A Contradictory Paradox: Discourses on Cuban Healthcare and Development

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Preface: The Cuban Health Paradox

"*Vivimos como pobres y morimos como ricos*," or "we live like the poor and die like the rich." So goes a common saying among Cubans, which many Cubans evoke to contrast the nation's general health status with access to material resources as a whole. This saying was repeated to me by Cubans from many different walks of life when I lived in Havana from January to May 2016, studying at the University of Havana and learning about Cuban healthcare, history, literature, and economics. In Cuba, scarcities are common, but medical care is widespread.

Most Cubans cannot access Wifi without first purchasing internet access cards (which many cannot afford) and traveling to special parks designated as Wifi zones (generally in cities)--speaking to loved ones, reading the news, or updating Facebook while sitting on curbs or park benches, but only when it is not raining. While almost no Cubans have Wifi in their homes, virtually all Cubans can access primary care physicians for free, who visit the homes of their patients.

I met many Cubans who struggled to come up with the money to buy enough food to sustain themselves, yet who had free access to pharmaceutical drugs and medical care. One acquaintance of mine had been undergoing free ARV treatments for HIV, and had also been harassed by the police for vocally criticizing government policies on topics such as censorship. He expressed gratitude to the government for his HIV treatment and also profound discontent towards the government for his treatment as a political dissenter.

I met several Cubans who had studied subjects like biochemistry or computer science at an undergraduate/graduate level, but instead had entered the tourist industry as taxi drivers or

tour guides because the salary of government jobs, even in high-level academic positions, was not enough to support their families. I heard of professors struggling to pay for their own public transportation to the location of their lectures. However, college and graduate education, including medical education, is free. My undergraduate classmates at the University of Havana received small stipends to attend and many will go on to graduate or professional school.

I once visited a friend who worked at an elementary school, and a school administrator there gifted me several history textbooks because there was a surplus; meanwhile, the same school administrator moonlighted as a dance teacher for tourists because his job did not pay enough to make ends meet.

I once played a pick-up basketball game at a park in Havana with somebody around my age--21 years old. Because of his age, goofy demeanor, and because he was just hanging out in the park, I assumed that he was, like me, a young adult still in school. I was surprised to learn after the game that he was a medical student who had already served a year in the military, and that after the game he would walk directly from the park to his house to shower, and then to a rotation in a cardiology unit at a Havana hospital. The point here is that in many cases, the social class occupied by Cuban doctors involved a level of community integration that I had not experienced in the United States.

It is commonly known in Cuba that killing a cow without government permission is illegal--even if you are a farmer who owns that cow, and are slaughtering it for its meat--and one can be sent to prison for it. This is because the government guarantees milk to all children under five, and takes this right extremely seriously. Whether or not this law is enforced is one issue,

but the pervasion of this knowledge in Cuba exemplifies how Cuban public health practices are also connected to state control over its population.

I met one man who worked in the maintenance sector of a hospital, making about $20 per month and struggling to sustain himself. He expressed to me a sentiment that several others had repeated to me before: that the government and the Revolution, despite being founded on an admirable ideology, had generally failed him. He said that the Revolution had ended decades ago because the nation's politics and living conditions were not being revolutionized, but were stagnant, and that he did not feel free or safe expressing his criticisms of the government. He thought that he lacked the relative economic security, opportunities for socioeconomic mobility, and political freedoms that he perceived to be enjoyed by many of his neighbors 50 miles to the north (in the U.S). However, he told me that despite the economic and political constraints he endured, he was happy that at least the Cuban government had gotten it right on public health; that structures such as the state and global politics had caused him hardships, but access to medicine was not one of those hardships.

Cubans obviously hold a wide range of unique opinions and experiences regarding the state, the Cuban Revolution, and healthcare. The above examples illustrate encounters I had with Cubans who experienced poverty and limits on political freedoms, and also a robust public health system, administered by the same central state. In this way, geopolitical economics (the embargo in particular), and the Cuban state, come to be seen by many Cubans as influential in their lives, for better and for worse.

The combination of an effective public health system with extreme economic and political challenges has intrigued and confused Western commentators on Cuba, particularly those from the United States. "Cubans live like the poor, and die like the rich" is also a phrase often co-opted by these Western commentators on the Cuban healthcare system, usually used to express surprise that Cuban healthcare does not follow trends normally associated with "rich" and "poor" countries. The Cuban healthcare system has lent itself to a commonly used concept among non-Cuban development experts, governments, public health academics, and mainstream media: the idea of the "Cuban health paradox," in which the paradox lies in a misalignment of Cuban public health with paradigms of international development--paradigms that emphasize the importance of economic growth and political freedoms for promoting national progress in a general sense.

The Cuban health system is often the subject of side-projects for U.S. or Canadian doctors or public health experts who take guided tours of the country. Many of these experts have found themselves delighted or inspired by the health system and sometimes publish informally-written color pieces on it for medical journals. Press, perhaps looking for compelling one-off stories, sometimes publish articles on the Cuban health paradox, in which Cuba's healthcare system becomes newsworthy or intriguing, if only on a slow news day, because of its departure from dominant notions of healthcare and development. The stories often contrast Cuba's 1950s cars and crumbling buildings as symbols of backwardness and underdevelopment with Cuba's domestic and international healthcare efforts as symbols of progress. Ethnographers and public health experts have also travelled to Cuba, seemingly intent on dispelling the idea that Cuba is a "utopia" for healthcare, focusing instead on the authoritarian aspects of Cuban

medicine. Public health literature coming out of Cuba is not necessarily widely read outside of the country. The Cuban model of healthcare tends to be taken by the world as a quirky example of public health in a poor, politically turbulent, and supposedly "underdeveloped" country.

As a student of medical anthropology and a pre-medical undergraduate at Swarthmore College, I traveled to Cuba with a program facilitated by Sarah Lawrence College because I was interested in studying the Cuban healthcare system. I lived a Havana neighborhood called Vedado and directly enrolled at the University of Havana. I took classes at the University's Center for Cuban Economic Studies (CEEC), the Cuban University for the Arts (ISA), and the Center for Demographic Studies (CEDEM), where I also undertook a faculty-tutored research project on the effects of the U.S. embargo on public health in Cuba. In addition to academic work, I was able to speak with medical professionals, scholars, and Cuban people about the healthcare system. I wanted to investigate how Cuba had managed to overcome the associations that had been part of my forays into public health and development economics (through the lens of critical anthropology): that economic instability and a history of colonialism correlated with poor health, manifesting in poor population-level health indicators. I found that most Cubans I spoke with--both academic experts and those not involved with healthcare or politics by trade--tended to link healthcare in Cuba more to the philosophies of populism, Revolution, and even nationalism than to the types of theories I had studied in anthropology that linked poverty with poor health due to structural inequality, and put even less emphasis on economic theories that promote the efficacy of free markets to efficiently produce and allocate resources.

In writing this thesis I felt that the Cuban healthcare system needed to be described from an anthropological perspective, not only as an international anomaly, as an inspiring rebellion

against neoliberalism, as an authoritarian dictatorship, or as part of a global communist movement, but as connected to an alternative development philosophy associated with the Cuban Revolution. I hope to bring to light the ways in which the Cuban healthcare system is portrayed by outsiders as paradoxical by presenting and analyzing a selection of illustrative examples from mainstream media, publications and policies of the U.S. government and international development organizations, and public health literature, showing how the the idea of the Cuban health paradox is based on particular neoliberal-oriented development paradigms to which Cuba does not conform. I will trace the Cuban healthcare system to its historical roots in social revolution and elucidate its basis in an ideology of development which opposes globally-dominant neoliberal development paradigms.

Introduction: "Distorted Development"

> *North American monopolies...have dedicated themselves to strengthening their colonial possessions and to perfecting their system against intrusion by old and new imperialist competitors. All this resulted in a monstrously distorted economy which has been described by economists of the imperialist regimes with a phrase demonstrative of the profound charity that they feel for us, the inferior human beings...They give to all the peoples of America [a] decorous and smooth name--the 'underdeveloped.'*
>
> *What is underdevelopment?*
>
> *A dwarf with an enormous head and a swollen chest is 'underdeveloped' in the sense that his weak legs and short arms do not match the rest of his torso; he is the product of a malformation which has distorted his development. This is what we are in reality, countries that are colonial, semicolonial, or dependent. Ours are countries with distorted economies because of imperialist policy which has abnormally developed the industrial or agricultural branches to complement the imperialists' own complex economies. 'Underdevelopment' or distorted development brings along a dangerous specialization in raw materials that holds over our people the threat of hunger. We, the underdeveloped, are also countries of monoculture, of a single product, of a single market. A single product, the uncertain sale of which depends on a single market that imposes and fixes conditions, holds the great formula of imperialist economic domination as expressed in the old and eternal Roman precept, 'divide and rule.'*
>
> -Ernesto Che Guevara, 1961: "Cuba: Exceptional Case or Vanguard in the Struggle against Colonialism?"

Iterations of the idea of development have underscored histories and debates surrounding Cuba since the era of Spanish colonialism, and remain relevant to Cuba today. Guevara pointed out that discourse among imperialist powers (scholars, governments, and international development experts) in the 1950s deemed Cuba and other Latin American countries "underdeveloped," in reference to their economic structures, and their populations' access to basic needs (e.g. nutrition, housing, education, healthcare). Guevara contended that the common conception of "underdevelopment" failed to recognize that economic imperialism, not inherent "inferiority," has distorted the economic development of post-colonial nations, including Cuba.

Further, he argued that economic distortion of post-colonial nations has served imperialist corporate interests, and is responsible for economic "development" of imperialist countries in terms of access to cheap labor, raw materials, and markets for refined goods. Lastly, he asserted that neoliberal standards of development that conflate freer markets and more foreign investment with higher standards of living and health tend to encourage the very type of economic distortion that is later referred to as "underdevelopment."

Guevara meant the "United States" when he referred to "imperialists." He argued that in terms of U.S.-induced economic exploitation and "distortion," Cuba resembled other Latin American nations, and, in line with Marxist-Leninist philosophy, that socialist, anti-imperialist revolutions were inevitable in these countries as well.

On the subject of promotion of capitalism as a means of national progress or development, the Latin America scholar Aviva Chomsky (2015:10) points out:

> It makes little sense to ask whether capitalism or socialism 'works' better. In the United States, capitalism seems to work remarkably well: our standard of living is higher than anywhere else in the world. But other countries, just as capitalist as our own, are not faring so well. If we use Haiti or Sierra Leone as our measuring stick, capitalism seems to be quite a failure as an economic system. Conversely, a heavy dose of socialism has not doomed Sweden or Norway to economic collapse, nor to authoritarian excesses. In a world historical view, what 'works' best seems to be having been a colonial power, while what 'works' worst is having been colonized. (2015:10)

In this passage, Aviva Chomsky channels Guevara, and the ideology of the Cuban Revolution, in pointing out that free market capitalism, often lauded by economists as a prerequisite for improving quality of life on a national level, has alternatively been a tool of oppressors in colonial and post-colonial nations in the form of justification for exploitation by

foreign interests, resulting in mass inequality, low incomes, and economic distortion or "underdevelopment"(Chomsky 2015).

Guevara's and Chomsky's points regarding development discourse reveal paradoxes in the way dominant Western governments, scholars, and media view Cuba from a development perspective. Ironically, these entities frequently term Cuba developmentally "paradoxical," because the post-1959 Cuban government has promoted universal access to basic needs while rejecting free markets and foreign corporate investment, prioritizing equity over economic growth, and aligning Cuba against dominant neoliberal paradigms in global development discourse.

The same Western development discourses tend to apply the idea of "paradox" to Cuba's public health and medical infrastructure as markers of development. In terms of population health indicators, Cuba's population has health at levels similar to the United States and other rich countries (e.g. in life expectancy and infant mortality), in spite of much lower national economic productivity and income, and limited private markets (in healthcare and all sectors). While health disparities exist in Cuba, Cuban public health excels compared to many richer countries in terms of social equity within aggregate indicators. In this case, as Guevara, and Chomsky would argue, it is the development discourse that is paradoxical, flawed, and limited in its explanatory power.

This thesis examines discourse on Cuban healthcare from governments, public health literature, and mainstream media inside and outside of Cuba, drawing from anthropological perspectives on healthcare and national development. It focuses on how Western development discourse--and especially U.S.-driven development discourse--conceptualizes Cuban healthcare

as "paradoxical" or "contradictory" because it has achieved high levels of public health, health equity, medical infrastructure, and global medical presence, despite restricting free markets, having relatively low GDP and economic growth, limiting domestic political freedoms, being a post-colonial Latin American nation, and being a long-time enemy of the United States. It analyzes how the discourse of "paradox" surrounding Cuban healthcare reveals flaws in common conceptions of "development" that conflate free-market capitalism, overall economic output, and integration into the global economy, with national development and eventual advances in health and quality of life. It also reveals how the Cuban government coopts the language of the "Cuban health paradox" to criticize imperialist capitalism and the United States, and to justify continued socialist governance on the basis of promoting human rights.

Theoretical Frameworks

Two main ideas support the theoretical frameworks of this thesis: "development" and "discourse." The end of this introduction will introduce these terms and how they will be used in the following chapters of the thesis.

Development

The idea of "development" is central to this thesis and to discourse surrounding public health in Cuba. The anthropologist Arturo Escobar traces the origins of "development" as a concept and practice to the 1940s and 50s, after World War II ended and the United States became interested in promoting capitalist democracy and suppressing communism, creating favorable economic conditions for production by U.S. corporations in former

colonies-turned-sovereign nations, and optimizing foreign markets to consume U.S. goods. Escobar argues that "development" does not merely refer to the aggregation of these capitalist influences in policies of countries around the world, but is "a mode of thinking and a source of practices [which] soon became an omnipresent reality"(Escobar 1988:430). "Development" forms an ideology in itself, or what the following section will describe as a "discourse," which influences common-sense notions of global affairs and constitutes a basis for communication and justification for policy-making. The "practices" to which Escobar refer involve wealthy, formerly colonizing countries investing and imposing policies in poorer, formerly colonized countries deemed "underdeveloped" or "developing," with the aim of incorporating these countries into a global capitalist economy. As Gunder Frank (1996) and Chomsky (2000) argue, the "integration" of "developing" countries into the global economy has taken the form of exploitation of the labor and resources of developing countries by multinational corporations based in "developed" countries, inducing the type of "lopsided economies" and social inequalities described by Guevara (1961), and exacerbating Guevara's version of capitalist "underdevelopment" in the "developing" countries.

Although the iteration of "development" described by Escobar--the one on which organizations like the World Bank and International Monetary Fund are based (Escobar 1988:430)--came into being after WWII, ideas central to "development," such as the creation of a hierarchy of nations and the use of perceived "underdevelopment" or backwardness as a justification for intervention, were also employed in earlier attempts of countries to shape or exploit other countries; specifically, this occurred through practices of colonialism or imperialism. "Development" does not refer to the same thing as colonialism or imperialism;

however, both practices involve richer nations imposing policies and power on poorer nations--policies which tend to further the economic interests of the imposing nation, which to varying degrees are implemented under a justification of helping the people of the colonized or "less developed" country. The following chapters will discuss how U.S. policies in Cuba in the first half of the twentieth century promoted U.S. economic interests in Cuba at the expense of the majority of the Cuban people, under policies said to generally advance (in a vague sense) Cuba as a nation.

Neoliberalism is a pervasive philosophy within development ideology which furthers the capitalist agendas of the richer countries generally in charge of international development. Keshavjee and Farmer (2014) describe the ideology of neoliberalism in the context of international development as a prioritization of free markets as the best arbitrators of "social goods"(2014:xxx), including healthcare. The ideas of development referred to in the previous paragraph in practice have largely centered around economic and political liberalization, leading to privatization of industry and social services, often by outside corporations. Neoliberalism has served the economic interests of multinational corporations and richer nations by creating inexpensive, less regulated sites of production and markets for their goods in formerly colonized countries (Kim et al. 2000). Like "development," there is a modern iteration of "neoliberalism" as an ideology and policy practice, but the ideas had been put into practice before. The following chapters will discuss neoliberal tendencies of U.S. development policies in pre-Revolution Cuba. Around the globe, neoliberal development policies have exacerbated social and economic inequalities and reduced the role of governments in the provision of social

services in so-called "developing nations," leading to public health deficiencies and global health disparities (Kim et al. 2000, Peet 2003, Keshavjee 2014).

The central goals and discourse of the Cuban Revolution of 1959 also concerned a conception of development--one which was radically different from the now globally-dominant neoliberal development ideology. The Cuban Revolution constituted an expulsion of the U.S.-based political and economic influences responsible for distorted "underdevelopment" and the stark social and economic inequalities in the country. The Revolution meant to promote development in terms of equitable economy and human rights, with health as a cornerstone of the Revolutionary project. Revolutionary leaders conceptualized the Revolution as necessary to provide basic needs associated with development to Cuba's working classes, including land ownership, housing, sanitation, education, and healthcare services (Castro 1975). In particular, the health and well-being of underserved and oppressed populations underlay the rhetoric, material initiatives, and concept of development that drove the Revolution.

Revolutionary leaders such as Che Guevara and Fidel Castro continually referred to basic needs and human rights as areas of imperialism-induced underdevelopment. They saw underdevelopment as linked to "monoproduction" of sugar as a cash crop by U.S.-owned corporations on Cuban land, lack of diverse industries, high and fluctuating unemployment, low opportunities for education, and poor health infrastructure, especially for working class, rural populations (Castro 1975). Revolutionary philosophy blames U.S. interests for creating and taking advantage of "free" markets, leaving Cuban laborers impoverished, and without adequate infrastructure.

Cuba's policies and successes in public health defy development models that link economic growth, free markets, and foreign investment with a natural path towards "development" seen as eventually bringing gains in quality of life and public health. Today, and for several decades, Cuba has satisfied certain imperialist standards of development (e.g. access to basic needs such as health), yet is widely categorized as "underdeveloped" in others (e.g. GDP, economic growth, participation in global markets, and political freedoms).

Discourse

This thesis deals with "discourse" as the medium that contains development paradigms, or what Escobar terms "a mode of thinking and a source of practices"(1988:430) called "development." Discourse, in a Foucauldian sense, consists of common-sense language and notions, or a basis of knowledge and assumptions in which thought and communication are rooted, which are pervasive within a particular field and influence perceptions and actions (Alvesson and Karreman 2000).

Discourse is the way that ideas of "development" exist in circles of governments, public health, media, and international development organizations, permeate popular consciousness, and manifest in development-oriented policies. The anthropologists James Ferguson argues that for many of these bodies, "development" as a goal has become entrenched in discourse such that its fundamental reality as an "interpretive grid through which the impoverished regions of the world are known"(Ferguson 1990:xiii), and for imposing policy interventions on these regions, often goes unchallenged. Ferguson points out that while many analyses "challenge" dominant development paradigms "in the name of *real* development"(1990:xiv), or successful

development policies, fewer examine the solvency of "development" itself, or the effects of "development" as a concept. He writes:

> It seems to us today almost non-sensical to deny that there is such a thing as 'development,' or to dismiss it as a meaningless concept, just as it must have been virtually impossible to reject the concept of 'civilization' in the nineteenth century, or the concept 'God' in the twelfth. Such central organizing concepts are not readily discarded or rejected, for they form the very framework within which argumentation takes place (1990:xiii).

"Development" as a "framework within which argumentation takes place" captures its existence as a discourse, as a baseline set of principles in which debate is rooted. Keshavjee and Farmer (2014) argue that the neoliberal aspects of development discourse in particular are powerful shapers of "what counts as real"(2014:xxiv) in terms of development as national progress, because neoliberalism promotes the economic interests of politically influential actors and corporations who are arbitrators of discourse. In the case of international development and healthcare, the development discourse consists of correlations generally held to be real and true: that economic growth and political freedoms correlate with national development, which correlates with advances public health.

"Development discourse" forms the basis for the "Cuban health paradox." A development discourse geared towards neoliberalism, emphasizing the importance of integration into global capitalism and economic growth as markers of development and advancement of civilization (an ideology whose manifestation will be further described in Chapter 2), contrasts with discourses of the Cuban Revolution which emphasize equity and self-determination as "development," and global capitalism in Cuba as "underdevelopment."

Structure of the Thesis

Discourses surrounding Cuban healthcare shed light on how hegemonic ideas of neoliberalism pervade dominant discourse on development and healthcare, and how resistance to this discourse by governments can promote public health and health equity. This thesis examines the notion of Cuban healthcare as "paradoxical" and reveals differences between Cuban discourse and policies regarding development, and globally dominant development discourse and policy.

Chapter 1 examines how the development and structure of the Cuban healthcare system reflects and furthers the ideology of the Cuban Revolution, and is conceptualized by leaders of the Revolution as connected to broader goals of national "development" and overcoming historical U.S.-induced "underdevelopment." It offers an outline of elements of Cuban healthcare and health services abroad, in relation to Cuba's perceived development status, in a global context. Chapter 2 presents an analysis of discourses of "paradox" on Cuban healthcare on in terms of economic development, which circulate in the U.S. government, international development organizations, public health scholarship, and media. This analysis leads into a discussion of implications for the role of healthcare in national development models. Chapter 3 examines the political aspects of the "Cuban health paradox," pointing out flaws in the pervasive notion that Cuba's successes in public health are paradoxical to the state's authoritarian governance and limits on political freedoms. Using the theoretical framework of biopolitics, this chapter argues that the Cuban government exerts political power through its public health practices. Finally, the conclusion discusses shifting discourses on health care and development in Cuba's future.

My research consists of discourse analysis of U.S., Cuban, and international governmental, academic (public health), and media texts, which I selected based on how well they demonstrate development discourse and the Cuban health paradox. My research questions and investigation were informed by fifteen weeks of living in Havana, Cuba, and engaging in conversations and academic work about health with academic and medical professionals, and Cuban people.

Chapter 1. "Revolutionary Medicine"

> *Ya entonces tenemos el derecho y hasta el deber de ser, por sobre todas las cosas, un médico revolucionario, es decir, un hombre que utiliza los conocimientos técnicos de su profesión al servicio de la Revolución y del pueblo... El trabajo que está encomendado hoy al Ministerio de Salubridad, a todos los organismos de ese tipo, es el organizar la salud pública de tal manera que sirva para dar asistencia al mayor número posible de personas, y sirva para prevenir todo lo previsible en cuanto a enfermedades, y para orientar al pueblo."*
>
> *Now we have the right, and even the duty, to be above all a revolutionary doctor, that is to say, a man who utilizes technical knowledge of his profession to the service of the Revolution and of the people... The work that is entrusted today to the Ministry of Health, and all similar organizations, is to organize public health in order to serve through care the greatest possible number of people, to prevent everything preventable with regard to disease, and to direct the people.*
>
> --Ernesto Che Guevara, Speech to Cuban Militia, August 19, 1960

Che Guevara's concept of the "revolutionary doctor" concerns the manifestation of ideology and symbolism in the technical aspects of the Cuban healthcare system. Trained as a medical doctor, Guevara played an influential role in shaping the Marxist, anti-imperialist ideology of the Cuban Revolution and the Cuban healthcare system. After his death, he and his ideas became revered symbols of the Cuban Revolution and are canonized to this day. In his 1967 eulogy of Guevera, Fidel Castro proclaimed: "Che gave the ideas of Marxism-Leninism their freshest, purest, most Revolutionary expression...We will always seek inspiration in Che's example, inspiration for struggle, inspiration for tenacity, inspiration for intransigence before the enemy [imperialism], and inspiration for internationalist sentiment"(Castro 1967). Struggle on behalf of economically oppressed classes against imperialism and capitalism characterizes the ideological core of the Cuban Revolution.

Populism has manifested in the development and structure of the Cuban public health system, which strives for and achieves a high level of health equity and public health. Cuba's government has continually stressed connections between health and political, economic, and social systems that the Revolution aimed to reconfigure, with the goal of class equality, national self-determination, and rejection of capitalism and imperialism. It is fitting of the Revolution's ideological connections between health and national development that a Revolutionary figure as influential as Che Guevara was a physician who served as the Revolutionary government's first minister of industry.

Since the beginning of the Cuban Revolution, the Cuban government has developed a health infrastructure driven by the central Revolutionary goal of institutionalized equity. State prioritization of equity sharply contrasts with the economic policies and configuration of Cuba from 1901-1958 as a protectorate of the U.S. The development and structure of public health in Cuba reflect the ideals of the Cuban Revolution, and are important for the continued symbolism of the Revolution. This first chapter will introduce a history of Revolutionary movements in Cuba through the lens of health, as well as provide background on the structure of the medical system.

The Historical and Ideological Roots of the Revolution and the Health System

Health of oppressed classes has been one of the major axes of transition for the Cuban Revolution since its inception. Health as a state priority manifests not only in the words of leaders like Castro and Guevara, but in the restructuring forces and fundamental philosophies of the Revolution, particularly those concerning transition from imperialist "underdevelopment"

towards self-determined development. Since the 19th century, anti-colonial and anti-imperialist Revolutionary movements in Cuba have linked health, well-being, and national development to self-determination.

The economic and political history of Cuba from 1492 to 1959 is characterized by continual economic exploitation and political manipulation by foreign powers, at the expense of the vast majority of the Cuban people. Exploitation in the forms of slavery and low-wage labor, and intentional hindrance of local economic development in favor of foreign economic interests, resulted in poor health and health disparities, and continually inspired resistance movements based on the well-being of the majority of the population and an ideology of realizing a form of national "development."

Colonial Period and Independence

The ideological roots of the Cuban Revolution, and the healthcare system, go back further than the Castro-led 26 de Julio movement in the 1950s. Cuba's primary national hero, José Martí, was a 19th century poet and political figure who largely inspired Cuba's 1895 war for independence from Spain. He is still indisputably the most venerated figure in Cuba, especially by the government. In Havana, one is always within eyesight of a bust of José Martí, the airport is named after Martí, and no structure in Havana is allowed to be taller than the Jose Martí Memorial. Castro and other leaders of the Revolution often invoke his words, and his embodiment of Latin American and Cuban struggle for self-determination.

José Martí called for freedom from European colonialism and became an influential leader of the *Cuba Libre* movement, which organized armed struggle for independence from

Spanish colonial rule (Pérez 2014). In his influential 1891 essay entitled "Nuestra América," which was part of a literary campaign for the *Cuba Libre* movement, he linked self-governance and land ownership with material well-being and existential harmony:

> And the able governor in America is not the one who knows how to govern the Germans or the French; he must know the elements that make up his own country, and how to bring them together, using methods and institutions originating within the country, to reach that desirable state where each man can attain self-realization and all may enjoy the abundance that Nature has bestowed in everyone in the nation to enrich with their toil and defend with their lives. Government must originate in the country. The spirit of government must be that of the country. Good government is nothing more than the balance of the country's natural elements…(Martí 1891).

Martí emphasized the importance of pan-Latin American solidarity, and self-determination based on geography. He called for Cuban association with Latin American roots rather than Eurocentric values. By connecting self-government, ownership of physical land, and individual well-being, he encouraged struggle against colonial powers on the basis of populism. For this reason, he became an inspiration and symbol for the 1959 Revolution. Martí emphasized connections between population health--not with biomedicine in mind, but in terms of harmony and well-being--and self-governance, economic self-determination, and freedom from colonial influence. In this sense, he set the precedent for connecting health of vulnerable populations with movements against colonialism and imperialism.

Other *Cuba Libre* leaders, including the generals Antonio Maceo and Máximo Gómez, also connected populist revolution to class struggle and health (Pérez 2014). In 1896 General Máximo Gómez of the *Cuba Libre* movement imposed a sugar moratorium, calling for all Cuban planters to cease sugar production. As the historian Louis Pérez writes: "the suspension of production as a device of war also set the stage for the redistribution of property as a design for

peace...to destroy one social class and create another"(2014:124-125). Gómez and the *Cuba Libre* movement considered class struggle an axis of revolution against colonialism.

During the war, the Spanish military forced rural Cubans into crowded camps called "reconcentrados" or "reconcentration camps," in order to undermine community support for the Cuban army (Hirschfield 2007:111). In addition to having their homes, possessions, and crops burned by the Spanish army, tens of thousands died in "breeding grounds for disease and sickness" of "entirely preventable epidemics"(Pérez 2014:127). Unbearable living conditions incensed Cubans against the Spanish and escalated the war for independence. The war became centered around class struggle, particularly in the arena of promoting living conditions and health for working classes. During the Cuban struggle for independence there had already emerged a philosophy of promoting health equity through a process of national development which entailed expelling foreign influences in favor of self-determination.

Neocolonial Period and the United States (1898-1959)

The history of socioeconomic and public health conditions created by U.S. development policies in Cuba demonstrates how capitalist-oriented policies of development served U.S. economic interests while degrading the health and welfare of Cuban rural and working class populations. The history also reveals the dominant development paradigms that form the basis for the Cuban health paradox. Note that at this time, the ideology of "development" had not crystallized in its dominant form as it did after WWII with the establishment of international development organizations (Escobar 1988); however, the practice of targeting Cuba with policy interventions meant to influence the structure of the country will be referred to here as "development" policy.

During the war for independence, the United States began to exert dominant political and economic influence on Cuba. After the mysterious explosion of the U.S. battleship Maine in Havana Harbor, the U.S. joined the war on the Cuban side after it was generally recognized that Cuba would win (Ortiz, lecture, University of Havana, 2016). In the U.S. the war is normally referred to as the "Spanish-American War;" in Cuba it is commonly known as the "Guerra hispano-cubano-norteamericana," or the "Spanish-Cuban-North American War." After Spain lost the war, the U.S. negotiated the 1898 Treaty of Paris with Spain, in which the U.S. took control of Spanish colonies in the Americas, and militarily occupied Cuba. The U.S. agreed to Cuban independence; however, as Pérez states, "in appropriating responsibility for ending Spanish colonial rule, the United States claimed the right to supervise Cuban national government"(2014:137). Through imposed economic policies, the U.S. exploited Cuban resources and labor for the benefit of U.S. corporations, marking the beginning of what is commonly termed in Cuba a "neocolonial" period, lasting from 1901-1959. The U.S. made Cuba a protectorate under the guise that the country would be a democratic republic, thereby justifying imperial expansion through the language of national progress--a motif that would be repeated in later decades in the development discourse and policies of international development organizations towards Latin America (discussed in Chapter 2 of this thesis).

Louis Pérez describes how Cuban independence was implicated in U.S. imperial expansion: "In attempting to end Spanish sovereignty, Cubans also endangered the U.S. aspiration to sovereignty [in the Caribbean]. Acquisition of Cuba was envisioned by North Americans as an act of colonial continuity...a legal assumption of sovereignty over a territorial possession deemed incapable of a separate nationhood"(2014:136). U.S. government officials

discredited Cuban claims to self-determination. One general asserted that the Cuban people were "not inspired by love of liberty, but by the lure of looting"(Pérez 2014:138). The U.S. government contended that Cubans were not ready for self-government, thereby justifying U.S. military occupation, and subsequent economic and political control. Land-owners and wealthy classes supported U.S. presence in Cuba, in order to maintain stability of sugar production and the class structure. The U.S. remained most loyal to the interests of this class of landowners (Ortiz, lecture, University of Havana 2016). In this way, the U.S. justified economic and political control of Cuba through a narrative containing elements of what would later become the notion of "underdevelopment" of the country.

U.S. policy in Cuba imposed a form of "distorted development"(Guevara 1961) through forced economic policies meant to favor U.S. sugar companies' claims to land and cheap labor. The United States supported low-wage sugar production for its own sugar corporations, and suppressed development of Cuban industry in order to promote its own exports to Cuba, and its own economic development. This development policy kept Cuba's working classes in poverty and poor health (Hirschfield 2007, Pérez 2014, Chomsky 2015).

The U.S. only agreed to end its post-war military occupation of Cuba (which lasted from 1898-1902) if the newly formed Cuban Republic signed a constitutional amendment called the Platt Amendment (passed in 1901). The Platt Amendment prevented Cuba from making treaties with other countries, gave the U.S. the right to occupy Cuba with its military at any time that it saw fit, and allowed the U.S. to influence future policy of the Cuban government, with the idea that those policies would privilege U.S. economic interests (De la Torriente 1930). The Platt

Amendment "served to transform the substance of Cuban sovereignty into an extension of the U.S. national system"(Pérez 2014:143).

The Cuban government gave exclusive preferences to U.S. sugar corporations in Cuba. The U.S. controlled the Cuban economy through tariffs. The 1934 reciprocal trade agreement, implemented when Batista took power, lowered the U.S. import tariff on sugar, but raised tariffs on other goods--ensuring that Cuba produced mainly sugar (with the production owned by U.S. corporations), and imported U.S.-produced refined goods (Ortiz, Lecture, University of Havana 2016). This is the "underdevelopment" to which Guevara (1961) refers: a distortion and foreign exploitation of the economy, justified through ideas of progress through economic growth.

U.S. citizens and corporations purchased $50 million worth of Cuban land-- tens of thousands of acres at a time--and by 1905 U.S interests owned 60% of all rural property (15% owned by Spaniards, and 25% by elite Cubans) (Pérez 2014:151). U.S. corporations dominated almost all industries (e.g. sugar--the major industry--and tobacco, mining, railroads, electricity) (*ibid*). The entire economy became even more wholly dependent on one crop: sugar. Workers' employment and well-being depended on sugar price fluctuations due to global events (e.g. WWI, the Great Depression, and WWII), causing periods of massive unemployment and very low wages (Mintz 1964, Guerra y Sanchez 1964, Ortiz, lecture, University of Havana 2016).

The term "Latifundia system" refers to the dominant economic structure of Cuba during the neocolonial period, in which sugar-growing corporations owned large portions of land, employing non-land-owning laborers on a seasonal basis, for low wages (Guerra y Sánchez 1964:86). Up to 40% of all land in Cuba was owned by sugar-growing companies during the neocolonial period. At times during this period, "one-fifth of the farmland [was] engrossed by

one-tenth of one percent of the all farms; and nine of the ten largest estates [were] owned by foreigners"(Mintz 1964:41). These foreigners included U.S. corporations such as the United Fruit Company, whose interests were backed by U.S. political influence on cuban economic policy (Ortiz, lecture, University of Havana 2016).

Although profitable for sugar corporations, the Latifundia system economically harmed Cuban laborers and their families through low wages and high rates of unemployment. Latifundia owners left large swaths of fertile land unused if sugar was not being grown there at the time (Ortiz, lecture, University of Havana 2016). The seasonal nature of sugar harvests left sugar laborers unemployed for seven to nine months at a time (Mintz 1964), and long-term employment depended on volatile U.S. sugar markets (Ortiz, lecture, University of Havana, 2016). Recruitment of Jamaican and Haitian workers during periods of high demand created competition for jobs during economic downturns (Mintz 1964). The anthropologist Sidney Mintz summarizes: "The short harvest season, the concentration of landownership, the discouragement of any sort of diversification or of subsistence cropping, all helped to keep the Cuban economy entangled in a monocrop orientation that systematically underutilized cooperant resources"(Mintz 1964:35).

The historian Ramiro Guerra y Sánchez (1964) also argues that sugar Latifundia limited the growth of other Cuban industries for lack of land, labor, and capital. Low-wage laborers lacked purchasing power to support domestic commerce, and influx of cheaper U.S.-produced refined goods controlled the market (Ortiz, lecture, University of Havana, 2016). Guerra y Sánchez writes that "by supplying sugar at a very low price to the consumer, the producer country [Cuba] becomes an economic fief of a distant metropolis, and its working class lives in

poverty so that the country that dominates and exploits it can live better and more cheaply"(1964:76). The economic and social conditions created by the Latifundia style of capitalism imposed on Cuba during the neocolonial period led to poor health and deep health disparities.

Health in the Neocolonial Era

As many opponents to the Cuban Revolution point out, the United States did begin to develop Cuban health infrastructure during the neocolonial era (Hirschfield 2007:121). During post-war military occupation, the United States instituted ministerial positions for public health in the Cuban government, and promoted biomedical research. Carlos Finlay, a Cuban parasitologist, was the first to discover that mosquitos were a vector for yellow fever, and the first to propose mosquito control as public health measure in the early 20th century. His discoveries helped eradicate yellow fever in Cuba and Panama(Araujo, lecture, University of Havana, 2016). During its occupation of Cuba in the years immediately following the war, the U.S. military implemented water infrastructure and mosquito control systems in Havana (Hirschfield 2007:121-122). U.S. development policy in Cuba set the precedent for government responsibility for public health by establishing public health-related ministerial positions in government (Araujo, lecture, University of Havana, 2016).

However, under neocolonial rule, the state let lopsided markets determine health equity. Medical care was concentrated in cities, and available primarily for the rich. In cities, parallel systems of private and public care divided access, resources, and quality of care unevenly between the rich and the vast majority of the population (*ibid*, Hirschfield 2007). Social and

environmental determinants of health also contributed to class disparities, particularly between rural populations and those living in cities.

In 1953, 2.3% of rural Cuban homes had running water and 54% had no sanitary facilities. 60% of Cubans had "serious nutritional deficiencies" and 80-90% were infected with intestinal parasites, according to the 1950 Mission of the International Bank (Mintz 1964:43). In 1958 there was only one rural hospital in Cuba, with three beds for every 10,000 people in Eastern Cuba. 62% of all hospital beds were in the city of Havana. Of the 6,300 doctors in the country, only 1,103 worked in public hospitals, even though the majority of the population could access only public hospitals (CEDEM 2012:59). There were wide health disparities between rural and urban areas (CEDEM 2012:61).

The political climate of the Republic encouraged rampant corruption and fraud because exploitation of government positions was one of the only ways for Cubans to gain wealth. The government was subject to regime change based on strong-arming of political opponents and elections (Hirschfield 2007:123-4). Hirschfield argues that such a political climate led to periods of government neglect of healthcare and proliferation of infectious diseases such as malaria and typhoid, in cities and rural areas (*ibid*). Health trends under the regime of Jose Batista, who gained and lost power multiple times throughout the 1930s-1950s, were subject to mixed reports showing improvement and decline, and due to political corruption, there is a lack of reliable data during this period. However, political corruption resulting in neglect of basic health infrastructure likely exacerbated health disparities. Increased U.S. foreign investment in Cuba encouraged by Batista--particularly in the form of illegal drugs, casinos, and brothels--also widened class disparities (Hirschfield 2007:188-189, Pérez 2001:235).

"26 de Julio" Revolution

After previous attempts at reform, Fidel Castro and the "26 de Julio" movement (named after the date of the first military action against the Batista regime in 1953) consolidated Revolutionary movements against imperialist-induced "underdevelopment." The movement opposed the Batista regime, which by the 1950s had suspended the Constitution and become a military dictatorship. Batista supported the United States' economic policies in Cuba, and because of this, Castro and the 26 de Julio movement explicitly and repeatedly connected Batista with imperialism, capitalism, and hinderance of Cuban development, with health disparities as a major motivator of Revolution. The movement united Batista opposition among laborers, students, and professionals, including some doctors (Pérez 2014; Ortiz, lecture, University of Havana 2016).

The 1959 Revolution and Health

In 1956, after leaving his birthplace of Argentina, Che Guevara joined Fidel Castro and the "26 de Julio" movement in Mexico, to sail as a soldier and doctor with a small armed force to Cuba on December 2, 1956. That force would overthrow the Batista regime and assume governance of the country on January 1, 1959.

Years earlier, Guevara had developed Marxist-Leninist political stances against imperialism when traveling through Latin America as a newly trained physician. He observed foreign interests exploiting low-wage labor under poor conditions, and hindering economic development in terms of refined good production, skilled labor, and domestic ownership of

production, and saw this exploitation and poverty manifest in the health of his patients (Guevara 1960). He saw rejecting U.S.-imposed capitalism as a necessary struggle for promoting basic needs of the majority of the population. He saw the Cuban Revolution as a transition away from exploitive capitalism and U.S. control, and medicine as contributing to that transition by promoting basic needs of the public (Guevara 1965). His Marxist ideals greatly influenced the guiding philosophy of the Revolution, the Castro government, and the Cuban health system.

Guevara and Fidel Castro termed their ideal direction for Cuba a "Revolution," a transition over time of the sociopolitical status quo of power, from foreign-owned economic oligarchy to the Cuban people, and a transition from U.S-imposed capitalism to self-produced socialism. Castro and his followers emphasized "development" as the central aim of the Revolution, with health as a central component. As cited in the epigraph at the start of this chapter, Guevara refers to "Revolutionary medicine:" the idea that revolution against oppressive influences on health requires embodiment of class struggle in the practice of medicine, and promotion of health equity by the political, economic, and social structures of the country.

While perceived as having its own intrinsic evils (Guevara 1965), capitalism was viewed by Revolutionary leaders as the instrument through which the U.S. dominated and oppressed the Cuban people, through specific political, economic, and class configurations, and in terms of public health (Castro 1975). They viewed health and development as depending not only on Marxist-based class struggle, but on specifically rejecting U.S.-imposed ownership and capitalism, and a discourse of development that differs from dominant neoliberal discourse on development.

After being arrested for the "26 de Julio" movement's initial military action in 1953, Fidel Castro delivered a widely published testimony in court, which was later transcribed into a book entitled *Historia me Absolverá* (History will Absolve Me). In *Historia me Absolverá*, which would be considered a blueprint for the Revolution, Castro laid out the justification for the Revolution and its policy plans. He identified six problems of Cuba at the time, which concerned the detrimental effects of U.S.-imposed capitalism on working classes: (1) foreign ownership of land, (2) lack of diverse industries and importations of refined goods from the U.S., (3) high unemployment, and poor and unequal (4) housing, (5) education, and (6) health. He proposed six policy solutions: (1) redistribution of land to laborers, (2) utilization of all available agricultural land, (3) promotion of industries other than sugar, universal guarantees to provide (4) housing and (5) education, and (6) fighting disease and improving public health (Castro 1975).

Castro's ideology framed market capitalism and imperialism as manifesting in poor health. He blamed the monocrop system and foreign ownership of land for poverty of working classes, and connected this poverty to poor health. He rooted his logic in a discourse of development that would underlay the development philosophies of the Cuban Revolution: that U.S. economic interests had hindered humane and equitable development in Cuba, and, drawing inspiration from Martí, that well-being and true development could be achieved only through self-determination and prioritization of working classes (Castro 1975).

In *Historia me Absolverá*, Castro used parasites as the symbolic mark of "underdevelopment:" they are preventable with modest sanitary infrastructure, associated with

poverty and rural conditions, and provide visceral imagery of misery due to lack of resources. He wrote of rural working classes:

> Only death can liberate one from so much misery. In this respect, however, the State is most helpful - in providing early death for the people. Ninety per cent of the children in the countryside are consumed by parasites which filter through their bare feet from the ground they walk on. Society is moved to compassion when it hears of the kidnapping or murder of one child, but it is indifferent to the mass murder of so many thousands of children who die every year from lack of facilities, agonizing with pain. Their innocent eyes, death already shining in them, seem to look into some vague infinity as if entreating forgiveness for human selfishness, as if asking God to stay His wrath. And when the head of a family works only four months a year, with what can he purchase clothing and medicine for his children? They will grow up with rickets, with not a single good tooth in their mouths by the time they reach thirty; they will have heard ten million speeches and will finally die of misery and deception. Public hospitals, which are always full, accept only patients recommended by some powerful politician who, in return, demands the votes of the unfortunate one and his family so that Cuba may continue forever in the same or worse condition. (Castro 1975)

Here, Castro dramatically related the problems of monoproduction, inequality, and lack of infrastructure to health, emphasizing the effects on children and working and rural classes, and portraying capitalist forces as manifesting in poor health. He pointed out that because many families' earners worked "only four months a year"--due to the seasonality of the sugar harvest, and the capitalist pressures for a monocrop system--they could not afford medical treatment. He referenced the exacerbation of health disparities by Cuba's dual public and private healthcare systems. He portrayed parasitic disease as a consequence of exploitation and neglect, with healing as both a motivating reason and a powerful symbolic justification for the Revolution. Castro's focus on the negative health consequences of global capitalism deviates from a dominant development philosophy which promotes integration into a global market economy.

Economically, Cuba in the neocolonial period resembled much of the Caribbean and Latin America in the 21st century, in terms of foreign ownership of the economic means of

production, shortages and vast inequalities in basic needs, and public health disparities (Farmer and Castro 2004, UNICEF 2016). Farmer and Castro (2004) (Professor Arachu Castro, not Fidel Castro) compare the economic and public health development of Cuba and Haiti. They argue that Cuba's anti-neoliberal revolution has protected it from the economic inequalities experienced by Haiti, and from state-imposed logics of "cost-effective care" or "appropriate technology" that justify holding back public health resources from low-income populations based on the idea that healthcare for the poor is economically inefficient or not conducive to economic growth. Cuba's resistance to the political, economic, and social structures imposed by imperialism on Latin America has enabled the Cuban government to provide public health resources based on the needs of the population, as opposed to the ends of market efficiency and growth.

Some scholars argue that the Castro government dedicated resources to public health as a way to spite the United States and a Western hegemony of neoliberalism in the Americas, and to symbolically demonstrate the power and benevolence of the Castro regime (Feinsilver 1993). However, health as a human right, and solidarity with exploited and neglected populations, also constituted intrinsic goals of the Revolution and those who took over the government (Castro and Guevara 1960, Guevara 1965, Castro 1975, Chomsky 2015). Revolutionary leaders saw the health system as anti-imperialist because they associated inequality and underdevelopment with imperialist economic exploitation. The "anti-imperialist" symbolism of Cuba's healthcare system and foreign aid grew out of a prioritization of providing basic needs for all, over the preservation of market productivity and corporate interests. The government's stance against

concrete and philosophical problems of neoliberal and neocolonial influence in Cuba manifested in the socialist structure of the healthcare system.

Development and Structure of the Healthcare System

Professor Ricardo Torres Pérez, an economist at the Center for Cuban economic studies of the University of Havana, characterized the economic policies of Cuba during the early years of the Revolution as "economic idealism," or a deliberate restructuring of the economy and society based on state responsibility for equity and national self-determination (Pérez, lecture, University of Havana, 2016). The philosophy of the Revolution has shaped economic and political structures in ways that maximize the state's ability to promote public health and health equity.

Like most other sectors in Cuba, the health system is driven by the philosophy of the Revolution. More than any other Revolutionary project, the health system is held up by leaders of the Revolution as a manifestation and furtherance of Revolutionary ideology. This ideology emphasizes constant struggle to promote equity and self-determination in the face of powerful global capitalist and neoliberal influences. The transformations of Cuba's health system during the Revolution exemplify and represent the Revolutionary narrative of transition from the "distorted development" of imposed capitalism towards an equitable and self-determined development of the socialist Revolution.

It is generally recognized in Cuba that there are major problems and deficiencies in the Cuban healthcare system. These include technological deficiencies, as well as health inequalities based on race, gender, class, and geography (Araujo, lecture, University of Havana 2016), and

between the quality of care made available to Cubans and foreigners (Personal communication 2016). However, aggregate health statistics indicate a high degree of disease prevention, treatment, and health equity, and the structure and development of the health system reflects state prioritization of these successes.

In the first several years of the 1959 Revolution, the Castro government nationalized all private clinics and created the SNS (*Sistéma Nacional de Salu*d, or National Health System), directed by the government agency MINSAP (*Ministerio de Salud Pública*, or Ministry of Public Health). The government charged MINSAP with establishing free and universal biomedical care.

The state took responsibility for promoting public health, adopting a philosophy of public health commonly termed "popular participation," in which state initiatives would be enacted by individuals (Curbelo 2004, Dominguez-Alonso and Zacca 2011). "Popular participation" refers to the community-level organization of activities such as vaccinations, disease screenings, and environmental health projects such as indoor spraying of homes against disease-carrying mosquitoes (De Vos 2005, Pérez et al. 2007). The Cuban government describes the comprehensive public health structure as "decentralized" because responsibility for healthcare delivery and public health is diffused to local levels; however, the national government initiates public directives at high levels of government, with Fidel Castro himself making decisions related to disease prevention campaigns on a day-to-day basis (Feinsilver 1993).

Cuba also exports healthcare in the forms of health workers practicing abroad for foreign aid and for profit, and has trained thousands of foreign doctors in order for them to return to practice medicine in their home countries (Huish and Kirk 2007). Promoting health equity in

Cuba and abroad has been a central project of the Cuban state since the Revolution. Some U.S. scholars argue that Cuba's global health efforts are meant to cultivate global political capital); however, Revolutionary leaders have focused on humanitarianism and solidarity with peoples oppressed by global capitalism as motivators (Feinsilver 1993).

The SNS has operated under economic constraints since 1959. In particular, economic crises and the U.S. embargo have restricted access to health resources, including medical supplies and in a broader sense, money, food, and other material resources related to health. The state has continually improved public health by financially prioritizing healthcare and health equity, a strategy that has been reflected in aggregate indicators of public health that have consistently improved and are comparable to the richest countries in the world.

Rural Health

One of the first acts of the Revolutionary government was to extend medical care to rural populations previously lacking access to medicine. Beneficiaries were mostly families previously dependent on U.S. sugar companies with low, fluctuating wages, periodic unemployment, poor living conditions, and lack of access to healthcare and education; there were high rates of infectious disease (Mintz 1964, CEDEM 2012) and many people in rural areas had never seen a doctor (Ortiz, lecture, University of Havana 2016). As Professor Paula Ortiz of the University of Havana states, the Revolution prioritized populations most in need, in the following order: 1) rural populations, 2) agricultural laborers, 3) industrial laborers, 4) skilled workers, 5) land-owning bourgeoisie (*ibid*). The basic needs of rural, working class Cubans

were the Revolutionary government's first priority. Disease prevention and healthcare were at the top of the list of needs.

Even before the Castro government took power, the guerrilla army provided medical care for Cubans living in rural areas where fighting was taking place (Ortiz, lecture, University of Havana 2016). Consistent with the prioritization of providing access to healthcare in rural areas, the Castro government created the *Servicio Médico Rural* (Rural Health Service) in 1960, even before establishing the SNS and MINSAP. Through the *Servicio Médico Rural*, graduating medical students serve in rural, underserved areas for 1-2 years after graduation. They provide primary care, promote public and environmental health, train health professionals in the area, and assess infrastructure needs. The program dramatically expanded healthcare coverage, improved health of rural populations, and over a period of years, greatly decreased rural-urban health disparities.

To extend access as comprehensively as possible, the government divided Cuba into "municipalities" based on population size and geography. Clinics were established based on population size in order to reach every individual regardless of geography. MINSAP built new clinics, and nationalized all previously private clinics. From 1960 to 1970, through a massive reorganization of resources and through the movement of physicians to the countryside with the Rural Health Service, MINSAP grew the number of rural hospitals and clinics from 1 to 53 (Keck and Reed 2012). The *Servicio Médico Rural* Still exists today, and virtually all Cubans see primary care physicians regularly (Dominguez-Alonso and Zacca 2011, Sánchez 2015).

Compared to other countries in Latin America, Cuba's city-rural health disparity is much lower due to the Rural Health Service, and as will be discussed in sections below, due to

improvements in economic and infrastructural conditions in rural areas (CEDEM 2012:61). By 1970, the largest geographic disparity in infant mortality within Cuba was between La Habana province (33 deaths per thousand births) and the rural Oriente province (44 deaths per live births), and rural-urban disparities in life expectancy were generally 1-2 years (*ibid*). For comparison, Latin America as a whole (excluding Cuba) in 1970 experienced 77 deaths per 1000 live births in urban areas and 224 per 1000 in rural areas (*ibid*). By 2014, the rural-urban disparity had narrowed further; the highest infant mortality rate in any province was 6.2 per thousand live births, and the lowest was 3.0 per thousand live births (La Habana province experienced 4.2 infant deaths per live births) (ONEI 2015). Overall life expectancy increased from 62 to 70 years for males and 66 to 73 for females between 1959 and 1975 (CEDEM 2012), and as of 2015 was 77 for males and 81 for females (WHO 2017).

Cuba's Rural Health Service demonstrates a commitment to providing health for previously neglected populations and reflects a view of "development" in healthcare centered around equitable distribution of medical technology and services.

Organization of Care

The SNS is organized in levels, ranging from local clinics to national public health decision-making bodies (i.e. MINSAP). The hierarchical organization of care is meant to ensure universal coverage, and to allow centralization of public health decision-making with the state, while diffusing responsibility for care to local levels. The structure reflects a recurring Revolutionary theme: that individuals enact state-sponsored public health projects on a

community level, with "no one left abandoned" in terms of access and participation (De Vos 2000, Dominguez-Alonso and Zacca 2011).

Since the Revolution, Cuba has put most emphasis on preventive medicine, family medicine, and primary care, as opposed to medical specialties and acute treatment. Family medicine is frequently deemed the "key" or "cornerstone" of the National Health System. All Cuban physicians are required to complete training in family medicine before specializing further (Sánchez 2015:1105). The goal is to create continuity of care, and diagnose and prevent diseases before they occur to the greater extent possible. Preventive care reduces morbidity and mortality--especially from diseases caused by parasitic infection that tend to afflict populations with limited access to medical care and sanitation resources--and decreases treatment costs (Araujo, lecture, University of Havana 2016).

Since the 1970s, the major institutional unit of the Cuban healthcare system has been the polyclinic. Polyclinics are primary care health facilities that serve municipal regions, with each municipality served by one polyclinic. The role of the polyclinic is not only to provide all non-hospital medical services, but also to take charge of health education, and to address environmental health issues in the communities they serve (Feinsilver 1993, De Vos 2000, Dominguez-Alonso and Zacca 2011). The polyclinic model marks a major difference between market-based healthcare and Cuba's socialized health system: instead of patients seeking hospital-based services when they feel their need justifies the cost, the polyclinic team is responsible for the health of the residents of the community on an ongoing basis.

In addition to establishing polyclinics, in 1984 the Cuban government initiated a family medicine program that extended universal access to teams of family doctors and nurses in all

regions of the country. The program was established in order to enhance the technological approach to medicine--seen by the government as ignoring root social and environmental causes of disease--with a biopsychosocial model of care that takes into account the full context of patients' lives (Labrador and Soberat 2004, Feinsilver 1993:40). In addition to the technological and educational services of the polyclinic, each municipality has a doctor-nurse team living in the area, who are "held responsible for the health outcomes for the people in their catchment areas (Whiteford and Branch 2008:23). Catchment areas typically include about 120 families, or 700 to 800 people (Labrador and Soberat 2004).

The medical teams reside where they practice, and typically have similar salaries as other state-employed Cubans (which is almost everyone) (Campion and Morrisey 2013). Family medicine teams often visit or treat patients in their homes--sometimes leaving their offices to find patients if they have missed an appointment--providing continuity of care and engaging in health issues as they afflict patients in their daily lives (Feinsilver 1993:41). As the anthropologist Sean Brotherton puts it in his ethnography of Cuban medicine, the doctors "integrate [themselves] into people's households"(2012:122), concerning themselves with all aspects of the patients' lives.

Polyclinics and family medicine teams cooperate with government-organized community groups called "Committees in Defense of the Revolution" (CDRs). CDRs coordinate and keep track of screenings and immunizations for community members (Feinsilver 1993:66). CDRs are also responsible for environmental health in their municipalities, providing feedback to provincial levels of governance to determine health resource allocation based on need. CDRs

may enforce particular rules regarding public health; for example, enforcing bans on growing mosquito-attracting plants (Whiteford and Branch 2008:25).

The Cuban system's integration of medical care into communities and the emphasis on primary care marks a major difference from market-based systems, such as in the U.S., where recent decades have seen care increasingly centered around already-sick patients seeking care from medical specialists (Andersen 1995, Cebul et al, 2008, Bodenheimer and Smith 2013). As of 2015, there were 83,698 Cuban physicians in total--13,382 of them family physicians--with a physician-to-population ratio of 1:133 (Sánchez 2015), which is the highest ratio of any nation in the world. For comparison, the United States has a physician-to-population ratio of 1:408 (CIA 2017). These statistics reflect the prevalence of doctors in communities and the prioritization of family medicine and primary care. This also marks a deviation of the Cuban development philosophy, from a neoliberal model of medicine as a market of consumers and providers, to a model of healthcare as a universal social service, more closely related to civic life than economic life. In Cuba, the diffusion of responsibility for care into the community level, and the association of the state with medicine, has also been said to create a sense of discipline associated with health and disease (Brotherton 2012). The biopolitical implications of CDRs in a Foucauldian sense will be discussed in Chapter 3.

Maternal and Child Health

The SNS has placed special emphasis on maternal and child health. Beginning in the 1980s, MINSAP developed specialized clinics for pregnant women and children. Care of

pregnant women, children, and adolescents is extensive, comprehensive and carefully coordinated (Feinsilver 1993:48, De Vos 2000, Whiteford and Branch 2011).

Family doctors visit the the homes of families, combining checkups for newborns with family-based preventive care. As of 1994--during Cuba's most severe economic crisis since the Revolution--"healthy babies under one year have fifteen required doctor visits; children between one and four years old are seen twelve times a year, and children between five and fourteen years old are seen about eleven times a year"(Whiteford and Branch 2008:53-54). Pregnant women receive roughly fifteen prenatal doctor visits, screenings for pregnancy-related complications, and counseling regarding health during pregnancy, as well as the psychological and practical aspects of parenting (e.g. hygiene and breastfeeding) (Feinsilver 1993:48-49). Between 1959 and 1975, infant mortality decreased from 70 to 30 deaths per 1000 births for males, and from 54 to 24 for females. As of 2014, infant mortality was 4.2 per 1000 (ONEI 2015).

Outside observers have argued that Cuba provides an excess of maternal and child care services (i.e.. beyond cost-effective use of limited resources); however, as Feinsilver points out, the prioritization of maternal and child care is a response to resource-limited conditions that put pregnant women and children at increased risk for complications (due to fluctuating access to nutrition and sanitation supplies) and increased need of monitoring. The prioritization of maternal and child care is also a manifestation of the idea that "investment" in the health of children will pay dividends in terms of "greater societal development"(1993:51). It reflects the idea of national development as improvement of health and quality of life on a population level, accomplished through equitable distribution of access to resources such as medical care.

Public health projects/prevention/popular participation

Another defining aspect of the Cuban healthcare system is its emphasis on "popular participation" in disease prevention campaigns. "Popular participation" refers to the integration of public consciousness and health behaviors into promotion of public health. Such a public health strategy involves active participation in health education and decision-making on a community level, and active participation in disease prevention campaigns, including mandatory vaccinations and compliance with sanitation-based initiatives (e.g. indoor spraying of pesticides in homes) (Pérez et al. 2007, Dominguez-Alonso and Zacca 2011, Whiteford and Branch 2011). As discussed above, the integration of CDRs and other community groups in the public health sphere integrates biomedical public health initiatives into the fabric of community life.

The Cuban health specialists Pérez et al. consider popular participation "a dynamic process in which people, through learning and involvement, gain access to and control over health care resources," where "involvement of people is active and based on community initiatives. The evaluation focuses on how people perceive and achieve social change"(2007:665). They point out that the public health apparatus employs community participation not only as a tool to convince the public to engage in health-promoting behaviors, but as a public health philosophy that includes the public in the apparatus itself. In this way, the public health system configures health as a bottom-up project driven by individuals, with the state taking responsibility for providing the necessary resources.

The philosophy of "popular participation" manifests in specific campaigns against disease. For example, suppression of a mosquito-borne disease called dengue fever in the 1970s was made possible through coordination of CDRs to distribute resources and impose sanitation

standards regarding pesticide fumigation, use of mosquito nets, restrictions on growing mosquito-attracting plants, etc. (Hirschfield 2007, Pérez et al. 2007, Brotherton 2012). The anti-dengue campaign also involved educating the public about the ecology and risk factors of dengue, and involving the community in decision-making processes in groups set up by MINSAP in each municipality (Pérez et al. 2007).

Popular participation as a public health strategy reflects an ideology and practice of public health that contrasts with systems based on neoliberal ideologies. Although emphasis is placed on individual behaviors, health outcomes are recognized as resulting from broader social forces and access to resources. Popular participation as a strategy is meant to address social determinants of health by mobilizing communities, instead of holding individuals responsible for their own health outcomes. The Cuban state initiates public health as a project driven by the public as a whole.

Social determinants of health

Striving for public health comprised part of larger campaign to address basic needs deficiencies that underlay the Cuban Revolution. Since the beginning of the Revolution, its ideology recognized public health as connected not only to medical care, but also to social and structural determinants. In *Historia me Absolverá*, Castro wrote that solving problems of inequitable education, employment, and housing for working classes would be forms of disease prevention in themselves (Castro 1975).

Cuba established a National Literacy Campaign in 1960 with a model similar to the Rural Health Service: the program sends recently graduated teachers from cities to teach literacy in

rural areas. In 1961, Cuba created the *Sistema Nacional de Educación* (SNE) in order to reorganize the education system to strive for equitable distribution of education resources, as it created the Sistema Nacional de Salud (SNS) in order to equitably distribute health resources. Cuba provides free and universal education from preschool to high school, and free technical school or university education. As of 2008, Cuba had a 99.96% literacy rate for 15-24 year olds (UNMDG 2010).

The government also established initiatives to provide housing for all citizens: houses and land were redistributed and in some cases built by the new government in order to strive for every Cuban to receive a house with electricity, running water, and basic sanitary infrastructure. In new housing reform laws in 1961, the government diminished rents by 30-50% and outlawed eviction, and by the 1990s most Cubans owned their homes or lived in rent-free public housing (Spiegel and Yassi 2004). As of 2008, 92.4% of Cubans had access to potable water (compared to 2.3% in 1953 (Mintz 1964:43), and 95.8% had access to what the UN terms "improved sanitation" for waste management (UNMDG 2010). While deficiencies in environmental health resources in rural areas persist (21.4% of Cubans lacked access to potable water in 2008), they are decreasing (31% lacked access in 1990) (*ibid)*. The Revolution led to improvements in environmental health for many Cubans and resulted in reduction of infectious disease.

Economic reforms undertaken by the Castro government, including nationalization of previously private corporations, diversification of industry and agriculture, and distribution of land to farmers, have drastically reduced unemployment. The UN estimates that as of 2014 the unemployment rate in Cuba was 2.7% (United Nations 2017). Whereas a high unemployment

rate for working classes before the Revolution contributed to health disparities, the government's emphasis on employment has helped to alleviate those disparities.

The Cuban state has paid special attention to nutrition as a determinant of public health, distributing food through rations in order to target disparities and prioritize areas of special need. Each family receives a booklet containing coupons redeemable for monthly food rations, the contents of which are determined based on an assessment of the family's needs; for example, all children under five receive milk rations (Eppinger 2014). Access to food has been one of the most major problems in Cuba since the Revolution, and rations only cover a fraction of one's diet. However, the government's prioritization of equitable distribution of food prevented scarcities from translating into morbidity and mortality on a massive scale (UNMDG 2010). Famine has occurred in Latin American countries due to economic crises, in systems where structural adjustment policies have imposed restrictions on government intervention into distribution of food (Morley 1995, UNICEF 2016). The Cuban state's attention to social and environmental factors surrounding health, particularly with respect to resource disparities manifesting in health disparities, have resulted in benefits for health equity.

Cuba could not have achieved its successes in public health without attention to socioeconomic factors. Attention to socioeconomic factors influencing health marks a major difference between Cuban strategies and neoliberal strategies for promoting public health, which focus mainly on biotechnology rather than distribution of healthcare, and social or environmental influences on disease.

Adjustment to the "Special Period," blockade

Beginning in 1960s, the U.S. has imposed an "embargo" or "blockade" on Cuba through a series of laws restricting commerce and travel. The embargo was a response to nationalization of U.S.-owned properties in Cuba (most notably, sugar plantations), the movement of the Cuban government towards a socialist/communist model during the Cold War, and Cuba's role in the Cuban Missile Crisis (Pérez, lecture, University of Havana 2016). The blockade meant to pit Cuban people against Castro by limiting access to basic needs; however, Cubans and Americans alike have pointed out that instead, the embargo has given the Castro government a scapegoat, allowing them to blame economic problems on the U.S. and to claim full freedom from imperialism (Schreiber 1973:404).

Not only does the embargo restrict trade between the U.S. and Cuba, but through sanctions on U.S. trade with companies that trade with Cuba, it also restricts commerce between Cuba and the rest of the world. This is why Cubans generally refer to it not as an "embargo"--a policy regarding commerce between two countries--but as a "blockade"--an act meant to deprive Cuba of resources in order to destabilize the Castro government. The UN considers the blockade a human rights violation and a violation of international law. The UN General Assembly annually votes unanimously on the matter, with the exception of Israel and the U.S. itself (Chomsky 2015:74).

The consequences of the embargo on economics and human rights manifest in the medical sector. Cuba faces shortages, high costs, and unavailability of many medications and medical supplies. Especially since the fall of the Soviet Union, many medical goods are patented and produced exclusively by U.S. corporations, and thus unavailable to Cuba, or only available through roundabout routes at exponential cost, and unreliably. Limited supplies include ARV

treatments for HIV, chemotherapy, antibiotics, prosthetics, machines such as MRI for diagnostic imaging, genetic sequencing technology, and even basic supplies such as gloves (Report to United Nations 2014, 2015). While Cuba's emphasis on preventive care may prevent the effects of the embargo from manifesting in aggregate health statistics such as mortality rates or life expectancy, its effects on access to specialized care--and to resources such as food--has undoubtedly affected the health of countless Cubans, particularly during the economic crisis following the fall of the Soviet Union (Torres and Martínez 2013).

During the 1990s, after the fall of the Soviet Union, Cuba lost their major market for agricultural goods, and their source of essential supplies for purchase, such as medicines and biotechnology. This exacerbated the effects of embargo just as the U.S. increased the severity of the embargo (Torres and Martínez 2013). Instead of imposing austerity measures in response to heightened budgetary constraints (as the IMF or World Bank would have enforced were Cuba allowed to be part of those organizations), the Cuban government *increased* public health spending, anticipating higher need due to economic pressures (Feinsilver 1993:4). Life expectancy, infant mortality, HIV/AIDS rates, and other key health indicators continued to improve during the economic crisis of the 1990s. However, the economic crisis still negatively affected health. For example, although maternal/infant mortality rates have consistently declined since 1959, low birth weight has increased during economic crises (particularly in the 1990s after the fall of the Soviet Union) due to food scarcities for pregnant women (Araujo, lecture, University of Havana, 2016).

In the case of the blockade, Cuba's health system is oriented directly against the U.S., which intended to negatively impact the welfare of the Cuban people in order to destabilize the

government. Castro has accused the U.S. of waging "biological war" against the health of the Cuban people through the blockade (and of directly introducing diseases) (Zilinskas 1999). Cuban government discourse configures its prioritization of public health as fighting for the rights of its citizens against the will of the U.S.

It is significant that during a series of decades in which the dominant discourse in public health and development has encouraged scaling back provision of healthcare services in accordance with budgetary constraints (Farmer and Castro 2004), the Cuban state chose to do the opposite during periods of resource scarcities and economic crises, instead increasing preventive care services in anticipation of the health effects of resource scarcities (Araujo, lecture, University of Havana 2016). The Cuban government's public health response to the blockade demonstrates a departure from a development discourse of de-escalating government spending on social services during times of scarcity, an idea which appears often in the policies imposed by development organizations on other Latin American countries (which will be discussed in the following chapter).

Science and technology

Restrictions on Cuban trade have compelled Cuba to pursue a degree of self-sufficiency in the realm of medicine and medical technology. Cuba developed its pharmaceutical industry in part as a response to the blockade's limits on access to foreign medicines and technologies, and also as a way to capitalize on its human capital in the fields of science and medicine (Curbelo 2005). As of 2015, 67% of Cuba's "essential" pharmaceutical products were domestically produced (Sánchez 2015). Cuba's biotechnology industry has grown in recent decades and is

projected to become one of the largest industries in the country in terms of revenue (Arencibia-Jorge et al. 2016). The Cuban biotechnology industry holds over 1200 patents, sells biotechnology products to over 50 countries, and generates hundreds of millions of dollars in revenue (Sánchez 2015:1105).

Pharmaceutical revenues are generally thought to flow towards developed countries which have the resources and capital to sustain a biotechnology industry, selling medicines to "developing" countries with high rates of morbidity and mortality (Geest 1984, Geest et al. 1996). Cuba subverts this global medical order, positioning itself as a "developed" country in terms of biotechnology, even though the structure of its economy--and its history and geography--does not reflect that of traditionally "developed" countries.

Foreign Medical Aid

Cuba also subverts a global medical order by playing a prominent role in global health aid and medical services. Cuba sends doctors to underserved areas in foreign countries as aid (especially countries in Latin America, the Caribbean, and Sub-Saharan Africa). As of 2016, Cuba had over 50,000 health professionals working or providing aid in 67 countries, which, as Gónzalez et al. point out, "is a greater number of health professionals than Médecins Sans Frontières (MSF), The Red Cross and Unicef combined"(González et al. 2016). While many of Cuba's medical missions have been short-term and emergency-oriented, dozens of countries have had Cuban medical assistance as integral parts of their medical establishments (Feinsilver 1992:156, González et al. 2016).

In 1999, the Cuban government also established an internationally-oriented medical school called Escuela Latinoamericana de Medicina (ELAM), which trains thousands of students from resource-poor regions of foreign countries on scholarships each year, with the expectation that the newly trained physicians will return to provide medical services for their communities. ELAM currently has a student body of roughly over 19,000 and has trained over 20,000 foreign physicians from under-resourced communities (Huish and Kirk 2007:84, Sánchez 2015, González et al. 2016).

Time magazine reports that Cuba was "the first nation to dedicate hundreds of health care workers in West Africa" during the ebola outbreak in 2014, sending over 460 doctors and nurses, making it one of the most important sources of support in the effort to fight the disease there (Sifferlin 2014). There have been hundreds of Cuban physicians in Guatemala since 1998, mostly practicing primary care (González et al. 2016). Cuba also offered to send over 1500 medical personnel and 36 tons of emergency medical supplies to New Orleans during Hurricane Katrina--but the offer was turned down (Huish and Kirk 2007:77). Cuban doctors abroad form a substantial portion of the country's total revenue (Pérez, lecture, University of Havana, 2016).

Cuba's role as truly one of the most essential countries in the world of medical aid, and the most important influence in the healthcare systems of many countries, means that it exerts an influence on global health that is hugely disproportionate to its size and economic resources. Feinsilver (1993) terms Cuba a "World Medical Power" due to its advances in science and technology, as well as its role in promoting public health in resource-poor areas in Latin America and Africa. She also argues that Cuba uses its medical resources for diplomatic purposes, creating good will towards the Castro regime through foreign medical aid. Cuba's role in

international health efforts contributes to the perception of the "Cuban health paradox" because Cuba, a country typically termed "underdeveloped" (as will be discussed in the following chapter) usurps the typical geopolitics of aid, in which "developed" countries aid the "developing world."

Cuban Mortality and Disease

Investigating the most common causes of death in a society provides insight into the functioning of the public health system. Cuba's record of fighting infectious disease demonstrates commitment to preventing diseases that most commonly afflict poor and rural populations, efforts which are reflected in the fact that the leading causes of death in Cuba are mostly chronic conditions which are not easily preventable.

Cuba eliminated several infectious diseases for the first time that they had been eliminated in any country, including: "poliomyelitis (1962), neonatal tetanus (1972), diptheria (1979), measles (1993), pertussis (1994), and rubella and mumps (1995)"(Sánchez 2015:1102). As of 2008, HIV incidence was 0.3% for 15-49 year olds, with universal access to treatment (UNMDG 2010, WHO 2015), and in 2015 Cuba announced, with confirmation from the WHO, that it had "virtually eliminated" mother-to-child transmission of HIV and syphilis (Lenzer 2016).

As of 2015, the leading causes of death for Cubans were, in order: ischemic heart disease, stroke, throat and lung cancers, Alzheimer's and other dementias, lower respiratory infections, hypertensive heart disease, chronic obstructive pulmonary disease, diabetes mellitus, prostate cancer, and colon or rectal cancer (WHO 2015). In many Latin American countries, the most

common causes of death are preventable infectious diseases; for instance, in Haiti, the leading causes of death as of 2015 were: stroke, lower respiratory infections, HIV/AIDS, ischemic heart disease, diarrhoeal diseases, diabetes mellitus, interpersonal violence, preterm birth complications, tuberculosis, and birth asphyxia/birth trauma (WHO 2015). Cuba's mortality profile demonstrates that its public health system effectively prevents the most preventable diseases.

The history of Cuban revolutionary movements illustrates long-standing ideological connections in Cuba between self-determination, public health equity, and concepts of "development." The health system established by the Castro government reflects these philosophies. The following chapter will elucidate how Cuba's development ideologies and path differ from those prescribed by dominant development discourse in the late 20th century, resulting in the idea of the "Cuban health paradox."

Chapter 2: The Cuban Health Paradox and Development Economics

"For a visitor from the United States, Cuba is disorienting. American cars are everywhere, but they all date from the 1950s at the latest. Our bank cards, credit cards, and smartphones don't work. Internet access is virtually nonexistent. And the Cuban health care system also seems unreal. There are too many doctors. Everybody has a family physician. Everything is free, totally free -- and not after prior approval or some copay. The whole system seems turned upside down. It is tightly organized, and the first priority is prevention. Although Cuba has limited economic resources, its health care system has solved some problems that ours has not yet managed to address."

-Edward Campion M.D. and Stephen Morrisey, Ph.D. 2013,
"A Different Model -- Medical Care in Cuba"
New England Journal of Medicine

"This book tries to understand the creation and evolution of what many Cubans and non-Cubans alike call the "Cuban jewel"-- its community-based primary health care model -- within the larger context of the contradictions so evident in contemporary Cuba. These very contradictions shape the creation of the jewel and include free access to health care for all Cubans, simultaneous with restricted individual rights of movement, employment, and dissent; extreme economic hardships while committing a relatively large percent of its GNP (gross national product) to public health (7 percent in Cuba, 1.27 percent in Costa Rica, and 0.64 percent in Brazil) (Rajthens and Boutwell 2001:2) and exportation of medical care to countries such as Haiti (for child immunization campaigns), Honduras, and Nicaragua (following natural disasters) at the same time as Cuba is further isolated from many of its global trading partners."

-Linda M. Whiteford and Laurence G. Branch, 2011.
Primary Health Care in Cuba: The Other Revolution, pg. 7

"Cuba has many economic problems, including the inefficiencies of central planning and the long trade embargo with the United States. Yet the country has a thriving public health system that has made its population among the healthiest in the world.

Researchers call it the Cuban Health Paradox. The country's economic isolation has left it poor, but people there live as long as their counterparts in much richer countries. According to data from the World Bank, life expectancy for someone born in Cuba in 2011 was 79 years, just a little longer than that of an infant born in the United States the same year. But the United States economy is more than eight times larger, per person, than Cuba's. Meanwhile, in countries like Iraq and Belarus, where, like Cuba, the economy produces about $6,000 annually per person, the life expectancies are more than eight years shorter.

Cuba stands out in other measures of healthiness. The low percentage of children who die before the age of 5 is similarly unusual, especially in the Americas. For the size of its economy, Cuba does a remarkable job of keeping its children healthy.

'I am often asked why is this poor country so healthy, but you also have to ask

> *why is this healthy country so poor?' said Jerry Spiegel, a professor at the University of British Columbia's School of Population and Public Health, who has studied the Cuban health system for more than 15 years."*
>
> -Margot Sanger-Katz, Dec. 18, 2014
> "Can Cuba Escape Poverty by Stay Healthy?" Subtitle: "Medical Paradox"
> New York Times

This chapter introduces dominant Western discourses related to economic development, geopolitics, and health, analyzes how these discourses contribute to the characterization of Cuban healthcare as "paradoxical" due to its economic and geopolitical status (see the epigraphs for preliminary examples of the discourse of paradox), and ultimately argues that the idea of the "Cuban health paradox" indicates inconsistencies in dominant development discourse that relate health and "development" to neoliberal ideologies and policies.

Perceptions that contribute to the "Cuban health paradox" focus on Cuba's deprioritization of economic growth in favor of equity. Ideologies employed by international financial institutions and the U.S. government, which also pervade public health circles and mainstream media, tend to connect economic growth and the size of a nation's economy with "development," and assume that this development will lead to improvements in public health. These entities tend to see Cuba's success in public health as paradoxical (or ignore it altogether), since the country has experienced erratic economic growth since 1959, has a relatively low GDP, and employs policies--such as nationalizing industry and limiting foreign investment--that prioritize equity over growth.

This chapter points out that the growth-oriented, fiscal responsibility-oriented economic policies that have been imposed on Cuba's Latin American neighbors during international debt crises are based on a neoliberal conception of "development" that serves the interests of

international corporations and creditor nations, with detrimental consequences for health equity in debtor nations; thus, it should come as no surprise that Cuba's rejection of these neoliberal policies in favor of equity-based policies would result in public health successes.

Dominant Development Discourse and Healthcare

The dominant discourse surrounding national development in the U.S--in the field of international development and in popular consciousness--centers around ideas of national progress and growth (Kim et al. 2000). This natural progress model tends to consider industrial capitalism and democracy as end goals, with the most advanced societies characterized by those systems (Friedman 1962, Rostow 1990). These ideas have been put into practice in governmental foreign policy and by international development organizations, such as the International Monetary Fund, World Bank, and the U.S. government. In the late 20th century, development assistance programs enforced by these bodies have instituted free market principles and austerity measures in so-called "developing nations:" generally formerly colonized nations, and producers of primary goods (e.g. sugar) that owe monetary debts to international financial institutions largely controlled by wealthy, former colonial powers that produce refined goods (Gershman and Irwin 2000). The imposed policies of development assistance programs in thr 1980s--typically referred to as "structural adjustment policies" (SAPS)--serve the interests of countries receiving debt payments and multinational corporations that benefit from open market policies.

Debt crises in primary producer countries that arose due to global economic downturns led international financial institutions (IFIs), such as the International Monetary Fund (IMF) and

the World Bank, to impose neoliberal economic policies under the guise of fiscal responsibility and economic freedoms meant to promote growth (Peet 2003). These policies were imposed as conditions of loans from IFIs to governments. Richard Peet analyzes the ideologies and policy influences of the IMF and the World Bank on Latin America in the latter 20th century. He describes the strategy of the IMF and World Bank:

> The idea was that the IMF and the World Bank should join forces to increase the amount of loans available from both institutions and the commercial banks. But loans would be made conditional on 'policy improvements in the macroeconomic framework' under structural adjustment programs (SAPs) - the 'policy improvements' being in line with right-wing notions of the causes of growth (markets, privatization, deregulation of private enterprise, reducing state deficits, and so on)...tax reduction, privatization of state-owned enterprises, reduction of trade barriers and investment liberalization. (2003:89)

Conditional loans became vehicles through which economic liberalization was enforced in so-called "developing" nations, including many in Latin America (*ibid*). SAPs use the same strategy as the Platt Amendment and other U.S. policies in Cuba in the early 20th century: opening markets to foreign control and homogenization in the language of economic freedom and growth. By encouraging growth of export-oriented markets, policies of economic liberalization favor the interests of multinational corporations who own the means of production, at the expense of laborers exploited for low wages. Reducing state deficits and taxes as a way of paying off debts neglect residents' basic needs by limiting government provision of public goods (e.g. healthcare and education). In reference to the opening quotation of this thesis: Guevera (1961) would argue that SAPs hinder "development" by distorting economies towards imperialist interests at the expense of working classes.

Kenneth Rogoff, the IMF Research Director in 2003 and a creator and proponent of its development policies, defended accusations of mal-intent against SAPs, and criticism of imposed austerity measures attached to loans, in a paper entitled "The IMF Strikes Back." He writes:

> Critics must understand that governments from developing countries don't seek IMF financial assistance when the sun is shining; they come when they have already run into deep financial difficulties, generally through some combination of bad management and bad luck. Virtually every country with an IMF program over the past 50 years, from Peru in 1954 to South Korea in 1997 to Argentina today, could be described in this fashion. (2003:40)

"Bad management and bad luck" would be criticized by many anthropologists as a misspelling of "a history of imperialist exploitation." Consider the "bad management" of the Cuban regimes during the neocolonial era, as discussed in Chapter 1: leaders such as Jose Batista, who tended to neglect public health concerns, maintained power due to allegiance to U.S. economic interests. Additionally, so-called "developed countries, such as the U.S., accumulate trillions of dollars in debt, but are not asked to undergo structural adjustment.

Rogoff continues: "At its heart, the austerity critique confuses correlation with causation. Blaming the IMF for the reality that every country must confront its budget constraints is like blaming the fund for gravity"(2003:41). The development ideology of SAPs asks "developing countries" to "confront" reality. The idea of reality implies here that if a nation has budgetary constraints, the inevitable world order does not allow the government to provide healthcare for citizens; however, this logic is typically only applied to formerly colonized countries in the Global South. Under this ideology, only through giving up healthcare as a human right (as well as education and other basic needs) can a country introduce enough growth to economically develop. It is important for this thesis that SAPs were instituted with the purported aim of achieving national development for so-called "developing" countries. The idea of the "Cuban

health paradox" stems from Cuba's deliberate divergence from the SAP-prescribed model of development.

Development Discourse and Health

Development models have considered poverty and health to be closely correlated due to conditions of poverty manifesting in morbidity and mortality (Farmer 2004) or explanations connecting poverty to "culture" leading to unhealthy lifestyles (Briggs 2003). Thomas McKeown's research has influenced the field of development economics to generally hold that economic growth leads to improvements in living conditions, which correlates with improvements in health outcomes in populations (McKeown 1962, Szreter 2002). Dominant Western development discourses have considered neoliberal market policies to promote, in the long run, conditions necessary for high standards and living and health. These policies include low regulations on domestic markets and openness to foreign investment (Williamson 1993). This set of neoliberal policies generally applied to so-called "developing" countries is often referred to as the "Washington Consensus"(*ibid*), a testament to the influence of U.S. ideology on dominant development discourse within international development organizations. While the detrimental effects of wealth inequality on health have been widely recognized by the field of international development (Coburn 2000), in practice overall economic growth has been prioritized and considered the ultimate way to sustain population health.

Structural adjustment policies target public health systems, and in the latter half of the 20th century, conditions of receiving aid and loans from Euro-American nations, International Financial Institutions (IFIs), or regional development banks have compelled Latin American

governments to diminish their role in providing healthcare for their residents in favor of privatized systems available to only those who can pay (Pfeifer and Chapman 2010).

The detrimental effects of neoliberal economic policies of "development" on public health have been well-documented in Latin America and the Caribbean, where in many cases GDP has grown, while public health challenges and disparities have increased (Farmer and Bertrand 2000, Kim et al. 2000). These post-colonial countries' experiences philosophically counter neoliberal philosophies and policies whose aims were meant to balance budgets, promote private enterprise and growth, and thereby eventually encourage broad based prosperity. Many Latin American countries experience a high degree of health inequity and deficiencies in public health resources compared to the Global North (UNICEF 2016). Anthropologists who study development argue that labor exploitation by foreign corporations and foreign-imposed austerity measures have largely contributed to global health disparities between Latin America and the Global North (Kim et al. 2000, Keshavjee and Farmer 2014).

Cuba: an Outsider to the Global Development Framework

Due to its particular political history and its relationships with the United States, Cuba is outside the development framework of international financial institutions and development organizations. The Cuban government has chosen to opt out of foreign aid and loans from IFIs, citing their rationale as the neocolonial influence that comes with the strings attached to loans. At the same time, the United States has pressured international development organizations to exclude Cuba in order to disempower the Castro regime (Backer 2006). Although Cuba's GDP, economy, and government lead development analysts to term it a "developing nation," its

outsider status and intentional resistance to globalized neoliberal influence have protected it from pressures to re-corporatize its economy or diminish its government's role in healthcare (De Vos et al. 2006).

Compare line-by-line Emmanuel Wallerstein's summary of The Washington Consensus in comparison to post-Revolution Cuban policies:

> Beginning in the 1970s...the neoliberals...impose[d], via the US Treasury and the International Monetary Fund (IMF), a practical program that came to be known as the 'Washington Consensus.' It demanded that all countries that were not 'developed' institute a program that gave priority to export-oriented growth, while simultaneously opening their borders to direct foreign investment, privatizing state enterprises, reducing their welfare programs, and downsizing their bureaucracies. (2013:6)

After a history of "export-oriented growth" during the neocolonial period, Cuba's 1959 Revolution intentionally rejected the model of foreign corporate investment as the basis for economic growth. Due to the embargo, Cuba's borders have been uniquely closed to direct foreign investment. Cuba nationalized industries instead of privatizing them. As has been discussed, the government dramatically increased the scope of its welfare programs. And, the country is famous for its unwieldy bureaucracy. Cuban policy directly opposes the dominant development discourse and policy that drives international development organizations, and which has influenced much of Latin America.

The Cuban Economy

Since the Revolution, Cuba's macroeconomic growth has been erratic, and its overall economic productivity considered low in comparison to countries of similar size. In the centuries before the Revolution, Cuba had one of the highest GDPs and growth rates of any Latin American country, and was one of the largest export-oriented primary producers on a global

scale, due to the scope of its sugar industry, and later in the neocolonial period, its tourism and nightlife industries (Pérez 2014, Ribiero et al. 2013). Although the war for independence interfered with the Cuban economy, the scale of investment of U.S. sugar companies in Cuba poised its export economy to keep growing due to its capacity for sugar production and tourism industries (Ribeiro et al. 2013).

It is important to note that the widely used general macroeconomic measure of GDP (the value of all goods produced by a country's economy) counts all goods geographically produced within the country, regardless of where the profits end up. This means the profits of U.S. sugar corporations figured into Cuba's GDP and economic growth rate (a measure of GDP change over time), regardless of the low incomes of Cuban laborers who produced the sugar.

Figure 01: PPP GDP per capita (constant 1990 US$)

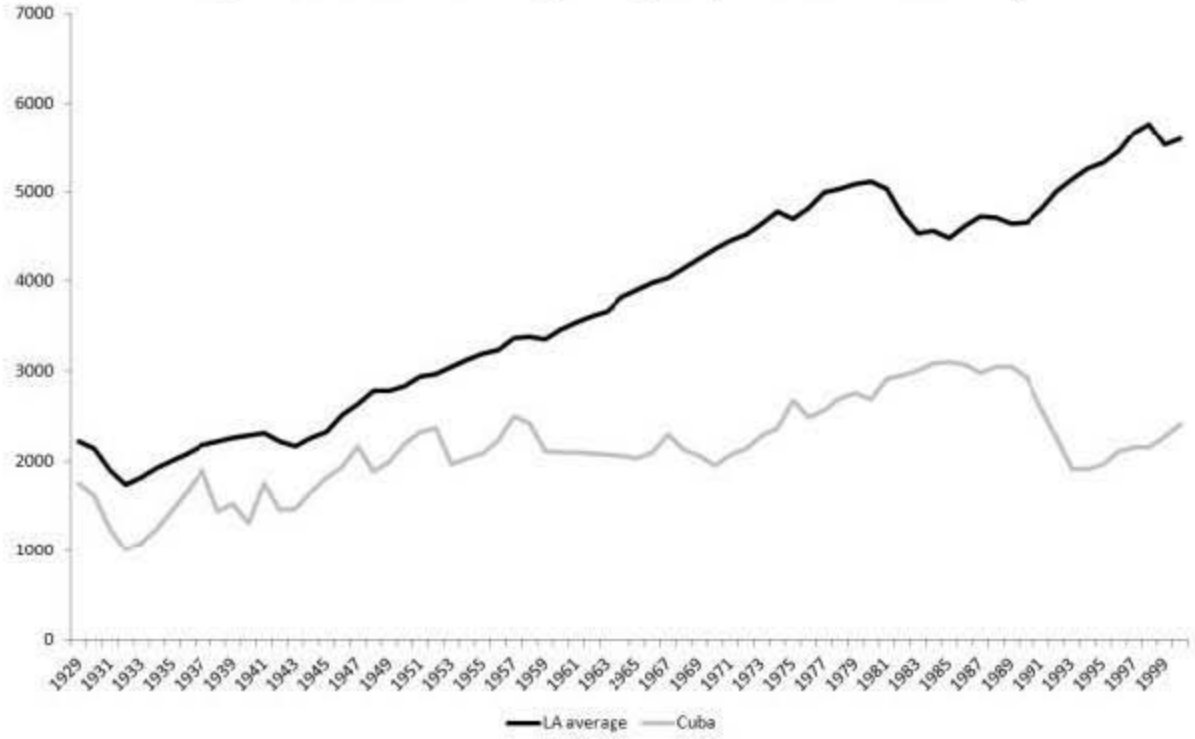


Figure from Ribeiro et al. 2013: This graph compares Cuban economic productivity (GDP per capita) with the Latin American average from 1929 to 1999.

After Cuba nationalized the sugar industry and all other industries within several years of the 1959 Revolution, redistributed land to farmers, and diversified agricultural and industrial production, Cuba's economic growth stagnated, and fluctuated over time. Cuba lost the source of revenue that comprised up to 80% of its GDP: exporting sugar to the United States.

After the fall of the Soviet Union in 1990 (Cuba's principal trading partner after the Revolution), and a concurrent tightening of the embargo which further prevented Cuba from trading with countries other than the U.S. (Torres and Martínez 2013), GDP decreased and Cuba entered an economic crisis. Even though the Revolution improved certain economic indicators such as unemployment, and invested in human capital through education, Cuba's overall macroeconomic status has suffered due to its alienation from the global economy, and both the size and growth rate of its economy have been lower than many other Latin American countries due to lack of direct investment--and land ownership--from multinational agricultural and tourism corporations, and in particular, because Cuba is no longer a producer of primary goods for the United States (Pérez 2014, Ribiero et al. 2013, Smith and Walter 2015).

As discussed in the sections above, dominant development discourse has typically encouraged policies in "developing" countries--countries with low GDP and economic growth that have historically been producers of primary goods for "developed" industrialized countries such as the U.S.--that open markets to foreign investment, and encourage GDP growth. Due to a combination of Cuba's expulsion of U.S. economic interests, and U.S. policies that have cut off Cuba from the global economy, Cuba's macroeconomic indicators have been stagnant and

erratic, leading to a characterization of Cuba as an economically "underdeveloped," poor country.

The Cuban health paradox

Because Cuba defies the path of development prescribed by IFIs and dominant Western development discourse, but has achieved successes in terms of public health and health equity, discourse in U.S. governmental speech, media, and public health literature tends to consider Cuba's development status to be "paradoxical." Whereas Latin American countries with similar economic status in the late 20th century have been subject to structural adjustment programs that have dramatically impacted the public health sector, with negative consequences for public health and health disparities, Cuba's unique political status has altered the course of its health system development. Because Cuba directly opposes global economic and political hegemonies and still (or because of this) has achieved success in terms of aggregate health indicators and is an influential player in global health, it confounds dominant discourse on development. The portrayal of Cuba's healthcare system as paradoxical to development models is instructive about the neoliberal assumptions and limits of development discourse.

It is unusual for a country with low GDP and salaries to have relatively positive health indicators, and to provide medical aid for other countries. In typical development models, "developing" or "underdeveloped" poor and post-colonial countries do not provide aid for other nations; they are thought to receive aid and remain dependent on developed nations (Cardoso 1979, Wallerstein 1987). In addition to Cuba's domestic health achievements, its pivotal role in

health aid in Africa and Latin America complicates its status as an "underdeveloped" nation (Feinsilver 1992).

The U.S. government still criticizes Cuban economic policies for not striving for growth of a foreign-controlled, export-oriented economy. In 2002 a report from the U.S State Department asserted that the Castro government's nationalization of foreign-controlled industry hindered healthy economic developments of the 1950s. The report, entitled "Zenith and Eclipse: A Comparative Look at Socio-Economic Conditions in Pre-Castro Cuba, reads:

> 1950's Cuba was a socially and economically backward country whose development was jump-started by the Castro government. In fact, according to readily available historical data, Cuba was a relatively advanced country in 1958, certainly by Latin American standards and, in some areas, by world standards"(1)...
>
> ...Food shortages are a function of an inefficient collectivized agricultural system -- and a scarcity of foreign exchange resulting from Castro's unwillingness to liberalize Cuba's economy, diversify its export base, and its need to pay off debts owed to its Japanese, European, and Latin American trading partners acquired during the years of abundant Soviet aid(4)....
>
> ...Cuba's enviable productive base during the 1950's was strengthened by sizable inflows of foreign direct investment. As of 1958, the value of U.S. foreign direct investment in Cuba was $861 million, according to United States government figures published in 1959. Adjusting for inflation, those foreign investment number amounts to more than USD3.6 billion in today's dollars(6)

The U.S. State Department here connects a "liberalize[d]" economy, direct foreign investment, and GDP growth with development, and "collectivism" with backwards development. Such logics are widespread in dominant development theory (Chomsky 2015:37). The report asserts that Cuba's post-Revolution de-liberalization policies have led to broad socioeconomic decline. However, the report as a whole hinges on the heavily disputed assertion (see health statistics in Chapter 1) that Cuban healthcare was on a better socioeconomic trajectory before the Revolution, and that the country has lagged behind the rest of Latin

America in terms of socioeconomic (including public health) development. The report reveals how Cuba's unwillingness to align itself with neoliberal development prescriptions--in intersection with anti-communist sentiment during the Cold War (Chomsky 2015:55)--causes dominant voices in the international development community to struggle ideologically with Cuba's successes in public health.

"Cuban Health paradox" and poverty in public health literature

Public health literature outside of Cuba tends to consider Cuba as an outlier that confounds assumptions of the health-wealth relationship, labeling this phenomenon the "Cuban Health Paradox."

In 2004, Jerry Spiegel and Annalee Yassi of the University of British Columbia Division of Public Health published an influential article entitled "Lessons from the Margin of Globalization: Appreciating the Cuban Health Paradox." They preface their paper with acknowledgement of "wide recognition" of the paradoxical nature of Cuban health due to a contradiction between Cuba's economic status and public health status. They explain that during the economic crisis of the 1990s, coinciding with the collapse of the Soviet Union, Cuba maintained high universal standards of public health, whereas other Latin American countries experienced increases in wealth and health inequity due to structural adjustment programs meant to stimulate economic growth with little regard for equity. They refer to Cuba as a "natural experiment"(2004:85) due to its "exclusion from the mainstream of 'globalization'"(*ibid*) and from neoliberal economic policies. They conclude that the "paradoxical" nature of Cuban public health calls into question the idea that "there is no alternative" to neoliberalism. This paper

illustrates how the prevalence of neoliberalism and economic growth as development ideology forms the basis for the deviation of the Cuban model and for the Cuban health paradox.

Robert G. Evans, also of the University of British Columbia, wrote an article in 2008 entitled "Thomas McKeown, meet Fidel Castro: Physicians, Population Health, and the Cuban Paradox." Like Spiegel and Yassi, he introduces the "Cuban paradox:" that "Cuba has achieved 'first world' population health status despite a minimal economic base"(2008:21). He refers to Cuba as a "black swan … [that] suffices conclusively to refute the proposition "all swans are white"(2008:24). Evans refers to Thomas McKeown's theory that economic conditions, as opposed to healthcare infrastructure, determine health outcomes, and presents Cuba as a counterexample. He points to political will, and Cuba's attention to both socioeconomic determinants of health and access to healthcare, as the driving factors of the observed "paradox." This article, too, portrays Cuba as an anomaly to a generally accepted pattern that economic growth and productivity lead to improvements in public health.

In 2006, Richard S. Cooper et al. of Loyola University Medical School published an article in the International Journal of Epidemiology entitled "Health in Cuba." Like his academic peers, Cooper acknowledges the status of Cuban health care as an "enigma"(2006:817) or an "alternative example where modest infrastructure investments combined with a well-developed public health strategy have generated health status measures comparable with those of industrialized countries"(*ibid).* He points out that Cuba does not "conform to the expected relationship" of health and "economic productivity"(2006:818). His concluding argument is that the public health community, as well as countries in similar economic circumstances, could learn from the Cuban government's comprehensive, holistic approach to

health. This paper evokes the idea of paradox without actually mentioning the word, by pointing out Cuba's incongruity with norms taken as natural in development discourse.

These articles reflect the manifestation of development discourse in the public health field. That public health professionals, who are trained to evaluate and develop policy strategies for promoting public health, consider Cuba's economic status paradoxical to its health status, suggests that the dominant models of development and health tend not to fully account for the case of direct opposition to neoliberalism. The main conclusions of these papers are that Cuba represents an anomalous alternative example, and that other developing countries could take a "lesson" from its example. However, the idea of the lesson usually stops there--the idea of the lesson--and the reader comes away from the paper with the notion that Cuba breaks a still generally trustworthy correlation of economic growth with public health.

"Cuban Health Paradox" and Poverty in Mainstream Media:

In addition to public health literature, popular media in the U.S. has also emphasized the idea that Cuban healthcare is paradoxical. A 2014 article in the New York Times entitled "Can Cuba Escape Poverty but Stay Healthy?" (subtitled "Medical Paradox") highlights the apparent confusion surrounding Cuba's economic status and public health. The story draws from relevant public health literature and an interview with Jerry Spiegel, the author of a paper discussed above. It echoes sentiments dominant in the public health literature: that "the country's economic isolation has left it poor, but people there live as long as their counterparts in much richer countries" and "for the size of its economy, Cuba does a remarkable job of keeping its

children healthy"(Sanger-Katz 2014). The premise of "paradox" underlying the article implies that economic globalization and growth are generally associated with public health.

A similar article published in Yahoo News in 2015 called "The Cuban Health Paradox" asks "How did a country that can't provide soap or bedsheets to its hospitals manage to achieve first-world life expectancies?" and claims that "despite its third-world economy, the country [Cuba] has managed to achieve some first-world health indices"(Interlandi 2015). The first-world vs. third-world comparison has international development ideology at its root because it draws on an imagined hierarchy or categorization of nations based on how advanced or "developed" they are. The perceived paradox stems from a perception of Cuba as an "underdeveloped" country due to the de-liberalization of its economy, yet with public health outcomes similar to so-called "developed" countries.

A 2016 article in The Atlantic called "How Cubans Live as Long as Americans at a Tenth of the Cost: Lessons of Physical Prosperity in a Despotic Regime" mirrors the points of the articles above regarding the contradiction of Cuba's economic status with its public health status. It also emphasizes the efficiency of preventive care as making possible comprehensive healthcare with limited economic resources (Hamblin 2016). The article demonstrates that even when Cuba's public health successes are explained through arguments about the efficiency of preventive care and the importance of political will, the successes are still considered paradoxical. This reflects Cuba's general global image as "underdeveloped," and public health as associated with dominant neoliberal standards of development.

Mainstream media follows public health literature and dominant development discourse in characterizing Cuban healthcare as contradictory to its economic status. Mainstream media

also draw similar conclusions: that Cuban healthcare represents a counterpoint to the idea of the economic growth-health correlation pervasive in dominant development discourse. The configuration of Cuba as an outlier or aberration reveals the strength of neoliberalism in the dominant generalizable development model that pervades popular consciousness.

"Cuban Health Paradox" and Economics in Governmental Speech

On March 22, 2016, Barack Obama became the first U.S. president to visit Cuba since Calvin Coolidge, and gave a speech outlining issues relevant to U.S.-Cuban relations and his vision for the future of Cuba. His speech addressed the Cuban government and economy, and the welfare of the Cuban people.

In the speech, Obama promoted "small business" and "normalize[d] relations" as central to improving the lives of Cuban people, and as beacons of "hope" in a country that otherwise stifles entrepreneurial spirit. "Small business" may be taken as code for open markets, and "normalized relations" code for allowing foreign (U.S. and multinational) businesses to tap into Cuban labor and markets. In the speech, the only positive aspects of the economy he referred to included the small proportion of privately owned businesses, and the future potential for foreign investment in Cuba. Notably absent from his public statement was any mention of the vast majority of the economy that is encapsulated by the public sector (Obama 2016).

President Obama did not directly reference health very often in his speech, but frequently addressed the lives of the Cuban people in general. In this way, he reinforced the notion that the Cuban economy harms welfare because it does not follow free market influences or certain liberal values. He did not directly point out the widely recognized notion of the paradox of

health, but implied it. His silence on the Cuban health system--arguably the most major social project undertaken by the Cuban government--demonstrates that the Cuban health system does not fit the narrative of Cuban depravity which is central to the ideology of U.S. foreign policy towards Cuba.

One of the few direct references to healthcare President Obama made was when he remarked: "We've [U.S. and Cuba] played very different roles in the world. But no one should deny the service that thousands of Cuban doctors have delivered for the poor and suffering"(Obama 2016). This is phrased in a way that implies geopolitical tension or paradox in Cuba's global health efforts. The phrase "no one should deny" implies that Cuba has delivered healthcare to the poor and suffering *despite* playing a different role in the world than the U.S. In contrast to this view, the Cuban government would hold that their opposition to U.S. imperialism has driven their role as a leader in global health.

Explaining The Economic "Cuban Health Paradox"

As discussed above, Cuba's rejection of neoliberal economic policies and exclusion from integration into the global market economy separated it from the public health configurations of other Latin American countries, and on a political level enabled the state to take responsibility for healthcare. During the economic crisis of the 1990s, in contrast to IMF-espoused policies of budgetary responsibility--i.e. cuts to social services--Cuba increased social services, particularly in the arena of public health, to meet the needs of its citizens in a context of growing scarcity.

Cuban healthcare demonstrates that public health can be promoted independently of a business-friendly economy or the instructions of international financial institutions.

Uncontrolled economic growth can limit health, especially for the poor, as evidenced by Cuba's experience before the 1959 Revolution. Aviva Chomsky (2000) refers to the relationship between Cuban healthcare and development discourse as the "threat of a good example." As noted above, the field of international development tends to deal with the "threat" through the characterization of Cuba as paradoxical: a difficult-to-explain outlier to a trend that is overall taken to be true.

However, even if the Cuban government avoids foreign-imposed austerity measures and is committed to providing healthcare to its people and to many others around the world, why does Cuba not follow the economic norms of the inverse poverty-health relationship? In other words, without economic growth, where did the government find the resources to provide healthcare and improve living conditions?

In her book on the politics of Cuban healthcare, the medical sociologist Julie Feinsilver argues that "Cuba's lower per capita expenditure to achieve health indices similar to those of developed countries suggests that health care is not as expensive as one might imagine" (1993:97). She holds that Cuba's unique political commitment to healthcare allowed it to overcome economic obstacles, and that in public health circles, a government's commitment to universal healthcare is undervalued compared to macroeconomic indicators.

Aviva Chomsky (2000) writes that four unique characteristics of the Cuban health system are responsible for Cuba's success in terms of aggregate health outcomes: (1) that the government "understands health to be the responsibility of the state," (2) that the government pays attention to social determinants of health, (3) that there is a high degree of "popular participation" in public health campaigns, and (4) that the government "rejected the idea that

Third World governments must settle for an 'appropriate' level of healthcare, in which cost-effective public health and preventive measures are emphasized"(Chomsky 2000:333). Her explanation of the apparent Cuban health-wealth paradox concerns both the structure of the Cuban healthcare system and the financial prioritization of health: the government's commitment to health equity has structured public health such that it effectively and efficiently reaches more people than in neoliberal societies (Chomsky 2000). As does Chapter 1 of this thesis, Chomsky draws links between prioritization of public health and deeper goals of the Cuban Revolution concerning prioritizing equality over economic growth. Like Feinsilver, she concludes that "excellent....health outcomes are possible *without* major economic "development" as measured by GNP or other standard measures" (2000:333).

In a personal conversation with Professor Rafael Araujo, who studies public health at the Center for Demographic Studies at the University of Havana, he explained to me that "*la voluntad política*," or "political will," is responsible for Cuba's achievements in health despite limited economic resources (personal communication 2016). He pointed out that while healthcare is a question of resources, the availability of those resources to the population of a nation is dependent more on the extent to which a government prioritizes the needs of its people than the extent to which the government promotes an economy of businesses. He gave the example of electrical blackouts in Havana, in which the government chose to divert power supply to hospitals before all other buildings, including government buildings (*ibid*). In conversation with Professor Ibis Arranz, who studies the ideological roots of the Cuban Revolution at the Cuban Institute for Arts, she pointed out that it is unsurprising that healthcare in Cuba is unique: few other societies are based on an ongoing revolution with healthcare and

education for the poor--instead of economic growth--central to the "project" of the government and society (personal communication 2016).

Another dimension of the paradox concerns the effects of economic growth compared to effects of economic equity. The development economist William Easterly finds that economic growth due to structural adjustment policies has tended to benefit poorer individuals less (Easterly 2003). Additionally, it is well-documented that the poor tend to suffer most morbidity and mortality in any country (Farmer 2004). Szreter and Woolcock (2004) find that growth in private markets tends to correlate with income inequality, which is also associated with health disparities. These factors help to explain why the Cuban people could, in the latter half of the 20th century, experience dramatic improvements in aggregate health outcomes (e.g life expectancy and infant mortality) with low or erratic economic growth at the national level. National economic growth on its own does not necessarily promote the health of a national population.

As Castro and Guevara elucidate in their writings, one of the fundamental bases of the Cuban Revolution concerned uncontrolled or "distorted" growth of foreign-owned corporations operating in Cuba (whose profits comprised most of Cuba's GDP and economic growth) whose labor exploitation and monopolization of natural resources resulted in poor health for the majority of Cuba's population. As discussed in Chapter 1, the Revolution's expulsion of foreign monopoly and dismantling of the export-oriented Latifundia system reduced income disparities and health disparities by limiting the economic exploitation of working and rural classes, and by delivering the profits of Cuba's production to the Cuban people instead of U.S. corporations. In this manner, improvements in public health correlated with limiting economic growth, because

the pre-Revolution growth took place in the profits of multinational corporations, at the expense of the welfare of Cuban wage laborers.

In addition to the structural economic effects of foreign monopolization of Cuba, consensus in the field of health economics holds that income inequality, independent of the magnitude of income, has negative effects on public health. Studies have demonstrated negative health effects of increased stress due to forms of social oppression that result from class divisions. Negative health effects of stress manifest in a host of biological morbidities, of which the aggregate health effects are well-documented, but varied and not yet comprehensively catalogued (Mellor and Milyo 2001). Income inequality also magnifies differential access to health resources due to class-based disparities in social capital (Kawachi and Kennedy 1999); for example, in the neocolonial period, Cuba's low-wage laborers typically worked in rural sugar plantations where the state neglected their access to public health services. The income inequality exacerbated by Cuba's growing yet increasingly unequal economy during the neocolonial era likely contributed to health disparities through direct mechanisms of income inequality. This economic history helps to explain the Cuban health paradox: even with erratic growth, Cuba's reduction of income disparities helped to alleviate health disparities and probably improved public health overall.

Shakow and Irwin (2000), in a chapter on development discourse, argue that "our understanding of poverty must pay attention not only to the lack of basic economic resources (including money and food) but also to the lack of social resources, including access to education and health care" (2000:45). The poverty-sickness association holds as far as it concerns access to basic needs that influence health. When Farmer (2004) and others who reference structural

violence elucidate poverty as a driver of illness, they refer to lived experiences of poverty as opposed to economic measures such as salary or GDP. In Cuba, the lived experience of poverty is different than in structurally-adjusted regimes due to a high degree of access to sanitation, healthcare services, and education. Although average income is low, Cuba's robust public service programs allow for a high standard of health. This is not to imply that poverty in Cuba is acceptable, or that it does not have negative effects on health and well-being, but that those effects are mitigated by the prioritization of healthcare and education as human rights.

Despite Cuba's public health successes as reflected in health indicators, the U.S. embargo has greatly harmed public health in Cuba by limiting access to medical and health-related resources (Cuba Report to UN 2014, 2015; Torres and Martínez 2013). This adds to the economic challenges facing Cuba's health system and, the state's goal of providing high-quality, equitable public health services. MINSAP's policy response to the embargo--emphasizing prevention over treatment--demonstrates the importance of preventive services, primary care, and human resources in a health system that prioritizes equity and overall public health.

On the other hand, many Cubans lack access to care for diseases that can be treated in countries without the technological restraints of Cuba--for instance, certain cancers cannot be treated due to patented U.S. technologies that Cuba cannot purchase, and capacities for diagnostic gene sequencing have been limited for the same reason (Cuba Report to UN 2014, 2015). Even though Cuba has seen success in key aggregate health indicators such as life expectancy and infant mortality, access to specialized care has been limited. Limits on high-cost, specialized care contribute to an explanation of how Cuba has achieved public health on a broad scale at low cost.

This chapter examined the "Cuban health paradox" on the axis of economics and concluded that the Cuban example challenges neoliberal development discourse which encourages open markets and foreign investment as the proper development path for "developing countries," and that Cuba's alternative development path allowed for the government's commitment to promoting public health. The next chapter will explore a different dimension of the "Cuban health paradox," which deals less with economics, and more with politics and human rights.

Chapter 3. The "Cuban Health Paradox" and Biopolitics

> *We must review again each of our lives, what we did and thought as doctors, or in any function of public health before the revolution. We must do this with profound critical zeal and arrive finally at the conclusion that almost everything we thought and felt in that past period ought to be deposited in an archive, and a new type of human being created. If each one of us [doctors] expends his maximum effort towards the perfection of that new human type, it will be much easier for the people to create him and let him be the example of the new Cuba...*
>
> *...The principle upon which the fight against disease should be based is the creation of a robust body; but not the creation of a robust body by the artistic work of a doctor upon a weak organism; rather, the creation of a robust body with the work of the whole collectivity, upon the entire social collectivity.*
>
> *Some day, therefore, medicine will have to convert itself into a science that serves to prevent disease and orients the public towards carrying out its medical duties. Medicine should only intervene in cases of extreme urgency, to perform surgery or something else which lies outside the skills of the people of the new society we are creating.*
>
> -Che Guevara
> 1960 Speech to Cuban Militia on Medicine

> *In terms of facilitating community-based participation, these extant groups formed an effective basis for enforcing public health regulations. Following an outbreak of dengue fever (a mosquito-borne disease) for instance, members of the CDR actively helped enforce the ban against growing dracaena (a succulent that provides a breeding ground for the mosquito that carried a dengue pathogen). They did so by going into their neighbor's yards to see if they were complying with the new mosquito control ordinance (Whiteford and Hill 2005). One of the many Cuban paradoxes is that this intrusion (and it was considered an intrusion) was possible because of the commitment to the ideals of the Revolution that exalt the role of the state over individual rights (Guillermoprieto 2001, 2004). These neighborhood extensions of the state became the building blocks of the Cuban PHC model.*
>
> -Whiteford and Branch (2011:25)

In addition to the economic and geopolitical aspects of the Cuban health paradox, another axis concerns human rights and power relations between the state and its citizens, which in the realm of health is often referred to as "biopolitics." The epigraphs above demonstrate

biopolitical aspects of the ideology of development that drives the Cuban healthcare system. Guevara (1960) called for a transformation of society from underdevelopment to development, towards a greater degree of social justice, and for this social transformation to take place through improvement of the health of individual bodies by work done on the "social collectivity." Whiteford and Branch (2008) elucidate how such a philosophy of revolution can turn public health into regulations and medical hegemonies that increase the power of the state over its citizens. Whiteford and Branch, professors of public health and medical anthropology at U.S. universities deem it "paradoxical" for the government to both promote health as a human right and to "exalt the role of the state over individual rights."

Several countries--including Latin American countries, such as Costa Rica and Chile--have similar GDP and economic growth statistics, and similar health indicators as Cuba (Horwitz 1987). However, these countries' healthcare systems are generally not considered paradoxical to the same degree as Cuba. Cuban government policies that limit political freedoms (such as freedom of speech or assembly), and economic freedoms (such as the right to own business, as well as the characterization of the Cuban government as communist) have led Western public health experts, development experts, journalists, and government leaders to consider Cuba's success in the arena of public health to be especially paradoxical.

The same voices that tend to consider Cuba's economic and political status paradoxical to its healthcare system also generally consider Cuba's government to be politically repressive. The perceived paradox does not only concern Cuba as a communist state during the Cold War. It also concerns perceptions about connections between medicine and human rights in general. The "paradox" reveals a tendency for development discourse to erase public health as connected to

state surveillance and control over the behavior of populations. The dominant development discourse against which Cuban healthcare is compared tends to view political freedoms as going hand-in-hand with access to basic needs such as healthcare. The Cuban healthcare model demonstrates how biopolitics are central to national development in terms of public health, and how public health practices can simultaneously promote equity and increase state power over citizens. It also reveals flaws in dominant development discourses that group promotion of population health and political freedoms into a unified development path.

This chapter will examine narratives in Western governments, public health literature, and mass media that concern the "Cuban health paradox" on the axis of social control. Whereas the previous chapter separates sections that discuss Western development discourse and the Cuban experience, and reconciles the discrepancies, this chapter integrates analyses of Cuban and Western discourses on healthcare and development, interpreting both through a theoretical framework of biopolitics, in order to explain the perception of the Cuban health paradox.

Biopolitics and Development

In order to explore the Cuban health paradox as it relates to different conceptions of human rights, this chapter will interpret Cuban healthcare and development using the theoretical lens of biopolitics. This section will introduce biopolitics as it pertains to the concept of development. Michel Foucault coined the idea of biopolitics as a strategy of governments--both liberal and socialized--that shapes populations to the ends of the state, in which the state exerts power through regulation of bodies. Foucault writes that biopolitics concerns

> the emergence of the health and physical well-being of the population in general as one of the essential objectives of political power...Different power apparatuses are called upon to take charge of 'bodies,' not simply so as to exact blood service from them or levy

> dues, but to help and if necessary constrain them to ensure their own good health. The imperative of health: at once the duty of each and the objective of all"(Foucault 1980).

Here Foucault argues that when governments adopt health as a public objective, with the health of the population as a whole as the objective to be measured and achieved (here, Guevara's "creation of a robust body" comes to mind), the state--and through a process of political diffusion, society as a whole--tends to regulate and keep track of bodies. Foucault introduces a metaphor of a "police" of health that enforce, through a host of social mechanisms, hygienic and health practices (*ibid*). Since bodily practices are intertwined with social practices, biology becomes a nexus of social control, through which the state exerts control over individuals.

Briggs (2003) builds on Foucault's theories to show that enforcement of hygiene can stratify populations into classes of citizens based on their health and bodily practices. His study of a major cholera outbreak in Venezuela demonstrates how populations can be politically divided into categories of those perceived as having the ability to comply with hygienic standards and those who cannot, with those political categories enjoying differential access to citizenship rights. Briggs' analysis uncovers another aspect of biopolitics: that homogeneous standards of the body imposed onto a population with differential access to resources can actually result in political inequities based on unequal health statuses.

Biopolitics is intimately related to international development. The anthropologist Susan Greenalgh points out:

> The anthropological work suggests that development is not merely a rise in economic productivity and living standards. It is also a field of power, with its own imagined futures, modernist discourses, governmental institutions and practices, and social effects (e.g., Arce and Long 2000; Cooper and Packard 1997; Escobar 1995; Ferguson 1990; Gupta 1998; Pigg 1992). Development is also a form of government rationality, a logic of state whose object is the population and whose aim is normalization of society in the name of optimizing the health, welfare, and usefulness of the population. (2003:197)

Greenalgh's description of development is clearly reflected in the ideologies and policies of the Cuban Revolution. In her conception, development is a state project, whereby the state pursues objectives based on the shaping of the population. The state and society pursue an "imagined future" through a process of "optimization" and "normalization" of society. Such a process requires exertion of state power in order to mold, as Guevara terms it in the epigraph above, "a new human type." Applied to public health and biopolitics, it becomes clear how a vision of national development based on aggregate health of populations may result in a biopolitics of development that imposes on individual and political rights in order to enforce healthy bodily and environmental practices.

Greenalgh also comments: "the efficacy of population categories emerges with particular force in socialist countries, whose states enjoy exceptional power to reshape social life through their extensive control over the resources and institutions of society"(2003:197). This turns out to be true of Cuba's socialist development strategy: the Castro government "enjoy[ed] exceptional power" due to their unilateral control of all state institutions and influence on the economy, press, education, healthcare system, and all other institutions in Cuba. Political control over individual health and behavior emerged as a major tool of the Cuban government to pursue development-based ends of social and health equity.

In her ethnography of biopolitical control of Inuit populations in Canada, Lisa Stevenson observed a biopolitics of

> care and governance that is primarily concerned with the maintenance of life itself, and is directed at populations rather than individuals… [It] informs not only the way policies concerning the population are enacted, but also how individuals engage with other individuals while adhering to the logic of biopolitics--a logic that treats individuals as members of a population. (2014:3-4)

Here Stevenson describes a state strategy of biopolitics that privileges the health and well-being of populations over that of the individual. In this scenario of biopolitics, public health success is determined by aggregate health statistics. Her idea of biopolitics as a pursuit of "maintenance of life itself" emerged from observations of suicide prevention programs, but is relevant to targeted public health initiatives meant to improve population health as a whole. Biopolitics has to do with population health and life as the ends of the state, with governments shaping the population as the method of achieving those ends. As will be discussed further, Cuban public health practices often reflect a prioritization by the state of population health over individual autonomy.

Development Discourse on Biomedicine and Human Rights

This section will further flesh out discussion of the role of human rights and biopolitics in Western development discourse. Whiteford and Branch propose that the WHO Declaration of Alma-Ata of 1978 and the UN Millennium Development Goals of 2005 are both documents that are illustrative of the international development community's dominant views on healthcare and human rights (2011:37). Published by the UN National Conference on Primary Health Care, the Declaration of Alma-Ata called for national governments to guarantee all people the right to health through a model of community-based primary care that addresses social and economic determinants of health (WHO 1978). It does not directly address the role of democratic governance or political repression in determining health, but defines health in broad terms as "a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity"(*ibid*). The definition of "health" in the declaration leaves open to interpretation whether political freedom is included in the term.

Published by the UN General Assembly in 2000, the Millennium Declaration identifies six universal values that all nations should share, all of which have to do with the ideal course of national development. The values are: Freedom, Equality, Solidarity, Tolerance, Respect for Nature, and Shared Responsibility (UN General Assembly 2000). Under the Freedom value, the declaration reads:

> Men and women have the right to live their lives and raise their children in dignity, free from hunger and from the fear of violence, oppression or injustice. Democratic and participatory governance based on the will of the people best assures these rights. (*ibid*)

And under the Equality value, the Declaration reads: "No individual and no nation must be denied the opportunity to benefit from development. The equal rights and opportunities of women and men must be assured"(*ibid*). The Declaration espouses a freedom-based language of human rights that also prioritizes equity--with equity achieved through "democratic and participatory governance."

Whiteford and Branch (2011) argue that the Cuban state infringes upon political rights implicit in the Alma-Ata and Millennium declarations. Cuba fulfills many aspects of the Declaration of Alma-Ata with its participatory community health model, universal access to integrated primary health care, low levels of preventable disease, and equitable health outcomes. However, its inclusion of "social well-being" in the definition of "health" implies the possibility of connection between health and political freedoms--a connection that is drawn by development discourses that focus on the importance of political liberalism.

Seen through the lens of the Millennium Declaration, the Cuban government seems to excel in some of the Millennium Declaration values (i.e. equity-based values) and fail in others (i.e. the values placed on individual freedoms). In terms of overall development status, Cuban

healthcare is treated as paradoxical, because it excels in certain categories regarding access and equity in terms of aggregate health indicators, yet fails in categories regarding political freedoms. The theoretical framework of biopolitics helps to resolve this seeming discrepancy by interpreting public health practices as the state exercising political power in order to shape populations--the Cuban state exerts political power over its population as a method of promoting public health.

Political Rights in Cuba and Paradox

Volumes could (and have been) written about the subject of political rights in Cuba and the discourse surrounding it. While a comprehensive description of the human rights policies of the Cuban government is beyond the scope of this thesis, it is nevertheless important to point out that the debate surrounding human rights in Cuba extends far beyond the health sector, and that perceptions of human rights in all sectors contribute to the idea of the Cuban health paradox.

Castro framed the Cuban Revolution as liberation of the masses from foreign control. However, this revolutionary shift from foreign control to self-determination did not necessarily prioritize freedom of the individual from state control. Castro framed socioeconomic development, and public health in particular, as elements of freedom from foreign oppression. However, critics often point to limited freedoms in terms of freedom of expression, the ability of the people to influence the state, and the degree to which the state controls citizens' behavior (U.S. Department of State 2015). The Cuban government attempted to optimize society to further the goals of the Revolution by influencing thought and behavior (Guevara 1960). Fidel Castro decreed in a speech to Cuban intellectuals: "within the Revolution, everything goes,

outside of it, nothing"(Castro 1961) referring to the idea that personal freedoms should not be allowed to impede Revolutionary development.

Human rights in Cuba have evolved over time. Consider that during the early years of the Cuban Revolution, in the U.S., Jim Crow Laws were still in effect and the Tuskegee syphilis experiments were underway in the United States (Washington 2006). As human rights in the U.S. have evolved in complex ways over the last half of the century, they have also evolved in Cuba. However, the issue that most concerns this thesis is not a comparison of human rights abuses, or the accuracy of facts from different sources concerning human rights in Cuba, but the discourse surrounding different forms of human rights in Cuba and how they contribute to the "Cuban health paradox," which has generally held that the Cuban state is politically oppressive to its people.

It is instructive to go through the categories in the U.S. State Department's 2015 "Country Report on Human Rights Practices" in Cuba as a window into the notions of rights that figure into the discourse on Cuba. After characterizing Cuba as an "authoritarian regime led by Raul Castro" lacking in free and fair democratic elections, the report summarizes:

> The principal human rights abuses included the abridgement of the ability of citizens to choose their government; the use of government threats, physical assault, intimidation, and violent government-organized counterprotests against peaceful dissent; and harassment and detentions to prevent free expression and peaceful assembly.
>
> The following additional abuses continued: harsh prison conditions; arbitrary, short-term, politically motivated detentions and arrests; selective prosecution; denial of fair trial; and travel restrictions. Authorities interfered with privacy by engaging in pervasive monitoring of private communications. The government did not respect freedom of speech and press, restricted internet access, maintained a monopoly on media outlets, circumscribed academic freedom, and maintained some restrictions on the ability of religious groups to meet and worship. The government refused to recognize independent human rights groups or permit them to function legally. In addition the government continued to prevent workers from forming independent unions and otherwise exercising their labor rights. (2015:1)

The U.S. State Department weighed most heavily rights that involve interactions between citizens and the state, and in particular, the ability for citizens to criticize and influence the state. They particularly focused on government control of information and attempts to shape the ideology of citizens through restrictions on behavior and expression, enforced by law. It is notable that attention was not paid to the types of rights that concern access to basic needs--such as healthcare, education, housing, and employment--which have been the focus of the Cuban government's discourse on human rights.

From the State Department's assessment of human rights, as well as from the speech of Revolutionary leaders, it is clear that in its mission of development, the Cuban government prioritized the success of socioeconomic transformation (Guevara's "new man") over political and economic freedoms. This is evident in the absence of democratic processes, state violence towards dissenters, limits on speech and press, and limits on private ownership of commerce. Such policies contradict standards of development central to U.S. government discourse, which tend to focus on these personal freedoms as part of development. The State Department's failure to mention Cuban healthcare in its assessment of human rights demonstrates an emphasis in the development discourse on rights related to individual freedoms as opposed to those related to basic needs, and reveals an unspoken idea of paradox between the Cuban government's efforts to support healthcare as a human right, and the narrative pushed by the U.S. State Department that the Cuban government violates human rights.

In his speech in Havana, President Obama also implied a paradox between Cuban successes in public health and the political control exerted by the government. He referenced

Cuba's lack of democratic processes and urged Cuba to adopt democracy on the basis that it has been effective for addressing socioeconomic disparities in the U.S. He remarked:

> There are still enormous problems in our society. But democracy is the way that we solve them. That's how we got healthcare for more of our people...that's how we address the inequality that concentrates so much wealth at the top of our society. (Obama 2016)

In this instance, President Obama conflated healthcare access with democratic freedoms. It is ironic that President Obama suggested democracy as a way for nations to expand access to healthcare, because while millions of Americans remain uninsured, Cubans are universally covered. The suggestion imbues a sense of paradox to Cuban healthcare: that Cuba has had success in health equity without democratic governance leads President Obama to not acknowledge this success, as it does not fit into the United States' pro-democracy narrative of development.

Cuban Biopolitics

If biopolitics refers to a state shaping the biology or biology-related practices of its population for political ends, then the biopolitical end of the Cuban state is health equity. As covered in Chapter 1, addressing health disparities by improving the health of rural populations and working classes constituted a central goal of the Revolution. This philosophy carries into modern Cuban policy and rhetoric as well. The state's influence on citizens' behavior operates through the Cuban public health system. The "Cuban health paradox" not only juxtaposes successes in the right to health against failures in political rights, but also sees a paradox where the same public health strategies that promote health as a human right also infringe on political and social rights, and enhance state control over individuals.

As discussed above, biopolitics as a state strategy of development in Cuba entails achievement of socioeconomic goals through power relations between the government and citizens. With population health as the objective, the Cuban state has imposed health-related regulations, and created a political atmosphere of public responsibility for health. This is not inherently antithetical to improving access to health resources and successfully promoting health equity.

To begin with the Cuban study of the health of its population: a 2012 study on population health by the Center for Demographics Studies of the University of Havana (CEDEM) writes:

> The population of Cuba completed, in a rapid manner, a process of transformation in mortality towards the end of the 1980s whose fundamental sign [the word here is 'signo'] was epidemiological homogenization, which had as its essential cause the development and radical transformations experienced by the health sector in the second half of the 20th century...The revolutionary triumph of 1959 marks an important impression that would drive the homogenization of indicators of mortality in the country, and their substantial improvement. (2012:59, my translation)

It becomes implicit in this Cuban government-funded study of demographic and health statistics that "homogenization" of outcomes defines Cuba's public health successes. "Homogenization" of health outcomes across sectors of the population might alternatively be termed "equality;" however, the statistical phrase "homogenization of indicators" centers aggregate health indicators as the measure of successful social transformation. The language of this study is an indicative example of shaping the population as a primary project of the Revolution's public health efforts.

The public health strategy of "popular participation" (discussed in Chapter 1) also factors into Cuban biopolitics. The expectation that individuals comply with hygienic standards and, as Foucault (1980) puts it, "police" their own health--enforced by the surveillance of CDRs and the

literal police (Brotherton 2012)--holds individuals responsible for public health. It reflects that the state objective of promoting health equity tends to prioritize population health over individual autonomy. The Revolutionary narrative phrased by Guevara of public health as the "work of the whole collectivity"(see epigraph), in the context of lawfully enforced public health practices, implies that individuals who do not comply with public health directives oppose the Revolution. However, the biopolitics of Cuba's "popular participation" philosophy differs from the class-stratifying biopolitics described by Briggs (2004) in that the Cuban government generally provides the material resources for the behaviors that it mandates (e.g. vaccinations, fumigation of homes, doctor's appointments). In this way, Cuban public health practices simultaneously promote equity and limit individual autonomy.

Cuba public health practices and biopolitics

Cuba's National Immunization Program, founded in 1962, exemplifies important aspects of Cuban biopolitics. The strategy has been very effective in terms of numbers. Cuba has one of the highest vaccination rates in the world for many preventable diseases, exceeding 99% vaccination rates for many vaccine-preventable diseases. It has eliminated many infectious diseases that are problematic in both rich and poor countries, including diptheria, measles, polio, and tetanus, and has reduced rates of other diseases, such as typhoid and hepatitis B, to very low levels (Reed and Galindo 2007). However, critics argue that the mandatory vaccination policy is coercive and infringes on the right to control one's own body (Feinsilver 1993, Hirschfield 2007, Whiteford and Branch 2011, Brotherton 2012). Hirschfield (2007:215) terms the Cuban health system "militarized," and CDRs "paramilitary" organizations, because of programs like

mandatory vaccination that require citizens to follow orders under a narrative of achieving a public mission, not an individual mission. She writes:

> the militarization of clinical medicine means that there is no concept of patients' rights, and no tradition of informed consent or right to refuse treatment. All of these rights form the cornerstone of medical ethics and clinical practice guidelines in most Western countries. (2007:215)

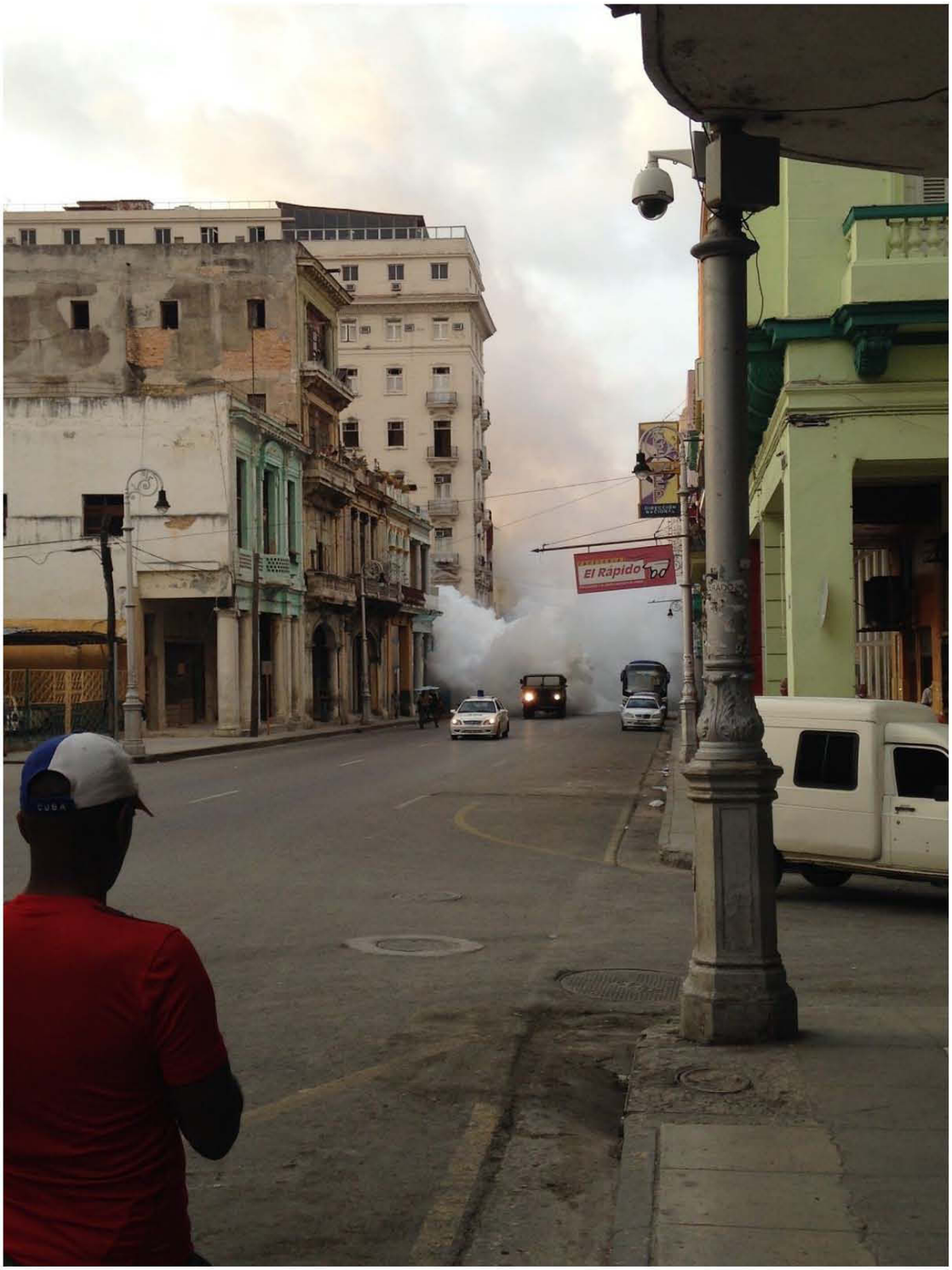
Hirschfield argues that mandatory health initiatives such as the National Immunization Program violate individual rights, drawing from the language of biomedical ethics ("informed consent," "right to refuse treatment"), which also allude to broader political freedoms, such as freedom from the will of the state to infringe upon on individual autonomy (2011:216).

"Militarized" medicine reflects the biopolitics of Cuban public health: in the case of vaccination, where an unvaccinated individual poses a negative externality to the collective, the state enforces, via the law, collective mobilization towards public health over the right of any one individual to dissent. Such a policy helps to reconcile the "paradox" that Cuba's success in health equity coexists with limits to political freedoms.

Another example of a "militarized," or coercive form of public health is Cuba's fumigation program, which consists of mandatory spraying of pesticides outdoors, in public buildings, and in homes. The pesticides eliminate disease-bearing mosquitoes and have been effective in preventing diseases such as dengue, and more recently, Zika (Brotherton 2012, Gorry 2016). Fumigation consists of mask-wearing soldiers spraying harsh-smelling, opaque clouds of gas from trucks or from tanks strapped to their backs, and it is illegal to refuse spraying of one's home if the military brigade responsible for fumigation knocks on one's door (personal observation 2016, Gorry 2016). The anthropologist Sean Brotherton noted in a study published

in 2012 that a soldier knocked on his door in Havana and informed him that "your apartment will be fumigated in fifteen minutes," and asked him to "please remove your sheets and store any open food in the refrigerator"(2012:125). When he refused, he was told "you have no choice in the matter"(2012:125) and that "fumigation is the law"(2012:127).

I had several personal experiences with fumigation while in Cuba as well. While studying in the University of Havana, my History course was cancelled once and cut short several times because the army needed to fumigate the academic building in order to exterminate possible Zika-carrying mosquitoes. Once I was on a busy street in Havana, and a cloud of opaque white fumigation smoke, taking up the entire road, billowed towards me. I hurried into a side street, only to find that the smoke was quickly enveloping this street as well, which was also well-populated. Everybody ducked into bars or restaurants as fast as they could, but not before the smoke completely enveloped us.



A photograph of the fumigation incident described in the paragraph above. April 2016. Photograph by Michael Kaplan.

In the Cuban model, biomedicine is less something one elects to take part in--less of a care-seeking activity--than it is in the market-based U.S. models, or even European socialized healthcare models, where the individual utilizes care services in order to improve his or her individual health. In Cuba, the doctor comes to find you, or the fumigator comes to your house, and it is illegal to refuse. Cuban biopolitics reflect differential philosophies of development between Cuban and dominant Western discourse: Cuban policies indicate a willingness of the state to prioritize the efficacy of public health programs over individual freedom to dissent.

Focus: the Biopolitics of HIV/AIDS in Cuba

Cuba's policies on HIV/AIDS provide perhaps the most illustrative example of this public health ideology. Cuba's HIV/AIDS prevention and treatment program is another example of a public health strategy that promotes statistical health equity while compromising individual autonomy. In 1985 Cuba made HIV blood testing mandatory for everyone who had left the country in the last four years, all blood donors, inpatients, prisoners, pregnant women, and residents of high population-density neighborhoods. Public health officials constructed webs of sexual contact with infected individuals to determine who should be tested. By 1986, the government had constructed sanatoria for HIV treatment--first military barracks, and later in modern housing complexes--where all infected patients were admitted, and could leave for short periods of time only after six months of psychological evaluation, and only with permission (Scheper-Hughes 1993:965).

HIV/AIDS rates have remained low, and Cuba never experienced a major epidemic of HIV, due to its strict prevention and treatment policies. Of those infected, virtually all patients

receive treatment. In 1993 Cuba reported only 927 seropositive individuals, 187 cases of AIDS, and 111 deaths (Scheper Hughes 1993:965). Today Cuba has an HIV prevalence of 0.3% among 15-49 year-olds, with 0.9 annual deaths per 100,000 members of the population (WHO 2015, United Nations 2015) and has completely eliminated mother-to-child transmission (Lenzer 2016).

Scheper-Hughes praises the Cuban health practice of mandatory care and quarantine for HIV/AIDS patients, and draws distinctions between the Cuban model, which prioritized equity over individual rights, and Western/U.S. models, which prioritize individual rights to refuse testing or treatment:

> Individual liberty, privacy, free speech, and free choice are cherished values in any democratic society but they are sometimes evoked to obstruct social policies that favor universal health care, social welfare, and equal opportunity...A strong and humane public health system has just as often protected the lives of socially vulnerable groups as it has violated their personal liberties. (1993:967)

Her points regarding Cuban HIV/AIDS policies and public health philosophies also mirror opposition between Cuban and Western development discourse, with the Cuban state more willing to violate individual freedoms in order to accomplish state goals of equity, and the U.S. prioritizing the autonomy of the individual. She points out, as does Charles Briggs (2004), that neoliberal narratives of individual freedom are complicated by the policy implications of neglecting the welfare of those most afflicted by diseases such as HIV/AIDS.

More Paradox

Pierre Sean Brotherton, a Professor of anthropology at the University of Chicago, engages in what he calls an "ethnography of paradox" to examine Cuban biopolitics. He criticizes arguments that see Cuban healthcare as an example of a better alternative to neoliberal

development policies, arguing that this viewpoint ignores the politically oppressive nature of Cuban public health practices:

> Scholars who argue that Cuba is an "antimodel" for structural adjustment policies "are blinded by what I call a kind of statistical fetishism, a heightened focus on ideological models and measures of health in place of more nuanced accounts of the complex interrelationships among the individual practices of health care professionals and ordinary people, health policies, and state power. (2012:10-11)

Brotherton uses the idea that the Cuban health system is contradictory, in that success in terms of health indicators masks the oppressive nature of treating Cubans as an aggregate population of "docile bodies"(2012:10-11). Brotherton's argument is connected to Stevenson's (2014) conception of a biopolitics through which the state attends to the aggregate health of populations rather than the well-being of individuals. In a Foucauldian sense, Brotherton argues that the Cuban state subjects Cubans to manipulation for the benefit of statistics, as opposed to paying attention to the nuances of individual health needs, or respecting the right to individual autonomy. In his interpretation, it is contradictory to consider Cuban healthcare "successful" for privileging health indicators over people. However, characterization of this Cuban reality as "contradictory" is based on a development ideology that falsely conflates political rights with access to healthcare, and masks the idea that biomedical and public health interventions have the potential to operate through mechanisms of control.

The policies of the Cuban government concerning free speech, assembly, due process, and other political rights exist alongside its public health practices, and do not contradict them. To the contrary, the Cuban state has been able to so thoroughly institute universal public health policies because of its power over institutions--the health system, CDRs, military, and the law--that influence its citizens.

This chapter has demonstrated that the "Cuban health paradox" between public health and limited individual rights is not paradoxical at all. Questions of public health and social control concerns the place of civic freedoms and equity in development ideologies. Development characterized as liberatory by the Cuban state is characterized as oppressive from the dominant Western perspective. Further research should look into the opinions and experiences of the Cuban people (and people in the United States) on the matter.

Conclusion: Looking Towards the Future

Cuba has achieved high levels of public health and health equity despite economic and geopolitical challenges. This success demonstrates that Cuba's economic and geopolitical status are not antithetical to public health, but do oppose neoliberal development discourse.

Cuban healthcare has also been considered paradoxical due to its successes in health equity despite limits on political freedoms. The Cuban example demonstrates that while healthcare and individual autonomy (both terms which are up for interpretation) may both be considered human rights, public health practices that promote the human right to health--in terms of healthcare and in the broader sense of social health--may simultaneously infringe upon individual autonomy.

Implications for economics, development, and health

The idea that public health in Cuba represents a "paradox" due to Cuba's economic policies and economic structure reflects a neoliberal orientation of dominant development discourse, which considers Cuba a difficult-to-explain anomaly because it has rejected dominant prescriptions of foreign-owned economic growth and free markets, yet experienced advances in public health. Cuba is an anomaly in that it has not been subject to structural adjustment policies and has resisted imperialist economic exploitation; but its economic structure is not contrary to public health in any complicated way. The type of economic development experienced by Cuba during the neocolonial period--termed "lopsided development" or "underdevelopment" by Guevara--exacerbated income and health disparities, and left the state neglecting public health

for the majority of the population. Cuba's economic prioritization of equity manifested in health equity and improvements in public health.

Cuba demonstrates an alternative model for promoting public health that opposes foreign investment-driven economic growth. It also demonstrates the importance of a public healthcare structure that is broad-based and integrated with socioeconomic determinants of health, and in particular, those promoting equity in terms of income and education. The Cuban example points out flaws in neoliberal development discourse, and in neoliberal public health strategies that focus narrowly on hospital care and technology.

Implications for human rights and development

The idea of the "Cuban health paradox" is partially built on the notion that the political authoritarianism of the Cuban government is antithetical to its provision of healthcare as a human right. However, Chapter 3 demonstrated that the public health practices undertaken by the Cuban state, which have been effective in improving public health and health equity, are also sites of social control--effective not in spite of, but because of the power of the state to influence the bodily practices, behaviors, and environment of the population. The Revolutionary goal of transforming society towards equity entailed an aggressive strategy--including the codifying of mandatory health practices into law, and even the forced quarantining of diseased patients--that both increased health equity and reduced individual autonomy.

The theoretical lens of biopolitics helps to explain Cuban public health practices as exercises of political power. Cuban biopolitics also reflect a larger history of biopolitics that has been traced by medical anthropologists, who have argued that biomedicine has been constructed based on practices of power (Foucault 1980, Rose 2009, Lock and Nguyen 2010). A detailed

discussion of this history is beyond the scope of this thesis; however, several examples include the oppression of African-Americans in the United States by through subjection to harmful medical practices (Washington 2006), the medicalized discourse utilized by Nazis to justify genocide (Lemke 2011, who cites Giorgio Agamben), and suppression of Palestinian births in Israel (Kanaaneh 2002). This is not to compare the motivations of these particular governments, which are opposites to each other--but to point out that medical and biological discourse and practice has been a tool for governments to shape societies in many different contexts. All of these examples involve a dominant authority intentionally shaping populations through forms of biopower (Foucault 1980).

Towards the Future

Cuban healthcare demonstrates flaws in dominant development discourse. However, the landscape of development discourse is changing: Jim Yong Kim (2000), who criticized development policies of IFIs, is now President of the World Bank.

Cuban development discourse is also shifting. As U.S.-Cuba relations thaw, Cuban politicians, academics, youth, and many others are now considering the material benefits of capitalism (O'Sullivan 2012). Cuban economists, politicians, and laypeople are considering the economic benefits of foreign investment and as the U.S. considers lifting the embargo, Cuba is thinking about welcoming U.S. corporations into Cuba (Torres et al. 2015). A $900 million industrial "free trade and development zone" has been approved for construction near Havana (Frank 2014). The tourism industry has ballooned massively in the past few years. Cuba is in the process of opening domestic markets as well, with more Cubans engaged in legally approved

private business and government-private cooperatives than at any time since the Revolution (Torres, lecture, University of Havana 2016).

In a 1966 essay with the apt title "The Development of Underdevelopment," in which "developed" countries are conceptualized as metropolises and "developing" countries as "satellites," the sociologist and economic historian (and Swarthmore College graduate) Andre Gunder Frank (1966) warns:

> when the metropolis fully recovers from its crisis and re-establishes the trade and investment ties which fully reincorporate the satellites into the system, or when the metropolis expands to incorporate previously isolated regions into the worldwide system, the previous development and industrialization of these regions is choked off or channeled into directions which are not promising. (11-12)

Development strategists should take note of Cuba's unique developmental history when looking towards the Cuba's reincorporation into the "worldwide system." Given Cuba's historical resistance to development paradigms and success in health equity, development strategists should consider, especially, the effects of proposed economic and political changes on public health for the most vulnerable populations.

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