Currents of Change: Water, State and Society in Buenos Aires, 1850-2000

by

Emma Goodstein Class of 2010

A thesis submitted to the faculty of Wesleyan University in partial fulfillment of the requirements for the Degree of Bachelor of Arts with Departmental Honors in History

Acknowledgments

Many people have aided me in putting together this water history of Buenos Aires, and to them I am exceedingly grateful. Without my thesis advisor, Professor Paul Erickson, this thesis would probably not exist. He believed in the importance of my work even when I started to doubt it myself. Both our individual meetings and his Science and the State class helped me take the history of water in Buenos Aires to new and better places. To the staff of the InterLibrary Loan Office I am also incredibly grateful. Wesleyan has an extensive Argentina collection for a North American library, but in order to write my thesis I must have ordered fifty books from ILL. Without the ILL staff, this thesis truly would not exist.

I owe my inspiration for this thesis to several important members of my

Argentine community. Profesor Daniel Mazzei, who first interested me in Argentine
history, encouraged me despite my funny accent, and introduced me to the great
historians of his fascinating country. I owe my interest in Argentine water to Juanita
Fernandez of soup kitchen and community center, La Casita de Juanita, from whom I
first learned of the lack of water in Buenos Aires slums.

Lastly, I must thank my friends and family for their unwavering faith in my ability to write these 130 pages. My father has been a pillar of strength during this process. His critiques were invaluable and his commitment to my project heroic. I am grateful to Bradley Spahn and Sarah Jeffrey for taking time out of their busy schedules to wade through my drafts. My mother and stepfather did the same, for which I owe them tremendously. I also want to thank Julien Burns for experiencing this process

with me and encouraging me with his example. Lastly, I owe everyone who has come into contact with me these past few months (especially Ben Waldron, Liza Goodstein, Allison Quantz and Aurora Margarita-Goldkamp) a debt of gratitude for dealing with me at my most unreasonable moments. This has been an amazing experience, and I could not have done it without their help.

Contents

Introduction	
Issues in the Study of Water	5
Chapter One	
From Water as a Privilege to Water as an Agent of Disease: The	
Globalizing Society of 1850-1900	25
Chapter Two	
Water as a Right: Juan Perón and the Attempt at Universal	
Water Distribution	58
Chapter Three	
The Commoditization of Water: Privatized Water Distribution in 1990s	90
Conclusion	
Towards a New Water Paradigm?	123
Bibliography	128

Introduction

Issues in the Study of Water

In the middle of the city of Buenos Aires, Argentina, on a busy street called Corrientes, sits a massive orange and cream-colored palace. As layered and as baroque as a wedding cake, this elaborate building, called the Palacio de Aguas Corrientes, or the Palace of Running Water, houses the water museum of Buenos Aires. Inside the Palacio are antique toilets, rusting water pipes, and other infrastructure from days gone by. The gaudy drama of the building and the museum it encloses highlight the important role water has played in Argentine history. Built in the late nineteenth century, the monumental exterior meant to house a series of water tanks demonstrates the efforts of the elites ruling at the time to transform Buenos Aires into the "Paris of the South" and create an aura of privilege surrounding running water. Conversely, its current status as a museum encapsulates the drama of privatization of the 1990s: the foreign water company attempted to insert itself into the national narrative by creating the idea of a national water heritage, to which end the company created the museum. The grand attempt at privatization and the ultimate failure of that attempt provoked an international interest in water management and the perceptions of water that are inherent to each management technique. This singular building tells a story of the myriad ways the Argentine state and society used, thought about, and manipulated water in the history of the city.

Buenos Aires offers several unique features that make it ideal for the study of water history. Bounded by two rivers, the Río de la Plata and the Matanza River, or

Riachuelo, and the only major port in the entire country of Argentina, Buenos Aires has always been defined by water. The citizens of Buenos Aires call themselves porteños, people of the port. The capital city of Argentina, and an autonomous federal district, the politics of the city are at once local and national. Thus, the social and political factors of both the city and the nation dictate the water politics of Buenos Aires.

The water history of Buenos Aires highlights the dramatic shifts that can take place in society's view of water. Throughout the last one hundred fifty years, the residents and governments of Buenos Aires have conceived of water variously as a privilege, an agent of epidemic disease, a human right, and a commodity. These different views of water were never mutually exclusive, nor did they reflect the views of every member of society, but they did experience epochs of prevalence in Buenos Aires society. This work attempts to demonstrate not just how these shifts in the perception of water occurred, but their impact on the management of water and effect on the residents of the city. In essence, this work uses water as a lens to view the changes in the Argentine state and society.

The study of water differs from that of any other resource because of water's unique nature and intimate connection to humanity: water is indispensible to human life, irreplaceable because of a lack of substitutes, in constant motion, and often freely available. Its uses vary from consumption to irrigation to transportation to hygiene. Its distinctive character makes water a substance that can be thought of in many different ways. These characteristics also cause difficulty in the governance of water because they make regulating water a quixotic endeavor. In fact, throughout the world today there

exist more than 192 different water law systems. Because of water's amorphous nature, perceptions of water change from society to society, based on contextual social and political factors. This work demonstrates how these changes occur over time in a single location, Buenos Aires.

This work focuses on Buenos Aires because the city has experienced several very clear shifts in the perception of water over the last hundred fifty years. Buenos Aires serves as a microcosm of larger shifts in the perception of water throughout the world. The city is a particularly interesting candidate for case study because of its tumultuous political and social history. The time periods under study here hosted oligarchic, socialist-fascist, and liberal democratic political regimes. The social structure also experienced similar drastic changes. These different modes of governance and changes in social order correspond to a marked difference in the perception and use of water. Conceptions of water and conceptions of the Argentine state constitute and mutually reinforce one another.

The Political and Institutional History of Argentina

Scholars have focused some attention on the institutional history of the water utility in Argentina. Much of the scholarship specifically concerning the history of water in Buenos Aires was undertaken in the 1990s at the behest of the now defunct privately owned water utility, Aguas Argentinas. The large collection of texts completed under the company's Heritage Program includes several series of books, such as Rey's *El*

¹ Joseph W. Dellapenna, Joyeeta Gupta, and ebrary Inc., "The Evolution of the Law and Politics of Water." (Doredrecht: Springer, 2009),

http://link.library.utoronto.ca/eir/EIRdetail.cfm?Resources__ID=877338&T=F. 10.

Saneamiento en el area metropolitana² and Bordi de Ragucci's El agua privada en Buenos Aires 1856-1892.³ The program was designed to conserve the history of water in the city, and extended to more than just texts. As mentioned previously, the program also created the Buenos Aires water history museum.

Other scholars, like Andrés Regalskey and Elena Salerno, have written extensively on the history of the water utility itself in the context of the emergence of state-run utilities. The water utility was one of the very first nationally owned companies in Argentina, and thus has interested scholars who study the history of public enterprises. Regalskey and Salerno argue that the national ownership of key companies, including the water utility, allowed the nascent Argentine state to spread its control over unruly provinces at the end of the nineteenth century. Institutional histories, like Regalskey and Salerno's or those of Aguas Argentinas, concentrate on the changing nature of water infrastructure and policy, but withhold analysis on the social and political implications of water management in Buenos Aires.

The traditional histories of Argentina generally and Buenos Aires more specifically make little mention of the impact of water on the development of the nation and the city. Most of the well-known scholars of Argentine history focus on the political developments of the state in an attempt to explain what is known as the Argentine paradox: why did one of the wealthiest countries at the turn of the twentieth century enter a downward spiral that ended in one of the most brutal military dictatorships of

² Osvaldo Rey, *El Saneamiento En El Area Metropolitana*, 2 vols., vol. 1 (Buenos Aires: Aguas Argentinas, 2002).

³ Olga N. Bordi de Ragucci, *El Agua Privada En Buenos Aires 1856-1892 : Negocio Y Fracaso*, El Libro Argentino (Buenos Aires: Vinciguerra, 1997).

¹ Regalsky, Andrés and Elena Salerno, "En los comienzos de la empresa publica argentina." *Investigaciones de historia economica*, no. 11 (2008).

our time? Much of the scholarship deals with this question by studying one specific time period or regime, like Tulio Halperín Donghi's study of the formative years of the Argentine republic in *Proyecto y construcción de una nación.* Even social history directs its attention towards the influence of the politics on everyday life, as Mariano Ben Plotkin does in *Mañana Es San Perón*, his study of Juan Perón influence on the society of Buenos Aires. The turbulence of Argentine political history explains this trend as well. However, little has been done to relate nature to the political and social history of the country. Water, as an essential historical determinant as demonstrated below, has been under-examined in Argentine history.

Julia Rodriguez's *Civilizing Argentina* provides a major exception to the tendency to ignore scientific history. Rodriguez argues that Argentina's so-called Golden Age of the late nineteenth century was not, in fact, so golden. Instead, the ruling oligarchy depended heavily upon the scientific theories of the day to justify a regime of oppression and unequal distribution of power and wealth, a theme which the first chapter of this work will discuss. Other than Rodriguez's work, no scholar has related political studies to the intellectual history of science, nature, or water in Argentina. As a result, in its framing, this work depends heavily on traditions set in other fields about other regions in a continuation of Rodriguez's historical project.

This work differs substantially in focus from the existing institutional and political histories. Instead of concentrating on the nature of the utility or the history of the state

⁵ Tulio Halperín Donghi, *Proyecto Y Construcción De Una Nación : 1846-1880*, 1. ed., Biblioteca Del Pensamiento Argentino 2 (Buenos Aires: Compañia Editora Espasa Calpe Argentina : Ariel, 1995).

⁶ Mariano Ben Plotkin, *Mañana Es San Perón : A Cultural History of Peron's Argentina*, Latin American Silhouettes (Wilmington, Del.: Scholarly Resources, 2003).

⁷ Julia Rodríguez, *Civilizing Argentina : Science, Medicine, and the Modern State* (Chapel Hill: University of North Carolina Press, 2006).

in isolation, this work will consider the social and political aspects of water consumption and how water, society, and politics intertwined to create a complex reality based upon changing perceptions of water. The following chapters will connect these different facets of Argentine history to create a holistic view of Buenos Aires' past in a way that historians have never attempted.

Water as a Determinant for the Success of Civilizations

Instead of relying on past studies of Argentine history for a framework, this work instead utilizes traditions from diverse fields to provide its structure. One scholarly camp has produced a series of works that attempt to link water to the success or failure of civilizations. George Perkins Marsh instigated the trend when he published *Man and Nature* in 1865. In his book, Marsh connects the downfall of the Roman Empire to man's role in changing his environment. The book delineates the way in which humans affect the environment, and, most importantly, how the environment affects humans. Specifically regarding water, Marsh argues that deforestation and other environmental degradation has caused the desertification of the Mediterranean, which in turn caused the downfall of civilizations like that of Rome. Marsh draws upon geographers such as Alexander von Humboldt to point out that nature affects man as much as man affects nature: "The distribution, outline, and relative position of land and water have influenced the social life and the social progress of man." This

-

⁸ George Perkins Marsh and David Lowenthal, *Man and Nature*, The John Harvard Library (Cambridge: Belknap Press of Harvard University Press, 1965). 8.

with nature on which other scholars would pick up in order to study the relationship of civilizations to water.

One of the first to expand upon water's role in the development of societies was the Marxist Karl Wittfogel in his 1957 work, *Oriental Despotism: A Comparative Study of Total Power*. In it, Wittfogel argues that despotic governments originate in societies with the need for large-scale irrigation systems. Wittfogel gave water a prominent and decisive role in the history, calling despotic regimes, "hydraulic governments." Although Wittfogel received much criticism for his work, he opened up a dialogue about water's place in the history of humankind.⁹

Teric Tvedt and Eva Jacobsson expanded upon water's role in civilization in their introduction to the book *A History of Water*, a compilation of studies of the importance of water to history throughout the world. In their argument, Tvedt and Jacobsson contend that the study of water history is essential to the comprehensive study of general history. Tvedt and Jacobsson argue that, "No city and no country has been able to exist without subjugating water in one form or another to the demands of human society. This universal nature and social fact alone makes water history relevant world history." In addition, they argue, not only is water a universal resource, it has been so throughout history: "Since water control is as old as human society, and water is a universal human resource, water in itself—and societies' relation to it—are

New York: I.B. Tauris;

Distributed in the United States and Canada by Palgrave Macmillan, 2006). ix.

⁸ Karl August Wittfogel, ACLS Humanities E-Book (Organization), and American Council of Learned Societies., "Oriental Despotism a Comparative Study of Total Power." (New Haven: Yale University Press, 1957), http://hdl.handle.net/2027/heb.03224.

¹⁰ Terje Tvedt et al., A History of Water, 3 vols. (London; New York

empirically fascinating and theoretically challenging." In essence, water is a substance with a constant presence throughout human history, which societies have always had to manage and to which they had to relate. The comparison of this management and relation provides insight into both the societies and the study of human interaction with water.

Steven Solomon authored another book concerning the centrality of water to human history, entitled *Water: The Epic Struggle for Wealth, Power and Civilization.*Like Tvedt and Jacobsson, Solomon takes great pains to underline the degree of influence water maintains over the fate of civilizations: "Water has strongly influenced the rise and decline of great powers, foreign relations among states, the nature of prevailing political economic systems, and the essential conditions governing ordinary people's daily lives." Solomon uses examples from irrigation in ancient Mesopotamia to the implementation of a running water infrastructure in Victorian London to explore the relationship of water to civilization, ultimately concluding that a civilization's mastery of the water at its disposal, specifically in its manipulation on a grand scale, controls the fate of that civilization.

These studies of the impact of water on civilization certainly influence the proceeding work, though with a slight alteration in the definition of civilization. The narrow idea that civilizations can fail or succeed limits the amount of change a civilization can undergo. Instead of concentrating on broadly defined civilizations like that of the Roman Empire, the proceeding chapters will examine three completely different but related eras or "civilizations" within the history of Buenos Aires. This

¹¹ Ibid. xi.

¹² Steven Solomon, *Water: The Epic Struggle for Wealth, Power, and Civilization*, 1st ed. (New York, N.Y.: Harper, 2010). 2.

work focuses on the different social milieus, practices, and technologies that emerge throughout the history of the Argentine nation, and how water policy impacts and is impacted by the different historical periods. "Civilizations" thus defined are flexible and adapt and change over time. Changes in the use and availability of water correspond with changes in society, politics, and culture.

In a similar vein, this work draws upon literature in political science concerned with resource conflict. Equally deterministic as the works concerning water and civilization, the scholars of resource conflict have stated that conflict over resources is inevitable because of the new scarcity of resources due to the growing population. This field developed in the mid-1990s as a response to the gap in international security theory left by the end of the Cold War. Robert Kaplan's sensationalist 1994 article, "The Coming Anarchy," proposed consideration of the environment as a national security issue because of the common incidence of conflict over resources around the world, and instigated broad interest in this field. Additional works, like Peluso and Watts' *Violent Environments*" and Klare's *Resource Wars*, sequence for the growing research.

This work follows in the footsteps of these scholars because the changing ideologies of water outlined in the proceeding chapters do indeed cause conflict over the natural resource. However, the prevailing theory of resource conflict states that clashes between different groups arise because of the inherently scarce nature of resources (the Malthusian perspective) rather than conflicting visions of how to use and distribute access to the resources. Instead, this work contends that political and social

¹³ Robert Kaplan, "The Coming Anarchy." *The Atlantic Monthly*, February 1994.

¹¹ Nancy Lee Peluso and Michael Watts, *Violent Environments* (Ithaca: Cornell University Press, 2001).

¹⁵ Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict*, 1st ed. (New York: Metropolitan Books, 2001).

factors influence the way in which groups of people conceive of resources in the first place, and it is these differing perceptions that lead to difficulties. In Argentina, underlying shortages of clean water shifted the understanding of the resource from being an elite privilege, to a public health concern, a human right, and a commodity. These different social perceptions, in turn, shaped the political conflict over access to water.

These scholarly traditions consider water as a determinant for civilization or conflict, but this work postulates that the reality is far more complicated than the simplistic explanations offered by the previously mentioned studies. Although this work draws upon many of the tenets mentioned above, it ultimately questions the role of the nature of water in politics and society in a way that the above-mentioned works have ignored.

Knowledge Dimensions of Water

The field of Science and Technology Studies has contributed insights that are relevant to the study of the changing nature of water in Buenos Aires. Science and Technology Studies examine the place of knowledge in society from a social science perspective. Specifically relevant to this work is Sheila Jasanoff's idea of the coproduction of science and social order, which provides a particularly useful theoretical outline. In *States of Knowledge*, edited by Jasanoff, she and others argue that natural and social orders are produced concurrently. Restated, Jasanoff's central thesis states that perceptions of scientific and natural phenomena are both produced by

and produce the political and social practices of the time. Therefore, considering that water is part of the natural order, water is a subject of coproduction. Instead of the simple reasoning that the mismanagement of water leads to the collapse of civilization, Jasonoff offers a more multifaceted approach for the study of water. This work relies heavily on Jasanoff's theory.

Water historians have sometimes located their work within the context of Science and Technology Studies by utilizing the idea of coproduction to frame their work. Samer Alatout, for example, whose scholarship has focused on the impact of the perception of water on the historical development of Israel and Palestine, emphasizes the connection between the coproduction of natural and social orders and the way people think about water. Alatout has written several important studies concerning water in Israel, key among them, "Bring Abundance into Environmental Politics: Constructing a Zionist Network of Water Abundance, Immigration, and Colonization,"¹⁷ and, "From Water Abundance to Water Scarcity: A 'Fluid' History of Jewish Subjectivity in Historic Palestine and Israel." Alatout claims that, "General insights from STS [Science and Technology Studies], together with particular insights gleaned from researching the culture of water expertise in the Middle East, demonstrate that knowledge about water is necessarily produced within, and shaped by, institutional, political and cultural contexts." Alatout's work provides an excellent template for the proceeding chapters by integrating coproduction with water history.

-

¹⁶Sheila Jasanoff, *States of Knowledge: The Co-Production of Science and Social Order*, International Library of Sociology (London; New York: Routledge, 2004).

¹⁷ Samer Alatout, "Bringing Abundance into Environmental Politics." *Social Studies of Science*, no. 3.

¹⁸ Samer Alatout, "Water Balances in Palestine: Numbers and Political Culture in the Middle East," in David B. Brooks, Ozay Mehmet, and International Development Research Centre (Canada), "Water

The idea of technological systems, included in the field of Science and Technology Studies, also has some bearing on the chapters that follow. Thomas Parke Hughes, in *The Evolution of Large Technological Systems*, claims a technological system is a structure, like the system of water distribution, that includes physical artifacts, like water purification plants; organizations, like the water utility or government regulatory bodies; and legislative artifacts, namely laws concerning the distribution of water. Hughes puts forth the idea that technological systems, like that of water distribution, are both "socially-constructed and society-shaping." This argument plays directly into the overarching tenet of this work: that notions of water, and thus the infrastructure, organizations and laws resulting from that notion, both impact societies and are molded by them.

The varying ways in which societies conceive of water greatly impact their relationship to the substance and subsequently their development as a society. This idea has proved central to the following chapters. Tvedt and Jacobsson's study of water and civilization acknowledge this point: "Control of water is, and always has been, based on cultural constructions of water, whilst at the same time it carries within itself values or ideologies." The cultural constructions, values, and ideologies of water all relate to water's place within society and dictate its impact upon that same society.

This argument, that societies vary in their perception of water and that variation impacts their treatment of the resource, has become a central tenet of many studies of

Balances in the Eastern Mediterranean." (Ottawa [Ont.]: International Development Research Centre,

_

^{2000),} http://link.library.utoronto.ca/eir/EIRdetail.cfm?Resources__ID=599888&T=F. 60.

Thomas Parke Hughes, "The Evolution of Large Technological Systems," in Wiebe E. Bijker et al.,
"The Social Construction of Technological Systems New Directions in the Sociology and History of Technology." (Cambridge, Mass.: MIT Press, 1987),

http://link.library.utoronto.ca/eir/EIRdetail.cfm?Resources__ID=741169&T=F. 50.

Tvedt et al., A History of Water. xx.

the environmental history. Specifically, many histories of the conquest and settlement of the American West rely heavily on water as a determining factor for historical events. The perception of water was first linked to the political successes and failures in the fledgling American West with Samuel P. Hays' Conservation and the Gospel of Efficiency. Havs argues, "In their task of gathering technical data about stream flow, hydrographers of the United States Geological Survey evolved the idea that water is a single resource of many potential uses. This simple reorientation in outlook opened up new vistas of water development. It became the fundamental idea in water conservation."²¹ Hays' argument, that the way people think about water could change and impact historical events, blazed a trail that other environmental historians would follow. After Hays set the precedent, water histories of the American West have become almost ubiquitous. In fact, according to environmental historian Gerald D. Nash, "no history of that newer region [the American West] can afford to ignore the role of water."22 Environmental historians have recently focused on water's relationship to society and its influence on the history of this region.

Studies of the American New Deal, especially those related to the Tennessee Valley Authority, also draw upon the relationship between water—in this case, dam building—and political and social construction. David Ekbladh's "'Mr. TVA': Grass Roots Development, David Lilienthal, and the Rise and Fall of the Tennessee Valley Authority as a Symbol for U.S. Overseas Development, 1933-1973," for example, shows how the U.S. government used dam-building to exert its influence around the

-

²¹ Samuel P. Hays, Conservation and the Gospel of Efficiency; the Progressive Conservation Movement, 1890-1920, [College ed., Atheneum, (New York.: Atheneum, 1972). 6.

²²Gerald D. Nash, "Review: Eden or Armageddon?" *Journal of Forest History* 33, no. 4 (Oct, 1989), http://www.jstor.org/stable/4005157

world. Ekbladh argues that dam-building in the TVA model became synonymous with democracy-building, or at least the prevention of communism.²³ Studies like Ekblahd's concerning the TVA have necessarily utilized ideas like coproduction and technological systems.

Michael Rawson's "The Nature of Water: Reform and the Antebellum Crusade for Municipal Water in Boston" deals with a subject matter parallel to the first chapter of this work. Rawson suggests that urbanization played a major role in the way different classes of Bostonians conceived of water. However, the parallel between Boston and Buenos Aires quickly ends. Although the different classes of both cities did think of water in different ways, the much more rigid social structure of Buenos Aires coupled with the hegemony of the oligarchy created perceptions of water distinct from those created in Boston. A novel characteristic of Rawson's work is that he integrates public health into the historical narrative of water management. A topic often ignored by historians, public health holds a central place in the proceeding work. Rawson's work provides an apt precedent for the following chapters.

This work builds upon earlier efforts to examine the ways in which the idea of the nature of water has changed throughout the history of Buenos Aires, and the ways the perception of water has influenced and been influenced by political and social factors. This synthesis of the ideas the historians of civilizations, political science resource wars, Science and Technology Studies and the environmental historians who

²³ David Ekbladh, "Mr. TVA: 'Grass Roots' Development, David Lilienthal, and the Rise and Fall of the Tennessee Valley Authority as a Symbol for U.S. Overseas Development, 1933-1973." *Diplomatic History* 26 (Summer 2002): 335-374.

²¹ Michael Rawson, "The Nature of Water: Reform and the Antebellum Crusade for Municipal Water in Boston." *Environmental History* 9, no. 3 (July, 2004). http://www.jstor.org/stable/3985767

use theories derived from STS has never been attempted, especially in contrasting different time periods. This work amalgamates these traditions to investigate the history of water in Buenos Aires.

Water, State and Society in Buenos Aires, 1850-2000

In 1852, Buenos Aires was ruled by a small group of oligarchs composed of the country's wealthy landowners. These landowners had always enjoyed access to clean water and the good hygiene such access provided. The lower classes, comprised of an ever-growing mass of immigrant industrial and dock laborers and their families, did not enjoy such a privilege. Instead, the lower classes lived in squalid tenement houses and obtained water from the polluted rivers or from poorly dug wells into which latrine water often seeped. Potable water, then, was one of the privileges enjoyed by the upper class that was not shared with anyone else.

When cholera struck the city in 1866, however, the way in which society valued water began to change. Residents all over the city began to die of the disease regardless of class. Although water had not yet been identified as the source of the disease, a small group of wealthy intellectuals who called themselves *higienistas* argued that the lack of water, which caused unsanitary living conditions of the tenement houses, spread diseases like cholera. The cholera outbreak and the influence of the *higienistas* caused the president to order the establishment of a water utility for the city. However, the prevailing view of water had yet to change because the construction of a network of running water only fed in to the current paradigm of privilege: aiding the upper class goal of the modernization of the city and serving the wealthy neighborhoods first.

Not until the 1880s with the advent of bacteriology and the discovery of the waterborne nature of the cholera bacillus did the perception of water change. Instead of thinking of clean water as a privilege, the residents of Buenos Aires began to think of clean water as a necessity for the prevention of epidemic disease. This change in the water paradigm was crowned by the triumph of *higienista* leadership in the municipal and national governments and the creation of a National Department of Hygiene.

Water began to be viewed as a resource that must be carefully managed to prevent epidemic disease.

In the middle of the twentieth century, another paradigmatic shift occurred. After a failed stint of democracy, and ten years of dictatorship, Argentina experienced the leadership of the charismatic, quasi-dictator General Juan Perón. Due to his leadership, the decades of the 1940s and '50s were a time of great economic and social change. Argentina's economy shifted from agricultural to industrial, resulting in mass migrations from the countryside to the city. Perón capitalized on the increasingly marginalized *descamisados*, as the new industrial working class was called, instigating a sort of socialist reform that, rhetorically at least, gave workers a whole host of new rights. Among those rights were the right to clean, drinkable water for consumption and hygiene.

Perón went about fulfilling this right in several ways. First, he created the Ministry of Public Health, appointing Dr. Ramón Carrillo as its head. The Ministry of Public Health's goal was the eradication of social ills to improve the health of the community. The Ministry espoused the idea of social medicine, a philosophy developed worldwide in the interwar years that emphasized the government's role in

promoting health. By considering the health of the population, rather than its disease, the Ministry targeted dirty water supplies and other root causes of common health problems. According to Carrillo, health was a right of every citizen, and because the lack of water causes ill health, access to potable water became a right as well.

The Peronist regime also concentrated their efforts on improving access to water by improving the housing situation of the working class. The mass migrations to the city had resulted in housing shortages, and the city's slums were overflowing by the time Perón came to power. Slum residents had very limited, if any, access to potable water. To remedy this situation, various government entities built tens of thousands of subsidized housing units throughout the city, sometimes creating whole neighborhoods just for workers. All of the housing constructed was required to have indoor plumbing. In this way, and according to Perón himself, housing became the right of every citizen, and, by extension, water too became a right the people expected the government to fulfill.

Despite Perón's promises concerning clean water, actually implementing his policies proved difficult. The water utility experienced many problems in attempting to expand sufficiently to meet the increased demand caused by the migration of workers to the city. Obras Sanitarias de la Nación, the city's water utility, did not have enough funds to construct the infrastructure it needed to meet the rising demand. A large part of the problem stemmed from the exceedingly low cost of water in the period. Although cheap water was a necessity for the provision of universal access, ironically the low cost prevented the utility from expanding enough to meet the demand for water, thus inhibiting access to clean water.

Perón was not in power long enough to tackle this important setback to his water plan. After a military coup ousted him in 1955, the country returned to military dictatorship and the concept of water as a right became a fond memory of the working class. The dictatorship ignored the water utility, allowing it to fall into disrepair by denying funding for expansion or even maintenance of the infrastructure. Thus, when democracy returned almost thirty years after the changes made by Perón, the time was ripe for yet another change in the water paradigm.

Although the military regime collapsed in 1983, by 1989, the new democratic regime was still working out many issues. Especially problematic was the deep economic recession characterized by rapid inflation. In 1989, when Carlos Menem was elected president, the country was in dire need of change. Menem provided that much needed course correction, perhaps to an excessive degree. Once in power, he instigated a massive privatization scheme to sell off most of the publicly owned companies, including the water utility, to private corporations. Influenced greatly by neoliberal intergovernmental development organizations (IGOs) like the World Bank and the International Monetary Fund, Menem thought that by selling the water utility, he could earn some capital for his struggling country and at the same time earn the good graces of the IGOs. However, by conforming to the World Bank's economic ideals, Menem essentially redefined potable water as a commodity within the Argentine economic system.

The water utility was auctioned off in a relatively non-competitive bidding process to a conglomerate of multinational Fortune 100 corporations. These corporations clearly considered water a tradable commodity, and a very profitable one

at that. The terms of the concession further emphasized the treatment of water as a good. According to the contract the new conglomeration of water corporations, dubbed Aguas Argentinas, could cut services as a response to non-payment. The contract also involved several incentives for the new owners of the water utility, including the guarantee of a large profit margin for the first several years. Despite these incentives, Aguas Argentinas renegotiated the contract twice in order to insure an even higher profit. The very idea that Aguas Argentinas needed regulation implicated Aguas Argentinas in profit-seeking behavior.

The prospect of improvements in state-provided water access continued to stagnate as prices rose and, not surprisingly, opposition to this new paradigm began to build within the Buenos Aires community. Starting in the late '90s, anti-Aguas Argentinas and anti-liberalism articles began to flood the newspapers. In 2001, the Argentine economy crashed, resulting in a catastrophic chaos that many blamed on Menem's neoliberal policies. The growing unrest was further encouraged by the economic crash, and the neoliberal agenda began to fade from the political horizon. The idea of water as a commodity began to lose favor along with the regime that had conceived of it. In 2006, the anti-neoliberal president Nestór Kirchner renationalized the water utility.

Despite the community's opposition to the privatization of the water industry, evidence suggests that perhaps the profit-oriented nature of the water company may have resulted in improvements in water distribution throughout the city. Access to water did increase, although it is not known whether this would have occurred if the water utility had not been privatized. Prices certainly rose. Child mortality, however,

decreased by a significant percentage in the areas most impacted by the expanded network of connections.

The effort to define the nature of water has come to the forefront of politics in modern times in order to regulate this resource in the international sphere, but the water management struggle is not a new one, as the proceeding chapters will demonstrate. The treatment of water depends on a myriad of social and political factors that change as history progresses and create differing ideas concerning the nature of water. The study of this history requires the acknowledgement of the centrality of water to history, as provided by scholars like Solomon and Kaplan. Yet to create a nuanced view of history viewed through the lens of water, this work relies on the scholars of Science and Technology Studies who have explored the interrelations between scientific knowledge (in this case, knowledge about water), politics, and society. With this framework in mind, this work will demonstrate that perceptions of water were both created by and exert influence upon the politics and society of Buenos Aires.

Chapter One

From Water as a Privilege to Water as an Agent of Disease: The Globalizing Society of 1850-1900

Between 1850 and 1900, events conspired to turn the Argentine worldview upside down. The country transformed from a small group of wealthy landowners of Spanish descent and their employees to a populous, urbanized nation with an international population. As the Argentine society changed, so too did its perception of water. Around the middle of the century, the landowning elite of Buenos Aires considered clean water a privilege of their wealth, one to be kept from the rapidly increasing mass of lower class, "racially inferior" immigrants who had begun to crowd the city. While this elite class did provide limited support for the construction of a public water system as part of a project to remake Buenos Aires as "the Paris of the South," the goal of the water system was not public access, but rather the modernization and beautification of the city.

A parallel perception of water emerged among certain members of the wealthy elite who began to consider water an agent of disease from which the city must be protected. This new paradigm prompted these so-called *higienistas* to campaign for the improved sanitation of the city in order to improve the Argentine race and safeguard the health of the city. A series of epidemics increased the role of the state in the distribution of water to the populace. However, not until the 1880s, with the advent of bacteriology, germ theory, and the discovery of the waterborne nature of many

diseases, did the *higienistas* win the public opinion battle and the perception of water change to that of a potential agent of disease.

The Construction and Characteristics of the Argentine State

Although Argentina gained its independence from Spain in 1810, the state did not become consolidated until the raging of the civil wars between the city of Buenos Aires and the provinces ceased in 1880. Although a constitution was written in 1852, and in 1862 Buenos Aires joined the rest of the provinces in a shaky confederation, Argentina did not have a unified government until 1880 when General Julio A. Roca assumed the presidency.²⁵ Roca and his compatriots formed the so-called Generation of '80 that created a real sense of unified nationhood in Argentina for the first time.²⁶

Despite the absence of a consolidated government throughout the country, the city of Buenos Aires enjoyed a relatively stable government almost since its independence. Beginning in 1852, the wars left the city itself alone, and with the downfall of the quasi-dictator Rosas in that same year, the city was able to flourish and develop a system of governance. As the only important port in the whole of Argentina, resulting in its status as the only city of consequence before the turn of the nineteenth century, the politics of Buenos Aires dominated the country. Its progress during the latter half of the nineteenth century set the tone for the rest of the developing country.

A small group of landowning elites dominated Argentine society. Made rich by the exportation of grains, and then, toward the turn of the century, frozen beef, mainly to Great Britain, the elites had a stranglehold on all aspects of Argentine life—

²⁵ Douglas W. Richmond, Carlos Pellegrini and the Crisis of the Argentine Elites, 1880-1916 (New York: Praeger, 1989). 2.

²⁶ Ibid. 8.

economic, political, and social. Although their land was concentrated in the *pampa húmeda*, the fertile grassland that surrounded Buenos Aires, the elites themselves were found mostly in that growing metropolitan city.

These same elites controlled the political life of the country. Although ostensibly a representative democratic republic, Argentina functioned more as an oligarchy because few were allowed to vote and the elections were often rife with fraud. The President held executive power, and a Senate and Chamber of Deputies, elected directly by each province and the City of Buenos Aires, shared the legislative. The Supreme Court headed the judiciary branch. Only members of the upper class filled these positions because of the limited nature of the franchise.

The framework for the Argentine government had been crafted years before, by the members of what was called the Generation of 1837, a group of wealthy intellectuals who, with their return from exile in 1852, began to shape the political form of the nascent nation. Included in this group were such figures as Juan Batista Alberdi and Domingo Faustino Sarmiento. These characters remained active politically until the turn of the century, and molded the politics of the country after their beliefs, which included their oligarchic tendencies.²⁸

Because of the cessation of the civil wars, agriculture and industry expanded greatly in the latter half of the nineteenth century. The exportation of agricultural products, the majority to Great Britain, became the mainstay of the economy. The elite

_

²⁷ Luis Alberto Romero, *A History of Argentina in the Twentieth Century*, trans. James P. Brennan (University Park, Pennsylvania: The Pennsylvania State University Press, 2002). 14.

²⁸ William H. Katra, *The Argentine Generation of 1837 : Echeverría, Alberdi, Sarmiento, Mitre* (Madison [N.J.]: Fairleigh Dickinson University Press, 1996). 7.

found themselves growing increasingly wealthier as they reaped the profits of the vast, fertile terrain of the countryside.

This expansion in agriculture and industry required a workforce, and that workforce was found in the immigrants that began to flood the country. Most immigrants remained in the cities, working in the ports and on the urbanization projects that began to flower in every metropolitan area with the return of a stable government. It was in this period that the first water distribution infrastructure was created and the perception of water in Buenos Aires experienced a dramatic shift.

The Ruling Elite: Water as Privilege

During the time period between 1810 and 1868 clean water was becoming increasingly hard to procure. Although everyone had access to some sort of water, the urbanization process had polluted the rivers and groundwater thereby forcing the poor to live in unsanitary conditions only served to further pollute the water sources. While some struggled to obtain the essential resource, the ruling elite enjoyed access to clean water because of their ability to pay for its provision. Because of the existing social structure, the elite considered clean water one of the privileges that came with their status.

Before the creation of government-run water utilities, the citizens of Buenos Aires obtained their water in three ways: by catching rainwater in cisterns, digging and utilizing wells, or buying river water from vendors.³⁰ The surrounding rivers had always provided ample supply of water for the city. Yet by the 1860s, according to "Vital

³⁰ Guillermo Rawson and Alberto B. Martinez, *Escritos Y Discursos Del Doctor Guillermo Rawson* (Buenos Aires,: Compañía sud-americana de billetes de banco, 1891). 72

²⁹ Romero, A History of Argentina in the Twentieth Century. 6.

Statistics of Buenos Aires," written in 1876, the rivers had become "certainly polluted by the population of the river port, and by the liquid animal materials proceeding from the butchers established on the shores of the *Riachuelo*, two miles to the South of the center of the city." The state of the sewage system also threatened the supply of clean water. Most houses had basements dug out of the dirt in which they stored their human waste that was often washed away by subterranean water flows (water flows into which many residents dug their wells). These prevailing systems of water distribution and waste management were the most important cause of the high rate of mortality within the city. However, most illnesses during this period were attributed to bad air rather than contaminated water. The same report, "Vital Statistics of Buenos Aires," calls "the imperfect circulation of the air, given off by decomposing organic matter, spread[ing] in the atmosphere," the biggest threat to the health of the city. 33 Similarly theories were in circulation across the globe. In London, for example, John Snow isolated an outbreak of cholera to a single water pump, but neither the scientific community nor Parliament believed his results. The lack of association between disease and water quality significantly affected the way society thought about water.

Like most urban centers in the late nineteenth century, Buenos Aires was characterized by a great discrepancy in sanitation between the wealthy and poorer neighborhoods. The great influx of immigrants, for which the city remained unprepared, worsened this gap. The city lacked sufficient housing for the immigrants, resulting in overcrowding that only increased with time. In 1880, an average of 2.1

-

³¹ Ibid. 72

³² Ibid. 73

³³ Ibid. 88

³⁴ Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization. 256.

people lived in each habitable unit, a number that increased to 3.8 by 1890.³⁵ In 1868, 64,126 people lived in tenement houses, or *conventillos*³⁶ out of a population of less than 180,000,³⁷ which is to say, more than a third of the population lived in the squalid, overcrowded *conventillos*.

This overcrowding further contributed to the increase in unsanitary conditions. Specifically, most of the houses in the densely inhabited areas of the city were originally built with patios on which the residents could collect rainwater while allowing the excess to drain through the permeable ground. With the influx of people in need of cheap housing, however, landlords converted these patios into living spaces, thereby reducing the availability of fresh water and causing stagnant pools to form in the streets, mixing there with human and animal waste. Water was a relatively scarce commodity already, and the overcrowding of the tenements only exacerbated the problem.

In the midst of this seemingly unhygienic urban metropolis, the wealthy sections of the city, located mostly in the northern half, enjoyed a relatively clean existence. The wealthy could afford to purchase clean water from vendors and hire workers to clean out their latrines. The distribution of water to the masses did not seem like a necessity when the most powerful members of society, the wealthy elite, had all the water they desired. Society had always been organized a certain way, favoring some and disfavoring others, and it was not the elite-run government's responsibility to close the gap between the two. Instead, the elites thought, the poor should be aided by the charitable action of the rich: the rich should not attempt to lift the poor out of poverty,

²⁵ Rey, El Saneamiento En El Area Metropolitana. 49

³⁶ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 113.

⁸⁷ Bordi de Ragucci, El Agua Privada En Buenos Aires 1856-1892: Negocio Y Fracaso. 52.

³⁸ Rev, El Saneamiento En El Area Metropolitana. 62.

³⁰ Bordi de Ragucci, El Agua Privada En Buenos Aires 1856-1892 : Negocio Y Fracaso. 52.

but rather try to alleviate a little of their misery. Guillermo Rawson, a doctor, senator, and proponent of public hygiene, put it thusly: "The beneficence and charity are in our country in the hands of women; the ladies' societies have done prodigiously in terms of philanthropic services," therefore the government has no need to step in. Indeed, according to an article in an 1896 edition of the newspaper *La Prensa*, the government spent the taxes it raised on frivolous activities and public beautification endeavors rather than charitable activities. ⁴¹

The ignorance of the role water played in the spread of disease and the elite's perception of water as a privilege meant that the first water provision system constructed in Buenos Aires had little to do with water provision for human consumption at all. The distribution of running water began as a project of the state-owned Western Railroads, completely unrelated to any desire on the part of the state to provide running water for its population. Instead, the railroad company built this infrastructure in an effort to provide fuel for the steam engines. The company built a pipe that ran from Recoleta to the Plaza Lavalle, the plaza from which the trains departed and a short distance across the northern part of the city. Only a small number of the neighboring houses benefitted from the railroad's infrastructure by connecting their houses to the water pipe. Because of its northern location, those who did benefit were among the city's wealthiest.⁴²

This new railroad-owned water provision system fell within the existing paradigm concerning the nature of water and public health itself. Public health fell so

¹⁰ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 123.

¹¹ Olga N. Bordi de Ragucci, *Cólera E Inmigración, 1880-1900*, Colección "Otra Historia" (Buenos Aires: Editorial Leviatán, 1992). 158.

¹² Elisa Radovanovic, *Agua y saneamiento en Buenos Aires, 1580-1930.* (Buenos Aires: Aguas Argentinas, 1999). 47.

far from the supposed jurisdiction of the Argentine government that one scholar, concerned with tuberculosis, wrote that, "The conclusion was obvious: 'Tuberculosis is cured by social revolution.' This fatalism—of moral and political-social tone—denied any possibility of hope for the cure or prevention of the disease." In terms of water distribution, the rich living in wealthy neighborhoods received their drinking water from the government for a fee, and had no need to consider the unfortunate souls who lacked clean water to drink or with which to wash.

The Influx of Immigrants Solidifies the Perception of Water as an Elite Privilege

The waves of working class immigrants that began to flood the country only cemented the upper class's view of water as they felt their country threatened by these masses of outsiders. The elite constructed elaborate racial theories based on the social scientific trends of the time, resulting in the solidification of the consideration of water as a privilege, a perception that was at the heart of the city's water policy.

Europeans, mostly from Italy and Spain, began to immigrate to Argentina in astounding numbers during the latter half of the nineteenth century and the early twentieth century. The population of the city of Buenos Aires grew from 180,000 in 1869 to an overcrowded 1.5 million in 1914. Almost all of that growth resulted from the influx of immigrants—in 1870, not more than 50% of the residents of Buenos Aires had been born in Argentina. By 1895, two out of every three residents were foreignborn. Most of the immigrants settled in Buenos Aires and the surrounding areas, with

⁴³ Mirta Saida Lobato, *Politicas, medicos y enfermedades.* (Buenos Aires: Editorial Biblios, 1996). 96.

⁴⁴ Romero, A History of Argentina in the Twentieth Century. 11.

⁴⁵ Rey, El Saneamiento En El Area Metropolitana. 27.

⁴⁶ Romero, A History of Argentina in the Twentieth Century. 11.

only a few heading for the agriculture-focused interior provinces. In 1870, 70% of Argentines lived in Buenos Aires, ⁴⁷ a percentage that persisted for some time. In 1887, for example, more than 20,000 people immigrated to Buenos Aires in the first few months of that year alone. ⁴⁸ In the year 1889, over a quarter of a million people immigrated to the country. ⁴⁹ In short, Buenos Aires acquired hundreds of thousands of new inhabitants over an incredibly short period of time.

Because of the rapidity of the expansion of the lower classes, the way in which the elite-run government ignored them started to become malicious. The elites, "faced with a mass of foreigners, displayed a desire to shut themselves off, to evoke patrician backgrounds, to concern themselves with surnames and lineages, and, for those who could, to flaunt a luxurious lifestyle and an ostentation that—though perhaps their European models would have considered them vulgar and in bad taste—were useful for marking social distinctions." Part of that ostentatious lifestyle included running water and sewers. On a most basic olfactory level, hygiene separated the classes.

The masses of immigrants, mostly Italians who did not speak Spanish, provoked in the landowning class a reaction toward what they called *argentinidad*, or Argentine-ness, a xenophobic nationalism. Many historians have argued that, lacking the storied history of past civilizations of its neighbor countries, the elite of the newly consolidated Argentina found in their hands the task of creating a national identity in the face of a mass of new Argentines.⁵¹ The idea of *argentinidad* essentially created an

⁴⁷ Rey, El Saneamiento En El Area Metropolitana. 27.

⁴⁸ Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 72.

⁴⁹ Ibid. 90.

⁵⁰ Romero, A History of Argentina in the Twentieth Century. 13.

⁵¹ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 246.

classist mentality among upper class Argentines, who considered the elites the only true Argentines, the real possessors of argentinidad.

The assumption of argentinidad as the national identity exacerbated the xenophobic tendencies of the Argentine elite. They blamed everything bad on the outsiders: "all the social and political conflicts, all the questioning of the leadership of the established elite could be attributed to bad immigrants, to 'strange organisms,' to 'destabilizing foreigners,' incapable of appreciating what the country offered them."52 Because it was those in power who feared the rush of foreigners, their xenophobia was especially apparent in the form of policy. For example, the Residency Law of 1902 allowed for the deportation of any foreign-born individual suspected of treasonous activities.53

Contemporary psychological thought aggravated fears of the foreign masses. José María Ramos Mejía, a renowned Argentine doctor and psychologist of the day, published a psychological and "biological" study of the Argentine people entitled Argentine Crowds in which he expounded upon the danger of the mob mentality. "If the modern man of European society, who when isolated is moderate and cultured, demonstrates such barbarity when part of a crowd," Ramos Mejia explained, "you may already imagine how American crowds must be, formed in a more instinctive and violent element, more subjected to the enthusiasms and heroisms of the primitive beings."54 In the face of this growing, and possibly violent, immigrant-based lower class,

Romero, A History of Argentina in the Twentieth Century. 17.

³¹ José María Ramos Mejía, *Las Multitudes Argentinas; Estudio De Psicología Colectiva Para Servir De* Introducción Al Libro "Rosas Y Su Tiempo." (Madrid,: V. Suárez; [etc., 1912). 53.

Ramos Mejía and other members of the upper class found even more basis for their xenophobia.

This xenophobia was based on the "scientific" racial theories of the day. In fact, the ruling class at first encouraged and actively promoted immigration to their country, but that effort ceased when the "wrong" sort of immigrants began to arrive. According to Argentine elites, Argentina was a vast land with a small population that begged for settlers. Especially after General Julio A. Roca's 1879 "Conquest of the Desert," a military endeavor that captured the lands of southern Argentina from their native inhabitants and killed almost all of said inhabitants in the process, the land was in desperate need of repopulation. Despite this frantic need for new Argentines, the existing Argentines did not approve of the immigrants that came to fill the empty land. The ruling elites had desired and expected Northern Europeans—English, French, and Dutch, much like the settlers who had populated the young United States—but instead they received Southern Europeans from Italy and Spain.

The racial standards of the day considered both Southern Europeans and native Argentines inferior to Northern Europeans. Indeed, in Carlos Bunge's *Nuestra America*, a psychological study of Latin America published at the end of the nineteenth century, he expressed the view that the both the barbarity of Argentina and the inherent despotism of the country's Southern European inheritance had caused its citizens, the *criollos*, or Argentine-born Europeans, to become lazy, deceitful, and arrogant.⁵⁵
Bunge's views demonstrate the degree to which racism toward Southern Europeans had become increasing prevalent toward the turn of the century. Toward the middle of

⁵⁵ Carlos O. Bunge, *Nuestra América, Ensayo De Psicología Social*, 6 Ed. ed., "La Cultura Argentina" (Buenos Aires: Vaccaro, 1918). 200.

the nineteenth century, thinkers of the Generation of 1837 like Sarmiento and Alberdi believed that the inferiority of Argentina stemmed completely from its location in the New World and its proximity to the barbarism of the uncivilized world. Bunge, however, broke away from that viewpoint by partially apportioning the blame to the influence of the Spanish conquerors.

Positivist thinking, the idea that everything could be explained by natural laws, had also become very popular during this period. Ramos Mejía expressed just such a line of thought as he explained the fickleness of the crowd: "[To respond to the question, why are some crowds barbarous and others heroic,] it has to do with what occurs in the body: that its properties result from the architecture of the molecules: moral dissymmetry, analogous to the molecules discovered by Pasteur." Ramos Mejía's explanation of the crowd is just one example of how the elite attempted to apply scientific explanations to social questions.

This racial thinking influenced by positivism prompted the elites in power with a more nationalist, conservative bent to consider the immigrant problem in terms of Social Darwinism. They based their ideas on the writings of Herbert Spencer, who in 1864 theorized that natural selection could be extended to human populations. Some of the conservative elite "saw the main threat of national interest in the deterioration of the physical health and purity of the population, and sought the remedy in eugenics," the selective breeding of the population.⁵⁷ Thus, the ruling elite not only considered there to be a scientific basis for racial typification, but also that a scientific cure existed

⁵⁶ Ramos Mejía, *Las Multitudes Argentinas; Estudio De Psicología Colectiva Para Servir De Introducción Al Libro "Rosas Y Su Tiempo."*. 59.

Eduardo Zimmerman, "Racial Ideas and Social Reform: Argentina, 1890-1916." *The Hispanic American Historical Review* 72, no. 1 (Feb., 1992). http://www.jstor.org/stable/2515946. 27.

for societal problems. According to Julia Rodriguez in her study of the period's scientific social thought, "social problems like poverty, vagrancy, crime, hysteria and street violence were defined as illnesses. Symptoms were identified, maladies diagnosed, remedies prescribed, and hygienic systems established to prevent reoccurrence." Theories based on Spencer and eugenics abounded and were liberally applied to the politics of the day.

Indeed, the oligarchy found it needed a cure for the immigrant disease because the masses of people flooding into Argentina's doors not only carried the genes of inferior races, but also the genes of social unrest. During this time, "physicians believed that environmental 'poisons,' such as use of alcohol or even poverty, could become, in effect, genetic, to be passed on to future generations through the weakening of the 'germ plasm,' causing criminal behavior, mental illness, and numerous other anomalies." This theory was based on that of Jean-Baptiste Lamarck concerning the issue of soft inheritance. Lamarck believed that traits acquired during an individual's lifetime could be passed on to its offspring. The panicked Argentine elite applied this theory to the masses of "degenerate" immigrants. Thus, because of this pseudoscientific thinking, the immigrant masses proved an even more significant threat to the purity and happiness of the Argentine race.

These views were so prevalent that influenced most governmental policy; the formation of the water utility provided no exception. In accordance with these beliefs, it was a logical step to use water, or the denial of access to water, as a method of "cleansing" the Argentine race. According to Rodriguez, "The government marshaled

³⁸ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 6.

⁵⁹ Ibid. 72

⁶⁰ Zimmerman, "Racial Ideas and Social Reform: Argentina, 1890-1916." 27.

hygiene as a civilizing and modernizing force, a way to engineer social change." Although never expressed explicitly, much of the government's actions at the time demonstrate, if not an active desire for the extermination of the immigrants, at least a severe level of neglect of the water needs of the lower classes. This neglect exemplifies the thinking of the ruling elite that clean, running water was a privilege to be enjoyed only by members of their same class.

The municipal Hygiene Commission intended to create a system for the provision of purified water since its inception in 1852, but never took any action to do so. The prominent engineer Carlos Enrique Pelligrini had been proposing a plan to provide running water to the city since 1845, but his plan was never taken into consideration. In fact, when the plan came under review again in 1860, another engineer sneered that the plan would be "useless for a city as grand and rich as Buenos Aires." The grand and the rich already had access to water, and obviously that was all that mattered. Indeed, when Guillermo Davies, a businessman, proposed a similar plan for the distribution of running water, the elite-run press ridiculed his endeavors. Davies approached the matter by pointing out that water cost more to purchase than bread, a fact that mattered to few, if any, of the members of the oligarchy who ran the Hygiene Commission, and might explain the failure of Davies' plan. These incidences demonstrate the degree of complacency the upper class felt about the current, unequal state of water distribution.

-

⁶¹ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 178.

⁶² Alejandro Kohl, *Higienismo Argentino : Historia De Una Utopía : La Salud En El Imaginario Colectivo De Una Época* (Buenos Aires: Editorial Dunken, 2006). 28.

⁶³ Aguas Argentinas. *Buenos Aires y el agua: memoria, hygiene urban y vida cotidiana*. (Buenos Aires: Aguas Argentinas, 2001). 20.

⁶¹ Bordi de Ragucci, El Agua Privada En Buenos Aires 1856-1892 : Negocio Y Fracaso. 31.

Despite the Commission's rejection of Davies' proposal, they did order a report on the feasibility of creating a system of running water in 1858, which was executed under the direction of John Coghlan, a British engineer. However, Coghlan's plan was never implemented. Instead, the Commission delayed discussion of the issue of running water for as long as possible because it did not find the issue particularly pressing. The upper class members of the Commission already had access to clean water, and while not averse to the idea of a system of running water, they did not feel rushed to undertake any action toward such a goal.

Even before the construction of the city's water infrastructure, the governing elite of Buenos Aires had demonstrated their concern for only their own access to clean water, with the exclusion of everyone else: by the 1860s, a law had been put into effect mandating that the water vendors sell water in the upper class, northern neighborhoods (everywhere between the southern part of Santo Domingo extending to the "north of the battery of the avenue of the Guardia Nacional"). Those who failed to do so were subjected to a fine of one hundred to two hundred pesos. No analogous rule existed for other sections of the city, underlining the existence of the idea that access to clean water was a privilege of the elite.

These policies that excluded the lower classes from guaranteed access to potable water stemmed from the socio-racial theories of the time. As a reaction to the changing society of Buenos Aires, these theories solidified and intensified the existing social structure, which in turn influenced the distribution of clean water.

⁶⁶ Elisa Radovanovic, *Agua y saneamiento en Buenos Aires, 1580-1930.* (Buenos Aires: Aguas Argentinas, 1999). 37.

⁶⁶ Ibid.

The Desire for the Modernization and Beautification of Buenos Aires

Despite the upper class's propagation of policies that protected their access to clean water from the lower classes, the idea of constructing a water utility did appeal to them. In fact, the beautification and modernization of the city of Buenos Aires explained the later construction of the water utility rather than the urge to care for the city's inhabitants. The creation of a water infrastructure for Buenos Aires worked well within the existing water paradigm: providing clean water to the wealthy households of Buenos Aires to flow from their taps and flush their toilets was one step in the city's process of becoming a modern, beautiful, European-style city.

Argentina's ruling class was incredibly Eurocentric—they looked to Europe for fashion, philosophy, and almost every other aspect of life. With this Eurocentrism came an inferiority complex that only the modernization of Buenos Aires could relieve. The United States also captured the respect of the Argentine elite. Guillermo Rawson spoke of the U.S. as "a country that we love, who progress and noble institutions we are accustomed to study and admire." The conflict between civilization and barbarism obsessed the political thinkers at the time. According to Generation of '37 member, Alberdi, "In America [that is, the New World], everything that is not European is barbarian." Another member of the Generation of '37, Sarmiento, wrote Facundo, one of the most famous books in Argentine history, the major theme of which is the clash of European civilization versus Argentine barbarism.

With that end in mind, the Argentine elites set to work constructing what would come to be called the "Paris of the South." During this period, from the 1850s to the

Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 128.

⁶⁸ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 11.

1880s, almost all of the major important buildings of Buenos Aires were built. These included the House of Government, the House of Congress, the Colón Theater, the Central Post Office, and many other buildings of importance. This construction spree attempted to oust the latent "barbarism" remaining within the city.

This desire for modernization to compete with Europe explains the enthusiasm with which the Buenos Aires municipal government eventually embraced the thought of sewers and running water. New York and London both had water pipes and utilized a water filtration system that operated with the most modern techniques in water purification. To become a modern city, Buenos Aires knew it had to embrace this new technology. Already, by 1860, 12 out of 16 major American cities had municipal water supply systems. Every citizen in New York had access to 250 liters of water a day. The leaders of the city new that eventually their city would need to construct a similar water provision system to qualify as a modern city.

The conservative landowners of the city wanted running water to show off their privileged lifestyle to visiting Europeans and to gain Buenos Aires a reputation abroad as a modern, beautiful city. Although running water had not yet become a necessity, these municipal leaders were not adverse to the idea of eventually implementing a system of water provision within their own city, provided their houses received priority access.

Higienistas Begin to Combat the Water Paradigm

[®] Rey, El Saneamiento En El Area Metropolitana. 39

⁷⁰ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 178.

⁷¹ Rey, El Saneamiento En El Area Metropolitana. 28.

⁷² Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization. 263.

⁷³ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 129.

Although the conservative, landowning elite maintained the agenda of ghettoizing the unwashed masses by neglecting the distribution of water, a small group of wealthy, liberal intellectuals had taken an interest in the area of public health for many of the same reasons: a fervent nationalism and an interest in social evolution. Yet these so-called *higienistas*, reached a different conclusion. Instead of pushing the unsanitary poor out of sight, the liberal intelligentisia, including Dr. Guillermo Rawson, Jose María Ramos Mejía, Carlos Bunge, and Eduardo Wilde, advocated for statesponsored improvement of public health and sanitary conditions throughout the city. These intellectuals shared the same class background as the more conservative elites previously mentioned, but through education—many were doctors—and personal experience, they came to a different conclusion concerning the sanitary needs of society. Reformers like the *higienistas* had begun to voice their opinions all over the world during this time; as Michael Rawson mentions in his article concerning similar developments in Boston, the reformers conceived of water as a "powerful engine of social change" because of its role in the spread of disease. Although much ignored at first, a series of epidemics, the desire for modernization, and the acceptance of germ theory allowed for their plans to be put into action, triumphing over the theories of the ruling upper class.

Dr. Jose María Ramos Mejía, the head of the Department, and Torcuato de Alvear, the mayor of Buenos Aires during the early 1880s, personified this war. The conflict could be stated thusly: "El Intendente [Alvear], who dreamed of Paris and a shining and frenchified Buenos Aires that could compete with the European capitals,

_

Michael Rawson, "The Nature of Water: Reform and the Antebellum Crusade for Municipal Water in Boston." *Environmental History* 9, no. 3 (July, 2004). http://www.jstor.org/stable/3985767. 415.

shared at the same time the ideals of the upper bourgeoisie of South America; they responded to the...ideology that yearned for grandiosity."⁷⁵ These dreams of the city's glorification held no place for the health of the lower classes. By contrast, Ramos Mejía, worked doggedly for the sanitization of the city to improve the health of the Argentine race.

The *higienistas* of Buenos Aires were chiefly concerned with the effect of unsanitary conditions on the moral and psychological profile of the citizens of the city. Bunge, for example, wrote in *Nuestra America* that the laziness and arrogance of Spaniards are "produced by...the[se] causes: misery, hunger, and lack of hygiene." To improve the Argentine race, therefore, the *higienistas* thought it necessary to improve the social conditions in which Argentines lived. By developing sanitary infrastructure, Argentina could work toward becoming a country whose racial purity could rival that of Northern Europe. These liberal intellectuals considered access to clean and abundant water to be a necessity for the strengthening of the Argentine race.

In contrast to the ideals of the ruling elite, the *higienistas* saw the most promise for the improvement of Argentina in its immigrant population. According to Bunge, other segments of the population were not capable of improving: "With [the elites], 'a country is not made.' They possess all the defects of the *criollo* psychology, and refined, sharpened by vanity and pomposity." Bunge also dismissed the inhabitants of the rural interior. He did think that the immigrants, however, could become an important component of the construction of the Argentine identity. After "adapting and argentinizing themselves sufficiently," the immigrants could become an integral part of

⁷⁵ Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 71.

⁷⁶ Bunge, Nuestra América, Ensavo De Psicología Social. 85.

⁷⁷ Ibid. 211.

the progress of the country. This could only be done, however, if social conditions, like access to potable water, improved to allow for sufficient racial enhancement.

Although the group of *higienistas* began to form in the 1850s, the government, mostly controlled by the more conservative factions of the landowning elite, did not begin to listen to their arguments until the 1880s. However, the outbreak of epidemic diseases in the capital city acted as a catalyst to instigate the change in the perception of water that the *higienistas* so desired.

The Outbreak of Cholera and Other Epidemic Diseases

The general view of water began to change in 1866, when an epidemic of cholera swept the city. By 1867, the disease was killing 5 out of every 100 people, a number that dropped only to 4 out of 100 in 1868. This devastating epidemic became the means by which the perception of water began to change, although the change did not become complete until the 1880s.

Brought aboard trading ships from India, the mode of cholera transmission of was unknown until the 1880s. The prevailing theory until that point held that the disease spread by the transmission of foul odors, especially those emanating from human waste. Although technically this theory missed the mark, the fact it connected the source of the disease with poor hygiene probably saved thousands of lives by instigating the public investment in the first public water works in South America.

The cholera epidemic did not confine itself to the lower class *barrios*, instead affecting all the residents of the city, including the ruling elite. Because disease was

⁷⁸ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 67.

thought to be transmitted by foul odors, like those created in the neighborhoods without access to water, the government of Buenos Aires finally felt compelled to extend running water to neighborhoods throughout the city in order to save their own lives by allowing the poor to wash away the stench created by the accumulation of their own excrement.

In the past, most of the epidemics that had hit the city had confined themselves to the poorer neighborhoods. The yellow fever epidemic of 1858, for example, was limited to a single section of the city, killing 3-400 of its inhabitants. This outbreak did not reach the wealthier leaders of the city, and so despite the epidemic's high death toll, the sanitation of the city of Buenos Aires did not come to the attention of the city's leaders until later: "Because the epidemic had been of such short duration and its effects limited in a certain manner, it was believed that the sanitary conditions of the city were so perfect that they would impede the development of something terribly bad." Because they viewed access to water as a privilege, the ruling elite were not concerned with expanding the reach of water services until such an action directly benefited themselves and their peers. Due to the elites' neglect, the state of the city's sanitation proved disastrous as soon as cholera came to town.

The cholera epidemic forced the residents of Buenos Aires to realize that the unsanitary conditions caused by lack of water in the poorer neighborhoods led to disease. Guillermo Rawson, a prominent *higienista*, pointed out this trend in his 1885 "Study of the Tenement Houses of Buenos Aires": "The fact that epidemics, whether they are exotic diseases or endemic illnesses that are in the habit of taking the diffuse

⁷⁹ Ibid. 66.

form, have their origin and their point of extraction in the neighborhoods...of the South, which...are the sections where health is least attended to in the city." By the southern neighborhoods, Rawson is implying the poorer neighborhoods. The yellow fever epidemic that befell the city five years later also began in the extreme south of the city. With an even greater rate of morbidity than the cholera epidemic, the yellow fever epidemic, killing 106.5 out of every 1000 people, was another wake-up call for the city, especially because of its origins in the southern *barrios*.81

These two epidemics began to draw a firm link between hygiene and disease, as Rawson acknowledged in 1876: "This excessive increase of people in a time in which the city was not prepared to receive them or give them the necessary accommodation gave way to an accumulation incompatible with public health and without doubt contributed to the epidemic of 1871, which killed more than 12,000 foreigners [immigrants]." The ruling elite had been loathe to make this connection between the disease and sanitation because it did not fit within their perception of the role of water and sanitation.

Running, potable water was no longer seen as a luxury item for the elites, but rather as a necessity for the maintenance of the health of the city. This change came about because the cholera and yellow fever epidemics were not confined to the poorer neighborhoods, but rather travelled throughout the city, infecting anyone, regardless of social status. By 1885, Rawson could state, "Between the economic and sociological problems that are intimately related with Public Hygiene, little can compare in importance of that relating to the dwellings of the workers and the poor, not only from

80 Ibid. 164.

⁸¹ Ibid. 69.

⁸² Ibid. 45.

a philanthropic point of view, for that which concerns the needy, but rather that of the interests of the community, in the degree in which they relate to health and life." Rawson emphasizes that sanitation should be undertaken "in the interests of the community" rather than to help the poor, the community being the city of Buenos Aires, including those who do not need charity. The upper class of the city was beginning to realize that the poor living conditions of the lower class affected the city more than just aesthetically or olfactorily.

After the epidemics of the late 1860s and early 1870s, the ruling elite began to realize that the unsanitary conditions in which the lower classes lived were the means through which epidemic diseases like cholera spread, and that lack of access to water was one of the main causes of these unsanitary conditions. This realization on the part of the government comprised one of the main components of the change in the perception of water in Buenos Aires.

The change in attitude about the universal need for clean water and the desire for modernization caused a marked change in water policy. Putting an end to the debate over the necessity of a water utility, the president of Argentina, Domingo Faustino Sarmiento, ordered the construction of a water purification plant in the neighborhood of Recoleta in 1868. With this order, Obras de Salubridad, the Buenos Aires water utility, was born.

Sarmiento readily acknowledged the importance of water in the prevention of epidemic disease. In his speech at the placing of the foundation stone of the first water purification plant, Sarmiento said, "Water is like blood...the city needed something to

_

⁸³ Ibid. 107.

wake it up, and so came...cholera." Having President Sarmiento, a man considered to be something like the Abraham Lincoln of Argentina, state the importance of water to the entire city indicates a seismic change in the prevailing view of water.

The Stalling of the Change in Paradigm

The fear created directly after the first cholera epidemic of 1866 began to die down as the years passed. According to Rawson, after the epidemic, "the people forgot the possibility of another epidemic, assuming that the vigilant sentinels would be enough to impede its entrance into the city." Rawson's vigilant sentinels were the slowly expanding water infrastructure and other new sanitary laws, although these new laws mostly governed the actions of the ports to prevent new epidemic diseases from crossing Argentina's borders.

The ruling elites were especially instrumental in maintaining the status quo in Argentine water politics. Although construction of water infrastructure did begin in the late 1860s, because the elites held political power the wealthy neighborhoods received first priority in the construction of the distribution system. In fact, houses in the working class neighborhood of La Boca did not obtain access to the sewer system until 1905, almost forty years after the foundation stone was laid at the purification plant in Recoleta. By privileging themselves and their friends with the luxury of running water, the elite managed to maintain the social hierarchy inherent to the existing water paradigm.

⁸⁴ Rey, El Saneamiento En El Area Metropolitana. 28.

⁸⁵ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson.

⁸⁶ Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 65.

Access to water did not extend throughout the city because the elites continued to think of clean drinking water, and health in general, as a privilege. For this reason, piped, running water and flushable toilets were still considered "luxury items;" such luxury belonged to the upper class, the thinking went. Water provision continued to be seen as an important part of the modernization and beautification of Buenos Aires, at the expense of the *higienista*'s idea of water as necessary to control disease that had begun to build with the cholera and yellow fever epidemics.

Even the infrastructural buildings for the distribution of water became part of the beautification plan for the city, rather than as part of a legitimate effort aimed at the improvement of public health. One of the British engineers working on a new filtration plant commented, "The chosen point is located in a neighborhood that is becoming very fashionable and the Argentine government stipulated that the exterior of the *deposito* should be eye-catching in appearance, and that it be in harmony with the buildings, both public and private, that are now being constructed around it." Not only does the engineer's observation emphasize the government's aspirations for the city, it also highlights its extreme neglect for the city's "unfashionable" neighborhoods. The building under consideration must be beautiful because of its location in a fashionable neighborhood, a location necessitated by the fact that only the residents in that neighborhood will receive the water filtered inside it.

Constructing water pipes for the wealthier, northern neighborhoods of Buenos Aires before the other neighborhoods allowed the upper class to act out their racial theories. In essence, "the government's choices in constructing the new city tramways

_

⁸⁷ Rey, El Saneamiento En El Area Metropolitana. 25.

⁸⁸ Ibid. 47.

and other public works conspired to push poorer residents of Buenos Aires southward into barrios like Barracas and Boca [traditionally the poorest neighborhoods]."⁸⁰ Ghettoizing the lower classes by way of public works like water and sewer pipes allowed the government to "beautify" the city and "purify" the citizens of Buenos Aires. This ghettoization, in turn, helped create the race of Argentines the ruling upper class so desperately desired. In fact, "these populations [the lower immigrant classes] could be [and were] quarantined physically and politically from the 'true' Argentina."⁹⁰ By pushing the undesirable elements into the sections of the city unconnected to the waterworks, the ruling elite fulfilled their goal two-fold: first, they purified the city of the inferior races, and second, they beautified the city by boxing the dirty parts into a corner.

The *higienistas* were quite aware of the scheming behind the distribution of purified water; according to Dr. Guillermo Rawson, "Buenos Aires has been very ignorant, and, even more than ignorant, negligent, of the interests of public health." Here Rawson acknowledges the intentional disregard for the hygienic needs of the city's poorer residents, and goes on to argue for improved sanitation throughout the city.⁹¹

The persistent need the upper class felt for the partition of classes prevented the fear of cholera from universally changing the view of water to a dangerous agent of epidemic disease. The pervasiveness of the privilege dogma caused deficiencies in the construction of the network of water connections that proved dangerous for the future spread of waterborne diseases. Although rhetorically all the citizens of Buenos Aires should have received access to clean water as a matter of disease prevention after 1868,

⁸⁰ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 27.

⁹⁰ Ibid. 27.

⁹¹ Rawson and Martinez, Escritos Y Discursos Del Doctor Guillermo Rawson. 70.

in reality this was not the case. As previously noted, the wealthier sections of the city received piped water first. As a result, toward the end of the century, despite investment in water infrastructure, over 300,000 people still did not have water connected to their place of residence. As late as 1880, the city's newly constructed sewer system would back up after heavy rains, flooding the streets with sewage. Waste and trash continued to be dumped into the river, polluting the water consumed by most of the homes unconnected to the city's network of pipes. The contaminated water also regularly flooded homes near the port. In addition, despite the construction of the water works, the incidence of typhoid, a disease transmitted by infected water, increased from 48 out of every thousand in 1869 to 74 out of every thousand in 1881. In reality, despite the cholera epidemic scare, the goal of eradication of disease was not pursued with enough vigor to actually achieve it.

This delayed achievement was certainly a result of the choices made by the upper class landowners who ran the government. As a counterexample, London began construction on its water distribution and sewage systems in 1858, the year of the Great Stink, a summer drought that caused the sewage in the Thames to smell unbearably. After London constructed a sewage system that kept sewage from being dumped in the Thames upriver from where drinking water was extracted, the city never suffered from another cholera outbreak. The last pandemic was in 1866, only afflicting those not yet connected to the sewage system. ⁹⁵ In contrast, Buenos Aires continued to suffer cholera

-

⁹² Rey, El Saneamiento En El Area Metropolitana. 52.

⁹³ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 177.

⁹⁴ Elisa Radovanovic, *Agua y saneamiento en Buenos Aires, 1580-1930.* (Buenos Aires: Aguas Argentinas, 1999). 52.

Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization. 261.

outbreaks well into the 1890s. Considering that London began construction of their sewage system only ten years before Argentina, Buenos Aires lagged far behind.

The Advent of Bacteriology Solidifies Water as an Agent of Epidemic Disease

The discovery of the bacteriological nature of waterborne diseases finally caused water to be considered universally a dangerous agent of epidemic disease. Louis Pasteur and Robert Koch, the founders of the new field of bacteriology, advanced the germ theory of disease in the 1870s. The rival scientists worked with the microscopic living organisms that allowed for the identification of the microorganisms that cause many of the diseases that plagued society at the time. Pasteur achieved worldwide fame when he published a study on the anthrax bacillus in 1881 that further proved the validity of germ theory. Soon after, Koch discovered the cholera bacillus, in 1883. As knowledge of their work began to spread throughout the world, it became impossible to ignore the importance of hygiene to urban life.

The discovery of the waterborne nature of cholera, combined with the growing belief in germ theory, allowed for, "the culture of hygiene that the elite had previously kept for the themselves to spread throughout the entire society." Once the oligarchy realized that their practice of hoarding hygiene was self-injurious, they quickly moved to spread the privilege of access to clean water to the entire society. Specifically, "starting in 1883 it was known that cholera was an epidemic disease of hydrological character,

⁹⁶ Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 60.

⁹⁷ Thomas D. Brock, *Robert Koch, a Life in Medicine and Bacteriology*, Scientific Revolutionaries (Madison, WI Berlin; New York: Science Tech Publishers; Springer-Verlag, 1988).

⁹⁸ Ibid, 171.

⁹⁹ Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization. 262.

Lobato, Politicas, medicos y enfermedades. 110.

moving various medical authorities and specialized journalists to point out the lack of sanitary infrastructure in the area of La Boca as the principal cause of the epidemic."

The pinpointing of the exact cause of the disease resulted in measures to spread sanitation to the problematic areas of the city.

Once the findings of bacteriology became well known, the oligarchy acknowledged the connection between clean water and disease. General Julio A. Roca, appointed President of the Nation in 1880, declared soon after his election, "There is one [public] work above all others, that is of vital importance and whose termination should not be postponed one day more, because it is related to public health. I am referring to the *Obras de Salubridad* [the public waterworks]." Once the water utility felt the full support of the presidency behind it, the network of connections began to spread as never before.

As a result of Roca's commitment to public hygiene, a National Department of Hygiene was created around the same time. ¹⁰³ Headed by Jose María Ramos Mejía, one of the most prominent *higienistas*, the Department was created to stop the spread of epidemic disease by monitoring the city's sanitation. The National Department of Hygiene was greatly concerned with the hygiene of the poorer neighborhoods. In a report written in 1884, Department personnel described the precarious housing situations in these neighborhoods. This report, directed by Ramos Mejia, told of the status of housing in La Boca: "The lack of houses for workers, it is said, and appropriate locales to rent to the great number of families forcibly removed from their current homes, should fatally produce overcrowding in the habitable locales that exist."

Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 48.

^{—,} El Agua Privada En Buenos Aires 1856-1892 : Negocio Y Fracaso. 140.

^{----,} Cólera E Inmigración, 1880-1900. 62.

The Department attempted to rectify this situation by creating housing codes, monitoring the sanitation of the lower-income districts of the city, and lobbying for the extension of water services to those districts.

Also in the year 1880, Obras de Salubridad passed from the jurisdiction of the municipal Commission on Running Water to the Minister of the Interior, under the leadership of Dr. Eduardo Wilde, another leading *higienista*. The gravity of the undertaking made an impression on Wilde; he called water, "a pernicious element that sends the germs of sickness and death day and night to the dwellings [of the people]." This view of water had clearly become commonplace among the ruling elite with the selection of Wilde to run Obras de Salubridad.

The creation of the National Department of Hygiene and the appointment of Wilde to the head of Obras de Salubridad represented the culmination of a war between the liberal, progressive *higienistas*, who aimed to spread hygiene throughout the city to improve the Argentine race, and the conservative ruling elite, who desired a beautiful, pure urban capital devoid of poor, dirty neighborhoods full of residents of inferior races. With the creation of the Department and the appointment of Wilde as director of Obras de Salubridad, the *higienistas* definitively won the war. Ramos Mejía and Alvear, the duo whose conlict personified the war between the two factions, had quarreled quite publicly over the needs of the city. In the end, however, "he [Alvear] suffered a defeat in public and journalistic opinion because Ramos Mejia had gained

¹⁰⁴ Elisa Radovanovic, *Agua y saneamiento en Buenos Aires, 1580-1930.* (Buenos Aires: Aguas Argentinas, 1999). 50.

popular recognition."¹⁰⁵ The triumph of the *higienistas* over the conservative elite signaled the shift in the prevailing water paradigm.

The opinions of the *higienistas* had become common parlance, echoed by every newspaper in town. By the mid 1880s, newspapers throughout the city began to call for the "destruction of the miserable lodgings of the population of La Boca abandoned because of the dictates of hygiene," as the newspaper *Mitre* put it. ¹⁰⁶ *La Nación* repeated the sentiment: "La Boca does not have sewers or water to drink and its population ingest their own waste!" *La Prensa* defended La Boca, saying, "The population of La Boca is a victim...of metropolitan abandonment whose consequences everyone suffers today." In a different article in *La Prensa*, a Dr. Penna wrote, "Between the neighbors that live on Alvear Avenue and the inhabitants of La Boca there is an enormous distance [in terms of hygiene] and all pay the same price." Practically every newspaper had come to the same conclusion, that the poor hygiene of the lower income neighborhoods was costing lives throughout the city, without regard to class or income.

By the year 1886 the newspapers were abuzz with articles that affirmed, "the necessity of running water and sewer connections in a zone that undoubtedly drinks well water and maintains communal water fountains." Bateman's original plan for the network of pipes around the city was completed in 1905, almost forty years after it was

Bordi de Ragucci, Cólera E Inmigración, 1880-1900. 71.

¹⁰⁶ Ibid. 50.

¹⁰⁷ Ibid. 53.

¹⁰⁸ Ibid. 53.

¹⁰⁹ Ibid. 156.

¹¹⁰ Ibid. 55.

originally conceived. In that time, Buenos Aires had grown by half a million people.¹¹¹

Despite these setbacks, most parts of the city had at least some public access to purified running water.¹¹²

The rate of construction of the water distribution network belies this change in opinion concerning the nature of water. From 1875 to 1885, the percentage of the city served by the network only increased by ten points, from 15% to 25%. In contrast, from 1885 to 1895, the coverage increased from 25% to 65%, or forty percentage points. Considering the population was increasing more rapidly during the latter interval because of higher immigration, the difference becomes increasingly stark. Expanding the network became more urgent because dirty water had become known as an agent of disease.

In essence, the turn of the century brought with it the idea that epidemic diseases were "a menace that would not return," a statement with which the majority of citizens agreed, according to a 1904 municipal census. The same census declared Buenos Aires to be a "hygienically invulnerable" city. Of course, this prediction would prove false, as diseases like dengue and the bubonic plague continued to ravage the country throughout the next century, but never again did waterborne diseases plague Buenos Aires on the scale of the cholera and yellow fever epidemics.

The ruling elite of Buenos Aires once considered water a privilege, one they guarded closely as "racially inferior" immigrants began to crowd the city. However, the

¹¹¹ Andrés Regalsky, Elena Salerno, "En los comienzos de la empresa publica argentina." *Investigaciones de historia economica*, no. 11 (2008). 122.

¹¹² Bordi de Ragucci, *Cólera E Inmigración, 1880-1900.* 65.

¹¹³ Aguas Argentinas. *Buenos Aires y el agua: memoria, hygiene urban y vida cotidiana.* 32.

¹¹⁴ Rodríguez, Civilizing Argentina: Science, Medicine, and the Modern State. 185.

¹¹⁵ Aguas Argentinas. Buenos Aires y el agua: memoria, hygiene urban y vida cotidiana. 33.

cholera epidemic of 1866 began to change this paradigm, as water became associated with infectious disease. The epidemic instigated the construction of a water distribution infrastructure, but this change was more physical than ideological; the water infrastructure was built in the spirit of beautification and modernization rather than in the interest of public health. Access to water through the network of pipes was not extended to the poorer neighborhoods. Water only became fully understood as an agent of disease when the new science of bacteriology discovered the waterborne nature of some diseases. Finally, the spreading of the water network to the lower class *barrios* became a governmental goal.

Despite this change in the perception of water, public health and the implied distribution of water did not become a guarantee for the city's poorer residents. In fact, the immigrants only became more dissatisfied with the social and political structure as time went on. Starting in the 1890s and culminating with the 1910 centennial celebration, the anarchist and socialist factions of the lower class protested violently with bombs, strikes and demonstrations. The oligarchy disintegrated in 1912 with the extension of the franchise to all male citizens, the implementation of the secret ballot, and the subsequent election of populist president Hipolito Yrigoyen in 1916. Unrest remained, however, as the existing social structure was maintained and the poor continued to lack basic necessities, like clean water. After a military coup in 1930 deposed the fledgling democracy, another military coup in 1943 placed General Juan Domingo Perón in command as the leader who would change the perception of water in Buenos Aires once again.

¹¹⁶ Romero, A History of Argentina in the Twentieth Century. 27.

¹¹⁷ Ibid. 91.

Chapter Two

Water as a Right: Juan Perón and the Attempt at Universal Water

Distribution

General Juan Domingo Perón came to power in 1943 and instigated a revolution in the Argentine concept of water. Instead of the concern about water's transmission of epidemic disease that characterized the early years of the Argentine republic, Perón propounded the idea of water as a human right. In keeping with his quasi-socialist bent, the Argentine leader attempted to extend potable water at almost no cost to the citizens of the Buenos Aires metropolitan area. *Porteños* began to expect potable water delivered to their neighborhoods by pipe as Perón's housing and public health policies repeatedly emphasized the existence of such a right. Yet Perón's ambitious plans never came to fruition. Although his regime demonstrated the perception of water as a right through both rhetoric and action, circumstances and poor planning derailed the actualization of universal access to potable water.

Industrialization, Slums, and the Lack of Water in the Years Before Perón

Perón's ascendency during the 1940s took place during a unique political and historical moment. The 1930s, dubbed the Infamous Decade, had been a period of both industrial growth and fierce repression. A military coup had ousted the democratically elected President Yrigoyen in 1930, and a series of military leaders took control of the country, led by General Uriburu. This faction of military conservatives led Argentina until it was ousted by another military coup in 1943. The concurrence of

the new military regime's oppression and corruption with the impact of the worldwide Great Depression caused Argentina to spiral downward into political and economic chaos that created a shortage of potable water in the city of Buenos Aires.

Before the Depression, the Argentine economy had focused on its agricultural exports. With the collapse of the global economy and international trade, Argentine beef no longer held the high value it once had. To survive, General Uriburu and his economic advisors began a process of industrial substitution of imports. This process quickly created industry in a country that had none even ten years prior. The new industry changed the focus of the country from the farms and ranches of the countryside to the industrializing cities.¹¹⁸

Peasants migrated by the hundreds of thousands to Buenos Aires and (in smaller numbers) other growing metropolitan centers. With the policy of industrial substitution of imports, many of the migrants found jobs in industry, creating a large demographic of workers nonexistent ten years previously. The military regimes took great pains to repress the unrest of workforce whose low wages forced them to work long hours in dangerous conditions and to live in slums.¹¹⁹

These slums, called *villas miserias*, sprang up across the city, in deserted lots around the center of the city and close to newly constructed factories because of the scarcity of standard housing and its high price given the low income of the migrants.

Lack of access to water plagued the *villas*, and "defects in the joints and the countless breaks in the hoses [made] bacteria and parasites a common presence [even] in the

_

¹¹⁸ Ibid. 67.

¹¹⁹ Ibid. 72.

officially defined 'potable' water."¹²⁰ Thus, a combination of economic factors created a water scarcity that necessitated a new outlook on water management.

Indeed, the enormous growth in population that led to the creation of slums around the city during the 1930s and early 1940s created a shortage of potable water. According to the water utility's own accounts, "The growth in density... determined that the large water works remained limited in the function for which they had been designed. In addition, the expansions in Greater Buenos Aires were not accompanied in time by the basic facilities that would maintain the quality of the service." In order to keep pace with the growing population, Obras Sanitarias de la Nación implemented such measures as the reduction of water pressure throughout the city to attempt to provide water to more people through the existing pipe system, but to no avail. ¹²¹

Potable water had become a scarce resource.

The scarcity of potable water resulted in unsanitary conditions that led to an increased incidence of disease for those in lower income areas. In the time leading up to Perón's presidency, Buenos Aires experienced epidemics of typhus, a disease caused by insufficient hygiene, as well as poliomyelitis and typhoid, both transmitted by fecal-oral contact often through contaminated water. The incidence of polio increased astronomically in the early 1940s: throughout the entire decade of 1932 through 1942, only 2,425 cases were recorded, but in the year of 1942-1943 alone, almost the same number, 2,280, new cases developed. The disease occurred with higher frequency,

Gabriela Nouzeilles and Graciela R. Montaldo, *The Argentina Reader: History, Culture, Politics*, Latin America in Translation/En Traducción/Em Tradução (Durham: Duke University Press, 2002). 511.

Rev, El Saneamiento En El Area Metropolitana. 89.

¹²² Karina Inés Ramacciotti, "Las sombras de la política sanitaria durante el peronismo: los brotes epidémicos en Buenos Aires." *Asclepio*, 58, no. 2 (2006). 132.

not surprisingly, in those areas with a higher level of population density. Typhus and typhoid had also reached epidemic proportions by the beginning of the 1940s. 123

Thus, when Perón came to power, Buenos Aires was in the midst of a public health emergency caused by the lack of potable water in the city's poorer areas. Despite the efforts of OSN, epidemics of waterborne diseases demonstrated the gravity of the problem. When Perón took charge, he instigated a fundamental change in the way the city thought about water in an attempt to rectify the situation.

With the 1943 Coup, Water Gradually Becomes a Right in Government Rhetoric

General Perón capitalized on the marginality of the growing class of workers living in *villas* and other unsanitary conditions by championing their cause when he reached political power. Beloved by the workers, Perón used their sheer numbers and corresponding political might to consolidate his power. During his stint as the head of the Department of Labor, Perón used his influence to change the perception of water from that of a substance that must be controlled to prevent epidemic disease to that of a right of every citizen because of its influence on health and happiness.

As a member of the United Officers Group, the military association that organized the coup d'état in 1943, Perón was appointed the head of the Department of Labor. Perón used his position to gain the adoration of the working class by promoting a multitude of labor laws and allowing unions the influence they had always desired. Perón gained further popularity after his substantial fundraising efforts for the victims of the 1944 San Juan earthquake. Later that same year, Perón was promoted to Vice

-

¹²³ Ibid. 136.

President and Secretary of War, a position from which he continued to champion the cause of the working class. On October 9, 1945, members of the military, afraid of his growing popularity, first forced Perón to resign and then arrested him four days later.

Workers flocked to his rescue: on October 17, Perón was released from jail because of massive popular demonstrations. According to Eva Perón, his wife, "The meeting of Perón and the People took place October 17. On that unforgettable night, the destiny of both was sealed, and the immense drama thus begun...Before a world of oppressed peoples, Perón raised the flag of our liberation." Thus, even before Perón became President of Argentina, he had cemented a huge base of popular support within the worker class.

During the time of Perón's influence, beginning even before his ascent to the presidency, potable water became, at least rhetorically, the right of every citizen because of its centrality in the maintenance of public health. In 1944, while serving as Secretary of Labor and Welfare (STP), Perón finagled his way into obtaining STP jurisdiction over the National Directory of Public Health (DNSP), claiming that the STP and the DNSP were like Siamese twins who would die if separated. By uniting healthcare with labor, Perón paved the way for the later innovations in water provision under his rule.

The military government of which Perón was part also began to improve the disorganization and disrepair in which the water utility, Obras Sanitarias de la Nación (OSN), had languished in the years since 1930. In 1944, the regime created the National Water Administration (ANDA), an oversight body of OSN and the General

¹²⁴ Romero, A History of Argentina in the Twentieth Century. 96.

Eva Perón, In My Own Words (New York: New Press, 1996). 59.

¹²⁶ Peter Ross, "Construction of the Public Health System in Argentina 1943-1955," *Electroneurobiología* 15, no. 5 (2007). 123.

Irrigation Directory. Its goal was to "oversee and administrate the precious element, verify its potability and guard its purity...and finally, in centers of population, annul contaminating effect of residual materials, isolating them and conducting them to their elimination." With this new oversight, OSN had more incentive to improve the condition of the water supply. The creation of ANDA also demonstrated the increasing tendency of the new regime to place value on the state's role in water distribution.

Through these actions, Perón emphasized his view that water was the right of every citizen, an emphasis he would further accentuate when he became president in 1946. Even while he worked in other governmental positions, Perón managed to amass a huge base of popular support among workers by creating policy that benefitted them. Some of these policies included the unification of healthcare with labor and the creation of ANDA. These actions helped Perón win favor with the masses of impoverished workers throughout the city, which in turn aided him in becoming the leader of Argentina.

Peron's Presidency and the Doctrine of Justicialismo

General Perón won the 1946 presidential election, and remained in power until another military coup ousted him in 1955. The Peronist doctrine, dubbed *Justicialismo*, revolutionized the economic, social and political landscape of Argentina. This new landscape provided an ideal setting for the perception of water in the city of Buenos Aires to change, especially because of the extent to which the Argentine people adopted the *Justicialista* way of thought.

_

Rey, El Saneamiento En El Area Metropolitana. 92.

Economically, *Justicialismo* espoused a "Third Position," between communism and capitalism. In Perón's words: "As an economic doctrine, *Justicialismo* creates social economy, putting capital in the service of the economy, and the economy in the service of social wellbeing." Especially important to Perón was the idea of economic independence. His economic goals were to "recover the national wealth from the power of the colonial capitalists," and "make the money in the country Argentine." In order to do so, the president implemented a massive nationalization campaign, most notably nationalizing the British-controlled railway system.

OSN, as an already nationalized entity, fit well within the new regime's big government ideal. In addition, during Perón's presidency, several of the small, Britishowned water utilities on the outskirts of the city were incorporated into OSN. ¹³⁰ By nationalizing these private water companies, Perón demonstrated his belief that water distribution should fall under the jurisdiction of the state. Forcing the state to take full responsibility for its citizens' access (or lack thereof) to water took the nation one step closer to considering water as a right.

Perón's economic doctrine favored the continuation of the substitution of imports with industry program. In fact, he favored his industrial constituency, especially the industrial working class, so much that he significantly disadvantaged the agricultural producers in the Argentine economy. With the 1946 creation of the Argentine Institute for the Promotion of Trade (IAPI), which essentially bought agricultural goods from farmers at low prices and exported them for higher prices to an international market,

Juan Domingo Perón, *La Fuerza Es El Derecho De Las Bestias*, 1. ed. (Habana,: S. Touriño, 1956). 24.

¹²⁹ Ibid. 32.

Rey, El Saneamiento En El Area Metropolitana. 91.

Perón tipped the balance in favor of the continued industrialization of Argentina. With this continuation came the prolongation of the migration to the cities which only exacerbated the unsanitary conditions of the slums by overcrowding them. While Perón's economic plans ostensibly favored state-controlled solutions to support the working class, his increased support of industrialization drew more and more people to the already overcrowded cities.

Perón's economic doctrine benefitted his political agenda greatly, by bolstering his supporters, the working class, and weakening his enemies, the landed elite. Because of the massive amount of support he held among the now-powerful factions of the working class, Perón was able to consolidate political power in an unconstitutional manner. According to an American observer in Buenos Aires in the 1950s, "Perón's control of the Executive Branch has already been noted; his domination of the Legislative and Judicial powers, though more indirect, is no less effective." Indeed, Perón actually rewrote the Constitution in 1949 to allow himself, among other things, to run for president a second time. His blatant disregard for the constitutional opposition and the separation of powers allowed Perón a freedom in the exercise of his will, permitting grand changes in the structure of the country to occur in a short span of time.

Perón's social doctrine involved a leveling of the class structure and a redistribution of wealth, but most of all a new importance was given to the welfare of the common citizen. The Peronist attitude toward the common people was revolutionary and sometimes fanatical. Eva Perón expressed the basis for the Peronist

George I. Blanksten, *Peron's Argentina* (Chicago,: Univ. of Chicago Press, 1953). 111.

social doctrine in her deathbed manuscript: "I love the *descamisados* [shirtless ones], the women, the workers of my people too much, and, by extension, I love all the world's exploited people, condemned to death by imperialisms and the privilege of land ownership, too much...The suffering of the poor, the humble, the great pain of so much of humanity without sun and without sky hurts me too much to keep quiet." Eva and her husband espoused the cause of the workingman and woman intensely and seemingly without reserve. In doing so, they enfranchised a huge, formerly marginalized, portion of the population.

This new consideration for public welfare had direct effects on the Argentine idea of water. For Perón, "the wealth of a country does not consist of the acquisition of fortunes of half a dozen individuals, but rather its control with the object of building up the patrimony both of private parties and of the State, which brings happiness to the greatest number of people, and does away with the tragedy that in a country where some are enormously rich, others lack the barest necessities of life and cannot even enjoy that mere minimum of happiness to which every man has the right." According to Perón, therefore, every man has the right to happiness, and because happiness stems from the fulfillment of basic necessities, the government should be responsible for ensuring their provision. Water, of course, is perhaps *the* basic necessity. Deprive a man of water and he dies more quickly than he would deprived of any other thing besides air to breathe.

Perón further emphasized the state's role in its citizen's welfare when he proclaimed, "The modern State has the moral obligation to produce, by any means in

Perón, In My Own Words. 49.

Juan Domingo Perón, *Peron Expounds His Doctrine* ([New York,: AMS Press, 1973). 85.

its power, an appropriate living standard for the inhabitants."¹³⁴ An appropriate living standard, although not directly outlined above, must of course include access to a source of sufficient potable water.

The Peronist government improved access to potable water by developing two different aspects of standard of living: health care and housing. According to the Ministry of Health, "Four major problems exist in big cities that the law should worry about: housing, the provision of hygienic water and the elimination of waste, transit, and the inconveniences deriving from transportation." The Peronist regime opted to concern itself with the first two problems, problems that would prove to be inextricably linked, especially in their relation to public health. In taking responsibility for these four issues, the government guaranteed the public a certain standard of living.

The Peronist idea of the right to a certain standard of living, specifically through health care and housing, insinuated its way into much of the everyday life of the Argentine people. Never one to overlook the power of propaganda, Perón utilized the political tool heavily. Even school textbooks could not escape his reach. By 1952, Eva Perón's ghostwritten autobiography *La razon de mi vida* was used as a textbook throughout the school system as mandated by law. In the fifth and sixth grades, it was the only text permitted. The Peronist opinion about the state's responsibility for the reduction of poverty and poverty-related afflictions permeated the book. In it, Evita describes her efforts (through the government-sponsored Eva Perón Foundation) toward that end: "Before just wages and worthy working conditions could give their fruits of comfort, it was necessary to remedy also the grief of so many years.

134 Ibid. 189.

Ministerio de Salud, *Plan analítico de salud pública.* 1609.

¹³⁶ Plotkin, Mañana Es San Perón : A Cultural History of Peron's Argentina. 108.

Everywhere homes, clothes, health were lacking. That is why I had gone out on the streets to say: 'Here I am. I want to be of some use to my people.'" La razon de mi vida essentially resituates the responsibility for personal wellbeing from the individual to the state. Because of the extensive use of the book in public schools, Perón could be sure the message was passed along.

In addition, many of the new textbooks printed during the Peronist era reiterated Perón's idea of the state's guardianship of its citizens' proper standard of living: "poverty, in Peronist books, was no longer the natural consequence of the social order," as it had been labeled in the textbooks of the pre-Peronist era. Instead, Perón bestowed upon the poor opportunities and rights they lacked. One textbook tells the story of a boy who was too poor to attend school: "Before, he could not afford to study. Now, ever since Perón began to govern us, everything is within his reach." In this way, the Peronist textbooks inculcated the idea of poverty as a problem the state would solve: "everything is within reach." Everything, of course, included access to clean water. Therefore, at least within the youth of Argentina, a sense of entitlement to the fulfillment of basic needs like that of potable water began to grow.

The doctrine of *Justicialismo* set Perón apart from any previous Argentine government. His unique economic and social policies created a drastically different Argentina. Because of the influence of the *Justicialista* policies on the people of Argentina, the government's views soon translated to the people.

¹³⁷ Eva Perón, *Evita by Evita : Eva Duarte Perón Tells Her Own Story* (London, New York: Proteus ; distributed by Two Continents Publishing Group, 1978). 111.

¹³⁸ Plotkin, Mañana Es San Perón : A Cultural History of Peron's Argentina. 115.

¹³⁹ Ibid. 119.

Social Medicine and the Right to Water

Perón and his administration first attacked the lack of potable water access from the angle of public health and social medicine. Emphasizing the importance of the health of all citizens, not just the wealthy ones, accentuated the consequences of the lack of access to potable water that had resulted from the changing social and economic milieu and the actions of previous regimes. The Peronist regime created a new ministry to improve the health of the public and appointed as minister an aficionado of the idea of social medicine. This action allowed the government to find a portal for increasing the State's role in guaranteeing the public's right to water.

In 1946, the president created the position of the Secretary of Public Health.

Perón expounded upon his decision: "even though it seems incredible, until 1946 there did not exist in the Republic of Argentina a state organization in charge of watching over the health of its population." Although Perón's statement is not completely accurate—several different health care systems existed, including the National Department of Hygiene, but they were "badly defined and [had] overlapping jurisdictions" it was true that one centralized system of healthcare was sorely lacking.

Because of the lack of organization regarding health care, most of the activities generally classified as relating to public health in Buenos Aires fell by default to the work of the Sociedad Benificiencia de la Capital (SBC), a charitable organization run by the women of the Argentine elite. The SBC had traditionally appointed the wife of the current President of the Republic as their honorary head, linking the SBC to the government since its inception. By the 1940s the SBC had become an official

Perón, La Fuerza Es El Derecho De Las Bestias. 59

Plotkin, Mañana Es San Perón : A Cultural History of Peron's Argentina. 138.

institution under the Ministry of Foreign Relations and Religion. Because of its origins as an elite charity, the SBC tended to reinforce traditional notions of social patronage—that is, that the poor should be grateful for the charity of the rich.¹⁴²

Thus, the creation of the Ministry of Public Health, "indirectly supported the auspicious recognition of the importance of sanitation in the problems of the community," according to the water utility itself. 143 The transfer of jurisdiction over public health from the SBC to the Ministry of Public health solidified the Peronist notion of health as a right, rather than a privilege or protection from epidemic disease endowed through charity. According to a colleague of Ramón Carrillo's, the first Minister of Public Health, "All that existed in health before was just beneficence, with Carrillo [health became] authentically a right." The state had to supply the public with the means to achieve health instead of doling out charity. Eva Perón herself attacked the SBC, saying, "To me, giving alms was always a pleasure for the rich: the cruel pleasure in exciting the desire of the poor without ever satisfying it. And in order to make the giving of alms even more miserable [the rich] invented beneficence. They thus added to the perverse pleasure of the alms the pleasure of having fun using the pretext of poor people's hunger. Alms and beneficence are, to me, the use of ostentatious wealth and power to humiliate the poor."145 Indeed, fed up with the SBC's

_

¹⁴² Ibid. 139.

Rey, El Saneamiento En El Area Metropolitana. 96.

¹¹¹ Daniel Alberto Chiarenza, El Olvidado De Belem: Vida Y Obra De Ramón Carrillo, Colección "Obras Fundamentales" (Buenos Aires: Adrifer Libros, 2005). 193.

Perón, Evita by Evita: Eva Duarte Perón Tells Her Own Story. 122.

"biased and one-sided"¹⁴⁶ nature and the state's inability to control SBC funds, the Peronist government took control of the organization in 1946.¹⁴⁷

The new Ministry of Public Health had, as its mission, the goal to, "collectively destroy disease...This organization involves the preservation of life," according to Perón himself. Indeed, Perón had grand hopes for the organization. The President further stated that, with the creation of this new entity, "Argentines can die from physiological miseries, but they can no longer die from social miseries." Social miseries included those stemming from a lack of potable water, and to emphasize that point, ANDA came under the Ministry's control. As the regulatory body for OSN, through ANDA the Ministry of Public Health could essentially control the water utility. In this way, the regime attempted to unify health policy, including that of water management, with social assistance.

As a component of the new health initiatives, the Ministry of Public Health started an ambitious war against the communicable diseases ravaging the poorer areas of Buenos Aires. Prominent among the targeted diseases were the aforementioned diseases transmitted and exacerbated by lack of potable water: typhus, typhoid and polio. To win this war, Perón mandated that the Ministry of Public Health, "must not set a limit to its expenditure. The limit is to be established only by the needs of all the

_

http://www.slideshare.net/iniciativaciudadana/plan-sanitario-del-dr-ramn-carrillo

^{----,} Peron Expounds His Doctrine. 255.

¹¹⁷ Plotkin, Mañana Es San Perón : A Cultural History of Peron's Argentina. 142.

Perón, Peron Expounds His Doctrine. 257.

^{—,} La Fuerza Es El Derecho De Las Bestias. 61.

¹³⁰ Ministerio de Salud, *Plan analítico de salud pública*. (Buenos Aires: Gobierno de Argentina, 1952). 302.

Honorable Camara de Diputados de la Nación, *Plan Sintético de Salud Pública, 1952-1958, Dr. Ramón Carrillo.* (Buenos Aires: Secretaria Parlamentaria)

sick in the country,"¹⁵² thereby showcasing the importance of public health in the new regime.

The Ministry of Public Health thoroughly understood the connection between water and disease. The Ministry's definitive plan for the creation of a new public health system is enshrined in a vast tome entitled Analytic Plan for Public Health, written in 1947. The *Plan* outlines the Ministry's understanding of the importance of potable water to the prevention of disease, saying, "The infections of hydrological origin, of which we are discovering more and which are growing in variety every day, oblige the correct provision of water...because the works of the water company prevent these illnesses. The Ministry's allowance that correct water provision prevents illnesses endorsed the importance of water to public health. The *Plan* directly connected typhoid to the lack of water services: "Typhoid is endemic...as a consequence of the poor water provision system and the deficient elimination of waste water." Concretely connecting disease to water emphasizes the need for the improvement of water provision, because if Argentines have the right to health, then they require clean water. In addition, the *Plan* determined that, "It is known that for each death by typhoid that is avoided, two or three other lives are saved for other causes. And this is easy to understand because with the works of the water company is provided the means with which the elements of individual hygiene are in quantity and quality in reach of the whole community."155 The *Plan* therefore unequivocally states that clean water is a requirement for the maintenance of public health.

-

Perón, Peron Expounds His Doctrine. 258.

Ministerio de Salud, *Plan analítico de salud pública.* 1574.

¹⁵⁴ Ibid. 1573.

¹⁵⁵ Ibid. 1574.

The guiding principles of the Ministry underlined the public's right to health under Perón, implying, by the transitive property, the public's right to water. The Ministry's regulations, as stipulated by the General himself, began with these two rules:

- "1. All men have equal right to life and health.
- 2. There cannot be health policy without social policy." ¹³⁶

These two sentences, as the most important sentences guiding the activities of the Ministry, state very clearly the rights of Argentines and how to ensure that those rights are guaranteed. Because the Ministry's *Analytic Plan* named water as a requirement for health, and health is guaranteed under Perón (through the implementation of social policy), Perón and the ministry essentially revalued water as the right of every citizen.

The first Minister of Public Health, Ramón Carrillo, played a vital role in the re-envisioning of water as a necessity for health and thus a human right. Originally a neurosurgeon and professor at the University of Buenos Aires, Carrillo became the first to hold the position of Secretary of Public Health after its inception in 1946.

During the 1930s, Carrillo's research had made him famous in the world of neuroscience, and in 1939 the Argentine military offered him a position at the Central Military Hospital as the Chief of Service of Neurology and Neurosurgery of the Army, while allowing him to continue his teaching at the University. At the Central Military Hospital, Carrillo developed an interest in the idea of social medicine due to his exposure to the poor health of the army recruits from poorer provinces.

Social medicine had begun to develop as a discipline during the interwar years all over the world. Social medicine focuses on preventing the causes of the diseases that ravaged society, rather than curing the diseases themselves. In particular, René Sand in

¹⁵⁶ R. A. Alzugaray, Ramón Carrillo, El Fundador Del Sanitarismo Nacional, Biblioteca Política Argentina. (Buenos Aires: Centro Editor de América Latina, 1988). 70.

Brussels and George Rosen in the United States pioneered the field of social medicine. Sand, like Carrillo, identified the antecedents of social medicine as the ancient Greek philosophies of medicine and health. Although nineteenth-century German and French social reformers influenced Rosen and others, Sand and Carrillo focused primarily on the philosophies gleaned from ancient Greek texts in addition to their own personal experience. Sand, funded by the Rockefeller International Health Board, spent time in Peru and Brazil setting up university departments of social medicine in the 1920s and '30s. Latin American social medicine developed from his work in these countries. Most probably the idea of social medicine spread from Peru and Brazil to influence Carrillo and the work of the Ministry of Public Health.

This unification of social policy with public health became the guiding principle of the Ministry upon its inception. Not only did Carrillo first begin to think about social medicine at the Hospital, but it was also at the Hospital that he met General Perón. The two became friends, and Perón and Evita were the best man and maid of honor at Carrillo's 1946 wedding. When Perón created the Ministry of Public Health, he immediately appointed Carrillo minister. ¹⁵⁸

Carrillo was instrumental in molding the *Justicialista* policies on public health, and creating a system of social medicine from the ground up based on his somewhat unorthodox views. According to his Peronista biographer, "Carrillo trace[d] the grand lines of the *Justicialista* health policies, that integrated welfare, salary, and housing

¹⁵⁷ D. Porter, "How Did Social Medicine Evolve, and Where Is It Heading?" *PLoS Med* 3, no. 10 (2006).

http://www.plosmedicine.org/article/citationList.action;jsessionid=FEB090E24CF13421750FF4D46C0F9D85?articleURI=info%3Adoi%2F10.1371%2Fjournal.pmed.0030399

¹⁵⁸ Chiarenza, El Olvidado De Belem : Vida Y Obra De Ramón Carrillo. 15.

policies."¹³⁹ By creating a health system that involved aspects of policy usually unrelated to health, Carrillo and the Ministry of Health drastically reoriented the idea of public health in Argentina. Carrillo placed an unprecedented emphasis on health, rather than the treatment of illness, in his work. Carrillo explained,

"Modern medicine tends, each time a little bit more, to occupy itself with health and with the healthy, and its fundamental objective already is not sickness and the sick, but rather—repeating the old Hippocratic aphorism—to avoid being sick...to orient its actions not toward the direct factors of illness, microbial germs, but rather toward the indirect factors, misery and ignorance, in the understanding of the social components: poor housing, poor diet, and low salaries have the same or more importance in the town's state of health." ¹⁶⁰

Carrillo's idea of integrative health—that housing, diet, and salary matter at least as much as the actual practice of medicine to the maintenance of optimum health—served to link public health to issues like the distribution of water.

In fact, Carrillo's attitude toward health necessitated the "revaluing of man as a social and moral being. For this reason...he has imposed a protective legislation for the worker and his standard of living." This revaluing, or, to put it more bluntly, this *valuing* of the common man and his social conditions was unprecedented. Carrillo himself expanded on the matter:

"If doctors only see the illness, if they only investigate the sick organ, they run the risk of passing above this world, this tiny world that involves the individual like something unimaginable, like a delicate web knit of dreams and hopes. While doctors keep seeing illnesses and forget about the ill person as a psychological and social unit, we will continue to be simply cobblers of the human personality."¹⁶²

¹⁶¹ Ibid. 72.

¹³⁹ Alzugaray, Ramón Carrillo, El Fundador Del Sanitarismo Nacional. 73.

¹⁶⁰ Ibid. 74.

¹⁶² Ibid. 71

Instead of the public health system acting as "cobblers," mending the holes in the shoes of the people, Carrillo wished instead for the public health system to make better roads on which the shoes of the people could walk.

Carrillo's hopes for the country's health system, outlined in the Ministry's *Analytic Plan*, centered around one main idea: that, "health is an inalienable right of man." According to the *Plan*, in 1947, "close to half of the population still live[d] in defectuous sanitary conditions, without the ability to receive, directly, the benefits of medical progress." Carrillo underlined the necessity of the creation of, "a high standard of living for the workers," and the semi-socialization of healthcare to provide free and universal access to health to solve this problem. Once again, a Peronist official connected standard of living to the idea of public health.

The connection between these two ideas, health and standard of living, had not been widely made before in Argentina. Carrillo found himself fighting against the prevailing idea, perpetuated by organizations like the SBC, that the rich should only help the poor in a religious, charitable capacity. This mentality made it impossible to link health with socioeconomic factors. Many vestiges of this attitude prevailed even among the doctors that the Ministry directed. During the course of his tenure as Minister, Carrillo made it his mission to instill a new mindset in the Argentine public, molding the ways in which they thought about health. He called for a "humanization"

Ministerio de Salud, *Plan analítico de salud pública.* 582.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

of medicine. ¹⁶⁶ Because of his efforts to link health with social factors like standard of living, Carrillo earned the nickname, "Father of Preventative Medicine." ¹⁶⁷

Carrillo expanded on the specific policies that would lead to health improvements in a list of goals for the Ministry. The list included the hygienic and sanitary characteristics of the "potable water supply and the distribution of the sewage system." In Perón's world, the public's right to health and happiness necessitated a vast web of interlocking components that included connection to the water and sewage systems and the correct and hygienic functioning of these systems. The Ministry regarded, "the provision of potable water...[as] an integral part of public hygiene, and because of this, inseparable from the problems of public health." By placing emphasis on the effects of communities' access to water or lack thereof, Carrillo and the Ministry connected the water supply's impact to the health of the community.

Because of this connection between water and health, water constituted an important component of the *Analytic Plan*. The entire *Plan* stems from the Health and Social Assistance Code ratified under Perón that stipulates, as one of the "bases for action," to, "supply potable water to all of the country." Because a preoccupation with the water supply was written into the Code, the Ministry could include water-based policy prescriptions in their *Plan*. Indeed, the *Plan* mandated that, "for those citizens that lack a source of water nearby for their water supply, the Ministry of Public Health of the Nation should by obliged by law to dispense, organize, or order the putting into practice of whatever proceeding to make the provision of water as hygienic as

166 Chiarenza, El Olvidado De Belem : Vida Y Obra De Ramón Carrillo. 85.

¹⁶⁷ Ibid. 71.

¹⁰⁸ Alzugaray, Ramón Carrillo, El Fundador Del Sanitarismo Nacional. 78

Ministerio de Salud, *Plan analítico de salud pública.* 1581.

¹⁷⁰ Ibid.

possible."¹⁷¹ Therefore, because water is so indispensable to the maintenance of public health, "it should be a constant preoccupation of the health authorities to provide potable water."¹⁷² By clearly placing water provision under the Ministry's jurisdiction, the *Plan* further cemented the new idea of water as a component of public health.

Under the influence of the Code, the Ministry of Public Health composed this vision statement:

"Of the provision of potable water and domestic consumption: From the water supply:

Art. 1. The provision of potable water for consumption of the population will be adequate in quantity and quality, no matter what its origin, putting to use, by the sanitary authority, the necessary measures to fulfill that end.

Art. 2. The authority that should fulfill that said in the preceding article is the Ministry of Public Health of the Nation, keeping in mind that all of the water supply system should provide for present and future necessities, in relation to the growth of the population.

...

Art 4. All of the population of the community has the right to be provided with a continuous water supply of water for drinking and domestic use. The water supply system will be in the most sanitary and economical condition of water capture in the region."¹⁷³

Not only does Article 4 declare that every person has the right to water, but Article 1 affirms that the provision of said water should be in the hands of the state, and that, as mandated in Article 2, the water supply must always be kept up to date. A more complete guarantee of the right to water could not exist. Although the *Plan* was not backed by the rule of law, the fact that the government stated the public's right to water for drinking and hygienic purposes in a document as important as the *Plan* shows just how much this new perception of water had been implanted into the consciousness of the Argentine government.

172 Ibid. 1290.

¹⁷¹ Ibid. 1606.

Ministerio de Salud, *Plan analítico de salud pública.* 1566.

Whether or not Carrillo's grand plan ultimately succeeded in improving the health of the Argentine people is difficult to say. It can be said, however, that access to water did increase during Carrillo's stint as Minister of Public Health, perhaps because of his ideas concerning the holistic nature of health: the percentage of those with access to drinking water in the city of Buenos Aires increased from 43% in 1942 to 60% in 1955. ¹⁷⁴ In addition, infant mortality decreased from 90 out of 1000 at the start of Carrillo's tenure to 54 out of 1000 live births when he left the Ministry. ¹⁷⁵ Although the causality between the two has yet to be conclusively proven, it can be logically hypothesized that increased access to potable water had something to do with the decrease in infant mortality. Perhaps Carrillo's comprehensive view of health did serve to improve the health of the people of Argentina because such a view placed emphasis on the distribution of potable water to all people.

The Role of Housing in the Transformation of the Perception of Water

Housing provided another way for the Peronist regime to transform access to potable water into a right. The provision of housing to the homeless or the poorly housed served as a major selling point of Perón's policies. Many of the branches of the government played a role in the mass construction of housing which was one of the regime's major legacies. Construction followed strict guidelines: every newly built house had to have running water. This amenity came to be an expectation as the construction of houses continued.

Peter Ross, "The Construction of the Public Health System in Argentina 1946-1955." *Electroneurobiología* 15, no. 5 (2007). 114.

¹⁷⁵ Chiarenza, *El Olvidado De Belem : Vida Y Obra De Ramón Carrillo*. 19

Housing, as it related to hygiene and therefore access to potable water, was a major concern for the Ministry of Public Health. The First Panamerican Conference on Public Housing greatly influenced the authors of the Ministry of Public Health's *Analytic Plan*. At that conference, referenced within the *Plan* itself, the attendees decided that the following requirements should be fulfilled for every citizen: "provision of water for consumption in a proportion of no less than 100 liters per day and per person. The installation and functioning of the source of the water supply, its distribution...should be under the vigilance of a responsible sanitary authority." The Ministry of Public Health took these guidelines into consideration when writing their own guidelines for housing.

Ministry action in relation to housing and water essentially limited itself to prescriptions for new and existing housing. For example, according to Castillo's *Plan*, every house constructed would be required to have, "good provision of water that is potable and for domestic use." Although the Ministry could not force the construction of housing or regulate the details of the housing constructed, the fact that water constituted such an important part of housing for the Ministry that it is mentioned as a necessity for public housing demonstrates the significance of housing to the provision of water to all city residents.

The Ministry found the regulation of the hygiene of houses so important to control because of the large-scale construction of public housing under the Peronist regime. As the Vice President, before his ascent to the presidency, Perón created the National Housing Administration (ANV). The ANV spent US\$50 million (1945)

Ministerio de Salud, *Plan analítico de salud pública.* 1302.

¹⁷⁷ Ibid. 1257.

dollars) a year on the construction of public housing for *villa* residents, with an explicit goal of slum clearance.¹⁷⁸ Between 1946 and 1951, the ANV constructed 350,000 homes for workers, with an additional 150,000 more by 1955.¹⁷⁹ The grand scale of this construction necessitated the involvement of the Ministry of Public Health because of opportunity to ensure that the newly created homes were connected to the potable water supply.

Like public health, housing also became a human right under Perón. The General announced, in a speech praising the work of the ANV, that, "All of this is but a grain of sand in the efforts of the nation to provide every Argentine with his own home...as befits a citizen of the New Argentina." With that sentence, Perón affirmed the right of every Argentine to obtain proper housing, which at the time included water and sanitation connections. Perón reiterated his statement later, explicitly confirming the house as a human right: "The dwelling is not a privilege of the man of means, but one of the elementary rights of the ordinary man." When Perón created the new constitution in 1949, the right to housing was put into writing. Although the ANV did not directly target issues of water and sanitation, slum eradication and the provision of public housing served to further those goals. Housing became, "a dream realizable with the help of the state, seen for the first time as a guarantee of workers' rights." Because housing encompasses so many things (shelter, warmth, electricity and, of course, water),

¹⁷⁸ Blanksten, *Peron's Argentina*. 266.

Perón, La Fuerza Es El Derecho De Las Bestias. 29.

¹⁸⁰ Ronn F. Pineo and James A. Baer, *Cities of Hope: People, Protests, and Progress in Urbanizing Latin America, 1870-1930* (Boulder, Colo.: Westview Press, 1998). 148.

Perón, Peron Expounds His Doctrine. 197.

Rosa Aboy, "La vivienda social en Buenos Aires en la segunda posguerra (1946-1955)." *Scripta Nova de la Universidad de Barcelona* 8, no. 146 (2003). http://www.ub.es/geocrit/sn/sn-146%28031%29.htm

183 Ibid.

guaranteeing the right to a roof over the head of every citizen institutionalized the necessity of spreading such essentials to all Argentines.

In addition to the housing built by the ANV, the Eva Perón Plan, administered by the Eva Perón Foundation (FEP), also built neighborhoods for workers throughout the city. The most famous of these neighborhoods was Ciudad Evita-built to resemble Evita's profile—but the FEP built many others as well. According to the newspaper *Democracia*, the FEP constructed, "neighborhoods and even entire towns to give healthy, comfortable, and cheap housing to all Argentines." The journalist's use of the word "healthy" further emphasizes the connection between sanitation, public health, and housing. With the construction of thousands of homes for the homeless, the government partially fulfilled its promise to its people.

FEP protocol specified the building of single-family housing units, ¹⁸⁵ in what some considered an unnecessarily luxurious style. Evita defended her home building thusly: "My homes are generously rich. But here, I even want to surpass myself. I want them to be luxurious. Precisely because a century of miserable asylums cannot be wiped out by another century of 'excessively luxurious' homes." Yet Evita's method begs the question of quality over quantity. Why build "excessively luxurious" homes for a few when decent homes could be built with the same investment for many more people? Eva's predilection for luxury seemed to contradict her husband's declaration of housing as a right. The problem was a common one within the Peronist government: OSN would experience similar difficulties in regards to water infrastructure. However, other sources describe the houses built by the FEP as more modest: "The houses in

¹⁸⁴ "Casas para el Pueblo: el Barrio Juan Perón", *Democracia*, June 7, 1949. 7.

Aboy, "La vivienda social en Buenos Aires en la segunda posguerra (1946-1955)."

¹⁸⁶ Perón, Evita by Evita: Eva Duarte Perón Tells Her Own Story. 140.

Los Perales [an FEP-constructed neighborhood] gave to their inhabitants the possibility to live in a comfortable manner, connected to networks of electricity, potable water, gas, and sewers, most of which were not available in the majority of the living situations from which the inhabitants had come." It is possible that the "luxury" of which Evita spoke only referenced the basic necessities that are often taken for granted, but that many of the new residents of public housing had lacked in their previous residences. For example, the Ministry of Public Health had mandated that worker neighborhoods should have collective washing machines and bathrooms installed in cases where the water supply was not "sufficiently abundant." The residents of those neighborhoods had probably never seen a washing machine before the state installed one in their common area, yet the welfare-oriented Peronist regime now considered the washing machine a necessity in every home.

With the "luxury" of the new public housing, Argentines experienced a major conceptual shift in what they expected from their housing. Perón received many letters evidencing this shift in a campaign during which he encouraged letters from the Argentine people with suggestions for new policies. In one letter, a worker named Armando Etchegoyen underlined the "requirement" that each house constructed have "a bedroom, a bathroom, and a kitchen." Other letters reiterated similar necessities, all specifying the need for a bathroom. Yet these letter-writers wrote their missives in 1952, years after the FEP had begun constructing houses. Before the precedent set by

¹⁸⁷ Rosa Aboy, "Ellos y nosotros: Fronteras sociales en los años del primer peronismo." *Nuevo Mundo, Mundos Nuevos*, (2008). http://nuevomundo.revues.org/25782.

Ministerio de Salud, *Plan analítico de salud pública.* 1271.

Rosa Aboy, "El 'derecho a la vivienda:' Opiniones y demandas sociales en el primer peronismo." *Desarrollo Económico* 44, no. 174 (2004). 295.

¹⁹⁰ Aboy, "El 'derecho a la vivienda:' Opiniones y demandas sociales en el primer peronismo." 297.

the FEP houses, the workers for whom the housing was slated did not expect such amenities as running water. In fact, according to the testimony of one neighbor in the *barrio* of Mataderos near the FEP-constructed section of Los Perales, "At the beginning, the 'coyas' came, a series of indigenous that came to Buenos Aires because they could not work in the country and the people came to find work here. So they gave them apartments and, not having seen an apartment before...[they] destroyed everything, because they didn't know what a bathroom was...they used the bathtub for other things...Before giving the people anything, they have to be educated." Although the veracity of this claim has been disputed, ¹⁹¹ it certainly remains the case that the workers who first came to live in these new homes did not expect such luxuries as bathtubs.

The Perón administration's social campaign to change expectations did not stop at the construction of housing for the homeless. As part of the economic plan to stimulate internal industry, Perón encouraged consumerism among the working class to form an internal market for the small machinery the country had begun to produce. Because of the new laws passed concerning rent freezes, minimum wages, and price ceilings, much of the working class found they could afford the luxuries now manufactured in the country. Many of these Argentine-made machines, like washing machines and dishwashers, created new demands on an already stressed system of water distribution. New luxuries were at the disposal of the working class; the Ministry of Public Health's *Analytic Plan* even mentions swimming pools in working class

19

¹⁹¹ Aboy, "Ellos y nosotros: Fronteras sociales en los años del primer peronismo." *Nuevo Mundo, Mundos Nuevos*, (2008). http://nuevomundo.revues.org/25782.

¹⁹² Romero, A History of Argentina in the Twentieth Century. 101.

¹⁹³ Ibid. 104.

neighborhoods: Pools in worker neighborhoods: the "installation [of swimming pools] is economical when it is done with mutual effort [within the neighborhood]." The need for water became less urgent and more frivolous because of its new ubiquity within the working class lifestyle in some parts of Buenos Aires.

The increased expectation for water services did not limit itself to the home. Schools constructed during the Peronist regime also inculcated into students the idea of water as a right by the mandate that all schools contain toilets. (Two for each classroom and three urinals in schools for boys and three toilets per classroom in schools for girls) The sinks were required to have automatic water dispenser. Baths or showers with hot water were also mandatory. Lastly, Perón required water fountains in all Argentine schools, with water free of bacterial and chemical contaminants. In sum, according to the Ministry of Public Health's *Analytic Plan of Public Health*, "No school can be constructed without a guarantee of the benefits of potable water and sewage services." Therefore, the children of the Peronist era learned to expect water not only in their homes, but also in their schools.

Indeed, Peronist policies served to educate (or indoctrinate) the Peronist constituency into a new way of thought. The houses constructed especially served this purpose: "The proletarian neighborhood...[as] a hygienic and modern environment, could be an apt scene to mold the citizens of the New Argentina, with the state as benefactor and landlord." As Argentines came to expect new amenities like bathrooms with running water, they themselves began to consider water as the right of everyone, and not just a privilege or a way for the city to prevent epidemics. By creating

¹⁹⁴ Ministerio de Salud, *Plan analítico de salud pública.* 1271.

¹⁹⁵ Ibid. 557.

¹⁹⁶ Aboy, "La vivienda social en Buenos Aires en la segunda posguerra (1946-1955)."

a different set of expectations about housing, Perón and his followers spread the idea of water as a right to all of Argentina.

The Failure of OSN to Manifest Perón's Vision

Perón's transformation of the perception of water greatly impacted, and was impacted by, the capacities of the water distribution infrastructure and the water utility, OSN. Although water became a right in the rhetoric of the Peronist regime, it failed to be manifested physically as a right because of the inability of OSN to meet Perón's impossible demands.

The large increase in the demand for water due to changing expectations required a drastic change in the water distribution infrastructure, but such an update did not occur on the scale necessary to meet the rising demand. OSN did attempt to keep pace with the increase in demand. Many of the construction projects abandoned by previous regimes due to lack of funding were completed during Perón's presidency. These projects included several sewage treatment facilities and other infrastructure necessary for the sanitary management of water and waste. In particular, the General Collector of the Lower Costanera Zone was finally finished, an urgent project that had been deemed a necessity since 1926.¹⁹⁷ The postwar economic boom and Perón's increased investment in all aspects of public welfare allowed for the sewage facility's completion. However, even with the new infrastructure the water utility struggled to keep pace, resulting in shortages especially during the summer months.¹⁹⁸

¹⁹⁷ Rey, El Saneamiento En El Area Metropolitana. 92.

¹⁹⁸ Ibid. 94.

Part of the problem stemmed from the low cost of water during this period. In keeping with the Peronist consideration of water as a basic human right, water cost virtually nothing. By Perón's mandate, water service cost an average of four centavos a day per person while a cup of coffee cost eighty centavos. Such a low cost caused a sharp decrease in income for OSN, which hindered the expansion and upkeep of the utility. This difficult paradox is a problem inherent to the consideration of water as a right. Because water cost had to remain low to ensure access to all, fewer people could receive access to water because the water utility had less money with which to maintain and expand its infrastructure. Without funding from a different source, the right to water may be proclaimed, but never enacted.

Thus, it becomes apparent that, for all Perón's rhetoric, his administration did not manage to fully realize the right to water. The lack of funds stemming from the low price of water created a situation in which the right to water was declared but never realized because the proper infrastructure could not be created. Therefore, while the people of Buenos Aires came to expect potable water from their government, the government could not deliver such a resource.

The End of the Right to Water

The end of the heyday of the rhetorical right to water began in 1952 with the fall of key leaders from power. Eva Perón's death from cancer in 1952 instigated the downfall. As one of the ringleaders of the public housing movement, especially through the Eva Perón Foundation, her death brought a halt to the movement. Not only did

¹⁹⁹ Ibid. 97.

public housing lose its most important proponent, but with Evita's death, the Eva Perón Foundation died too. Much of the housing construction momentum was lost without the fervor of the FEP.

Eva's death also had a profound effect upon her husband. The General began to exhibit "erratic" behavior, spending much of his time at his private residence in the suburbs surrounded by the teenagers of the Union of Secondary Students, rather than at the presidential Casa Rosada. He drew his attention inward, away from the wellbeing of his people. The regime itself began a move toward totalitarianism. Limiting political opposition in both politics and the press, the Perón administration began to inadvertently stir up political unrest. The Catholic Church was especially irked by Perón's behavior, and the ensuing conflict eventually brought about his downfall.²⁰⁰

As if to underline the significance of the preceding events to public health, Ramón Carrillo resigned from the position of Minister of Public Health in 1954.

According to his biographers, Carrillo did not approve of the direction in which Perón was taking the country after the death of Evita. He especially objected to the new Vice President, Alberto Teissaire, and his efforts to continue the consolidation of power in the hands of a few. In addition the Minister suffered from malignant hypertension, which, as a doctor, he could no longer ignore. He offered up his resignation in June of that year. Without Carrillo's grand vision, Argentina's public health system began to flounder.

The ultimate disaster for the right to water came with the coup d'état that ousted President Perón in 1955. After a conflict between the Union of Secondary

²⁰⁰ Romero, A History of Argentina in the Twentieth Century. 125.

²⁰¹ Chiarenza, El Olvidado De Belem: Vida Y Obra De Ramón Carrillo. 156.

Students and the Catholic Church during the celebration of the Day of the Student in 1954, Perón began to furiously attack the religious institution. Demonstrations, arrests, articles and pamphlets were flung from all sides. The navy took advantage of this chaotic time to put into effect a "truly insane" plan: to bomb the Casa Rosada and kill Perón. The plan went awry and killed three hundred of the civilians demonstrating in the Plaza de Mayo in front of the Casa Rosada. The bombing led to the Peronist civilian reaction of setting fire to churches and cathedrals around the city. Not long afterwards, on September 16, 1955, General Eduardo Lonardi and a few members of the Argentine military led a revolt against Perón. This revolt succeeded, and by September 22, Perón had fled the country and Lonardi had proclaimed himself provisional president of Argentina.

Despite the downfall of *Justicialismo* in Argentina, Perón managed to profoundly transform the Argentine perception of water. Through radically different public health and housing policies, the Peronist regime managed to change the idea of water from that of a dangerous agent of infectious disease to the right of every Argentine. The dramatic alteration Perón implemented in Argentine society created an Argentina in which citizens began to expect potable water delivered to their neighborhoods because they had a right to such a service. However, despite these rising expectations, water never became more than a rhetorical right of the citizens of Buenos Aires because the reduced cost of water failed to allow for sufficient expansion of the water distribution network to meet the growing demand.

Romero, A History of Argentina in the Twentieth Century. 129.

²⁰³ Ibid. 130.

Chapter Three

The Commoditization of Water: Privatized Water Distribution in 1990s

The fall of Perón in 1955 marked the beginning of the decline of Obras Sanitarias de la Nación. Because of a virtual paralysis of investment in public works, water service became worse with each passing year. The water situation was not the only gloomy one in Argentina during those years. Decades of violent dictatorship and corrupt regimes had profoundly degraded the country's economy. President Carlos Menem (1989-1999) chose to solve both the economic and water supply problems by auctioning off the publically funded OSN to a conglomerate of international entities to create a tradable market for potable water in the city of Buenos Aires. With the privatization of OSN, Menem changed Argentina's Peronist idea of water as a right to a commodity to be traded for profit.

The Water Situation Before 1989

The coup that ousted General Perón in 1955 was followed by a series of coups, military-led dictatorships and restrictive pseudo-democracies, each more brutal than the last. The only respite arrived in the form of Perón himself, returning for a brief stint as president starting in 1973 that ended with his death in 1974. Following his death, and the inept government run by his second wife, Isabel, the last of Argentina's dictatorships came into power. Led by the leaders from the army, navy, and air force, the regime became infamous for its penchant for the kidnapping, torture, and murder of estimated 30,000 political prisoners.²⁰⁴

Romero. History of Argentina in the Twentieth Century. 218

The turbulence of the time and the inability of any single government to remain in power caused the various regimes to place a low priority on water. OSN initiated new works, but very slowly. Federal investment in the company decreased by a substantial amount as the money usually slated for water provision was spent on various other things deemed more important to each individual government. In 1964, for example, OSN received only 25% of the funding they received in 1940.²⁰⁵

Although the previous governments had tended to ignore the water needs of the capital city, none did so with as much resolve as the military junta of 1976-1983. The dictatorship took an explicit position against the development or expansion of Buenos Aires' water works, by denying OSN the funds they would have needed to operate the utility properly. Instead the regime chose to invest the government's money in other aspects of government like the army and police force that had expenditures of up to 6% of the GDP in the early 1980s. Indeed, every request for money generated by OSN to the Ministry of Economy came back with the unambiguous reply that new works should not be initiated. The Ministry continued to deny OSN's requests until finally, exasperated with managing the failing company, the military government began a plan in 1979 to decentralize the water provision company, pushing it out of federal hands and into those of the city and the province. The decentralization process further reduced investment in water and sanitation infrastructure to 0.56% of the entire public investment, down from 1.5% in 1970. The decentralization process further reduced investment, down from 1.5% in 1970.

²⁰⁵ Rey, El Saneamiento En El Area Metropolitana.109

²⁰⁶ The World Bank, Argentina: From Insolvency to Growth (Washington, DC: World Bank, 1993). 94.

²⁰⁷ Rev, El Saneamiento En El Area Metropolitana.117

²⁰⁸ Ibid.124

By refusing to invest in the water works, the dictatorship demonstrated its disregard for the welfare of the public. For example, as if to underline the complete disregard of the regime for its people, the military government razed the *villas de emergencia*, or slums, of the capital city and surrounding suburbs. While the *villas* represented many of the larger poverty-related problems in the city, they also contain a high proportion of those without connections to water. The military regime's disregard for Argentine citizens (also exemplified by the 30,000 *desaparecidos* abducted during the regime's rule) showed a disregard for the human need for drinking water. The junta ignored the water utility and razed the homes of those with the most need for its support (in terms of water access and otherwise) in a devastating effort to make the problem of the needy public disappear.

Democracy returned to Argentina in 1983, and with it came a degree of concern for the state of the public's access to potable water in the *Capital Federal* and the surrounding metropolitan area. The failing military regime turned the leadership of the country over to democratically elected Radical Party candidate Raúl Alfonsín in 1983. Alfonsín came to power during a period of hyperinflation (at times above 4000% a year²¹⁰) and economic turmoil willed to him from the previous government.

Alfonsín also inherited a diseased system of water management from Argentina's previous governments. Not only had OSN been at turns ignored and mistreated, the ailing enterprise was also overstaffed and rife with corruption. The population of Buenos Aires had increased exponentially since the fall of Perón, but the

Victoria I. Casabona, "El Agua: Recurso De Poder En Un Barrio Periférico," in *Constructores De Otredad: Una Introducción a La Antropología Social Y Cultural*, ed. Mauricio F Bolvin, Ana Rosato and

Victoria Arribas (Buenos Aires: Eudeba/Universidad de Buenos Aires, 1999). 2

²¹⁰ Alexander J. Loftus and David A. McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires," *Environment and Urbanization* 13, no. 2 (2001).

water and sewage distribution pipes had not been expanded commensurately. Three million people, or 40% of the citizens of Buenos Aires, lacked water provision services and four million lacked waste removal services.²¹¹ Because of the decentralization, no new infrastructure had been completed since 1981.²¹² Industrial pollutants had increased substantially—by the early 1980s, unregulated industries discharged into the rivers surrounding Buenos Aires as much organic effluent as a population of 20 million people. The untreated sewage of more than six million people was also dumped daily into these rivers.²¹³ Additionally, the dictatorship had encouraged public enterprises to borrow money from international investors. By 1980, the water and electricity companies of the nation jointly were US\$1496.6 million in debt. That number rose to US\$2180 million in 1985.²¹⁴ In effect, the previous governments had incapacitated much of the city's water provision capabilities.

Alfonsín attempted to rectify the dismal water situation, but economic problems hindered any progress. In conjunction with OSN, he did create the program Pro-Agra, increasing the number of slum residents with access to treated water by 150,000 in over 20 *villas*, ²¹⁵ but more comprehensive action proved impossible. By the end of Alfonsín's presidency in 1989, water provision had not improved by much. Over two hundred thousand *villa* residents still lacked water services. Many of the poorer neighborhoods lacked water connections as well. ²¹⁶ Preventable disease due to lack of potable water was still high: 8.75% of those admitted to the hospital suffered from intestinal disease due to

Rey, El Saneamiento En El Area Metropolitana.130

²¹² Ibid.130

²¹³ Ibid.128

²¹⁴ Luigi Manzetti, *Privatization South American Style*, Oxford Studies in Democratization (Oxford; New York: Oxford University Press, 1999). 82

²¹⁵ Rev, El Saneamiento En El Area Metropolitana. 1

²¹⁶ Carlos Saúl Menem and José Roberto Dromi, *Reforma Del Estado Y Transformación Nacional* (Buenos Aires: Editorial Ciencias de la Administración, 1990). 64.

poor water quality. The percentage in developed countries usually hovers around 0.3%. ²¹⁷ Up to 45% of the water in the system was unaccounted for—produced, but not billed to customers—compared to an average of 10-20% in developed countries, implying the existence of decaying infrastructure. ²¹⁸ Despite Alfonsín's wholehearted attempt to fix both the chaotic economic situation and the seemingly broken system of treated water distribution, he left an unfinished legacy for his successor to untangle. And when that successor took power, he took drastic steps.

Menem's Economic Reforms and the Problem of Water's Economic Classification

Carlos Saúl Menem was elected democratically in 1989 and took office that same year. Almost immediately after assuming the presidency, Menem began a revolutionary series of economic reforms. He began by launching a large-scale privatization program, targeting all of the enterprises owned by the state. In conjunction with the privatization program, he also initiated a process of financial and trade liberalization. This included granting independence to the national bank and creating a monetary currency board in 1991 to implement his Convertibility Plan, which essentially tied the peso to the U.S. dollar in an effort to curb inflation. These and other structural reforms led to the general deregulation of economic activities.²¹⁹

Privatization of public utilities and other publicly owned companies constituted a large part of Menem's economic plan. Key among those was the water utility, OSN.

²¹⁷ Rev, El Saneamiento En El Area Metropolitana. 135.

²¹⁸ The World Bank, "World Development Report: Infrastructure for Development," (New York, NY: The World Bank, 1994). 4

²¹⁹ Alberto Chong, Florencio Lopez-de-Silanes, and ebrary Inc., "Privatization in Latin America Myths and Reality / Edited by Alberto Chong, Florencio López De Silanes," In *Latin American development forum series*. (Palo Alto, CA, Washington, DC: Stanford Economics and Finance; World Bank, 2005), http://site.ebrary.com/lib/yale/Doc?id=10078126. 71.

Yet the privatization of water providers brings with it a host of problems because a debate exists over water's status as a public or merit good versus a private one and privatization often implies a perception of water as a private good.

A pure public good, according to economic terminology, is one that is both inherently indivisible and freely accessible to all. Public goods often suffer from the "Tragedy of the Commons," as individual actors exploit the resource because they assume others are doing so as well, leading to its over-exploitation. The Argentine water supply did indeed suffer from the Tragedy of the Commons because water access was not excludable. As most of the connections were not metered *porteños* had little incentive to restrict their usage often creating water shortages during the summer months. Private companies often undersupply public goods because the problem of free-riders causes underinvestment: if a person could know that others will receive the good without paying for it, that person has no incentive to invest in the good. However, privatization advocates argue that water need not be freely accessible; people can pay a fair price for it or be excluded, thus overcoming the Tragedy of the Commons.

Many economists also classify water as a merit good, whether it is a private or a public good. A merit good is one which society deems its members should receive based on need rather than ability- or willingness-to-pay. Under Perón, water functioned as a public merit good. The consumer's ability to pay sets a merit good's price, on a regulated basis. For many experts in the field, commoditization occurs when, "water

....

²²⁰ Joseph W. Dellapenna, "The Importance of Getting Names Right: the Myth of Markets for Water," *William & Mary Environmental Law and Policy Review*, no. 317 (2000). 17

²²¹ Loréna Alcázar, Manuel A. Abdala, and Mary M. Shirley, "The Buenos Aires Water Concession," in *Regulation and Competition Policy*, ed. Development Research Group The World Bank Regulation and Competition Policy (Washington D.C.: The World Bank, 2000). 5

ceases to be a service, supplied at subsidized rates to citizens as a right, and is increasingly viewed as a commodity, sold to consumers on a profit-making basis of willingness-to-pay rather than ability-to-pay."²²² The difference, then, between public merit goods, and pure private goods is the implicit goal of profit-seeking.

Despite the traditional classification of water as a public merit good, the World Bank instead argued forcefully in the early 1990s that water supply needed to become a pure private good or a tradable commodity. A private good is the opposite of a public good—it is both exclusive and rivalrous. The World Bank promoted this categorization of water in their 1992 *World Development Report*, the Bank's annual major analytical report. The Bank's Chief Economist Larry Summers supervised the report, which focused on development and the environment that year. In the report the World Bank stated that both water supply and wastewater removal and solid waste collection should be classified as private goods. The report then made the distinction between these private goods and waste treatment and disposal, which they claimed, "benefit the community at large." According to the World Bank, "an appropriate guide to the level of service to be provided" for water supply and wastewater/solid waste collection should be "willingness to pay." The public should finance waste treatment and disposal, however, because of the nature of these services as public goods.²²³

This classical argument for water privatization focuses on the need to consider water a scarce commodity and treat it as such. The under-pricing of water, subsidization of waste, and non-volumetric consumption charges exemplify the failure to consider

²²² Karen Bakker, "Archipelagos and Networks: Urbanization and Water Privatization in the Global South," *The Geographical Journal* 169, no. 4 (2003). 336

²²³ The World Bank, "World Development Report: Development and the Environment," (New York, NY: The World Bank, 1992). 108.

water a commodity. This failure, according to proponents of privatization, results in water pollution, inefficiency and under-investment.²²⁴ The argument for privatization, originating from the classification of water as a commodity, assumes that the state does not consider water a commodity and therefore is inefficient.

Indeed, the assumption is larger than a simple semantic failure: the privatization argument rests on the simple belief that the state is largely incapable of efficient water distribution. The World Bank cites "institutional failure" as the cause of poor public utility performance in its 1992 report. The report argues that developing countries cannot sustain reliable and efficient public water and sanitation companies because the companies become "too political;" that is, "key policies are effectively made by government and heavily influenced by short-term political considerations." In essence, the World Bank propounds the conversion of public water utilities to the market to regulate and increase efficiency because governments make decisions based on politics rather than economics.

The Bank claims that high levels of inefficiency and corruption often characterize public utilities. A World Bank review of a Sri Lankan water supply company in the same report summarizes the World Bank's view of the failings of public enterprises: "[they] are key elements of patronage systems...overstaffing is often rife, and appointments to senior management positions are often made based on political connections rather than merit." For the World Bank, as a key proponent of privatization, "the private sector...will be crucial to the provision of accountable and

²²¹ Bakker, "Archipelagos and Networks: Urbanization and Water Privatization in the Global South." 335

²²⁵ The World Bank, "World Development Report: Development and the Environment." 108-110.

²²⁶ Ibid. 110.

efficient service."²²⁷ The World Bank presses the matter even further, going so far as to claim that, because of "state failure," "there is no good economic reason for the persistence of the state in a tradable-goods industry."²²⁸ The tradable good mentioned is, of course, water.

In Argentina, the idea of state failure holds true. The failure of OSN to meet the public need for water in the city of Buenos Aires occurred because of the policies of the regime in power. The water utility itself was not to blame for the lack of water provision during the time of the dictatorship. Instead, the dictatorship's decision to block all funding to OSN hindered any progress the company might have made.

The Aguas Argentinas account of the recent history of water distribution in Buenos Aires takes great pains to emphasize the ineffectiveness of OSN in order to justify the need for privatization, but many of the examples given highlight the culpability of the military regime. The construction of the system of water provision Villa Adelina exemplifies this effort. Initiated before the decentralization of the water utilities, the system was planned to include a subterranean river from the Belgrano treatment plant that would increase access to potable water for 400,000 people. OSN had already invested fifty million dollars and to finish the job required less than 10% of that amount and six months of labor. Despite these compelling arguments, OSN argued in vain for over two years attempting to obtain the requested funds. The military government denied every request. Most of the examples given by Osvaldo Rey in the Aguas Argentinas account, like the one above, can be attributed to the governmental

²²⁷ Ibid. 111.

²²⁸ Bakker, "Archipelagos and Networks: Urbanization and Water Privatization in the Global South." 335.

Rey, El Saneamiento En El Area Metropolitana. 123

failings of the military regime and not the public entity itself. Perhaps, however, in a time of democracy such as that of the late 1980s and early 1990s, OSN could have functioned properly under continued state control.

The privatization argument further postulates that treating water as a commodity rather than a right, (or to put it differently, as a private or tradable good rather than a public one) encourages the judicious use of the substance in terms of conservation and economic sustainability. However, in the Argentine case, neither a private nor a public company could produce conservation through pricing because 99% of the existing connections were unmetered and installing meters was prohibitively expensive (about US\$200 per connection, or \$300 million to install meters for all customers). Without meters, consumers have no incentive to reduce their consumption, no matter the monthly fee, and no matter the entity in charge of distribution.

Another flaw in the privatization argument is that, unlike other commodities, water cannot be sold on the competitive market. Indeed, the commonly used term "water market" is somewhat of a misnomer. Water utilities have a natural monopoly because of the vast economies of scale implied, therefore the laws of supply and demand do not apply. Instead, the pricing of water is purely an administrative decision, as consumers cannot choose between providers for the best product or lowest prices.²³¹ Although other alternatives do exist in Buenos Aires, such as personal wells and water purchased from private water tankers, the former often provides only unpotable water²³²

²³⁰ Alcázar, "The Buenos Aires Water Concession." 28

²³¹ Violeta Petrova, "At the Frontiers of the Rush for Blue Gold: Water Privatization and the Human Right to Water," *Brooklyn Journal of International Law* 31, no. 2 (2006). 592.

²³² Casabona, "El Agua: Recurso De Poder En Un Barrio Periférico."

and the latter may cost up to ten times as much as tap water.²³³ In addition, many users connected to the network of pipes illegally.²³⁴ However, because these alternatives most often prove unviable, most consumers opt for water distributed by the water utility when available. The World Bank admits the inconsistency of the natural monopoly with the ideology of privatization: "It is virtually impossible to have direct competition between suppliers in a specific [geographic] area."²³⁵ The 1992 World Development Report offers several examples of solutions used around the world, such as competition for concessions every few years, but the report promotes none of them. Indeed, the problems of privatization were glossed over in the report and were not solved in the Argentine situation.

Nothing close to a market for water was created in the city of Buenos Aires, despite the fact that a private company took control of water provision. Although companies competed for the initial concession once the privatization process began, continued competition proved impossible because Argentina granted the concession for thirty years. In this case, the importance of the distinction between privatization and the creation of a market emerges—without a competitive market, there are fewer advantages to private ownership. Indeed, the lack of competitive market mechanisms implies that privatization is, "not likely to promote the economically efficient use," of

²²³ Petrova, "At the Frontiers of the Rush for Blue Gold: Water Privatization and the Human Right to Water." 587.

Diego and Diego Petrecolla Bondorevsky, "Concesiones De Agua Y Saneamiento En Argentina: Impacto En Los Sectores Pobres," in *Centro de Estudios Económicos de la Regulación* (Buenos Aires, Argentina: Universidad Argentina de la Empresa, 2001).

²²³ The World Bank, "World Development Report: Development and the Environment." 111.

water, and because a public entity concerns itself more with distributional equity, logically a public entity would be preferable.²³⁶

This debate over water's economic classification and the resulting most efficient mode of management was stirred by Menem's plan for the privatization of the water utility. The debate illuminates the idea that private water utilities consider water a commodity, and thus privatization implies commoditization. Despite the arguments against privatization, Menem continued with his plan to privatize the water utility.

The Role of Intergovernmental Organizations in the Privatization of Public Utilities

The World Bank and other intergovernmental organizations including the International Monetary Fund, the Inter-American Development Bank, and the International Finance Corporation all propounded privatization in Argentina. Menem desperately needed their support. The President had inherited an Argentina with an "international reputation [that] had been tarnished due to the inability of the Alfonsín administration to fulfill its obligations with foreign banks and international lending institutions. This happened at a time when foreign capital was sorely needed and the country's investment-risk rating had become one of the worst in the world." To reduce debt and qualify for the US sponsored, debt-forgiving Brady Plan, Argentina had to regain the support of the United States and the intergovernmental organizations of the developed world.

Menem found Argentina could regain that support by privatization. The

Argentine government followed World Bank privatization recommendations exactly,

Dellapenna, "The Importance of Getting Names Right: the Myth of Markets for Water." 23

²²⁷ Manzetti, Privatization South American Style. 80

including privatizing the state telecommunications company before the distribution of any loans as a showing of good faith. To reward Argentina's obedience and encourage continued reform, the Bank lent the country US\$1.5 billion between 1991 and 1995 in order to aid the privatization process. Many of the loans were tied to specific uses. For example, the US\$300 million Public Enterprise Reform Adjustment Loan (PERAL I) of 1991 stipulated its use for the early retirement of many government workers. A second loan of the same amount (PERAL II) came in 1993. The Bank also loaned Argentina US\$23 million in 1991 for technical support from international consulting firms specializing in the privatization process. 229

The International Finance Corporation (IFC) also aided the Argentine government in its privatization efforts. The IFC, in conjunction with the Midland Bank, the Bank of Tokyo, and the Banco Río de la Plata, created two corporations, the Argentine Private Development Trust Co. Limited and Corporación de Inversiones y Privatización S.A., to help finance private companies interested in participating in the privatization process.²⁴⁰

But Argentina did not only receive international loans to aid in the privatization process. Instead, privatization improved Argentina's standing and credibility in the international community. For example, in 1997, after eight years of privatization under the Menem administration, the IMF enhanced Argentina's line of credit because of the country's "good governance" practices.²⁴¹ Argentina's risk index dropped from 31.9

Independent Evaluation Group, "Privatizing Argentina's Public Enterprises," http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/4B4E2615E69FCD668 52567F5005D8A53.

Manzetti, Privatization South American Style. 88

²⁴⁰ Ibid. 89

²⁴¹ Ibid. 89

points in the first quarter of 1990 to 2.8 points in the last quarter of 1993. Such an increase in international standing is not surprising because of the neoliberal bent of many of the international powers during the 1990s.

Because the World Bank and other intergovernmental organizations had such a hand in fomenting privatization in Argentina, it is not unreasonable to assume that the World Bank passed along its perception of water supply as a private good to the Argentine government. Indeed, in Reforma del Estado y Transformación Nacional, President Menem himself and the Minister of Works and Public Services, Roberto Dromi, expound upon the necessity for state and economic reform in terms that mirror those of the influential intergovernmental organizations. Written in 1990, the book offers an argument for and an explanation of the economic reforms Menem would begin to implement. The policy makers expressed the opinion that, "the obsolescence and inefficiency of the government-owned enterprises is in fact incompatible with productive capitalism."²⁴³ Private initiative, they continued, "is an essential derivative of liberty. It is the natural substitute of the business activities of the state."²⁴⁴ The authors made a point to express the equality of domestic and foreign private initiative as well: "the state admits [them to be] equal." The acceptance of foreign private companies explicitly demonstrates the extent to which Menem's rhetoric pandered to organizations like the World Bank and the IMF. The influence of these organizations played on the Argentine privatization process strongly suggests that the Argentine government adopted the view of these organizations toward water management.

²⁴² Ibid. 148

Menem and Dromi, Reforma Del Estado Y Transformación Nacional. 26

²⁴⁴ Ibid. 27

²⁴⁵ Ibid. 28

The Implementation of the Privatization Process

Menem began the economic reforms supported by the international community that he had outlined as soon as he took office. Because of the inflation crisis and questionable legal maneuvering on the part of the president, the legislature passed the National Administrative Reform Law (No. 23696) and State of Emergency Law (No. 23967), essentially declaring a state of economic emergency concerning public services. The laws stipulated the right of the Executive Branch to privatize any and every enterprise owned by the state in whole or in part without public consent or independent oversight. Menem immediately gave the order to privatize 32 of the 400 state-run enterprises.247

These laws were implemented in Decree No. 2074/90, which authorized the organization of a concession-based privatization scheme. Privatizing the water utility, as part his overall privatization program, formed part of Menem's larger short-term plan to create revenue to solve Argentina's fiscal problems. The primary objective of the privatization program was to "obtain short-term financing for the public sector and improve the net external position of the economy."248 Yet the trade of water for cash implies a perception of water as a commodity, as something that can be traded for something else. The Menem administration traded control over public health for a short-term increase in cash flow and international standing, reflecting an implicit disregard for any deeper importance water provision might have held, reducing water to

²⁴⁶ Carlos Menem, "National Administrative Reform Law," in Law 23.696, ed. Republic of Argentina

^{(1989).}

Manzetti, Privatization South American Style. 72

²⁴⁸ Manuel Sánchez et al., *Privatization in Latin America* (Washington: Published by the Inter-American Development Bank; distributed by the Johns Hopkins University Press, 1993). 256

a simple tradable good. Because the water concession had no more profound reason for its existence than making a profit (such as concern for public health or human rights), the concession created a new role for water—that of a commodity.

The federal decree led to the creation of the Technical Commission of Privatization in 1992 comprised of representatives from the Subsecretary of Public Works and Services, the Bicameral Commission of the National Congress, the President's Secretary of Planning, Obras Sanitarias de la Nación, and various affected unions. ²⁴⁹ This commission was in charge of creating a short list of potentially interested "prestigious international firms," and organizing the technical aspects of the business deal. ²⁵⁰ The Commission targeted international firms because, the government argued, the crisis occurring in the Argentine economy and the inadequacy of the domestic stock exchange forced OSN into international hands. ²⁵¹

The Commission ultimately chose a conglomerate of multinational companies under the name Aguas Argentinas. The leader, Lyonaise des Eaux, a French firm and major player in the water industry, held a quarter of the shares in the company, with the rest divided between several Argentine banks, another French firm called Compagnie Generale des Eaux, the English Anglian Water and the Spanish Aguas de Barcelona.

The Commission chose Aguas Argentinas over the competition ostensibly because of the company's demonstrated ability to reduce water tariffs by 26.9%. However, because the interested companies decided to merge to create Aguas Argentinas they were able to offer a much less competitive bid, which Argentina was

²⁵¹ Manzetti, Privatization South American Style. 100

²¹⁰ Osvaldo Rey, *El Saneamiento En El Area Metropolitana*, 2 ed., 2 vols., vol. 2 (Buenos Aires: Aguas Argentinas 2002). 2, 20

²⁵⁰ Ibid. 20

²²² McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 185.

forced to accept. The government chose the Aguas Argentinas conglomerate with their figure of tariff reduction of 26.9% over the one other competitive offer of 26.7%. 233

These bids were so close as to raise existing suspicion of collusion practices. 254 The similarities between the bids also evoke suspicion because of vagueness and inaccuracy in the figures used by the companies to form their estimates. The rapidity with which OSN was auctioned created a situation in which the bidding companies were supplied with weak and sometimes inaccurate information. 255 With the similarity of the bids and the inaccuracy of the information given, it becomes apparent that little competition existed during the bidding process.

The water multinationals that merged together to form Aguas Argentinas already had a controversial history concerning water privatization around the world. The main corporation, Lyonaise des Eaux, which became Suez-Lyonaise des Eaux, and just one other company jointly control approximately 70% of the global market of water distribution. Both are currently Fortune 100 companies. Clearly Lyonaise des Eaux and the other primary component of Aguas Argentinas, Aguas de Barcelona, had found the water provision industry a very profitable one. Corruption scandals haunted several of the companies, although the most notorious bribery scandal involving Lyonaise des Eaux's operations in Grenoble would not surface until 1996. The companies hired to run Buenos Aires' water utility had unambiguously profit-minded intentions.

²⁵³ Ibid.

²⁵⁴ Manzetti, Privatization South American Style. 100.

²⁵⁵ Alcázar, "The Buenos Aires Water Concession." 21

²²⁶ Bakker, "Archipelagos and Networks: Urbanization and Water Privatization in the Global South." 330

²²⁷ Alan Friedman, "French Firm Draws up Own Code of Ethics," *The New York Times*, Tuesday, January 30, 1996 1996.

Of course, not everyone agreed with the necessity of auctioning off OSN to an international company, or group of companies, especially ones with such power.

Argentina had a strong, and according to many, embarrassing tradition of subjugation to foreign powers. Water utilities in Buenos Aires were first constructed under British control, and relinquishing that power once again to European control was seen as a failure on the part of Argentina. Many also feared that the international powers who had demonstrated little respect for their well being in the past would continue to neglect Argentines' interests once foreign powers gained control of the water utility. An imperialist power might sell Argentine water for the highest price to make the highest profit without regard for the health of Argentina.

Even the phrasing of the federal decree that privatized OSN showed an attempt to justify the actions of the Menem administration to make them seem more legitimate. The decree calls for the privatization of the "distribution and commercialization services currently *on loan to* OSN [emphasis added]." The phrasing of the decree emphasizes the federal government's effort to legitimize an action that many saw as a concession to imperialism. The distribution and commercialization services technically were not "on loan" to OSN, because the federal government owned the company. But with the relegation of the water infrastructure to a private firm, the federal government did indeed "loan out" the distribution and commercialization services. Fictionalizing a parallel between the two systems of water provision ownership deemphasized the drastic change that privatization implied in the government's attitude toward water.

Rey, El Saneamiento En El Area Metropolitana. 19.

The conflict over foreign versus domestic control of Argentina concerned much more than just the water industry itself, however. Indeed, French control over Porteño water was perceived as only a symptom of a larger disease. Foreign monopolies over Argentine goods and services had been a part of the political discourse of the country throughout its existence. British control of the beef industry and railroads in the early twentieth century had shaped the destiny of the country in innumerable ways. Most notably, Perón found much of his success in nationalist, anti-imperialist rhetoric. His nationalization of the railroads became a symbolic way of expelling the international meddlers from the country. Many viewed the influence of the World Bank, the IMF, and the United States in Argentine politics as a regression to earlier, pre-Perón, more imperialistic days. Even the World Bank understood this political dynamic. In the 1992 World Development Report, the World Bank admitted that, "foreign control of water supply is often perceived to involve losing sovereignty over a strategic sector." The surrender of the Buenos Airs water works to international forces could be considered a defeat in the battle against the forces of imperialism. In the past, foreign powers rarely placed priority on the good of Argentines, and it remained unlikely that they would do so in the case of water provision.

The unions provided the only real political resistance to privatization because of the jobs that privatization would take away. Yet the unions failed to unify their resistance in any way. Unions did voice their disapproval through strikes in the early 1990s, but to no avail. Appealing to Congress proved useless, as President Menem mostly bypassed the legislative body with the use of decrees allowed by the state of

The World Bank, "World Development Report: Development and the Environment." 110.

national emergency. The Menem administration also took harsh steps toward the suppression of worker political power by decreeing new laws regulating the right to strike. Under this new legislation, workers who had participated in strikes in 1990 and 1991 were laid off in massive numbers and some were even jailed. The government also attempted to placate union workers in the privatized fields by creating the Programa de Propiedad Participada, a program that offered employees of newly privatized industries 10% of the shares of the company. Through this program, OSN employees received 10% of the Aguas Argentinas stock when the private company took over. Government tactics, both the carrot and the stick, managed to suppress the opposition of the unions to privatization, despite the reduction of the water utility's workforce from 7,600 workers to 4,000.

Although many opposed privatization, and privatization of water utilities specifically, 1993 polls demonstrate that around 50% of Buenos Aires residents agreed with the statement, "It was good privatization occurred" in the water industry. (The proportion favoring ranged from 43-67% over the months of March to November) However, only about 15-20% agreed with the statement, "Privatization was well carried out." Although the respondents did not state reasons for such disagreeing, perhaps the concessionaire's overtly profit-seeking behavior, as discussed later, influenced some responses. Significantly, Menem's reforms proved especially popular among the lower income groups that lacked water connections. In those regions with less than 20% of the population connected to the water network, Menem consistently gained 60% or

²⁶⁰ Manzetti, Privatization South American Style. 97

²⁶¹ McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 195

Manzetti, Privatization South American Style. 87

more of the vote. The 1995 presidential elections produced similar results. At the beginning, at least, those without water welcomed the change because the old water management system did not work to their advantage. Menem's economic reforms had worked to cure inflation so perhaps they would work to extend access to water.

Overall, the privatization of the water utility treated water as a commodity, and the Argentine government and the international conglomeration of corporations that ran Aguas Argentinas definitely treated it as such. The former sold the utility off in a noncompetitive bidding environment for a one-time cash flow, and the latter had an extensive history of profit-seeking behavior, often at the expense of the quality of water distribution. However, the Argentine people were not enthusiastic about trading their old definition of water for a new one. Although some embraced the new perception, many remained unconvinced or opposed it outright.

The Profit-Seeking Behavior of Aguas Argentinas

The shift in the perception of water from right to commodity culminated on May 1, 1993, when Aguas Argentinas took possession of the former Obras Sanitarias de la Nación. The new company took over all water and sewage services in the city of Buenos Aires. The Aguas Argentinas concession was the largest private water and sanitation concession ever attempted in the world. Once Aguas Argentinas took control, the utility found itself reoriented toward profit rather than the simple provision of services, with mixed results.

Rey, El Saneamiento En El Area Metropolitana. 134

 $^{^{\}mbox{\tiny 263}}$ Alcázar, "The Buenos Aires Water Concession." 15

The contract between Aguas Argentinas and the Argentine government stipulated a term of thirty-five years for the company's concession. The contract divided the term into five-year periods, requiring one million new connections by the end of each period. At the end of the concession the contract required that 100% of households be connected to running water and 95% connected to sewage service. The contract also specified goals concerning aspects of service quality such as water pressure and obligated a base annual amount of investment (US\$240 million for the first five years). 266

Before the concession, federal law prevented OSN from refusing access to those who failed to pay. When Aguas Argentinas took control, this law was revoked, allowing the company to refuse service for failure to pay. Find the law caused a large scandal when Aguas Argentinas threatened to cut off the water supply of La Casa del Niño, a well-known children's home. The new policy exemplified the changed attitude toward water. When water was a merit good, no one could be denied it, despite lack of payment, but when Aguas Argentinas took over, water became simply a private good that the company could refuse to trade if payment were denied.

Going against traditional privatization practices, which usually call for a reorganization and general tidying up of public enterprises before their sale, Menem and the Minister of Public Works and Services, José Roberto Dromi, preferred to auction of many of the state companies in their deficit-ridden state. By not improving the companies before their sale, the Menem administration put itself in a weak

Alcázar, "The Buenos Aires Water Concession." 25-26

²⁶⁶ Ibid.

The World Bank, "World Development Report: Infrastructure for Development." 5.

²⁸⁸ Yanina Kinigsberg, "Ayuda Para 220 Chicos De Familias Sin Recursos," *Clarín*, August 10 1998.

bargaining position that necessitated the use of incentives detrimental to economic efficiency and competition.²⁶⁹

In the case of Aguas Argentinas, the government allowed a sharp increase in the price of water in order to allow for a profit in the first few years of Aguas Argentinas' operation. Beginning in 1991, when OSN became earmarked for privatization, water fees were increased at first by 25% in February, then by an additional 29% in April of that same year. The next April, in 1992, an 18% goods and services tax was added to the original fees. This tax was later increased to 21%, then finally to 29% a few months before privatization. These increases allowed Aguas Argentinas to charge higher rates than OSN to simultaneously bring in a profit and appear to have reduced the service charges. The Argentine government's complicity in Aguas Argentinas false generosity demonstrated its priorities: for the government under Menem, auctioning off the water provider, which implied allowing the highest bidder to reap a profit, prevailed over decreasing the cost of water provision. Though both the government and the concessionaire expressed the importance of inexpensive water, their actions demonstrated different priorities.

In order to enforce their contract the state created a regulatory agency, Ente Tripartito de Obras y Servicios Sanitarios (ETOSS)—the Tripartite Entity of Sanitary Works and Services—with representatives from the federal, provincial and municipal governments. ETOSS worked from within the Secretary of Public Works and Communication. Originally employing 70 people (mostly former OSN employees) the agency had a budget of US\$8 million drawn from a surcharge of 2.7% on all water

Manzetti, Privatization South American Style. PAGE NUMBER.

²⁷⁰ McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 190.

bills.²⁷¹ Its job was to represent consumers and ensure the completion of contractual arrangements.

The existence of a regulatory body was an essential component of the management transfer of the water utility. Because water provision is a natural monopoly, it escapes free market regulation. Without state regulation, the company could use its power in unconstructive ways, hence the necessity of ETOSS. Aguas Argentinas itself admits the need for a regulatory body in its history of the privatization process: "To assure the quality of service, the protection of the community's interests, the control, supervision, and verification of the current norms and the concession contract an Entity was created."²⁷² That Aguas Argentinas admitted to its own need for regulation speaks to the company's inability to function as a benevolent enterprise. The externality of social wellbeing did not concern the water company because its only interest lay in profit.

Despite the existence of a regulatory body, much debate exists over its actual effectiveness. Many rumors existed surrounding the corruption of ETOSS members in their relations with Aguas Argentinas, although nothing was proven. ²⁷⁸ In addition, the regulator operated from a relatively weak position in relation to the concessionaire, making it difficult for ETOSS to put forward substantial objections. ETOSS had few means to enforce its requests. Indeed, Aguas Argentinas often refused to provide ETOSS with documents it requested. Much of the information received from Aguas

²⁷¹ Ibid.

Rey, El Saneamiento En El Area Metropolitana. 134

²⁷³ McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires."

Argentinas, according to ETOSS, was "poor, incomplete, and biased."²⁷⁴ Because of its lack of tools and possibly poor motivation, ETOSS proved unable to adequately perform its regulatory duties.

The government also increased water charges before the sale of OSN to allow the concessionaire to offer lower prices during the bidding process before the creation of ETOSS, which put the regulatory body at a disadvantage. As a result, the concessionaire could charge prices equal or greater than those of the former OSN without the interference of the soon-to-be-created ETOSS. According to Governor Fernando de la Rua of Buenos Aires in 1999, "Water rates, which Aguas Argentinas said would be reduced by 27%, have actually risen 20%."275 Indeed, de la Rua's calculation appears correct considering the substantial increases in fees immediately before privatization. The result of these increases was an artificial decrease in price as soon as Aguas Argentinas took control of water provision. However, Aguas Argentinas did not charge lower fees than OSN before February 1991. Instead, the price of water with Aguas Argentinas was substantially higher than that of the pre-1991 OSN prices. Aguas Argentinas was able to obtain higher water prices through federal government manipulation of OSN before the creation of ETOSS, therefore preparing for the existence of a regulatory entity by using artificially inflated prices as a jumping off point for negotiations and immediately putting ETOSS on the defensive.

The fact that the regulatory body did not function properly allowed Aguas

Argentinas to reap profits from the concession that otherwise would not have been
permitted. This profit-seeking behavior, unchecked by ETOSS, disregarded the

²⁷⁴ Daniel Rivera, *Private Sector Participation in the Water Supply and Wastewater Sector: Lessons from Six Developing Countries*, Directions in Development (Washington, DC: World Bank, 1996). 65.

[&]quot;Embestida De De La Rúa Contra María Julia Alsogaray," *Clarín*, March 27, 1999.

concerns that ETOSS was ostensibly created to protect: "quality of service, the protection of the community's interest," and adherence to the contract, in Aguas Argentinas' own words. The goal of water provision had shifted. The water utility no longer sought to provide high quality water access to the citizens of the municipality. Instead, the company aimed for the highest profits for the least expenditures. Aguas Argentinas was able to ignore its contractual agreements because ETOSS did not enforce them.

Aguas Argentinas ignored the contract so completely, in fact, that the company forced the renegotiation of the contract twice. The first time occurred in 1994, when Aguas Argentinas pressured the regulatory body for increased prices, including a 13.5% increase in consumption charges. The company argued that because they complied with the government's extra-contractual demands to increase connections to poor neighborhoods costs would increase, necessitating an increase in prices. Yet the Aguas Argentinas claim contradicts itself because the company already agreed in the original contract to extend services to 100% of the residents living in the concession area. ETOSS agreed to the increase in charges because it could do nothing else in its weak position. Again, Aguas Argentinas' underhanded methods to extract money from the Argentine government demonstrate how water had become only a means to profit-laden end.

Increasing water charges did not provide increased incentive for Aguas

Argentinas to expand and improve the water network, however. In fact, the company
profited more from banking their increased revenue from higher user fees while

Rey, El Saneamiento En El Area Metropolitana.

²⁷⁷ McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 191

delaying new constructions. For example, it is estimated that delaying the construction of the Berazategui wastewater treatment plant saved Aguas Argentinas about US\$100,000 per day. The treatment plant was never built, and much of the sewage created by the city is still dumped directly into the Berazategui sewage outlet that flows into the Río de la Plata. This increase in income from user fees diverted Aguas Argentinas's incentive from financing the infrastructure improvements themselves in order to obtain new customers to increase revenue. Instead, the Argentine government simply handed them the desired rate increase. This interaction between the company and the government demonstrates the extent of the failure of both the market mechanism and the regulatory body to police Aguas Argentinas' actions.

The second time the company argued its profits were not large enough (US\$217 million lower than expected) because many citizens refused to pay the connection fee of US\$600 that Aguas Argentinas charged. According to Aguas Argentinas, much of the community to which they were in the process of extending connections "lacked the capacity to pay." And because "the income from this section [was] definitive for the maintenance of the economic-financial equation of the concession," Aguas Argentinas needed to recoup their losses somehow. ²⁸⁰ Note that Aguas Argentinas did not claim to require the money for expansion of the network or internal investment, but instead to maintain the "economic-financial equation," or, to put it plainly, the profit the contract had promised the company. However, Aguas

²⁷⁸ Rivera, Private Sector Participation in the Water Supply and Wastewater Sector: Lessons from Six Developing Countries. 52.

²⁷⁹ "Sewage System Infrastructure," Atlas Ambiental de Buenos Aires, http://www.atlasdebuenosaires.gov.ar/aaba/index.php?option=com_content&task=view&id=314&Itemid=154&lang=en.

Rey, El Saneamiento En El Area Metropolitana. 2

Argentinas profits constituted 28.9% of revenues in 1995, compared to the more modest numbers of model privatized water utilities of England and Wales, which hovered around 9% in 2000.²⁸¹ This renegotiation eventually succeeded, and the new contract allowed another price increase to replace the oft-unpaid connection fee: a universal monthly surcharge of around US\$3 a month.²⁸²

The renegotiation of the contract took more than a year because the legislators involved retained doubts about the disadvantages of the change in pricing for low-income residents. According to a 1997 newspaper article, the Aguas Argentinas' demands appeared "neither equitable nor just" to the commission appointed to renegotiate the contract.²⁸³ In addition, replacing the connection fee with a universal monthly fee removed the incentive for Aguas Argentinas to initiate new connections.²⁸⁴ In spite of the commission's objections, the new contract was approved in 1998. Tariff increases continued until 2000, however, prompting leading newspaper *Clarin* to publish an article entitled, "Renegotiation as Permanent Policy," condemning the extracontractual demands of the concessionaire.²⁸⁵

Resentment of the Menem administration, Aguas Argentinas, and the aura of corruption surrounding the two began to build, in particular after the renegotiation of the contract between the government and the company revealed the weakness of the government's position. Newspapers began to decry the effectiveness of the regulatory agency, ETOSS, as Aguas Argentinas continued to fail to comply with the conditions of the original contract. One 1998 article in *Clarin* criticized ETOSS for showing,

²⁸¹ McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 192

²⁸² Alcázar, "The Buenos Aires Water Concession." 37

²⁸³ "Trabaron el aumento de agua." *Clarín.* September 25, 1997.

²⁸⁴ Alcázar, "The Buenos Aires Water Concession." 38

²⁸⁵ "La renegociación como politica permanente." Clarín. February 18, 1998.

"deficiencies in completing the requirements of the contract on the part of the concessionary. It has not created its own norms regulating [Aguas Argentinas'] action either on the level of analysis or resolutions." Such a regulatory failure "endangers the patrimony of the state and directly affects the quality of life of the inhabitants... [who are] users forced into the service provided," because the company is a monopoly. Such criticism of Aguas Argentinas by both the legislators in charge of renegotiation and the press implies a level of resistance to the Menem administration's attempt to change water's role in society.

Even Aguas Argentinas seemed overly defensive of its actions. The account published by Aguas Argentinas of their activities between the start of the concession in 1993 and the writing of the report in 2000 begins enigmatically with an epigraph from Voltaire: "The man who ventures to write contemporary history must expect to be attacked for everything he has said and everything he has not said." This epigraph might be interpreted as a defense of the actions taken by Aguas Argentinas—the account, the epigraph seems to imply, may not contain all the relevant information concerning the privatization of OSN. The first volume of the account, summarizing the history of Argentina water provision from the days of Spanish colonialism through 1993, contains no such disclaimer, although the history ends only seven years before Aguas Argentinas undertook its writing. The epigraph suggests an opposition to Aguas Argentinas, that perhaps the company's water provision, or the motivation behind its water provision, could be criticized because Argentine society did not share the same view of water.

²⁸⁶ "Falta control en la mayoría de los servicios privatizados." *Clarin.* May 17, 1998.

²⁸⁷ Ibid.

²⁸⁸ Rey, El Saneamiento En El Area Metropolitana. 5.

The criticism of the private company intensified and opposition to President Menem grew. The Argentine economy crashed in 2001 in what many claim as the downfall of Argentine neoliberalism. The phoenix to rise from the ashes of Argentine economy was a new presidential figure, Néstor Kirchner, a neoperonist with a distinctly socialist agenda. Kirchner renationalized the Buenos Aires water utility in 2006 to the general approval of the public. Once again, the Argentine government's perception of water shifted, this time away from the idea of water as a commodity that should be sold for profit.

The Successes and Failures of Commoditization

Since the dissolution of the concession in 2006, and even before that, many have attempted to analyze the successes and failures of Aguas Argentinas and answer the question, did commoditizing water create more efficient and equitable distribution? Certain obvious improvements become apparent: according to World Bank analysis, Aguas Argentinas increased the efficiency of the workforce of the water utility and poured money into the failing infrastructure. By 1999, the company had increased the proportion of the population with access to water by 12.4%.

Failures of the change in the management of water also emerge. Most notably, although the company promised to decrease rates, the price of water actually rose.

Although accurate numbers are difficult to ascertain considering the frequent price

²⁸⁹Vilas, Carlos M, "Neoliberal Meltdown and Social Protest: Argentina 2001-2002." Crit Sociol. 2006 32: 163-186

²⁵⁰ "La Bolsa cayó 8,6% y sufrió su mayor debacle en 14 meses." La Nación. April 29, 2003.

²⁰¹ "Cayó la participación de la inversión extranjera en el país." *La Nación.* October 16, 2006.

²⁹² Alcázar, "The Buenos Aires Water Concession."48-49

²²³McDonald, "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." 188

adjustments, the World Bank estimates that an already connected customer would have paid 23.4% more for their water in 1998 than in 1992, while the consumer price index rose by 21.2%. However, the Bank does not take into account the steep increase in price OSN initiated before the privatization to make the company seem more attractive to potential bidders. Although Aguas Argentinas was not involved, the 1991 increase in price was a direct result of the privatization process. Accounting for that increase, it is reasonable to conclude that consumers paid significantly more for their water as a result of the concession. Some consumers were unable to pay the increased prices and connection fees. Because of the conflicting evidence, the question remains: despite the profit-seeking behavior of Aguas Argentinas, did the company improve the public health of Buenos Aires by expanding access to potable water in an equitable manner?

One measure of increased access to or improvement of services is the change in child mortality rates. Water-borne and water-washed diseases affect children at a higher rate than they do adults thus children have a higher mortality rate. ²⁹⁶ In Argentina, the Ministry of Health reported in 1999 that the waterborne diseases diarrhea, septicemia, and gastro-intestinal infections are among the top ten reasons for child death in the country, ²⁹⁷ therefore water provision, or lack thereof, plays an important role in child mortality.

According to several studies, child mortality decreased after the privatization of the water utility. The Inter-American Developmental Bank reports a 5% and

²⁹⁴ Alcázar, "The Buenos Aires Water Concession,"44.

²⁰⁵ "Embestida de De la Rua contra Maria Julia Alsogaray." Clarín. March 27, 1999.

²⁹⁶ Paul Gertler Sebastian Galiani, and Ernesto Schargrodsky, "Water for Life: The Impact of the Privatization of Water Services on Child Mortality," *Journal of Political Economy* 113(2005). 85. ²⁹⁷ Ibid.

"statistically significant" decrease in child mortality after OSN's privatization. ²⁹⁸ Another study found an 8% reduction in the mortality of children under five and a 26% reduction of mortality rates occurred in the low-income areas that received the most expansion in access. ²⁹⁹ The mortality rate in Argentina fell from 72 deaths per 1000 live births in 1960 to 22 deaths per 1000 live births in 1999. ³⁰⁰ Such results imply the success of the privatization of water provision in Buenos Aires. Despite apparent corruption and profit-seeking behavior, Aguas Argentinas improved water distribution throughout the city leading to a decrease in child death due to waterborne and waterwashed diseases.

Whether releasing water distribution to private hands increased access to potable water throughout the Buenos Aires metropolitan area or not, one thing remains certain: attitudes toward water shifted during this time period. Under Menem, the Argentine government and big businessmen realized that water could be sold to make a profit. A large segment of Argentine society opposed this change, but the Menem administration and those managing the water utility certainly agreed that water was a commodity. Perhaps the water industry became more efficient as it became also became more profitable, but the truth remains that water distribution changed from an oft-ignored government responsibility to a means of increasing cash flow. And because of its fluid nature, water's image continues to shift. The water utility was renationalized under Menem's anti-neoliberal successor, signaling further change in the future of the Buenos Aires water story. How the water paradigm will shift remains to be seen. What

 $^{^{238}}$ Chong, Lopez-de-Silanes, and ebrary Inc., "Privatization in Latin America Myths and Reality / Edited by Alberto Chong, Florencio López De Silanes." 70

Sebastian Galiani, "Water for Life: The Impact of the Privatization of Water Services on Child Mortality." 86.

³⁰⁰ Ibid. 104.

is certain, however, is that it will shift, because, as we have seen, the way Buenos Aires has thought about and valued water has changed dramatically over time.

Conclusion

Towards a New Water Paradigm?

Shifting perceptions of water have shaped the history of water in Buenos Aires. The changing social and political environment of the city has formed these perceptions, which, in turn, have molded the cultural environment by impacting the management of water. This coproduction of political, social, and water paradigms influenced the history of Buenos Aires in different ways.

Water was originally understood in Buenos Aires as a privilege of the ruling elite. During the middle of the nineteenth century, influenced by "scientific" racial theories and social Darwinism, the elite constructed a social structure that denied the poor, and increasingly immigrant, lower classes guaranteed reliable access to potable water. However, this idea began to shift as epidemic diseases such as cholera struck the city in the late 1860s. A water utility was constructed because of the influence of epidemic disease and also from a desire for modernization on the part of the elite.

Despite the change in water management, it was not until the 1880s and the discovery of the waterborne nature of disease that water become known throughout the city as a dangerous potential agent of disease requiring careful management.

Buenos Aires' cultural perception of water changed again in the mid-twentieth century under the leadership of President Juan Perón. In attempting to obtain a universal standard of living for the residents of Buenos Aires, Perón sought to make potable water into a fundamental right of every citizen. Perón attacked the issue of

water distribution by renovating the health care system and increasing the state's role in the provision of housing to the people.

After the downfall of Perón and the following years of military dictatorship, the prevailing perception of water in Buenos Aires shifted once again with the return of democracy in the late 1980s. President Carlos Menem, under pressure from intergovernmental organizations like the World Bank and other members of the international community, embarked on a massive privatization program upon his election in 1989. Among those companies slated for privatization was the water utility. Auctioned off to a conglomerate of multinational corporations, the water utility's privatization changed the government's view of water to that of a commodity. Although the commoditization of water was not embraced universally among the citizens of Buenos Aires, the government began to treat the resource as such by allowing the newly created Aguas Argentinas to reap profits from the distribution of water.

Yet none of these perceptions of water succeeded in their goal of providing water access throughout the city, whether for the purpose of disease prevention, fulfillment of public rights, or for profit. Disease prevention was not sufficient motive for the extension of water services to sectors of society still considered inferior. Perón's campaign for a universal standard of living that included a sufficient allowance of potable water failed because of a lack of funds. The commoditization of water in Buenos Aires also failed to deliver the results the water corporations promised because of the exclusive corporate focus on profit.

Buenos Aires still struggles with potable water distribution today. Many of the residents of the continuously growing slums drink water from the rivers contaminated

with industrial effluents like arsenic. The water utility is currently under federal control, and, with the presidency of the neo-Peronist Nestór Kirchner and the following presidency of his wife, Cristina Fernandez de Kirchner, the perception of water is returning to a Peronist-like perception of water as a right. However, the lasting effects of the financial crisis of 2001 have constrained efforts toward the improvement of the distribution that such a perception necessitates. A new influx of immigrants, from neighboring countries like Bolivia and Paraguay, have once again swelled the slums and taxed the water distribution infrastructure. The problems created by immigrants, economic crises, and political and social exclusion have existed in one form or another since Argentina became a nation. They have greatly impacted the way Argentines think about and manipulate water. Yet as the preceding chapters have suggested, the way in which *porteños* conceive of water is constantly in flux as political and social circumstances change.

Some of the factors in the changing perception of water in Buenos Aires are distinctly Argentine. The confluence of the construction of the Argentine identity, the idea of *argentinidad*, and pseudo-scientific racial ideas sharpened the conflict over water discussed in the first chapter. Perón offered a political agenda distinct to Argentina, though his many of his endeavors could be termed socialist, his pseudo-fascist, dictatorial approach certainly tinged with urgency the effort to make access to water into a right. Lastly, the Argentine water concession remains to this day the largest water privatization scheme ever attempted, and its successes and failures exemplify the commoditization of water in a way no smaller-scale concession could have done.

Juanita Fernandez, personal interview, 12 May, 2009.

³⁰² Sebastian Galiani, "Water for Life: The Impact of the Privatization of Water Services on Child Mortality." 7.

However, similar shifts in water paradigms have transpired all over the world. Parallel changes have occurred in places such as London: reformers advocated the extension of universal water access while the aristocracy attempted to hold on to water for themselves, ³⁰³ and Margaret Thatcher oversaw the privatization of water distribution in 1989 in accordance with World Bank principles that propounded the commoditization of water. ³⁰⁴ Conversely, other regions shift their perception of water due to other causes. The failure of the privatization of the water utility in Cochabamba, Bolivia, for example, that caused a violent conflict between the water corporation and the citizens of the city, resulted in a community-run water utility. Thus, through citizens' efforts, the government's water paradigm shifted from considering water a commodity to conceiving of water as a community-managed resource. ³⁰⁵

In fact, a debate is currently raging in the international community concerning the very subject of water as a commodity versus water as a right. Water companies, such as Suez and the other former owners of Aguas Argentinas, continue to advance their privatization program around the world, inherent to which is the view of water as a commodity. In response, activists have argued for the consideration of water as a human right. Authors and activists such as Maude Barlow and Vandana Shiva contend that, "access to clean water for basic needs is a fundamental human right," and as such every country's government should be required to provide access to every citizen at an affordable price. The United Nations also espouses this view. Access to water formed a

³⁰⁸Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization. 260.

²⁰¹⁴Dead in the Water." *CBC*, March 31, 2004. http://www.cbc.ca/fifth/deadinthewater/bank.html

³⁰⁵"Dead in the Water." *CBC*, March 31, 2004.

²⁰⁶ Maude Barlow and International Forum on Globalization., *Blue Gold: The Global Water Crisis and the Commodification of the World's Water Supply: A Special Report* (Sausalito, CA: International Forum on Globalization, 1999). xiv

vital component of the UN's Millenium Development Goals. Through this project, a Special Rapporteur was appointed in 2008 to "flesh out the elements of water as a human right." The UN now holds the same perception of water that Perón implemented more than fifty years ago. The previous chapters have shown that these differing considerations of water are not new, and depend on the social and political milieu of the time.

The world still struggles with water management. One in five people lack access to safe drinking water, and half of the world's population lacks adequate sanitation. The problem is not a shortage of freshwater, but rather inappropriate management techniques stemming from injudicious water paradigms. Buenos Aires has already experimented with three different ideas of water, and, as the preceding chapters have demonstrated, none of these water paradigms resulted in the distribution of water to all sectors of the city. Perhaps universal access to water in developing countries is an unachievable task, or perhaps political or social factors unrelated to the perception of water prevented its completion. A third theory, and the most likely one considering the perspective the preceding chapters have espoused, is that successful water management requires a new water paradigm that Buenos Aires has yet to experience. Perhaps the Palacio de Aguas Corrientes will one day house the evidence of a different and more effective water paradigm.

Joseph W. Dellapenna and Joyeeta Gupta, *The Evolution of the Law and Politics of Water* (Dordrecht: Springer, 2009). 6

²⁰⁸ World Water Council, World Water Vision. (London: Earthscan Publications Ltd, 2000). 6.

Bibliography

- Aboy, Rosa. "El 'derecho a la vivienda:' Opiniones y demandas sociales en el primer peronismo." *Desarrollo Económico* 44, no. 174 (2004), 289-306.
- Aboy, Rosa. "Ellos y nosotros: Fronteras sociales en los años del primer peronismo." Nuevo Mundo, Mundos Nuevos, (2008). http://nuevomundo.revues.org/25782.
- Aboy, Rosa. "La vivienda social en Buenos Aires en la segunda posguerra (1946-1955)." *Scripta Nova de la Universidad de Barcelona* 8, no. 146 (2003). http://www.ub.es/geocrit/sn/sn-146%28031%29.htm
- Aguas Argentinas. Buenos Aires y el agua: memoria, hygiene urban y vida cotidiana. (Buenos Aires: Aguas Argentinas, 2001).
- Alatout, Samer. "Bringing Abundance into Environmental Politics." *Social Studies of Science*, no. 3.
- Alcázar, Loréna, Manuel A. Abdala, and Mary M. Shirley. "The Buenos Aires Water Concession." In *Regulation and Competition Policy*, edited by Development Research Group The World Bank Regulation and Competition Policy, 46. Washington D.C.: The World Bank, 2000.
- Alzugaray, R. A. Ramón Carrillo, El Fundador Del Sanitarismo Nacional, Biblioteca Política Argentina. Buenos Aires: Centro Editor de América Latina, 1988.
- Bakker, Karen. "Archipelagos and Networks: Urbanization and Water Privatization in the Global South." *The Geographical Journal* 169, no. 4 (2003): 328-41.
- Bank, The World. "World Development Report: Development and the Environment." 1-308. New York, NY: The World Bank, 1992.
- Bank, World. Argentina: From Insolvency to Growth. Washington, DC: World Bank, 1993.
- Barlow, Maude, and International Forum on Globalization. Blue Gold: The Global Water Crisis and the Commodification of the World's Water Supply: A Special Report. Sausalito, CA: International Forum on Globalization, 1999.
- Bijker, Wiebe E., Thomas Parke Hughes, T. J. Pinch, and American Council of Learned Societies. "The Social Construction of Technological Systems New Directions in the Sociology and History of Technology." Cambridge, Mass.: MIT Press, 1987.
- Blanksten, George I. Peron's Argentina. Chicago,: Univ. of Chicago Press, 1953.
- Bondorevsky, Diego and Diego Petrecolla. "Concesiones De Agua Y Saneamiento En Argentina: Impacto En Los Sectores Pobres." In *Centro de Estudios Económicos de la Regulación*, 1-50. Buenos Aires, Argentina: Universidad Argentina de la Empresa, 2001.
- Bordi de Ragucci, Olga N. *Cólera E Inmigración, 1880-1900*, Colección "Otra Historia". Buenos Aires: Editorial Leviatán, 1992.
- . El Agua Privada En Buenos Aires 1856-1892 : Negocio Y Fracaso, El Libro Argentino. Buenos Aires: Vinciguerra, 1997.
- Brock, Thomas D. Robert Koch, a Life in Medicine and Bacteriology, Scientific Revolutionaries. Madison, WI Berlin; New York: Science Tech Publishers; Springer-Verlag, 1988.

- Brooks, David B., Ozay Mehmet, and International Development Research Centre (Canada). "Water Balances in the Eastern Mediterranean." Ottawa [Ont.]: International Development Research Centre, 2000.
- Bunge, Carlos O. *Nuestra América, Ensayo De Psicología Social.* 6 Ed. ed, "La Cultura Argentina". Buenos Aires: Vaccaro, 1918.
- Casabona, Victoria I. "El Agua: Recurso De Poder En Un Barrio Periférico." In Constructores De Otredad: Una Introducción a La Antropología Social Y Cultural, edited by Mauricio F Bolvin, Ana Rosato and Victoria Arribas. Buenos Aires: Eudeba/Universidad de Buenos Aires, 1999.
- "Casas para el Pueblo: el Barrio Juan Perón", Democracia, June 7, 1949.
- "Cayó la participación de la inversión extranjera en el país." *La Nación.* October 16, 2006
- Chiarenza, Daniel Alberto. *El Olvidado De Belem : Vida Y Obra De Ramón Carrillo*, Colección "Obras Fundamentales". Buenos Aires: Adrifer Libros, 2005.
- Chong, Alberto, Florencio Lopez-de-Silanes, and ebrary Inc. "Privatization in Latin America Myths and Reality / Edited by Alberto Chong, Florencio López De Silanes." In *Latin American development forum series*. Palo Alto, CA Washington, DC: Stanford Economics and Finance; World Bank, 2005.
- "Dead in the Water." *CBC*, March 31, 2004. http://www.cbc.ca/fifth/deadinthewater/bank.html
- Dellapenna, Joseph W. "The Importance of Getting Names Right: the Myth of Markets for Water." William & Mary Environmental Law and Policy Review, no. 317 (2000).
- Dellapenna, Joseph W., and Joyeeta Gupta. *The Evolution of the Law and Politics of Water*. Dordrecht: Springer, 2009.
- Dellapenna, Joseph W., Joyeeta Gupta, and ebrary Inc. "The Evolution of the Law and Politics of Water." Doredrecht: Springer, 2009.
- Ekbladh, David. "Mr. TVA: 'Grass Roots' Development, David Lilienthal, and the Rise and Fall of the Tennessee Valley Authority as a Symbol for U.S. Overseas Development, 1933-1973." *Diplomatic History* 26 (Summer 2002): 335-374.
- "Embestida De De La Rúa Contra María Julia Alsogaray." *Clarín*, March 27, 1999. "Falta control en la mayoría de los servicios privatizados." *Clarin*. May 17, 1998. Fernandez, Juanita. Personal interview, 12 May, 2009.
- Friedman, Alan. "French Firm Draws up Own Code of Ethics." *The New York Times*, Tuesday, January 30, 1996 1996.
- Halperín Donghi, Tulio. *Proyecto Y Construcción De Una Nación : 1846-1880.* 1. ed, Biblioteca Del Pensamiento Argentino 2. Buenos Aires: Compañia Editora Espasa Calpe Argentina : Ariel, 1995.
- Hays, Samuel P. Conservation and the Gospel of Efficiency; the Progressive Conservation Movement, 1890-1920. [College ed, Atheneum, New York,: Atheneum, 1972.
- Honorable Camara de Diputados de la Nación, *Plan Sintético de Salud Pública, 1952-1958, Dr. Ramón Carrillo.* (Buenos Aires: Secretaria Parlamentaria) http://www.slideshare.net/iniciativaciudadana/plan-sanitario-del-dr-ramn-carrillo

- IndependentEvaluationGroup. "Privatizing Argentina's Public Enterprises."

 http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/4B4E2615E69FCD66852567F5005D8A53.
- Jasanoff, Sheila. States of Knowledge: The Co-Production of Science and Social Order, International Library of Sociology. London; New York: Routledge, 2004.
- Kaplan, Robert. "The Coming Anarchy." The Atlantic Monthly, February, 1994.
- Katra, William H. *The Argentine Generation of 1837 : Echeverría, Alberdi,* Sarmiento, Mitre. Madison [N.J.]: Fairleigh Dickinson University Press, 1996.
- Kinigsberg, Yanina. "Ayuda Para 220 Chicos De Familias Sin Recursos." *Clarín*, August 10 1998.
- Klare, Michael T. Resource Wars: The New Landscape of Global Conflict. 1st ed. New York: Metropolitan Books, 2001.
- Kohl, Alejandro. *Higienismo Argentino : Historia De Una Utopía : La Salud En El Imaginario Colectivo De Una Época*. Buenos Aires: Editorial Dunken, 2006.
- "La Bolsa cayó 8,6% y sufrió su mayor debacle en 14 meses." *La Nación.* April 29, 9003
- "La renegociación como politica permanente." Clarín. February 18, 1998.
- Lobato, Mirta Saida. *Politicas, medicos y enfermedades.* (Buenos Aires: Editorial Biblios, 1996).
- Manzetti, Luigi. *Privatization South American Style*, Oxford Studies in Democratization. Oxford; New York: Oxford University Press, 1999.
- Marsh, George Perkins, and David Lowenthal. *Man and Nature*, The John Harvard Library. Cambridge: Belknap Press of Harvard University Press, 1965.
- McDonald, Alexander J. Loftus and David A. "Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires." *Environment and Urbanization* 13, no. 2 (2001): 179-99.
- Menem, Carlos. "National Administrative Reform Law." In *Law 23.696*, edited by Republic of Argentina, 1989.
- Menem, Carlos Saúl, and José Roberto Dromi. *Reforma Del Estado Y Transformación Nacional*. Buenos Aires: Editorial Ciencias de la Administración, 1990.
- Ministerio de Salud, *Plan analitico de salud publico.* (Buenos Aires: Gobierno de Argentina, 1952).
- Nash, Gerald D. "Review: Eden or Armageddon?" *Journal of Forest History* 33, no. 4 (Oct, 1989), http://www.jstor.org/stable/4005157
- Nouzeilles, Gabriela, and Graciela R. Montaldo. *The Argentina Reader: History, Culture, Politics*, Latin America in Translation/En Traducción/Em Tradução. Durham: Duke University Press, 2002.
- Peluso, Nancy Lee, and Michael Watts. *Violent Environments*. Ithaca: Cornell University Press, 2001.
- Perón, Eva. Evita by Evita: Eva Duarte Perón Tells Her Own Story. London
 New York: Proteus; distributed by Two Continents Publishing Group, 1978.
 —. In My Own Words. New York: New Press, 1996.

- Perón, Juan Domingo. La Fuerza Es El Derecho De Las Bestias. 1. ed. Habana,: S. Touriño, 1956.
- ——. Peron Expounds His Doctrine. [New York,: AMS Press, 1973.
- Petrova, Violeta. "At the Frontiers of the Rush for Blue Gold: Water Privatization and the Human Right to Water." *Brooklyn Journal of International Law* 31, no. 2 (2006): 577-.
- Pineo, Ronn F., and James A. Baer. Cities of Hope: People, Protests, and Progress in Urbanizing Latin America, 1870-1930. Boulder, Colo.: Westview Press, 1998.
- Plotkin, Mariano Ben. *Mañana Es San Perón : A Cultural History of Peron's Argentina*, Latin American Silhouettes. Wilmington, Del.: Scholarly Resources, 2003.
- Porter, D. "How Did Social Medicine Evolve, and Where Is It Heading?" *PLoS Med* 3, no. 10 (2006). http://www.plosmedicine.org/article/citationList.action;jsessionid=FEB090E24C F13421750FF4D46C0F9D85?articleURI=info%3Adoi%2F10.1371%2Fjournal. pmed.0030399
- Radovanovic, Elisa. *Agua y saneamiento en Buenos Aires, 1580-1930.* (Buenos Aires: Aguas Argentinas, 1999).
- Ramacciotti, Karina Inés. "Las sombras de la política sanitaria durante el peronismo: los brotes epidémicos en Buenos Aires." *Asclepio*, 58, no. 2 (2006).
- Ramos Mejía, José María. Las Multitudes Argentinas; Estudio De Psicología Colectiva Para Servir De Introducción Al Libro "Rosas Y Su Tiempo.". Madrid,: V. Suárez; [etc., 1912.
- Rawson, Guillermo, and Alberto B. Martinez. *Escritos Y Discursos Del Doctor Guillermo Rawson*. Buenos Aires,: Compañía sud-americana de billetes de banco, 1891.
- Rawson, Michael. "The Nature of Water: Reform and the Antebellum Crusade for Municipal Water in Boston." *Environmental History* 9, no. 3 (July, 2004). http://www.jstor.org/stable/3985767
- Regalsky, Andrés and Elena Salerno, "En los comienzos de la empresa publica argentina." *Investigaciones de historia economica*, no. 11 (2008).
- Rey, Osvaldo. *El Saneamiento En El Area Metropolitana*. 2 ed. 2 vols. Vol. 2. Buenos Aires: Aguas Argentinas 2002.
- —. El Saneamiento En El Area Metropolitana. 2 vols. Vol. 1. Buenos Aires: Aguas Argentinas, 2002.
- Richmond, Douglas W. Carlos Pellegrini and the Crisis of the Argentine Elites, 1880-1916. New York: Praeger, 1989.
- Rivera, Daniel. Private Sector Participation in the Water Supply and Wastewater Sector: Lessons from Six Developing Countries, Directions in Development. Washington, DC: World Bank, 1996.
- Rodríguez, Julia. *Civilizing Argentina : Science, Medicine, and the Modern State.* Chapel Hill: University of North Carolina Press, 2006.
- Romero, Luis Alberto. A History of Argentina in the Twentieth Century. Translated by James P. Brennan. University Park, Pennsylvania: The Pennsylvania State University Press, 2002.

- Ross, Peter. "Construction of the Public Health System in Argentina 1943-1955." Electroneurobiología 15, no. 5 (2007): 107-78.
- Sánchez, Manuel, Rossana Corona, Inter-American Development Bank., and Instituto Tecnológico Autónomo de México. *Privatization in Latin America*. Washington: Published by the Inter-American Development Bank; distributed by the Johns Hopkins University Press, 1993.
- Sebastian Galiani, Paul Gertler, and Ernesto Schargrodsky. "Water for Life: The Impact of the Privatization of Water Services on Child Mortality." *Journal of Political Economy* 113 (2005): 83-120.
- "Sewage System Infrastructure." Atlas Ambiental de Buenos Aires,

 http://www.atlasdebuenosaires.gov.ar/aaba/index.php?option=com_content&task=view&id=314&Itemid=154&lang=en.
- Solomon, Steven. Water: The Epic Struggle for Wealth, Power, and Civilization. 1st ed. New York, N.Y.: Harper, 2010.
- "Trabaron el aumento de agua." Clarín. September 25, 1997.
- The World Bank. "World Development Report: Infrastructure for Development." New York, NY: The World Bank, 1994.
- The World Bank. Argentina: From Insolvency to Growth. Washington, DC: World Bank, 1993.
- The World Bank. "World Development Report: Development and the Environment." 1-308. New York, NY: The World Bank, 1992.
- Tvedt, Terje, Eva Jakobsson, R. Coopey, and Terje Oestigaard. *A History of Water.* 3 vols. London; New York, New York: I.B. Tauris; Distributed in the United States and Canada by Palgrave Macmillan, 2006.
- Vilas, Carlos M, "Neoliberal Meltdown and Social Protest: Argentina 2001-2002." Crit Sociol. 2006 32: 163-186
- Wittfogel, Karl August, ACLS Humanities E-Book (Organization), and American Council of Learned Societies. "Oriental Despotism a Comparative Study of Total Power." New Haven: Yale University Press, 1957.
- World Water Council, World Water Vision. (London: Earthscan Publications Ltd, 2000).
- Zimmerman, Eduardo. "Racial Ideas and Social Reform: Argentina, 1890-1916." *The Hispanic American Historical Review* 72, no. 1 (Feb., 1992). http://www.jstor.org/stable/2515946 27