, and racially sound. However, public health reformers were motivated by a fear that without a therapeutic program to maximize the health of the laboring classes, racial degeneration would occur within what they felt was the sound (and authentically national) population group, and its "natural" growth would stagnate. A decadent people would then have to accept the further immigration of workers from population groups that had been pronounced racially degenerate (Afro-Caribbeans, Chinese, Gypsies, Arabs, and South Asians). Thus Cleto González Víquez, a two-time president (1906–1910 and 1928–1932), coined the term *autoinmigración* to refer to all public health ventures, because they would maximize the endogenous growth of the populace. Juan Bautista Alberdi's famous dictim, "to govern is to populate," had been sublated by eugenic fears: to govern was to sanitize.[8]

This remained very much a vanguard posture, however, promoted by a few influential political figures and a coterie of activist reformers, but resisted by most powerful Costa Ricans as prohibitively expensive and an intrusion of the state on domains that should remain private. Of course, it also threatened to subordinate physicians to greater state oversight and regulation, and the Faculty of Medicine fought or subverted the more ambitious public health initiatives. Vociferous resistance also came from the Juntas de Caridad, semiautonomous bastions of oligarchic prestige and economic power that administered hospitals and public relief. Nonetheless, as incipient as these modern public health ventures were in the overall scheme of things, they remind us that even in a country as marginal as Costa Rica, the Rockefeller Foundation's international public health work was in many respects epistemologically, and even programmatically, redundant. This, of course, made it relatively compatible with the established projects of these vanguard sectors of Costa Rican public power.

Imperial Blinders and Local Plans

The Rockefeller Foundation was hardly an omniscient, well-prepared imperial machine. Employees charged with setting up the program knew nothing of the Central American discoveries of hookworm disease, and they were equally ignorant of the extensive treatment of hookworm disease in Costa Rica. The foundation's advance man, Joseph White, was surprised when Guatemalan and Salvadoran physicians in public health posts informed him of the prior research on the disease in their countries, though he remained unimpressed by their opinion that ancylostomiasis was not a high public health priority. When he arrived in Costa Rica in May 1914, White was even more surprised to learn of the treatment campaign there (though it appeared to him self-evident that the campaign director, Luis Jiménez, "was by far best fitted to deal with the Commission, having been educated in Philadelphia"). White was also ignorant of the community of medical scientists in the country, and of the alliances and divisions that existed among them.[9]

This surprising lack of preparation was probably a factor of two things. First, the foundation does not appear to have worked closely with U.S. consular services, either before or after establishing operations in other countries, probably in order to minimize the perception that Rockefeller programs were an arm of U.S. foreign policy. Second, advance men like White relied to a certain degree on information given to them by local agents of the United Fruit Company, who, in his case, were "all personal friends" (White was a colonel in the Marine Hospital Service, and many United Fruit managers had also served in the Marine Corps). Indeed, in Costa Rica he even used the local general manager of the United Fruit Company to act as a conduit in extending the official Rockefeller Foundation offer to the country's minister of the interior, though this corporate cooperation later foundered, as we will shortly see. The United Fruit Company officials do not seem to have had any great insight into local public health efforts, perhaps because they had their own medical section that mostly confined itself to treating employees in the enclaves.[10]

Costa Rican politicians and public health activists, on the other hand, had a fairly good idea of what to expect from the Rockefeller Foundation's International Health Commission. Many physicians had been trained in the United States and maintained professional contacts there. Indeed, one Costa Rican physician and member of the political elite, Juan Ulloa, had been on the board of the International Sanitary Bureau of the Union of the American Republics since its creation in 1902. The bureau was more

a network of information exchange than a programmatic agency, but it allowed delegates to become acquainted with the budding imperial health apparatus of the United States (the head of the Sanitary Bureau was the surgeon general of the United States). The bureau's 1909 conference was held in San José, where public health officials from all over Latin America met with the local community of activist physicians (Luis Jiménez and Carlos Alvarado presented a report on their anti-hookworm work). Costa Rican public health activists had had time to observe and to measure this colossus, and when the Rockefeller men came calling, they knew whom they were dealing with.[11]

Moreover, by 1914 anti-imperialist skepticism and resistance had become a significant and even acceptable part of Costa Rican political culture. The president of the republic at the moment of acceptance of the Rockefeller offer was Ricardo Jiménez, who had been widely applauded as recently as 1907–1908 for his nationalist denunciations of the United Fruit Company. The incoming president, Alfredo González Flores, would reveal himself to be an outspoken critic of the corruption of the political class by foreign capitalists, and of laissez-faire in general. He would actually take steps against both, actions that led to his ouster in the military coup of 1917.[12]

Anti-imperialist hostility was hardly discreet. It was one of the first things felt by Louis Schapiro, the director of the hookworm mission, on arriving in Costa Rica. In justifying to his superiors a decision to omit the name of the Rockefeller Foundation from the Departamento de Ankylostomiasis's official stationery, he noted, "I thought, with the feeling against the United States in this country, that the work would be better received by merely mentioning the International Health Commission in conjunction with the Government. There is a national suspicion of anything done by American Institutes, especially when the work is carried on free."[13] That the González Flores regime came to welcome and to work with the Rockefeller mission had a great deal to do with Schapiro himself. It also had to do with the credentials of one Costa Rican in particular, Solón Núñez, who was appointed by the government to work with the anti-hookworm department.

Double Agents and the Republic of Rational Health

The first man sent down to Costa Rica to direct the anti-hookworm mission, Henry Carter, had little success cracking the local establishment, one

of the reasons that he left for another job after six months. His replacement was Louis Schapiro. The son of Polish Jews who had immigrated to the United States, Schapiro was hardly the typical "ugly American," despite the fact that his background as a physician included service in the military and the Coast Guard, and three years as a senior public health official in the occupied Philippines from 1910 to 1913. Schapiro had learned to speak Spanish quite well and, according to Victor Heiser, who had been his superior in the Philippines, had "demonstrated very unusual executive ability" and "unusual tact in getting along with all classes of people." For two years prior to arriving in Costa Rica, he had worked in the public health department of Milwaukee and as a specialist in hygiene and tropical medicine at Marquette University. Judith Walzer Leavitt has described the exceptional success of public health reformers in making Milwaukee known, by the second decade of this century, as "the healthiest city" in the United States. Schapiro's tenure there followed the brief socialist incumbency in the city council that had consolidated a model of broad community mobilization in public health. It was the product of a left-liberal coalition designed to defeat traditional politicians who had preyed on the rapid growth of the city while impeding public health initiatives.[14]

Even as Schapiro began organizing the anti-hookworm units in Costa Rica, he became intrigued by the possibility of using the public education system as the matrix of popular hygiene mobilization. He may have been the object of some calculated flattery in this regard. In April, when his assistant director, Carlos Pupo Pérez, gave a public conference on the hookworm for schoolteachers in San José and the vicinity, Schapiro was enthused by the large turnout of 174 teachers, indicating that school inspectors had done a very efficient job of publicizing the event (or of suggesting the costs of absenteeism). This was followed soon after by an official offer to Schapiro from the president and his brother, the minister of education, Luis Felipe González Flores, to organize and direct a Department of School Health.[15]

Without consulting his superiors, Schapiro accepted the post, since he thought it would "make my position here a great deal stronger, as through the Presidential Decree, all official doctors automatically come under the control of this office." A bit sheepishly, he insisted that "as soon as they can obtain a competent Costa Rican they will do so." On 2 June he concluded a report to the second in command of the IHC, John Ferrell, "I am deriving a great deal of personal pleasure and find that my position officially has been greatly strengthened by my acceptance of the Directorship of the Departamento de Sanidad Escolar." Indeed it had been: on

22 May, probably under pressure from the government, the extremely exclusionary Faculty of Medicine of Costa Rica had recognized him as an honorary member (his predecessor, Carter, had complained that doctors were "a close corporation, and do all they can to keep outsiders out of the Country"). Schapiro had impressed the Costa Ricans as approachable, competent, and flexible enough to be asked to oversee a local project long in the making.[16]

Well before the arrival of the foundation, Costa Rican health reformers had planned to piggyback the system onto the highly successful public education network, the cornerstone of the ethical state built by the Liberal reformers of the 1880s. In the words of Pupo Pérez, words that played on the old battle cry of the educational reform, this would inaugurate "the era of free and obligatory hygiene." [17] The central obstacle to this was a lack of resources, itself the product of a political class not convinced of the need to push through the necessary budget appropriations. By mid-1915, despite an executive that was singularly disposed to effect this reform, the always precarious fiscal situation of the Costa Rican state was becoming ever more bleak with the onset of the wartime recession. Schapiro was willing to take responsibility for the Rockefeller Foundation filling the void and acting as the vehicle for realizing the project.

Obviously, this hardly made him a Kurtz figure, gone "native" and no longer responsive to the imperial program. The large measure of autonomy that the foundation accorded local directors was in no small measure responsible for the wide variety of Latin American encounters with Rockefeller public health. The scope of improvisation granted to a director was particularly wide given the "demonstration model" promoted by the foundation, whereby technical and institutional frameworks would be established in the host country, and then "transplanted" through a gradual transferral of fiscal and administrative responsibility to the host state.[18] The uses a director made of his autonomy were not likely to be questioned if they could be justified as necessary for successfully making the transplant take root in the host body. They would be questioned even less when, as in the case of Schapiro, the paperwork flowed efficiently, and the end result was such an obvious fulfillment of the mission's basic mandate.

Still, it would be rash to discount the degree to which the cultural flexibility of individual directors determined the shape of different missions, and Schapiro was obviously more flexible than most in this respect. His sensitivity to host cultures was further revealed in the mid-1920s in Siam. The Rockefeller Foundation was expelled by the Thai government owing to a feeling that the organization was making the country walk down a

path its government did not want to tread. They permitted only one agent to stay; it was Schapiro who, according to Heiser, had volunteered for the "thankless task," and who became "a tremendous favourite in Siam," able to engage in ambitious sanitary engineering projects, and to establish a series of health centers before he died there of a terminal illness.[19] I would suggest that we might understand Schapiro as a kind of double agent, advancing the interests of "imperial medicine," but as far as possible on the terms of those sectors of the host country's political class he considered progressive.

Schapiro soon acquired a Costa Rican partner in this double game: Solón Núñez, a young physician appointed by the government to be the assistant director of the Sanitary Department of Schools in 1916. A year later he was appointed the subdirector of the Departamento de Ankylostomiasis by Schapiro. Núñez was the key Costa Rican in the seven-year direct Rockefeller involvement, and subsequently became undersecretary of public health in 1922, and then secretary of the new Ministry of Public Health and Social Protection in 1927. His background is worth some comment, since it also brushes against the grain of the stereotypical local "collaborator" central to the assumptions of dependency theory and of proponents of cultural imperialism.

Prior to 1913, when he departed to study medicine in Geneva, Núñez was a high-profile member of a group of embittered young dissident intellectuals who had dedicated themselves to the cause of anti-imperialism and social justice. Often teachers in the country's leading schools, and grouped around radical periodicals and cultural centers for workers, this loosely affiliated network included many of Costa Rica's most inspired leftist intellectuals, like Joaquín García Monge and Carmen Lyra. Núñez had been a teacher in two rural schools, and then a school inspector, all the while increasing his profile as a critic of dominant society by taking an active role in publications like *Aurora* (1908) and *Cultura* (1910). His 1911 essay in *Renovación,* "Jesús y Tostoi," is considered a classic expression of the romantic anarchist and social Christian vision that animated the project of this generation of *ácratas* (disaffected ones).[20]

It is unlikely that Núñez had lost his anti-imperialist principles by the time he returned from his studies in Switzerland and his apprenticeship on the battlefields of France. It was clear to him, however, and to many other progressives of the day, that there was a difference between, say, the Departamento de Ankylostomiasis and the building of a U.S. canal or the annexation of the country. Direct Rockefeller control was designed to phase itself out by 1921, whereupon the state would assume complete

control over the operations. The basic Rockefeller public health plan was quite compatible with that proposed by Costa Rican reformers, particularly given Schapiro's willingness to integrate the mission with the school system. The entire project promised a way of circumventing the obstacles thrown up by the retrograde elements of the medical and political establishments, and thus represented a possible shortcut to a centralized apparatus of public health that Núñez very much conceived as a socialist advance over laissez-faire. A Faustian bargain? Some said so, and Núñez caught his share of criticism for devoting himself to the mission. He never hesitated, however, and vociferously defended Schapiro on more than one occasion, insisting that the foreign physician was a great Costa Rican patriot.[21]

Ironically, then, like many of his generation who had nourished themselves on the works of the great anarchists, Núñez's energies were now turned toward imaginative leadership in expanding the role of the state. This was especially the case after 1914, when the young González Flores brothers opened the doors of state patronage positions to this brilliant generation. Its members had a sense that, if they played their cards right, they would find themselves at the social controls when the transplant was fully integrated into the local system. In many respects, this process was similar to the incorporation of progressive intellectuals into state reformism in the United States (and indeed throughout the world) at this time—proponents of social medicine like Louis Schapiro, for example.

In an important sense, however, Schapiro and Núñez were "triple agents," and their ultimate allegiance was not to an imperial institution, a nation-state, an agroexport bourgeoisie, or an embryonic, U.S.-based medical-industrial complex. Their bond and their behavior might best be understood as the result of a mutual feeling that they were citizens of a more transcendent political community: what we will call the "Republic of Rational Health," a sort of latter-day, specialist analogue of the seventeenth-century Republic of Letters. This republic, too, was universalist and devoted to the accumulation of systematic knowledge; its ideal was the maximization of human vitality through the application of that knowledge. This was a commitment to public health in the full sense of the term, since it was not bounded by any institutional borders, nor even by the nation-state: it was an identification with humanity as a whole. Núñez and Schapiro were pioneers of an international network of public health institutions staffed by bureaucrat-intellectuals, very much the first generation of the transnational, bureaucratic-intellectual, global elite with which we are increasingly familiar (and one that encompasses the functionaries of nongovernmental organizations as well). Though both

were surely aware that this network had been engendered by the capital of robber barons, the imperial dreams of great powers, and the needs of commerce and industry—and remained somehow in their service—both also knew that the Republic of Rational Health was not reducible to them. The international career in social medicine had its own logic, and it was propelled by its own desire.[22]

The Campaigns

Both Lynn Morgan and Juan César García propose that the anti-hookworm campaigns targeted coffee pickers and plantation workers in Costa Rica, and that they were coordinated with the United Fruit Company's medical apparatus and the coffee oligarchy. In fact, no such direct relationship existed between the program's organization and the immediate needs of foreign or local agrarian capital. In the first year of operations, for example, campaigns were undertaken in extremely isolated peasant communities in Guanacaste and Puntarenas, and in the public schools in San José, as well as along the Pacific littoral and in coffee-growing regions of the Central Valley. The country was broken down into a grid and systematically worked through, with the intention to test and, if necessary, to treat every individual in the area. Neither the schedule nor the method were determined by the nature of agricultural production in the region, although communities could hasten the arrival of the anquilostomiasis unit by petitioning for it and promising assistance up front. As for the United Fruit Company, when a hookworm unit inaugurated its campaign in the province of Limón in June 1915, Schapiro complained to his superiors in New York that "the showing by the officials of the United Fruit Company was not that of co-operation." Schapiro only made headway in the area after meeting the governor and principal officials, the Roman Catholic priest, and the British consul to Costa Rica, who called together and secured the cooperation of the "colored ministers." [23]

Even had the United Fruit Company been cooperative in the one part of the country where it held sway (and which accounted for only a tenth of the Costa Rican populace), such complex coalition weaving would have been necessary there and elsewhere. Especially in the countryside, the anti-hookworm campaign was a kind of guerrilla war between the culture of progress and a wide variety of local cultural configurations. The greatest political resistance came from *gamonales* loathe to impose the costs of latrine building on peasants, lest it lead them to lose influence to rival

political bosses. The greatest ideological resistance came from the local empirics and *curanderos,* clearly perceiving the arrival of a previously distant rival. Nonetheless, it is probably best to steer clear of romanticizing this resistance as a pure emanation of organic healing traditions under the calculated onslaught of imperial biomedicine. Herbal, spiritual, and traditional healers were merely one end of the spectrum of rural healers, which included the corner-store owner who carried on a lucrative trade prescribing foreign patent medicines for "diseases of the blood," the traveling homeopathic salesman, and even, eventually, members of the local community who had been hired on as microscopists during the campaign. It is also interesting to note that the most valuable allies of the anti-hookworm units in the rural areas were primary-school teachers, most of them women. This crucial stratum of popular female progressivism seemed to accept with gusto a mission of hygiene evangelism that led them to confront local traditions and power structures.[24]

The Department of School Health was formally a section under the direction of the anti-hookworm program. The government provided a budget for a director, part-time physicians, and full-time sanitary assistants, these latter recruited from the ranks of female teachers and trained in nursing. Because the school health work was so deeply intertwined with the propaganda activities of the anti-hookworm program, the foundation's resources were also employed to keep it administratively focused, and to subsidize its constant work with teachers, which included periodic training sessions and the supply of literature and classroom materials. As well as providing free diagnosis and prescription medicine to poor children, the school health section was the first real social work agency in Costa Rica, and the sanitary assistants increasingly undertook home visits rather than simply school inspections. By 1921, it received a larger portion of the total budget of the Departamento de Ankylostomiasis than did the actual program for the treatment of hookworm disease.[25]

Nationalism and Sovereignty

Most accounts of the dynamic between Rockefeller medicine and nationalism portray it in negative terms—that is, in terms of the nationalist backlashes provoked by the missions in host countries. In a different vein, Armando Solorzano has shown that in Veracruz the foundation's anti–yellow fever work did a great deal to legitimize the revolutionary government of Obregón, and that in its extraordinary collaboration with

the socialist government in the Yucatán, it unwittingly paved the way for national integration. However, the foundation's work could also have a more intimate and complementary role in the production of the national community.[26]

In 1915, Schapiro offered to make massive quantities of hygiene literature available to the Ministry of Education. The minister responded by setting aside in the curriculum a half hour each week, "the day and the time to be uniform throughout the Republic . . . for the instruction of pupils from the literature furnished." The image of this simultaneous instruction recalls Benedict Anderson's analysis of the nation as a group of people anonymous to one another, transformed into a political community through the simultaneous sharing of identical experiences. The vehicle for these rituals need not be of creole fiber, as the employment of this imperial literature makes perfectly clear. The material resources and scale of the Rockefeller program made possible this concretization of nationalist experience throughout the republic. In a more general way, as the hygiene program became entrenched throughout the country's primary school system, the distinction between physical and moral hygiene was blurred, and both were linked to national values. Being a good Costa Rican became increasingly impossible unless one defecated in a latrine, bathed once a day, and underwent scientific examination and purification at the hands of the state. The most surreal portrait of this came from Núñez in 1931, when virtually every Costa Rican had been subjected to an examination for hookworm disease at least once in his or her life. In extolling the incorporation of this ritual by the populace, he noted that there was "a continuous stream of people to the country's laboratories in search of having their feces examined." [27]

As the state had assumed a greater burden of the cost of the Departamento de Ankylostomiasis, and as the department had proven itself to be coordinated and effective, a succession of governments had arrogated to it more authority over public health matters. On the other hand, the Faculty of Medicine and the Superior Council of Public Health, an ad hoc advisory body dominated by members of the medical and charity establishments, had lost a good deal of public confidence and prestige, especially in the wake of a chaotic response to the disastrous influenza pandemic of 1919–1920, which claimed the lives of over 2,000 Costa Ricans. In 1920, on the eve of the Costa Rican state assuming financial responsibility and administrative control over the Departamento de Ankylostomiasis, Schapiro and Núñez met with the cabinet of the new Acosta government, which

had succeeded the overthrown military dictatorship of the Tinocos. They struck a secret deal to transform the Departamento de Ankylostomiasis into the Subsecretariat of Hygiene and Public Health, with Núñez at the helm. The parties agreed on what legislation would be necessary, since it meant suppressing the jurisdiction legally bestowed on the Faculty of Medicine. In return, Schapiro guaranteed further Rockefeller support for a public health laboratory in San José, the training of personnel, and other pilot projects. Thus, the moment of greatest Rockefeller subversion of Costa Rican sovereignty was also the moment that guaranteed the state jurisdiction over a hitherto unconsolidated domain.[28]

Central American Comparisons

My understanding of the anti-hookworm work in Guatemala, Panama, Nicaragua, and El Salvador is based on much more cursory evidence than my assessment of the Costa Rican program. It is clear, however, that work in these other four countries came nowhere near the extent of coverage achieved by Rockefeller-sponsored work in Costa Rica, even in absolute numerical terms. By 1921, the Costa Rican mission had examined 277,000 individuals (70 percent of the populace), inspected almost 50,000 homes, and overseen the building of 16,000 latrines. In Nicaragua, El Salvador, and Guatemala, only about 150,000 individuals in each country had been examined (25, 8, and 8 percent of the populace respectively), 15,000 homes had been inspected, and 3,000 privies had been built. The principal ingredient for the success of the work in Costa Rica—an extensive public education system—was absent elsewhere in Central America. The importance of this is reflected in the fact that the figures on the use of school infrastructure and literacy by the Costa Rican mission dwarf the extent of such work carried on by its Central American counterparts. By 1921 almost 1,000 hygiene lectures for children had been given in Costa Rican public schools, less than 200 in Guatemala, and less than 50 in El Salvador. Almost 300,000 units of literature had been distributed in Costa Rica, and less than 70,000 each in Guatemala and El Salvador, despite the fact that their populations were five times greater than that of Costa Rica.[29]

Furthermore, the mission directors in the other countries were unable to transform their institutions into nuclei of national departments of health. Neither was there any sign of strategic alliances between progressive sectors of the local intelligentsia and the Rockefeller missions of the kind so

crucial to the Costa Rican encounter. Corresponding to this is a sense that the missions were never able to trade in their public image as foreign (and thus suspect) entities for a more functional national costume.

It is striking that the greater the influence of the United States within a country, the less successful was the public health work undertaken there by the imperial philanthropic institution. Although I have no figures on the Panama program, it is clear from reports that the mission was considered a failure, essentially because there was no local public health apparatus with which to work. The U.S. canal authorities had jurisdiction over public health in Colón and Panama City, and their primary efforts went toward eradicating yellow fever and maintaining potable water. The canal authorities were not interested in anti-hookworm work in rural or urban areas, and the Panamanian government was not interested in investing money or personnel in the Rockefeller project as long as control over public health matters was primarily in U.S. hands.[30]

In Nicaragua, the other satellite of the United States, the situation was not much better in terms of the insinuation of the mission into the local public health apparatus. The second director in particular, Daniel Molloy, carried out an ambitious campaign in the most populous parts of the country, and seems to have had some success in gaining popular acceptance of the mission's work, most notably among the indigenous people of Matagalpa. Support at the level of government, the medical establishment, or social reformers, however, was never forthcoming. The country's historic division between the ruling groups of León and Granada was reproduced at the level of medicine and public health, each city having its own medical school, and the central government recognizing two national boards of health (one from each domain of power). Neither group appeared particularly interested in assisting the anti-hookworm work, nor did the central government itself. In fact there is frequent mention of outright sabotage of the mission's work by these groups, and of campaigns to ensure that the mission be equated with the U.S. presence in the country.[31]

In Guatemala—and again despite close ties between Manuel Estrada Cabrera and the U.S. government—the mission got a frosty reception from *El Señor Presidente* and the local medical establishment. It also seems to have been the most ineptly run foundation project in Central America. With almost no government assistance, and with unambitious leadership, the anti-hookworm work was confined almost entirely to the agroexport plantations of the southern piedmont and coastal plain. Certain large planters agreed to assist the mission's work on their properties, and to undertake the construction of privies, in an attempt to improve labor out-

put. Only in El Salvador did the anti-hookworm program (which did not start until 1916) eventually acquire the kind of momentum to suggest that it might have eventually rivaled the Costa Rican campaign's coverage. Although it is impossible to determine why this was so from the scant information I have available, it is worth speculating that it corresponds to the existence there of a network of positivist reformers who would become visible during the popular political mobilizations of the 1920s.[32]

Conclusion

This brief assessment of the Central American experience with hookworm disease and with the Rockefeller Foundation suggests some of the ways that rethinking the imperial encounter from a local perspective can upset entrenched assumptions. The Central American periphery actually preceded the U.S. metropole in research on, and treatment of, hookworm disease. In Costa Rica, this peripheral precedence meant that key sectors of the government and public health community were more knowledgeable about what the Rockefeller-sponsored hookworm program could offer the country than was the foundation itself, and the Costa Ricans appropriated the mission accordingly. Paradoxically, while impinging on Costa Rican sovereignty in important ways, the foundation's presence strengthened and expanded the reach of the Costa Rican state, and provided resources and methods that made more profound the sense of nation among the people of the country. Finally, a comparison with anti-hookworm work in other parts of Central America suggests that there was no positive correlation between direct U.S. geopolitical influence and the realization of the Rockefeller Foundation's imperial public health mission.

The Costa Rican campaign was the only case in Latin America where the hookworm work lived up to its original goal of acting as a catalyst for creating a centralized state agency of public health. In his 1921 summary of the Costa Rican program, Schapiro insisted that "the organization and direction of the Department of Medical Inspection of Schools . . . was the first step to centralize public health agencies towards the formation of the National Health Department." That is to say, it was the drastic modification of the original Rockefeller plan, one initiated by the Costa Rican state and made possible by Schapiro's predisposition and autonomy of action, that led to the "success" of the mission.[33]

There is no doubt that in the anti-hookworm mission the resources and prestige of the Rockefeller Foundation were employed to extend the in-

fluence of the United States, and even to tamper with Costa Rican sovereignty. Neither is there any doubt that this was part of an imperial plan to expand the network of propaganda for centralized public health systems, and to promote the idea of curative medicine alongside a more preventive model. My presentation of the program also raises the specter of issues that bedevil contemporary Latin America: the transplantation to Central America of personnel originally trained as part of Southeast Asian counterinsurgency exercises (i.e., the Philippines); and the creation of a parallel state, whereby institutions under the direction of U.S. personnel are inserted into the state apparatus of the subject country. Even the foundation's planned withdrawal, and its insistence that the host states assume the financial burden and direction of the programs, inevitably recalls more recent imperial desires of "Vietnamizing the conflict" and of "winning hearts and minds." [34]

Beside these troubling issues, however, is the argument I have presented here, that the Costa Rican state was able to meld the anti-hookworm program with its own prior public health designs, redirecting the foundation's narrowly focused original energies into a hygienicist boost of the public education system. In a time of fiscal crisis, the resources of the empire were harnessed to expand the sway of the state and to extend Costa Rican nationalism among the rural populace. The anti-hookworm commission was quite willing to ally itself with some of Costa Rica's leading anti-imperialists, and the disposition of Louis Schapiro enhanced its ability to do so. The funds and personnel of the foundation also helped overwhelm influential sectors and institutions of the political, commercial, and medical establishments who were otherwise opposed to the statist social policy then being advocated by a vanguard of public health reformers.

Notes

The author would like to thank Marcos Cueto, Ricardo Salvatore, Catherine LeGrand, Warwick Anderson, Iván Molina, and Stuart Schwartz for their assistance in refining this work. The author acknowledges the support of the Social Sciences and Humanities Research Council of Canada, and of the Vicerectoría de Investigación of the Universidad de Costa Rica, which made parts of this paper possible.

1. Catherine Lewerth, "Source Book for a History of the Rockefeller Foundation," vol. 2, Rockefeller Foundation Archives (hereafter RAC), 1949, 411.

2. A recent collection on the encounter of the Rockefeller Foundation with Latin America, taking the foundation as its principal object of analysis, is Marcos

Cueto, ed., *Missionaries of Science: The Rockefeller Foundation in Latin America* (Bloomington: Indiana University Press, 1994). The collection successfully goes beyond the often simplistic anti-imperialist, anticapitalist indictments that characterized the work of an earlier generation of students of U.S. philanthropy: in particular, Edward H. Berman, *The Influence of the Carnegie, Ford, and Rockefeller Foundations on American Foreign Policy: The Ideology of Philanthropy* (Albany: State University of New York Press, 1983); and E. Richard Brown, *Rockefeller Medicine Men: Medicine and Capitalism in America* (Berkeley and Los Angeles: University of California Press, 1979); for a more recent example, see Soma Hewa, "The Hookworm Epidemic on the Plantations in Colonial Sri Lanka," *Medical History* 38, no. 1 (Jan. 1994): 167–83. Two studies that broke the mold through more sensitive readings of the philanthropy's activities are Mary Brown Bullock, *An American Transplant: The Rockefeller Foundation and Peking Union Medical College* (Berkeley and Los Angeles: University of California Press, 1980); and John Ettling, *The Germ of Laziness: Rockefeller Philanthropy and Public Health in the New South* (Cambridge, Mass.: Harvard University Press, 1981).

3. For example, David Arnold's 1988 review essay of the state of studies of disease, medicine, and empire begins with a brief overview of the historiography treating Europe and North America in the nineteenth and twentieth centuries, and then explains that "the rest of the world has come increasingly under scrutiny as well," listing Africa, South and Southeast Asia, the Pacific region, and Australasia, but omitting Latin America. Though he does mention some specific cases from Latin America later on, they do not warrant a categorical mention, and the collection is without a Latin American case study. "Introduction: Disease, Medicine, and Empire," in *Imperial Medicine and Indigenous Societies,* ed. Arnold (Manchester: Manchester University Press, 1988), 1. Studies of Latin America are also absent from another important collection on this subject, Roy Macleod and Milton Lewis, eds., *Disease, Medicine, and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (New York: Routledge, 1988). The fact that the Philippines under U.S. occupation receives attention in both collections underlines the point.

4. Guenter B. Risse, "Medicine in New Spain," in *Medicine in the New World,* ed. Ronald L. Numbers (Knoxville: University of Tennessee Press, 1987); George M. Foster, "On the Origin of Humoral Medicine in Latin America," *Medical Anthropology Quarterly* 1, no. 4 (Dec. 1987): 364–66; Poonam Bala, "State and Indigenous Medicine in Nineteenth and Twentieth Century Bengal, 1800–1947" (Ph.D. diss., University of Edinburgh, 1987); and David Arnold, "Smallpox and Colonial Medicine in Nineteenth-Century India," *Imperial Medicine,* 47.

5. Lynn Morgan, *Community Participation in Public Health: The Politics of Primary Care in Costa Rica* (Cambridge: Cambridge University Press, 1993), 17–18. This point of view is echoed by Juan César García, *Pensamiento social en salud en América Latina* (México: Interamericana McGraw Hill/Organización Panamericana de Salud, 1994), 112–13; and by Jorge Cayetano Mora Agüero, *Las Jun-*

tas Progresistas: Organización comunal autónoma costarricense, 1921–1980 (San José: Editorial PEC91, 1991), 23–24.

6. On the Central American discoveries, see Solón Núñez, "La Ankylostomiasis," *Boletín de la Subsecretaría de Higiene y Salud Pública* 1, no. 1 (May 1923): 11–15. Some of the theses are listed in Francisco Asturias, *Historia de la medicina en Guatemala,* 2d ed. (1902; Guatemala: Editorial Universitaria, 1958), 242–53, 431–34. On the numbers of physicians in Costa Rica, see Luis Dobles Segreda, *Indice bibliográfico de Costa Rica,* vol. 9, *Higiene y medicina* (San José: Imprenta Lehmann, 1927–1936; and Asociación Costarricense de Bibliotecarios, 1967), 384–402. On Ashford and Stiles, see Ettling, *The Germ of Laziness,* 29–32.

7. For Durán's 1907 proposal, see Archivo Nacional de Costa Rica, Policía, 977. For a summary of the initial Costa Rican campaign, see "Jiménez to White," 28 May 1914, RAC, Record Group (RG) 5, Series (S) 1.2, box (B) 6, folder (F) 87. On Stiles's efforts, see Ettling, *The Germ of Laziness,* 38–43. The Colombian case is an interesting halfway point in this respect, with local physicians identifying the disease in 1905 and pressing the government to initiate a dispensary campaign to treat laborers in the sugar and coffee sectors, though with limited success (systematic Rockefeller Foundation efforts against hookworm began there in 1920). See Christopher Abel, "External Philanthropy and Domestic Change in Colombian Health Care: The Role of the Rockefeller Foundation, ca. 1920–1950," *Hispanic American Historical Review* 75, no. 3 (1995): 350–51. Julyan G. Peard discusses earlier Brazilian efforts to diagnose and treat hookworm in a pioneering article on Brazilian social medicine, "Tropical Disorders and the Forging of a Brazilian Medical Identity, 1860–1890," *Hispanic American Historical Review* 77, no. 1 (1997): 1–44.

8. Steven Palmer, "Hacia la auto-immigración: El nacionalismo oficial en Costa Rica (1870–1930)," in *Identidades nacionales y estado moderno en Centroamérica,* ed. Arturo Taracena and Jean Piel (San José: Editorial Universidad de Costa Rica, 1995), 75–85.

9. On Guatemala, "White to Rose," 7 Apr. 1914; on El Salvador, "Report from Dr. P. A. Villacorta," appended to "White to Rose," 25 May 1914; and on Costa Rica, "White to Rose," 25 May 1914; all in RAC, RG 5, S 1.2, B 6, F 86 and F 87.

10. "White to Rose," 3 June 1914; and "Alvaradez [*sic*] to White," 14 Apr. 1914; in RAC, RG 5, S 1.2, B 6, F 86 and F 87.

11. Norman Howard-Jones, *The Pan American Health Organization: Origins and Evolution* (Geneva: World Health Organization, 1981), 8–13. The results of the San José conference were published as *Actas de la Cuarta Conferencia Sanitaria Internacional de las Repúblicas Americanas* (Washington, D.C.: Unión Panamericana, 1910), but the International Health Commission personnel had not read the publication prior to arriving in Central America.

12. For a complex variety of reasons, the coup was not backed by the United States, and the military regime was severely weakened by its failure to receive Washington's blessing during its two and a half years of existence.

13. "Schapiro to Ferrell," 20 Apr. 1915, RAC, RG 5, S I.2, B 7, F 106.

14. "Rose to White," 5 Oct. 1914 and 10 Oct. 1914, RAC, RG 5, S I.2, B 6, F 88; Luis Felipe González Flores, *Historia de la influencia extranjera en el desenvolvimiento educacional y científico de Costa Rica* (San José: Editorial Costa Rica, 1976), 160; and Judith Walzer Leavitt, *The Healthiest City: Milwaukee and the Politics of Health Reform* (Princeton, N.J.: Princeton University Press, 1982).

15. "Schapiro to Ferrell," 22 Apr. 1915, RAC, RG 5, S I.2, B 7, F 106; and "Luis Felipe González Flores to Schapiro," 7 May 1915, RAC, RG 5, S I.2, B 7, F 106.

16. "Schapiro to Ferrell," 7 May 1915; "Schapiro to Ferrell," 2 June 1915; and "Schapiro to Ferrell," 22 May 1915; all in RAC, RG 5, S I.2, B 7, F 106. See also "Carter to Ernst Meyer," 13 July 1914, RAC, RG 5, S I.2, B 6, F 96.

17. Carlos Pupo Pérez, *Nuestras enfermedades evitables: Principios de higiene que nadie debe ignorar* (San José: Imprenta Alsina, 1913), 4.

18. A good overview of the "demonstration model" can be found in Abel, "External Philanthropy and Domestic Change," 341.

19. Victor Heiser, *An American Doctor's Odyssey* (New York: W. W. Norton, 1936), 501.

20. Juan Bautista Frutos Verdesia, *Dr. Solón Núñez Frutos* (San José: Ministerio de Cultura, Juventud y Deportes, 1979), provides a basic biography and a selection of his writings; the importance of his youthful anarchism is discussed in Alvaro Quesada Soto, *La voz desgarrada: La crisis del discurso oligárquico y la narrativa costarricense, 1917–1919* (San José: Editorial de la Universidad de Costa Rica, 1988), 167–68.

21. For a defense of Schapiro by Núñez, see *Memoria de la Secretaría de Salubridad Pública y Protección Social: 1927* (San José: Imprenta Nacional, 1928), xi.

22. My discussion of the Republic of Letters and of its relationship to Kant's understanding of the public use of reason comes from Roger Chartier, *The Cultural Origins of the French Revolution* (Durham, N.C.: Duke University Press, 1991), 24–27.

23. Morgan, *Community Participation,* 18–19, 83; and García, *Pensamiento social,* 112–13. For a good overview of the manner in which the campaign was undertaken, see "Informe de la Sub-secretaría de Higiene y Salubridad Pública," *Memoria del Ministerio de Gobernación y Policía: 1923* (San José: Imprenta Nacional, 1924), 257–81. See also "Schapiro to Ferrell," 8 July 1915, RAC, RG 5, S I.2, B 7, F 107.

24. On the role of teachers, see "Informe del Departamento de Ankylostomiasis, 1922," *Memoria del Ministerio de Gobernación y Policía: 1922* (San José: Imprenta Nacional, 1923), 231–33.

25. This composite picture of the evolution of the Sanitary Department of Schools has been garnered from the annual reports of the Departamento de Ankylostomiasis in the *Memorias de Gobernación y Policía,* from 1915–1922. The 1921 budget information is from Dr. F. F. Russell, "Report of Inspection of Costa Rica (1921)," RAC, RG 5, S 2, B 41, F 244, 2. For a more detailed look at the links be-

tween public health institutions and other nascent agencies of moral policing, see Steven Palmer, "Confinement, Policing, and the Emergence of Social Policy in Costa Rica," in *The Birth of the Penitentiary in Latin America: Essays on Criminology, Prison Reform, and Social Control, 1840–1940,* ed. Ricardo Salvatore and Carlos Aguirre (Austin: University of Texas Press, 1996).

26. Armando Solorzano, "The Rockefeller Foundation in Revolutionary Mexico: Yellow Fever in Yucatán and Veracruz," in Cueto, *Missionaries of Science,* 52–71. An excellent treatment of the ambiguous and unexpected manifestations of nationalism in motivating biomedical research in Latin America is Marcos Cueto, "Nacionalismo y ciencias médicas en el Péru," *Quipu* 4, no. 3 (Sept.–Dec. 1987): 327–55.

27. "Report of Quarter Ending March 31, 1915," RAC, RG 5, S 1.2, B 7, F 106; Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism,* 2d ed. (London: Verso, 1991), 35–36; and *Memoria de Salubridad Pública y Protección Social, 1931–32* (San José: Imprenta Nacional, 1932), 9.

28. Louis Schapiro, "Hookworm Campaign in Costa Rica (1921)," RAC, RG 5, S 2, B 28, F 168, 2.

29. For Costa Rica, see "Informe del Departamento de Ankylostomiasis," *Memoria de Gobernación y Policía: 1921* (San José: Imprenta Nacional, 1922), 269, 275; for Nicaragua, "Relief and Control of Hookworm Disease in Nicaragua," RAC, RG 5, S 2, B 34, F 202, 20–21, 27; for El Salvador, "Relief and Control of Hookworm Disease in Salvador," RAC, RG 5, S 2, B 36, F 218, 12, 19, 21; and for Guatemala, "Relief and Control of Hookworm Disease in Guatemala," RAC, RG 5, S 2, B 31, F 194, 5, 10.

30. Russell, "Report of Inspection of Costa Rica," 4; and García, *Pensamiento social,* 115. Symptomatic of this is that the hookworm programs receive not a single mention in the memoirs of the Canal Zone's chief health officer during this period: Winston P. Chamberlain, *Twenty-five Years of American Medical Activity on the Isthmus of Panama, 1904–1929: A Triumph of Preventive Medicine* (Canal Zone: Panama Canal Press, 1929).

31. "Relief and Control of Hookworm Disease in Nicaragua," 32–34; "Report to Rose from Managua," RAC, RG 5, S 2, B 34, F 201; and García, *Pensamiento social,* 113.

32. "Relief and Control of Hookworm Disease in Guatemala"; and "Relief and Control of Hookworm Disease in Salvador," 5, 23–25. García, *Pensamiento social,* 111, notes the existence of a group of state medicine intellectuals in El Salvador as early as the turn of the century.

33. Schapiro, "Hookworm Campaign in Costa Rica (1921)," 2.

34. In fact, U.S. medical personnel had even used the term *Philippinization* to characterize their efforts to transfer to Filipinos the public health apparatus that was so crucial a part of occupation and counterinsurgency (Warwick Anderson, personal communication).