

WOMEN AND WATER FOR GOTHAM

A Gendered History

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INTRODUCTION

The Water Spirits go to the rescue. They surge toward the Evil Ones, and the opposing forces sway back and forth alternately striving for the spiritual mastery. At length the Water Spirits succeed in forming a ring around the fallen ones, and the Evil Spirits, with a cry of defeat, flee into darkness. The Water Spirits bring water, bathe the brows of the fallen and give them water to drink. When the prostrate ones drink, they rise from the ground, their bad habits—typified by spoiled garments—fall away; they appear transformed; and all join in a dance of thanksgiving.¹
--Edward Hagaman Hall, *An Allegorical Pageant: The Good Gift of Water*, 1917

An allegory of the Catskills Aqueduct, Edward Hagaman Hall's *The Good Gift of Water* analogized the contending forces of filth and cleanliness that has pervaded New York City history. The *Evil Ones*, representing refuse and dirt on the streets and within the homes of city residents, not only plagued the public health of New Yorkers since European settlement, but also represented debauchery and a dearth of morality, coaxing residents to drink and commit crime. This era of dirty degeneracy symbolized the very beginnings of New York City water in the late eighteenth century, afflicted by the greed and inadequacy of privatized water. However, as the *Water Spirits*, a female personification of public water and women, surged toward the *Evil Spirits*, they formed *a ring around the fallen ones*, or sick and immoral peoples, and disposed of the *bad habits* and filth that plagued New York City prior to the mid-nineteenth century. Over the course of the nineteenth and twentieth centuries, public water and public women have co-emerged as prominent influences on the health and morality of New York citizens, helping them *rise from the ground and join in a dance of thanksgiving.*²

As one of the largest international economic and cultural urban centers of the world, New York City possesses an extensive historiography of everything, from the history of Wall Street to that of draft riots. However, this thesis focuses on the history of the city's water systems. Why is

¹ Edward Hagaman Hall, *The Catskill Aqueduct and Earlier Water Supplies of the City of New York*, New York,

² "Public women" refers to women who exercised public influence in order to protect the morality and workings of a city, whether out in the streets or from the confines of their homes.

the current city's water so renown? How did New York City's modern water systems develop? Who was responsible? Who benefitted?

Gerard T. Koeppel, the foremost historian of New York City water, summarizes the history of New York City water in his book, *Water for Gotham: A History*. Despite the fact that the book was published in 2000, Koeppel spends the majority of his text providing a relatively objective history of late eighteenth and early nineteenth century New York City water systems, or lack thereof. He spends the first five chapters of the book leading up to the establishment of the United States of America, examining Mannahatta from its international birth as New Amsterdam to its emergence as an American city. In the following chapters, Koeppel focuses on the political debates surrounding the creation of the Manhattan Water Company and the Croton Aqueduct, dropping the names and backgrounds of many a prominent male figure, such as Aaron Burr (the founder of the Manhattan Water Company) and Colonel De Witt Clinton (who produced one of the first propositions for the Croton Aqueduct). Many pages of Koeppel's book are occupied by debate between these powerful upper-class male figures, reflecting the extremely masculine nature of politics and authority in New York City leading up to the completion of her first aqueduct. Koeppel's focus on the debate between men mirrors the dominant historiography of the city's water systems--a history that excludes almost any mention of women.

Similar to Koeppel, Brian Phillips Murphy and Nelson Manfred Blake both largely focus on male actors in their histories of New York City Water, *Building the Empire State: Political Economy in the Early Republic* and *Water For the Cities: A History of the Urban Water Supply Problem in the United States*, respectively. Both of these historians spend a great deal of text exploring the political-municipal conflict and maneuvering of the Democratic-Republicans

versus the Federalists during the early republic. Like Koeppel, Murphy and Blake also published extremely gendered histories, failing to address the many female actors that contributed to the formation of New York City's famous water systems.

Writing a mainstream history of New York City water naturally culminates in a work dominated by the names of prominent male figures. However, the general omission of female actors creates a large gap in the city's water history. Koeppel, Murphy, and Blake have all written excellent histories of New York City's water systems, but all of them fail to explicitly discuss gender or women at length. None of them have explored how water was connected to women's emancipation in both the private and public spheres of New York City.

This project aims to construct a causal connection between the development of water as a public work and the emergence of women as public actors in New York City. The *Water Spirits* in *The Good Gift of Water* symbolize the power of public water and public women since the turn of the nineteenth century, upholding the moral authority and influence of the collective over the centuries. The simultaneous rise of women and water as public entities has shaped the physical, social, and cultural characteristics of New York City, as well as her water history.

Chapter 1 will explore the first failed attempts at establishing a public water system on Manhattan, which coincided with the general confinement of women to the interior as republican mothers. Private pumps and reservoirs acted as the primary sources of water for New Yorkers in the early republic, providing polluted water for those without the means to buy expensive spring water carted from up island. As a result, these dirty waters endangered the morals of the home and the health of the public, leading to the 1798 yellow fever epidemic and the 1832 cholera outbreak that prompted a new water solution: the Croton Aqueduct.

The Croton Aqueduct, the subject of Chapter 2, redefined the concept of public health and the role of women in mid-nineteenth century New York City. The first successful public water work of the city, the aqueduct provided clean and safe waters for the homes of women; however, access remained largely limited to the upper economic echelons of the city. Wealthy women enjoyed the privilege of the cool Westchester waters, which emerged in the public pipes just as women began to seep through the confines of the cult of domesticity.

While working-class women and families could not afford the waters channeled down the Croton Aqueduct, the turn of the twentieth century introduced affordable waters through a new public water project: the Catskills Aqueduct. Chapter 3 examines the creation of a systematic engineering accomplishment that emerged alongside the unionization of female workers into organizations. Not only did working-class women in New York City enjoy the clean waters from the Catskills Mountains, but they began to advocate for themselves in the public sphere, joining together as increasingly powerful political bodies.

From the early republic to the dawn of the twentieth century, New York City exhibited mutually shaping developments of women and water in the public sphere. In the eighteenth century, republican mothers were largely confined to the private sphere, just as city water remained privatized. However, as the metropolis invested in public waters that culminated in the Croton and Catskills aqueducts, women emerged from the cult of domesticity and began to exercise their republican moral authority past the thresholds of their homes. Throughout the history of New York City, water and women simultaneously surged into the public sphere, providing the gift of life, their power to work, and their strength to serve the city community.

CHAPTER 1

Privatized Water : Privatized Women :: Public Work : Public Force
Privatization, Public Health, and Republican Motherhood in Early Republic New York City

*Frederick Gantz, In Magazine-Street, near the Fresh Water Pond: With great gratitude, returns thanks to those Ladies and Gentlemen who have countenanced him in his late arduous and expensive Undertaking, in establishing a TEA-WATER PUMP;--the quality of which, (from the opinion of the Faculty) is superior to the Old Pump and from that recommendation, and his strict attention, he hopes for future encouragement. He has engaged a number of Tea-water-men to supply Families yearly, quarterly, or monthly, and assures them, that his motive for so doing, is to prevent imposition.*³

--*New-York Morning Post*, July 28, 1787

Before the invention and organization of effective plumbing systems, cesspools of human feces spread across the basements and first floors of many buildings. Such bodily waste, full of unhealthy and fatal bacteria, spilled over into the streets, mixing with the excrement of pigs and horses, seeping into drinking water wells and pumps. Men and women used all of their free time and energy to pump up water from a pond where children fell through the ice and lost their lives in the wintry months.⁴ Their drinking liquid barely resembled water, contaminated by the filth discharged from our bodies and nearby industry. This was the water of the early republic in New York City, the water Frederick Gantz denounced in his advertisements for a new “Tea-Water Pump.”

Gantz’s *New-York Morning Post* advertisement not only showcased the marketing that took place in newspapers nearing the turn of the nineteenth century, but also revealed his audience, intent, and the state of New York City’s water crisis in 1787. By then, the wells, Fresh Water Pond (also known as “The Collect”), and old “tea water pump” failed to provide anything but foul water to those New Yorkers who could not afford fresh spring water carted from up island. Gantz began by thanking the *Ladies* who had supported and waited for this new pump. As

³ “New-York Morning Post, Published as The New-York Morning Post And Daily Advertiser (New York, New York),” *America’s Historical Newspapers*, August 16, 1787.

⁴ “New-York Gazette, Published as The New York Gazette (New York, New York),” *America’s Historical Newspapers*, January 13, 1800.

primary agents in the home, women provided the main domestic market for water, which was used for everything from bathing to cooking to doing laundry. In writing this statement, Gantz recalls for us Abigail Adams' advice to "remember the ladies," ladies from the upper echelons of New York City society. Another interesting word choice was his description of establishing this new pump as an *Undertaking*. Similar to all water projects preceding and following Gantz's advertisement, this pump most likely required a large investment to dig and build; however, his intent was purely self-interested, as are most private endeavors.

In the second half of Gantz's posting, he felt the need to prove the quality of his new pump's water, citing the opinion of the *Faculty*, a term that implied academia and a superior wealth of knowledge, separate from his own economic interests. Furthermore, Gantz justified his employment of *Tea-water-men*, an interesting gender paradox in itself, by explicitly explaining his motive to *prevent imposition*, providing a reliable force of water providers.⁵ Water collecting often fell under the umbrella of unpaid work that women were largely responsible for in American society. Clearly, the state of New York City's water supply in 1787 not only produced great suspicion by those unfortunate enough to drink water from the populated part of the island, but also revealed the relations and tensions between *Tea-water-men*, who delivered water, and women, who steeped tea in the home.

Private purveyors of drinking water, along with the municipal powers of New York City, failed to protect the public's health and provide city residents with clean and safe water throughout the colonial period and the early republic. This failure endangered the population's health, leading to a yellow fever epidemic in 1798 and later cholera epidemics that swept through the city, especially in 1832. In response to such health challenges, women began to take on a

⁵ As a commodity stored in the kitchen and served by women, tea was and is often associated with the private sphere of the home. The notion of *Tea-water-men* defies the popular historic lines drawn between the public and private gender domains, mixing the territories and roles of tea of the household and the men of the public.

larger role in protecting the lives and minds of Americans. Even from the restrictive private domain of the home, women began to fill the void of water privatization's failure, adopting and embodying the great responsibility of Republican Motherhood.

In order to understand the great failure of short-sighted private endeavors to supply the City of New York with an adequate water supply, it is vital to take a step backwards. The year 1677 marked the first time New Yorkers attempted to build a public well system.⁶ Revealing of water schemes over the next one hundred and twenty or so years, the city's council failed to do the public work itself. Goading individuals to dig their own wells and split the cost of building and maintaining wells, the city threatened punitive measures and natural health consequences.⁷ As designated by the Common Council on September 10, 1686, these newly-proclaimed public wells "were built of stone, 'one halfe of the Charge of them to be borne by the inhabitants of every Streete proportionately and the other halfe by the City.'"⁸ By September 6, 1789, New York City's complacent attitude towards its water supply was firmly established, the Common Council ordering that "whenever the Overseers of the Public Wells and Pumps neglect or refuse to do their duty that the Aldn & Assist of the Ward direct the necessary Repairs; lest by the want of water from the public wells and pumps the City may be endangered in case of Fire."⁹ The city only acted when private actors failed to, engendering a larger threat of fire on the island. Safe to say, the Common Council's attempt to provide a pseudo-public water supply failed miserably. Not only did the colonial city fail to supply water to its people, but a precedent of public failure and private endeavor was established around water as a commodity.

⁶ The English conquered New Amsterdam in 1664, meaning this public well system venture was attempted only thirteen years following the establishment of New York, after the Duke of York, the King's brother. New York was merely an adolescent by the 1677 attempt at a public well system. Jesse Greenspan, "The Dutch Surrender New Netherland - History in the Headlines," *HISTORY.com*, Accessed February 1, 2017.

⁷ Hagaman Hall, *The Catskill Aqueduct*, 29; Gerard T. Koepfel, *Water for Gotham : A History*. Princeton, N.J.: Princeton University Press, c2000, 18.

⁸ Hall, *The Catskill Aqueduct*, 29.

⁹ Hall, *The Catskill Aqueduct*, 31.

The Collect, also called the Fresh Water Pond, illustrated a continuation of such public failure. This pond supplied drinking water to Dutch settlers and English colonists dating back to the seventeenth century. It occupied forty-eight acres within today's intersection of Foley Square, the NYC Criminal Court, the NYC Department of Health, and the NYC Supreme Court.¹⁰ While plentiful and potable three hundred years ago, the quality of Collect water quickly declined towards the end of the eighteenth century, marking the beginning of the city's struggle to provide an adequate supply of clean and safe water to its residents.

Alongside the Collect, both temporally and geographically, was the famous Tea Water Pump, which resided in Chatham Square, southeast of the early republic's Fresh Water Pond and east of today's Chinatown.¹¹ This water was not only a source of sustenance, but fostered a tea culture amongst affluent New Yorkers, who could afford to buy water carted around the city by the bucket. Similar to almost every other product sold by private businesses, tea water's healthful reaches only stretched as far as the wealth of its customers, creating a mass water, and therefore health, disparity between the rich and poor of Manhattan. While the quality of Tea Water had significantly dropped by the 1780s, its reputation as the best water in Manhattan arguably lasted until the introduction of the Croton Aqueduct, which was not up and running until 1842.¹² Tea Water, as a fountainhead of clean and respectable water, remained a source of pride past the turn of the nineteenth century, but New York City desperately needed a new source of water.

¹⁰ Sergey Kadinsky, *Hidden Waters of New York City: A History and Guide to 101 Forgotten Lakes, Ponds, Creeks, and Streams in the Five Boroughs*, The Countryman Press, 2016.

¹¹ Kenneth T. Jackson and Nancy Flood, *The Encyclopedia of New York City* (2), New Haven, US: Yale University Press, 2010, ProQuest ebrary, Web, 9 February 2017.

¹² Ibid.

Detecting an opportunistic void, Aaron Burr created the infamous Manhattan Water Company in 1799 to allegedly quench the thirst of New Yorkers.¹³ In cooperation with the city and state, the Manhattan Water Company dug wells in congested areas plagued by human feces and carved their hollow pipes out of wood, which became notorious for leaking. Little did the state and city know, Burr's real ambition consisted of creating a Democratic-Republican banking empire that developed into what is JP Morgan Chase & Co. today. The early well system, Collect Pond, Tea Water Pump, and Manhattan Water Company all failed to supply an adequate amount of clean drinking water to New Yorkers in the early republic, highlighting the failure of water commodification in the eighteenth century. Landowners and company shareholders, like the Knapp Brothers and Burr, naturally aimed to maximize profits, making the provision of water to the public a secondary concern. The public needed water to survive, a need commonly regarded as an inalienable human right to people in New York City. Privatization of water failed the residents of New York, creating popular will for change and the emergence of public ownership, especially among women in the first few decades of the nineteenth century.¹⁴

¹³ The infamy of the Manhattan Water Company was attributed to the fact that its goal was not to provide the citizens of New York City with water, but to create a political-leaning bank. In creating this company, Burr, according to prominent historians in the field such as Gerard Koepfel and Brian Murphy, deceived the state legislature and his peers who helped pass the company's charter, such as Alexander Hamilton. Not only did Burr mislead the state and city, but he deprived working-class families of water and health, and working-class women of republican motherhood. Because of the great cost to connect the company's reservoirs to buildings, most tenement owners did not care to provide their tenants with this new source of water, restricting the company's reaches to the upper economic echelons of the city. Without clean water and the ability to provide a sanitary environment for their families, working-class women were deprived of the opportunity to take on a new role as republican mothers, which consisted of middle and upper class women.

¹⁴ "Privatization," referred to the linear history of the failures of the privatization of water, from the Tea Water Pump to the Manhattan Water Company. Because of its privatization, New York City's clean water of the eighteenth century was only available to a handful of middle and upper class residents, excluding the larger working classes from its healthful reaches. While republican mothers, who were primarily higher-class citizens, enjoyed the luxuries of tea water delivered straight to their doors, working-class women, who made up the majority of the tea water women profession, did not. Access to water was extremely stratified in the late colonial and early republican period of New York City history, only affording the wealthy families of republican mothers the fruits of health and prosperity.

During these decades, women emerged with a new empowered role in society as republican mothers, responsible for nurturing and raising the next generation of civically-minded men. *Republican Motherhood* describes these middle-class women, who began to exercise their political rights from the sphere of the home.¹⁵ Despite the fact that modern historians often



relegate early nineteenth century women to the private sphere, these mothers possessed a significant amount of political influence and socialization via their role as what Linda Kerber terms “guardians of republican virtue” for their

sons and husbands.¹⁶ Responsible for raising the next generation of moral and virtuous leaders, republican mothers had a significant amount of influence over their families. Nearing the third and fourth decade of the nineteenth century, the authority of these mothers began to leak into the streets of the public sphere through their raising of civically-minded sons and guidance of republican husbands. Since “waters stagnate when they cease to flow,” according to Abigail

¹⁵ *Republican Motherhood* was coined by Linda Kerber, an American historian, in the 1970s. Carolyn Herbst Lewis, “Republican Motherhood,” In *Encyclopedia of Motherhood*, by Andrea O’Reilly, 2455 Teller Road, Thousand Oaks, California 91320, United States: SAGE Publications, Inc., 2010, 2.

¹⁶ *Ibid.*, 3.

Adams, women of the early republic compelled the waters of America to flow, along with the burgeoning stream of their political socialization in the public sphere.¹⁷

The Collect, Tea Water Pump, and Manhattan Water Company all failed to provide a sufficient supply of drinking water to the people of New York City. These owners and shareholders, all men, were solely focused on profit, limiting the language, operations, and customer-bases surrounding their water enterprises. While these stark failures endangered the public's health, they created a window of opportunity for women to surpass the limitations of both the privatization of water and their own privatization in the home. Women of the early republic began to transcend the greed, diction, and systemic subordination of historical precedent, becoming more effective agents of socio-political change in the first few decades of the nineteenth century. As Kerber states, "Republican Motherhood was a very important, even revolutionary, invention. It altered the female domain in which most women had always lived out their lives; it justified women's absorption and participation in the civic culture."¹⁸

Failure of The Collect and Tea Water Pump

Almost a hundred years after the failure of the first attempted public well system in 1677, on January 29, 1770, *The New-York Gazette* published the establishment of, "An Act to revive an Act to enable the Mayor, Deputy Mayor, Recorder and Aldermen of the City of New York, for the Time being, or the major Part of them, to raise a Tax for mending and keeping in Repair the Public Wells and Pumps in the said City, to the South of Fresh Water, and other Purposes therein

¹⁷ Laura C. Holloway, *The Mothers of Great Men and Women :and Some Wives of Great Men /*, New York :, 1883, 646.

¹⁸ Linda K. Kerber, *Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia : Women of the Republic : Intellect and Ideology in Revolutionary America*, Chapel Hill, US: The University of North Carolina Press, 2014, 284.

mentioned."¹⁹ The convoluted nature of this act was not only dispiriting but explicitly detached from any intent by the city to take tangible action towards repairing public wells and pumps, which perpetuated the poor quality of the Collect Pond over the next few decades.

By 1798, the public Fresh Water Pond was more of a polluted cesspool than a fountain of clean water. As the *Daily Advertiser* deplored in 1798,

The Collect, behind the Tea-Water Pumps, is a shocking hole, where all impure things center together and engender the most unwholesome productions; and from this pond, foul with excrement, frog-spawn and reptiles, that delicate pump is supplied...With all [New Yorkers'] nobleness of character, they can reconcile themselves to drink the *nasty wash and slops* carted about from the Collect. The Collect! of what? of all the leakings, scrapings, scourings, p-s--gs, & --gs for a great distance around.²⁰

In addition to the *frog-spawn* and *nasty wash and slops* that polluted the Collect Pond were business enterprises and manufacturers, such as brick kilns, tan yards, lime kilns, and charcoal pits.²¹ Even human bodies occasionally joined the polluted waters of the Collect. As claimed by *The New-York Gazette* on January 13, 1800, "It seldom happens that during the winter we have not to record, the melancholy [tidings] of some of our youth being drowned in the *Collect-Pond*, in consequence of the ice breaking, when they are skating or [sliding]."²² Human and commercial waste combined to form the *shocking hole* of the Collect. The *Daily Advertiser's* labeling of the pond as *impure* and *unwholesome* highlights one side of an interesting historiographical analogical dichotomy of spheres and morality. As a public space out of doors, the Collect represents a point of intermingling amongst various people and entities. The Collect symbolizes all that was unwholesome and contaminated, from city residents to the *scourings* of

¹⁹ "New-York Gazette, or Weekly Post-Boy, Published as The New-York Gazette or the Weekly Post-Boy (New York, New York)," *America's Historical Newspapers*, January 29, 1770.

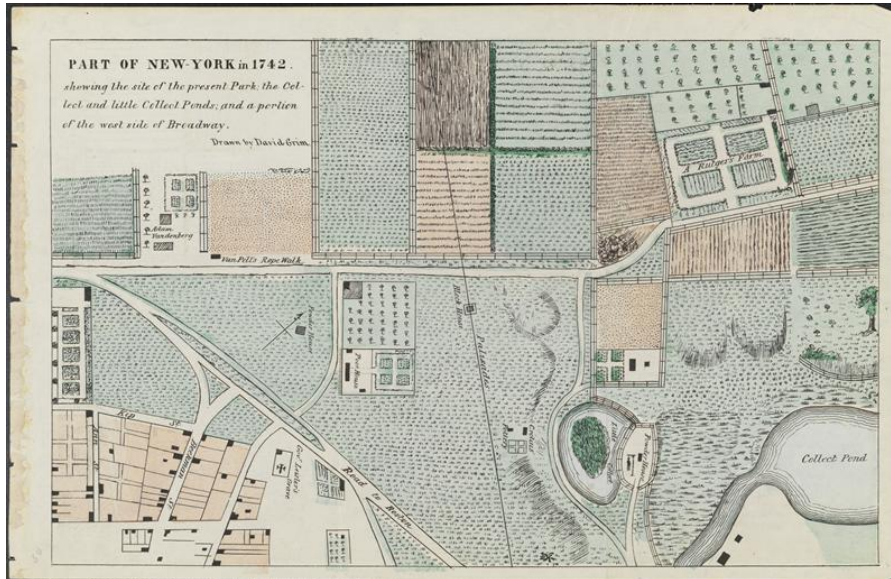
²⁰ Alvin Fay Harlow, *Old Bowery Days: The Chronicles of a Famous Street, [With Plates and a Bibliography.]*, New York & London, 1931, 123.

²¹ *Ibid.*, 44.

²² "New-York Gazette," January 13, 1800.

local business. The opposite pole of this analogical dichotomy lies within the moral sphere of the interior, run by Republican Mothers.

Soon after the turn of the nineteenth century, a forty-foot wide canal was dug northeast of the Collect Pond to funnel its waters into the Hudson, becoming what is today known as Canal Street. In 1825, the pond was filled using materials from Bayard's Mount and Mount Pleasant,



hills north of the pond, and was ironically called "Paradise Square," or Five Points. This slum contained poor drainage and landfill work, causing the soil upon which the tenements were

built to emit methane gas; this gas in turn caused the building foundations to crumble and sink.²³

Not only had the Collect become a failed public water source, but it remained an immoral nuisance even after being filled in, and transformed into densely crowded slums occupied by poor immigrants.²⁴

Similar to the Collect, the private Tea Water Pump became more of a public nuisance than a water supply nearing the turn of the nineteenth century. In 1797, the Common Council of the City of New York ordered the pump to close.²⁵ However, earlier in the century Tea Water held a place of prominence in the upper echelons of New York Society. Even after the Boston

²³ Kadinsky, *Hidden Waters of New York City*.

²⁴ *Ibid.*

²⁵ *Ibid.*

Tea Party dumped chests of tea into the Boston harbor, the sale and consumption of tea, which required a clean source of water, refused to subside.²⁶

Moreover, the city developed a new profession of “tea water man” and “tea water woman,” identifying people who were hired to sell water from city wells and pumps.²⁷ Tea water held a place of such importance that the city allowed these private tea water men and women to



sell public water, in return for their aid to firemen. In January of 1793, the Minutes of the Common Council of New York outlined a quid pro quo agreement between the city and these men: “[296] On a representation of the Fire Men. Ordered

that an Ordinance be prepared for the Regulation of the Tea Water Men in order that they may be compelled to assist in supplying the Engines with Water in case of Fire.”²⁸ In order to protect the city from fires and extortion, and provide the wealthy with their precious tea water, New York City slowly began to regulate private water providers, like the Tea Water Men and Women. As Robert Livingston, the Chancellor of New York, proclaimed, “It is a notorious fact that the greed of this city is worse than that of any other place upon the continent.” “[A]s we have little hope to expect,” Livingston continued, “that such an improvement 'will be crowned with [success] while

²⁶ Jane T. Merritt, *The Trouble with Tea: The Politics of Consumption in the Eighteenth-Century Global Economy* JHU Press, 2016.

²⁷ Ibid.

²⁸ “Minutes of the Common Council of the City of New York ... v.02 yr.1793-01, - Full View | HathiTrust Digital Library | HathiTrust Digital Library,” Accessed January 26, 2017, 185.

there are still tea-water men, and tea-water women & tea-water children' insisting they alone had gained in 1757 the permanent and exclusive right to supply the city with water for all time."²⁹

Livingston not only criticized these private profiteers for monopolizing the water market, but recognized the diversity of tea water carters, including working-class men, women, and children.

Unlike the laboring class of tea water women that occupied the streets of New York City, middle and upper class women were relegated to the interior, where they would gather, drink tea, and discuss a number of subjects, including politics. As described by Christopher Pitt in his book of poetical works in 1782,

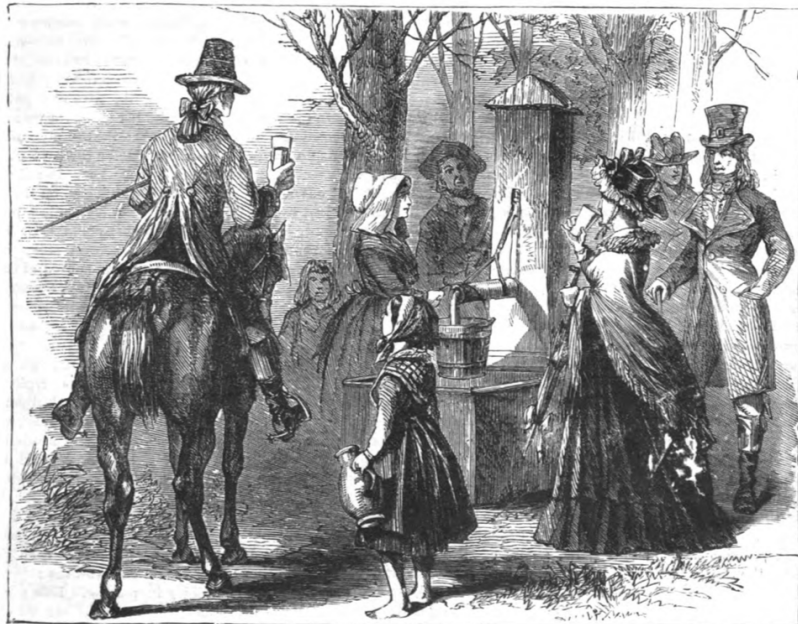
In the fine lady now her shape was loft,
An by such strange degrees she grew a toast;
Was all for ombre now; and who but she
To talk of modes and scandal o'er her tea,
To fettle ev'ry fashion of the sex,
And run thro'all the female politicks,
To spend her time at toilet and basset,
To play, to flaunt, to flutter, and coquette?
From a grave thinking wouser she was grown
The gayest flirt that coach'd it round the Town.³⁰

While Pitt's gendered poetical description highlighted the highly feminine aspects of wealthy ladies sipping tea, using qualifiers such as *flaunt*, *flutter*, *coquette*, *gayest*, and *flirt*, it also revealed the nature of these publicly mysterious interior gatherings of women. Not only did early republican women discuss *modes and scandal o'er her tea*, but they ran *thro'all the female politicks*. Even from their politically subordinate position as homemakers at the time, women regularly discussed politics over tea, from water delivered by their male and female counterparts. Tea Water provided city-regulated jobs for working class men and women, and contributed to the burgeoning political sphere between middle-class women in the home.

²⁹ Brian Phillips Murphy, *Building the Empire State : Political Economy in the Early Republic*, (Philadelphia: University of Pennsylvania Press, 2015), 4.

³⁰ Christopher Pitt, *The Poetical Works of Christ. Pitt*. At the Apollo Press, by the Martins, 1782.

However, not all New Yorkers had the privilege of drinking Tea Water, and even if they



KNAPP'S TEA-WATER PUMP, GREENWICH STREET. Digitized by Google

did, the quality of the water quickly decreased in the early republic. The *American Gas - Light Journal* of 1859 described the early republic's water supply, claiming that Tea Water was "obtained by the more wealthy from the Tea-water pump in Chatham square, and from the spring at Fort Gansevoort, carted

in hogsheads about the city, and delivered in pails, at a high price, at their doors; two or three buckets per diem being considered a sufficient supply for a family. But to the poor this scanty luxury was inaccessible."³¹ Only the very wealthy could afford to pay private tea water men to cart water to their doors. Because of this wealth discrepancy, most residents could not afford to buy clean water. New York City's insufficient water supply, according to *Frank Leslie's Popular Monthly*, caused "sewer-gas pours into our houses, killing hundred where exhalations from the streets kill one, and not a voice is raised, except to blame some official guiltless of all wrong."³² New York City needed more water, prompting new enterprises like Frederick Gantz's new Fresh Water Pump, which opened in 1787.

³¹ "WATER: Palmam Qui Meruit Ferat ORIGIN OF THE CROTON AQUEDUCT THE OLD TEA WATER PUMP THE OLD RESERVOIR DIVISION OF THE COMMON COUNCIL BRONX RIVER RECOMMENDED THE FIRST CHOLERA SUMMER THE COMMITTEE ON FIRE AND WATER BRONX RIVER AND RYE POND EXAMINED CROTON RIVER BILL PASSED CROTON BILL RATIFIED BY THE PEOPLE CROTON AQUEDUCT BOARD, 1859," *American Gas - Light Journal* (1859-1861); *New York*, no. 2 (August 1, 1859): 10-11.

³² Frank Leslie, *Frank Leslie's Popular Monthly*. Frank Leslie Publishing House, 1882.

Unfortunately, the city and private businessmen acted too slowly, leading to the yellow fever epidemic of 1798. In September of that year alone, 1,154 New Yorkers caught the fever and 954 people died (648 men, 354 women, and 152 children), averaging about thirty-eight deaths per day.³³ None too surprising, “More men than women have died of the disorder, in the proportion in general of about four to three....[since] men, by the nature of their employment, are more exposed to infection than women. The man having occasion to bustle about from one place to another, whilst the woman’s particular province is the superintendence of the family concerns.”³⁴ The disproportionate mortality rates for women versus men reflected the acceptance of a strong gender division of New York City in the early republic. According to James Hardie, the 1799 historiographer of this account, the death rates of men versus women resulted from gendered labor roles and separate gender spheres around the turn of the nineteenth century. This consequential proportion revealed more about the time period’s notion of separate gendered spaces in the city than about the actual relationship between the sexes, shown by the existence of tea water women. While untrue, this notion was also expressed in a list of the dead.

Within a long list of burials from those who passed away during this epidemic were interesting descriptors, signifying a tie to Tea Water. For instance, “Climson Martha, wife of William tea-waterman, Bayard Street,”³⁵ or “Mitchell Mr. a child of, near the tea water pump.”³⁶ Martha was not only described in relation to her husband, William, demonstrating the need to tie women to their male counterparts in the public sphere of documentation; but, the burial list felt

³³ James Hardie, *An Account of the Malignant Fever, Lately Prevalent in the City of New-York: Containing I. A Narrative of Its Rise, Progress and Decline ... II. The Manner in Which the Poor Were Relieved ... III. A List of the Donations ... for the Relief of the Sick and Indigent. IV. A List of the Names of the Dead ... V. A Comparative View of the Fever of the Year 1798, with that of the Year 1795*, Hurtin and M’Farlane, at the Literary printing office, no. 29 Gold-street, and sold by the author, no. 1 Rider-street--by John Low, at the Shakespeare’s head, no. 332 Water-street, the other booksellers, and the printers, 1799.

³⁴ *Ibid.*, 47.

³⁵ *Ibid.*, 96.

³⁶ *Ibid.*, 120.

compelled to list his profession of *tea-waterman*, acknowledging the profession. On the other hand, Mitchell, a child, presumably passed away *near the tea water pump*, illustrating the danger and disgust associated with the pump near the turn of the century. Regardless of the respect and infamy that accompanied the Tea Water Pump and its waters, New York City needed clean water in order to protect the public's health. As Richardson Underhill wrote to his "Esteemed Friend," James Hardie, "If to all these regulations, it were possible to add the salubrious influence of a stream of fresh water, cleaning the surface of our streets, I think this city may yet be blessed with a good general state of health."³⁷

Around the turn of the nineteenth century, the majority of New York City's water supply was privately run, placing responsibility for the city's dearth of water and health on individual landowners and businessmen. While this allocation of blame remained in the private sector, it expanded to a larger portfolio of culpable shareholders in 1799.

Failure of The Manhattan Water Company

By the turn of the nineteenth century, private water companies reigned supreme, including such works as the Water-Works Company, Sharon Canal Company, New-York Harlaem Spring Water Company, New York Well Company, and the infamous Manhattan Water Company.³⁸ In 1799, the New York State Legislature, in *An Act of Incorporation of the Manhattan Company*, accepted the said entity as a private business responsible for providing the residents of New York City with clean drinking water. As the legislature stated,

The said company shall, within ten years from the passing of this act, furnish and continue a supply of pure and wholesome water, sufficient for the use of all such citizens dwelling in the said City, as shall agree to take it on the terms to be demanded by the said company; in default whereof the said corporation shall be

³⁷ Ibid., 24.

³⁸ Koepfel, *Water for Gotham*, 133-134.

dissolved...*And be it further enacted*, That is shall and may be lawful for the said company, to employ all such surplus capital..in any...monied transactions of operations, not inconsistent with the constitution and laws of this State or of the United-States, for the sole benefit of the said company”³⁹

While this legislative act established a contingency of failure, it also empowered the private company to utilize its surplus capital in any way it desired, which was banking. Instead of focusing on supplying water for all *citizens*, including women, children, and working-middle class families, Aaron Burr’s company was established as a Democratic-Republican bank to rival the Federalist banks led by Alexander Hamilton. The inevitable corruption of the Company was explicit. Even as the city explored transferring its water rights over to the City of New York, its mayor at the time, De Witt Clinton, participated as both public servant and director of the Company.⁴⁰ The corruption of the Company was even decried by its rival, Alexander Hamilton, who protested that it was “a perfect monster in its principles but a very convenient instrument of profit and influence.”⁴¹

The priority of Burr and the Manhattan Water Company to provide financial support for local Democratic-Republican politicians inevitably led to its failure to supply water for the residents of New York City. Burr, De Witt Clinton, and the rest of the Company board were not only cognizant of their deceit, but aimed to perpetuate such duplicity, arguing that it was “incumbent on [themselves] to convince our fellow Citizens that we are truly earnest in the business...[S]hould we do nothing we shall raise a violent clamor ag[ainst] us.”⁴² Despite their duplicitous ambitions, the Company failed to convince citizens that they had access to clean

³⁹ New York (State). Legislature. *An act of incorporation of the Manhattan Company*, [New York], 1799. 11pp. *Sabin Americana*, Gale, Cengage Learning, Columbia University, 01 February 2017, 11.

⁴⁰ Nelson Manfred, Blake, *Water For the Cities; A History of the Urban Water Supply Problem in the United States*, Syracuse, N.Y.: Syracuse University Press, 1956, 104.

⁴¹ Koepfel, *Water for Gotham*, 99.

⁴² Blake, *Water For the Cities; A History of the Urban Water Supply Problem in the United States*, 96.

water when it failed to flow out of their faucets. As the *New York Commercial Advertiser* quoted from a city resident in 1811,

The inhabitants of the southern part of our city have not had a pitcher of Manhattan water for the last five or six days...We are informed that the northern parts of the town have been amply supplied: how then does it happen that the southern parts are entirely neglected? There must be an unpardonable fault somewhere. The citizens pay a high price for the necessary article of water, and to be deprived of it when it is most wanted is not only extremely [vexatious], but it actually endangers the health of the people.⁴³

The *Commercial Advertiser* highlighted the dearth of water provided for working-class inhabitants from the southern parts of New York City, a dearth that threatened the very health of tenement residents.

Another customer exclaimed in 1803, “Alas! I have turned my cock repeatedly, but nothing comes from it,” cock referring to a water spigot or faucet.⁴⁴ Not only was there not any water flowing from the customer’s faucet, but the masculine language used to describe the lack of water signified a figurative linguistic and literal physical failure of the Company *cock* to provide water to the streets and homes of New Yorkers. The male-dominated private Manhattan Water Company failed to provide clean water for New Yorkers, polluting the morality and health of gendered spaces. The city failed to think collectively, depriving residents of clean water and health. As an anonymous “Water Drinker” claimed, “I have no doubt that one cause of the numerous stomach affections so common in this city is the impure, I may say poisonous nature of the pernicious Manhattan water which thousands of us daily and constantly use.”⁴⁵

The failure of Burr’s privatization of water deprived city residents of water and their health. Privatization of water at the turn of the nineteenth century failed to pursue the public’s

⁴³ Ibid., 106.

⁴⁴ Koeppl, *Water for Gotham*, 70.

⁴⁵ Koeppl, *Water for Gotham*, 115.

interest and protect the public's health. The drastic early failure of water privatization provided the necessary framework and socio-political milieu for the Republican Mother to emerge.

The Beginnings of Purity and Health in Republican Motherhood

While women were more often than not relegated to the confines of the home, they began to turn their heads outwards to the political public sphere in the first few decades of the new republic. As republican mothers, these women occupied a niche space of civic virtue, responsible for educating their sons and steering their husbands in a moral direction from the suppressed boundaries of their domestic sphere. Republican Motherhood, according to Kerber, who coined the term, both blurred and reinforced the lines drawn between public and private, politics and domesticity, expanding the political and civic role of women in America's young republic.⁴⁶

Kerber describes "The Republican Mother" as "a device which attempted to integrate domesticity and politics. The ideology of Republican Motherhood also represented a stage in the process of women's political socialization."⁴⁷ By raising their sons and guiding their husbands as civically-minded actors, republican mothers held a significant amount of influence and power over their male counterparts, despite the boundaries of their homes. Republican Motherhood symbolized the beginning of women in the public, political, sphere of America through their close proximity to their husbands and their sons. "In reading history you will generally observe," John Adams, the second president of the United States, professed, "when you find a great character, whether a general, a statesman, or a philosopher, some female about him, either in the character of a mother, wife, or sister, who had knowledge and ambition above the ordinary level of women, and that much of his eminence is owing to her precepts, example, or investigation, in

⁴⁶ Lewis, "Republican Motherhood," 2.

⁴⁷ Linda K. Kerber, *Toward an Intellectual History of Women: Essays By Linda K. Kerber*, UNC Press Books, 2014, 59.

some shape or other."⁴⁸ For Adams, this woman was his wife, Abigail Adams. In 1774, Abigail wrote a letter to her husband, who was a member of the First Continental Congress in Philadelphia at the time, requesting, "I desire you would remember the ladies, and be more generous and favorable to them than your ancestors. Do not put such unlimited power in the hands of the husband. Remember, all men would be tyrants if they could. If particular care and attention is not paid to the ladies, we are determined to foment a rebellion, and will not hold ourselves bound by any laws in which we have no voice or representation."⁴⁹ Even at the inception of the United States, women were beginning to socialize politically and influence the men in their lives.

Theodosia Burr Alston, Aaron Burr's daughter, embodied the next generation of republican women, after Abigail Adams, which was reflected in the letters written from Alston to Burr. "My health is infinitely improved," Alston wrote on December 1, 1803, "and I attribute it to nothing but the continual bustle I have been kept in for three weeks past. What a charming thing a bustle is. Oh, dear, delightful confusion. It gives a circulation to the blood, an activity to the mind, and a spring to the spirits."⁵⁰ In this letter, Alston highlighted the connection between her health and a *delightful confusion*, or intellectual stimulation and challenge, signifying a rationality associated with Republican Motherhood. In response to Burr's request for an encore, Alston replied on June 4, 1803, "Encore stupid. For Heaven's sake, what do you imagine I can find to say once a day that is worth saying, shut up thus, either tinkling on the harp or holding a tête-à-tête conversation? You must, indeed, have a high opinion of my genius and the fertility of my imagination."⁵¹ Using a playful tone, Alston was delighted at her father's request for an

⁴⁸ Holloway, *The Mothers of Great Men and Women*, 635.

⁴⁹ *Ibid.*

⁵⁰ "North American Women's Letters and Diaries Results," Accessed January 26, 2017.

⁵¹ *Ibid.*

encore of her *genius and the fertility of her imagination*. Burr clearly valued the mind and opinion of his daughter, illustrating her influence over one of the most influential and infamous men of the early republic.

While Abigail Adams and Theodosia Burr Alston “claimed a significant political role” in the young republic, Linda Kerber claims that they “played it in the home.”⁵² However, Kerber continues, “As the restrained, deferential democracy of the republic gave way to an aggressive, egalitarian democracy of a modern sort among men, women invented a restrained, deferential but nonetheless political role.”⁵³ Women began to walk past the thresholds of their homes, bringing their tea gatherings into the male-dominated public sphere, demonstrated by the Female Benevolent Society of the City of New York. Created in 1834, the society’s first annual report established its goal as “the promotion of moral purity in the city of New-York” by “rendering assistance to females who show signs of repentance, and manifest desire to return to the paths of virtue.”⁵⁴ Not only did the members of the society embrace their roles as republican mothers, but they expanded this responsibility past their immediate families, becoming figurative mothers of women across New York City. Moreover, the Female Benevolent Society wrote their own constitution and established their own hierarchy of management and organization, including a board manager addressed as a “Directress.”⁵⁵ New language began to emerge, parallel to women in the public sphere, around the turn of the century.

Similar to this society, women and children began to build the public temperance movement in order to protect the health and livelihoods of the young republic. During the same time period, Bruce Dorsey claimed, “Early Americans drank at work during the day, and they

⁵² Kerber, *Published for the Omohundro Institute of Early American History and Culture*, 11-12.

⁵³ Kerber, *Toward an Intellectual History of Women*, 60.

⁵⁴ New York Female Benevolent Society, “Annual Report of the Female Benevolent Society of the City of New York,” *Annual Report of the Female Benevolent Society of the City of New York.*, 1834.

⁵⁵ *Ibid.*

quaffed in taverns and their homes when the day was through. Their own health, they reasoned, was more apt to be threatened by consuming the local water supply than by drinking beer or wine.”⁵⁶ Because of the polluted nature of the early republic’s water supply, which was presumably significantly worse in densely populated cities, women and children formed temperance groups, such as the Cold Water Army, to encourage sobriety and protect the health and virtue of American families. Temperance groups led by women, like the Female Benevolent Society, broadened the bounds of Republican Motherhood, bringing women into the public sphere. These women occupied, organized, and adapted the public sphere for the good of the public, as both republican mothers and private philanthropists.

The Waterway to Public Ownership

From the tribulations of the early well, Collect, and Tea Water Pump systems to the ultimate failure of the Manhattan Water Company, privatization of water failed the late colony and early republic of New York City. However, following this failure was the emergence of the ideology of Republican Motherhood and the politicized woman who embodied civic virtue from the private sphere. In *Democracy in America*, Alexis de Tocqueville claimed, “In no country has such constant care been taken as in America to trace two clearly distinct lines of action for the two sexes and to make them keep pace one with the other, but in two pathways that are always different.”⁵⁷ Similar to many historians of gender roles, de Tocqueville felt compelled to draw a *distinct line* between American men and women; however, such divisions did not necessarily divide the reality of the early republic in the City of New York, as demonstrated by the Female Benevolent Society of New York and the women of the Temperance Movement. Following the

⁵⁶ Bruce Dorsey, *Reforming Men and Women: Gender in the Antebellum City*, Cornell University Press, 2006, 90.

⁵⁷ Linda K. Kerber, “Separate Spheres, Female Worlds, Woman’s Place: The Rhetoric of Women’s History,” *The Journal of American History* 75, no. 1 (1988): 9–39.

failure of water's privatization came the desire for public ownership of water works and women's expanded politicized role as republican mothers, responsible for protecting the virtue and health of the young republic.

As the nineteenth century progressed, women's roles outside of the home grew, alongside the old and new Croton Aqueducts, publicly owned by New York City. With a steady source of clean water and immigration, the city's population soared, generating nostalgia for the romantic, more agrarian, realities of the Collect Pond and the Tea Water Pump. The historiography of *The American Gas - Light Journal* in 1859, *Leslie Frank's Popular Monthly* in 1882, and Alvin Fay Harlow's *Old Bowery Days* in 1931 all attest to the late nineteenth and even twentieth century longing for the days of carted water, despite how disgusting and dangerous those waters were in the early republic. While these articles expressed nostalgia, the introduction of accessible public water transformed the health and lives of New Yorkers for the better. As the city adopted water as a public work, it also began to accept women as a public force.

CHAPTER 2

The “Pure and Wholesome Water” of Crotona

Public Ownership, Public Health, and the Cult of Crotona in Nineteenth Century New York City

*OH, who that has not been shut up in the great prison-cell of a city, and made to drink of its brackish springs, can estimate the blessings of the Croton Aqueduct?--clean, sweet, abundant water!*⁵⁸

--Lydia Maria Child, American abolitionist and women’s rights activist, November 13, 1842

On July 4, 1842, Croton waters traveled over 30 miles from Westchester to the fountains of City Hall and Union Square, the fire hydrants along Broadway, and the homes of New Yorkers.⁵⁹ As these momentous waters rushed into the city for the very first time, “Every rank, every age, and every profession were represented” in celebration, as proclaimed by Charles King in *A Memoir of the Construction, Cost, and Capacity of the Croton Aqueduct*. “We saw all seventy ways of living” King continued, “We can hardly particularize any one class where all appeared so well.”⁶⁰ Old men, “beardless boys,” mothers, and infants all “joined in this glorious pageant, not as curious spectators, but rather as joint owners of the great work whose completion we this day celebrate. It is indeed the triumph not only of the city but of the country at large.”⁶¹ After five long years of construction and many more years of political maneuvering later, New York City finally owned its very first public water work, the Croton Aqueduct. By the 1880s, per capita daily use of Croton water soared close to a hundred gallons, the highest in the world.⁶² And by 1911, the daily supply of Crotona surpassed 400 million gallons.⁶³

⁵⁸ Lydia Maria Child, *Letters from New York*, 3d ed., New York, 1845, 158- 232.

⁵⁹ New York (N Y.) Board of Assistant Aldermen, *Journal and Documents of the Board of Assistants, of the City of New York*, The Board, 1840.

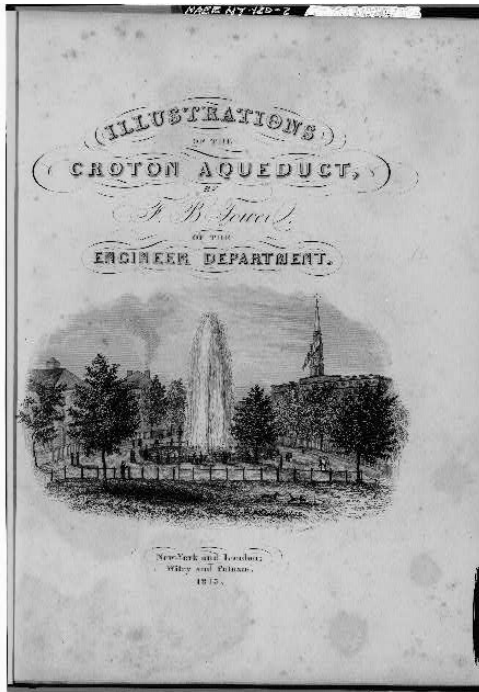
⁶⁰ Charles King, *A Memoir of the Construction, Cost, and Capacity of the Croton Aqueduct, Compiled from Official Documents: Together with an Account of the Civic Celebration of the Fourteenth October 1842, on Occasion of the Completion of the Great Work : Preceded by a Preliminary Essay on Ancient and Modern Aqueducts*, C. King, 1843, 269-270.

⁶¹ *Ibid.*, 301.

⁶² Koeppel, *Water for Gotham*, 287.

⁶³ *Ibid.*, 289.

Prior to the Croton Aqueduct, the city had never had such *clean, sweet, abundant water*. In 1796, Noah Webster asked in *A Collection of Papers on the Subject of Bilious Fevers*, “Why should cities be erected, if they are to be only the tombs of men?”⁶⁴ Around the turn of the



nineteenth century, New York City was filthy, polluted by overflowing cesspools, muddy streets, overcrowded tenements, and dirty citizens. Cholera, typhus, yellow fever, and smallpox pervaded the city. But, this grave picture transformed with the introduction of the Croton Aqueduct, which transformed a *great prison-cell of a city* into what Lydia Maria Child called a “marriage between the Spirits of Light and Water Nymphs.”⁶⁵ By flowing into the masculine public sphere of New York City, Crotona, the female water nymph from the pristine, pastoral, lands of Westchester, consummated a novel

union between man and woman, solid and liquid, public and private, street and home. Child’s feminization of the Croton Aqueduct and its waters was no accident. While Child may have been a pioneer of her time as an abolitionist and women’s rights activist, her sentiments anticipated the beginnings of change for the city and the women who lived there. With the introduction of clean water, women’s lives and roles rapidly expanded both in the home and onto the street, just as Crotona traversed Mannahatta.

The Croton Aqueduct redefined notions of cleanliness, public health, and in turn the role of women both in the home and on the street, transforming the female sphere of New York City

⁶⁴ Noah Webster, “A Collection of Papers on the Subject of Bilious Fevers, Prevalent in the United States for a Few Years Past,” New-York, *Sabin Americana*, 1796, 208.

⁶⁵ Child, *Letters from New York*, 158.

from 1842 until the turn of the twentieth century and beyond. Unlike any other amenity, as Gerard Koeppel claimed in *Water for Gotham*, “Water is...the best purifier of the houses and streets of cities,”⁶⁶ and “Cities, like other living things, need water to survive, and even more water to flourish. As they grow, they grow thirstier, and the thirst must be quenched--usually from rivers far beyond their limits,” the first of which was Crotona.⁶⁷ While gas, electricity, and transportation eased the pains of domestic work and made various parts of New York more accessible, none of them held the power of necessity for life that water carried. Water was and remains crucial to public health, the historic role of women, and human existence.

This chapter will first address the public health challenges New Yorkers faced in the mid-nineteenth century to provide context for the great changes the Croton Aqueduct produced. The aqueduct embodied representative government, public ownership, and the diverse benefactors of Crotona, which mainly applied to upper-class women.

For upper-class women, a supply of clean water redefined standards of living within the home, providing a means for maintaining cleanliness and bodily health. However, Crotona’s power was not limited by the boundaries of tenement homes and building thresholds. Her potency extended into the identities of women, expanding their female sphere onto the streets of Manhattan and into the boardrooms of City Hall. These new Crotona women eroded the traditional separation of the masculine public sphere and the feminine private sphere, surging into the city like the waters from Westchester on July 4, 1842.

However, such success for upper-class women did not necessarily apply to all of the diverse populations of New York City; it merely exemplified a microcosm of the larger issues within reform movements throughout social histories of the United States (i.e. women’s

⁶⁶ Blake, *Water For the Cities*, 9.

⁶⁷ Koeppel, *Water for Gotham*, xi.

suffrage). The fact that the aqueduct was a public, rather than a private, enterprise somewhat democratized access to clean water. Nevertheless, such clean water largely remained the privilege of upper class families.

The Croton Aqueduct re-characterized definitions of cleanliness, public health, and the cult of domesticity in nineteenth century New York City, revolutionizing women's roles in the home and on the street. Similar to the expanded female sphere of the twentieth and twenty-first centuries, in the mid-nineteenth century, according to the *Annual Report of the Croton Aqueduct Department* in 1852, "Comparatively few remain, who are aware of the singular purity, and healthfulness of [water, which is] so unstintingly furnished from the Croton, through the magnificent erections provided by wise and liberal legislation."⁶⁸ Today, waters from Crotona and the Catskills provide unstinting streams of water that flow through the veins of New York City into our faucets, showers, and toilets, a privilege many of us take for granted, just like women's influential presence in the public sphere of the twenty-first century.

The Tombs of Men

Before the creation of the Croton Aqueduct, the health of New York City's population remained vulnerable to miniscule bacteria in water that had yet to be discovered by Louis Pasteur and Robert Koch. According to the *New York Times* in 1896, "After a while, save for drinking purposes, the people [in tenements] manage to do without water, and so filthy and unwholesome habits become second nature, and disease and death follow."⁶⁹ Without water, tenement residents had no other choice but to live in filth, at the hands of infectious bacilli. As Charles King

⁶⁸ New York (N.Y.) Croton Aqueduct Board, *Annual Report of the Croton Aqueduct Department*, The Board, 1852, 33-34.

⁶⁹ "NO WATER FOR FOUNTAINS: Dearth of Water in Tenement Houses in New-York. WHAT ARE WE GOING TO DO ABOUT IT A Rapidly Diminishing Pressure -- A Question of the Greater New-York -- The Limited Watershed," *New York Times*, February 16, 1896.

proclaimed in 1843 in his memoir, “It may be laid down as a general rule, that the health of a city depends more on its water, than all the rest of the eatables and drinkables put together.”⁷⁰

In addition to bodily health, the dearth of clean water in New York City also endangered the economic health of the city and its residents. The Great Fire of 1835 destroyed much of today’s financial district, prompting the city to blow up private properties in order to prevent the spread of fire, the first action of its kind.⁷¹ New York lacked the water capacity to dampen such a great fire. According to Koeppel, “Croton water would eliminate some or all of the public and private costs of maintaining the fire department, property losses from fire, fire insurance premiums, street cleaning, public pump maintenance, carted spring water, and Manhattan Company water fees.”⁷²

Prior to the Great Fire, New York City experienced the great Cholera Epidemic of 1832, which impelled the residents and government of New York City to take action. Citizens cried unceasingly for “pure and wholesome water,” Koppel claimed, which led to the passage of the 1833 “Act for the Appointment of Commissioners in Relation to Supplying the City of New York with Pure and Wholesome Water” through the New York Senate and Assembly.⁷³ The ubiquitous title of *pure and wholesome water* dominates the historiography of the city’s grave necessity. *Pure and wholesome water* implied a religious parallel implication of the city’s need for piety, part of which was encapsulated in what Asa Green termed in *A Glance at New York*,

⁷⁰ King, *A Memoir of the Construction, Cost, and Capacity of the Croton Aqueduct, Compiled from Official Documents*, 91.

⁷¹ Koeppel, *Water for Gotham*, 176-177.

⁷² *Ibid.*, 153.

⁷³ *Ibid.*, 155.

the necessity to “qualify [water] with a drop of ardent spirits, to render it potable.”⁷⁴ Such religious scarcity was soon filled by Crotona’s immaculate and sobering feminine waters.

The Cult of Crotona

Besides clean water, public health, and economic prosperity, the publicly-owned Crotona provided women with the means to begin their journey towards women’s suffrage by fracturing the nineteenth century concept of the cult of domesticity. Also known as the “cult of womanhood,” this notion was, according to Jeanne Boydston in *Home and Work*, a “set of ideological conventions that narrowly associated women with the household and with political subordination and economic dependence.”⁷⁵ Such an “ideology of spheres,”⁷⁶ Boydston continued, divided the world into “two sex-linked spheres, sometimes described as a dichotomy between ‘private’ and public,’ sometimes between ‘leisure’ and ‘labor,’ and sometimes between ‘home’ and ‘work.’”⁷⁷ Women were relegated to a secondary role in society, bound to their homes and the extensive unpaid labor that dominated their supposed leisure time. Moreover, “Poverty” as claimed by Boydston, “increased the core labor of housework, particularly in urban areas. In New York City, where the poor lived largely in tenements, water for laundry (or for drinking or cooking--indeed, the food itself) had to be carried up as many as three or four flights of stairs.”⁷⁸ As you can imagine, the construction of the Croton Aqueduct thoroughly

⁷⁴ Asa Greene, *A Glance at New York: Embracing the City Government, Theatres, Hotels, Churches, Mobs, Monopolies, Learned Professions, Newspapers, Rogues, Dandies, Fires and Firemen, Water and Other Liquids, & C., & C. ...* A. Greene, 1837, 186-187.

⁷⁵ Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic*, (New York: Oxford University Press, 1990), 1.

⁷⁶ *Ibid.*, 141.

⁷⁷ *Ibid.*, xiv.

⁷⁸ *Ibid.*, 90.

transformed the lives of upper class women first, generating bucket loads of time that were once full of water collection and hauling.

As the “great centres of moral influence,” according to Clinton Rogers Woodruff in the *Proceedings of the Conference for Good City Government and the Annual Meeting of the National Municipal League* in 1895, “intelligent women of all classes” capitalized on their free time to service New York City.⁷⁹ The moral superiority of women cultivated in the home of the early nineteenth century poured out onto the streets with Crotona. These new Crotona women began to utilize their “housekeeping instincts” past the thresholds of their front doors. “That time-honored weapon, the broom of cleanliness,” Woodruff continued, “is now happily to be wielded beyond the bounds of the door-step. It will brush down the city cob-webs and find its way into all the dark corners and alleys.”⁸⁰ Instead of confining their influence and power to the home, women began to extend their skills to a city level of housekeeping.

Unlike Burr, De Witt Clinton, and the Board of the Manhattan Company, women, according to Woodruff, “preserve[d] the tradition of government for the sake of the governed, and of devotion to that ineffable something--extra territorial, supra political--which expresses itself in civic pride.”⁸¹ Women became successful leaders in the public sphere, justified by their exemplary moral nature. Even Woodruff admitted that “Men accept the inevitable more or less good-naturedly. But women are naturally irreconcilables. They will not admit that what they disapprove *is* inevitable. Therefore, they constantly achieve the impossible.”⁸² Despite the fact that Woodruff’s comment was phrased as a backhanded compliment, labeling women as irreconcilable, he highlighted the growing acceptance of women as productive, diligent,

⁷⁹ Clinton Rogers Woodruff, *Proceedings of the ... Conference for Good City Government and the ... Annual Meeting of the National Municipal League*, 1895, 150.

⁸⁰ *Ibid.*, 255.

⁸¹ *Ibid.*, 501-502.

⁸² *Ibid.*, 504.

individuals who have the ability to selflessly govern the city for New Yorkers. Woodruff also claimed, “From the woman’s point of view, then, an important step towards good government in cities is the thorough enlistment of the help of women, since this is the only great unused force waiting to be tried.”⁸³ Although he inserted ideas into the psyches of women, Woodruff made an excellent point: women were not only capable and successful in the public sphere, but were essential for the prosperous governing of New York City and the country.

One such woman, Catharine Beecher, both directly and indirectly expanded and confined the role of upper-class women within and beyond the domestic sphere of the home. A famous American educator and female author of the early and mid-nineteenth century, Beecher founded organizations, like the Hartford Female Seminary, that aimed to educate and elevate young American women.⁸⁴ Such elevation through education was not merely motivated by a desire for gender equity, but was closely entrenched within the foundations of American democracy. As Beecher claimed in *A Treatise on Domestic Economy: For the Use of Young Ladies at Home, and at School*, “The success of democratic institutions, as is conceded by all, depends upon the intellectual and moral character of the mass of the people,” which was the responsibility of republican mothers who were responsible for the “formation of the moral and intellectual character of the young” and the “character of the future man.”⁸⁵ While the United States’ democracy depended largely on the virtues and influences of women, Beecher ultimately accepted the inferior position of women within mid-nineteenth century American society. As she claimed, “Society could never go forward, harmoniously, nor could any craft or profession be successfully pursued, unless these superior and subordinate relations be instituted and sustained,”

⁸³ Ibid., 506.

⁸⁴ “Catharine (Esther) Beecher, | Britannica Concise Encyclopedia - Credo Reference.” Accessed April 7, 2017.

⁸⁵ Catharine Esther Beecher, *A Treatise on Domestic Economy: For the Use of Young Ladies at Home, and at School*, T.H. Webb., 1843, 36-37.

such as that between husband and wife.⁸⁶ While she acknowledged women's choice in marriage, as well as the abrogation of the institution itself, Beecher essentially confined the influence of women to the home, despite their outward-facing powers of education.⁸⁷

Moving past the gendered subordination relations outlined in her treatise, Beecher delved deeper into the socioeconomic hierarchy of women in *The Duty of American Women to Their Country*. In addition to recognizing the influence of republican mothers within the cult of domesticity, Beecher outlined ways in which upper-class women could enrich and empower their working-class peers through education. From lending books to influencing school trustees and the men in their lives, wealthy women would be able to improve the country's democratic institution through the education of the laboring classes.⁸⁸ As Beecher suggested, "If the influential ladies in any place would go but once a year to the schools in their vicinity, to inquire for their comfort and prosperity, it would give a wonderful impulse to the cause of education. The torpid indifference of the influential classes to the education of the young, except where their own families are concerned, is the grand cause of all the dangers that threaten us."⁸⁹ If upper-class women acknowledged their collective responsibility to educate all classes of girls and boys, the American educational system as well as democracy would be uplifted.

While Beecher focused mainly on the larger, national, implications of upper-class women's responsibilities within the realm of education, Lydia Maria Child paid more attention to the daily lives of working-class women in her writings. Another influential mid-nineteenth century female author, Child advocated for abolition, Indian rights, and most relevantly, the

⁸⁶ Ibid., 26.

⁸⁷ Ibid.

⁸⁸ Catharine Esther Beecher, *The Duty of American Women to Their Country*, New York, 1845, 75-76.

⁸⁹ Ibid., 78.

rights of women, which were reflected in her books.⁹⁰ In *The American Frugal Housewife: Dedicated to Those Who are Not Ashamed of Economy*, Child claimed, “I have written for the poor.”⁹¹ Acting as a handbook of sorts for working-class women, this book, similar to Beecher, emphasized the importance of education; however, such education was not meant to uphold American democracy, but to provide happiness for young girls. As Child stated, “This [domestic education] is the way to make them [girls] happy, as well as good wives; for, being accustomed to the duties of life, they will sit lightly as well as gracefully upon them.”⁹²

Moreover, Child stressed the dangers of marriage, without an education, to a girls’ contentedness, claiming, “The greatest and most universal error [of female education] is, teaching girls to exaggerate the importance of getting married; and of course to place an undue importance upon the polite attentions of gentlemen.”⁹³ Analogous to Beecher’s writings, Child’s *The American Frugal Housewife* highlighted the necessity of female education. However, Beecher focused on political implications while Child emphasized individual ramifications. Child recognized, in *Biographies of Good Wives*, that “The actions and motives of each individual do, more or less, affect the character and destinies of his country,” but that she expected “to do but little” to “alter the current of public feeling, and change the hue of national character” within her biographical writings.⁹⁴ As she concluded in her intro:

*Gentle reader, I have put my little garden-hoe into a mighty stream--and perchance the current will sweep it to oblivion.*⁹⁵

⁹⁰ Many of Child’s novels focused on the rights of women, such as *Evenings in New England: Intended for Juvenile Amusement and Instruction*, about woman discussing important issues like slavery and history and science, and *The Frugal Housewife. Dedicated to Those Who Are Not Ashamed of Economy*, which provided guidance for women about domestic duties and self-improvement; “Lydia Maria Child - Biography in Context,” Accessed April 7, 2017.

⁹¹ Lydia Maria Francis Child, *The American Frugal Housewife: Dedicated to Those Who Are Not Ashamed of Economy*, S.S. & W. Wood, 1841, 6.

⁹² *Ibid.*, 92.

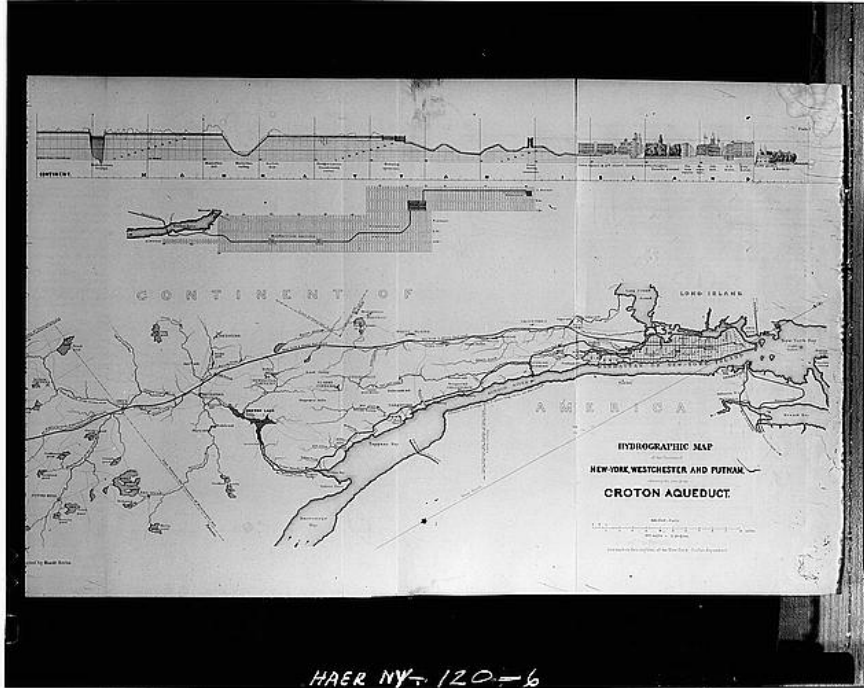
⁹³ *Ibid.*, 91.

⁹⁴ Lydia Maria Child, *Biographies of Good Wives*, 6th ed., New York, 1855, 13-14.

⁹⁵ *Ibid.*, 14.

The Tribulations of Public Ownership

Despite all of the progress women made to contest the traditional notion of a cult of



domesticity, the immaculate waters of the Croton River failed to serve everyone in New York City. While Croton water served to protect the public health of New York City residents, it was also water taken from Westchester County, inciting suburban resentment against the city.

Such animosity naturally engendered retaliation and a counter-response from the Croton Aqueduct Board in 1853: “To protect the aqueduct grounds through Westchester county, fences have been erected at many points...Without the most unremitting attention and vigilance, encroachments upon these grounds will often be made, and pertinaciously continued....a desire to annoy, and thwart the Department in the discharge of its duties, being the only conceivable motive.”⁹⁶ In a sense, New York City acted as an imperial force in the northern hinterlands, establishing her supremacy by colonizing and confiscating the fruits of the Croton River.

Once water finally flowed through the streets of New York, the question of payment heavily favored the wealthy, since taxes fell on building owners and landlords instead of on

⁹⁶ (N.Y.), New York (N Y.) Croton A. York, and New York (N Y.) Croton Aqueduct Board. *Documents of the Board of Aldermen*, The Board, 1853, 10.

tenants or as a general tax.⁹⁷ Consequently, the *New York Evening Post* reported in the 1840s that “very small exertions are at present made by our citizens to introduce this water into their dwellings” because the “great mass of the people, who are tenants, will derive no benefits from it, and the health of the city will not be materially improved.”⁹⁸ The cost to buy and connect pipes to private buildings prevented many landlords and consequently tenants from enjoying the *clean, sweet, abundant water* of the Croton. Crotona was built for the middle and upper classes. As Elizabeth Ewen explains in her book, *Immigrant Women*, “Immigrant women knew about the value of fresh air and clean water, but it cost money to get to the country, or even to parks in the city. The parks had been built for the middle and upper classes,” just like the aqueduct.⁹⁹

In response to such uneven distribution of Croton water, Mayor James Harper and Lydia Maria Child came to the aid of the working class women and men of New York City, proposing a provision of public baths. As Child claimed in her *Letters from New York*, “We have no free public baths. The wealthy can introduce water into their chambers, or float on the bosom of the tide, in the pleasant baths at the Batter; but for the poor, this is a luxury that can seldom, if ever, be enjoyed....and the labouring man has to walk three or four miles to obtain a privilege so necessary to health,” a trek similar to that of distant parks in New York City.¹⁰⁰

However, following the introduction of Crotona into the daily lives of upper middle class New Yorkers came general rising standards of living and notions of cleanliness. The aqueduct, according to the Board of Assistant Aldermen in 1836, “minister[ed] to the health, comfort and security of the citizens” and “elevate[ed] the character of our people as an enlightened and public

⁹⁷ New York (N Y.) Board of Assistant Aldermen, *Journal and Documents of the Board of Assistants, of the City of New York*, The Board, 1841, 261.

⁹⁸ Koepfel, *Water for Gotham*, 279.

⁹⁹ Elizabeth Ewen, *Immigrant Women*, (NYU Press, 1985), 140.

¹⁰⁰ Child, *Letters from New York*, 399.

spirited community.”¹⁰¹ Furthermore, the “Croton water,” according to Greene, “will be a great inducement to personal cleanliness. Having it, as they will, running pure into their very bedrooms, the citizens will find it an agreeable pastime, instead of a disgusting labor, to wash themselves of a morning.”¹⁰² Crotona changed the daily habits of upper class New Yorkers, greatly decreasing the amount of work required by women and domestic servants. Such standards of cleanliness eventually trickled down to the working classes, who resided on the southern end of the island. Initially meant to stymie the onslaught of disease and fire that threatened the public’s health, Crotona cleaned up the filth from the street, in residents’ homes, and on people’s bodies. The new aqueduct championed public ownership of water and splintered the traditional nineteenth century cult of domesticity.

The Downfall of the Croton

On July 4, 1842 at the celebration of Crotona’s birth, Governor Seward commented on the purpose of this infrastructural achievement: “This aqueduct, like all our other public works, was undertaken not only for the present but for the future--Its capacity is graduated not to supply the wants of the present population of the city, but to meet the exigencies of the million who within half a century may be congregated upon Manhattan Island,” and congregate they did.¹⁰³ While Governor Seward’s aspirations for Croton were admirable, the aqueduct’s water levels began to shallow at the dawn of the twentieth century. Despite New York City’s best efforts to protect and conserve Crotona, her resources ran low, according to *The New York Times*, “Not

¹⁰¹ New York (N Y.) Board of Assistant Aldermen, *Journal and Documents of the Board of Assistants, of the City of New York*, The Board, 1836, 14.

¹⁰² Greene, *A Glance at New York*, 185.

¹⁰³ “Croton Celebration.: Remarks of Governor Seward at the Croton Celebration,” *Niles’ National Register (1837-1849)*, October 29, 1842.

because we use more water than other people, but because we waste more.”¹⁰⁴ By this time, New Yorkers were accustomed to having flowing water from the faucets in their homes and the hydrants on their streets. But they needed more.

While little physical evidence of the Croton remains in the city today,¹⁰⁵ the Murray Hill reservoir replaced by the New York Public Library, the York Hill Reservoir by Central Park’s Great Lawn, and the Croton by the Catskills Aqueduct,¹⁰⁶ the lasting impact of the intimate relationship between women and water has only strengthened, and it all began with Crotona. Lydia Maria Child predicted the birth of this momentous parallel best on a beautiful day in 1842:

Crotona manifests the idea of an age on which rests the golden shadow of an approaching millennium--that equal diffusion is the only wealth, and working for others is the only joy.

¹⁰⁴ “The Waste of Water,” *New York Times*, August 26, 1899.

¹⁰⁵ Today, New York City only gets about 10% of its water from the Croton watershed through the new Croton Aqueduct.

¹⁰⁶ Koeppel, *Water for Gotham*, 290.

CHAPTER 3

AN ACHIEVEMENT OF CIVIC SPIRIT SCIENTIFIC GENIUS AND FAITHFUL LABOR

Systematic Science, Health, and Women in Twentieth Century New York City

*Instead of indiscriminate agitation, and perhaps the demoralization of individual public servants, the league plan insures systematic effort, good order and cooperation. Women can hardly take a course that will better fit them for the duties of practical citizenship than that which is offered through the formation of organizations like that now earning and obtaining commendation in the chief city of the country.*¹⁰⁷

--*The Christian Science Monitor* "Women and Municipal Work," August 23, 1913

Following the turn of the twentieth century, American women not only traversed the threshold of their homes into the streets of New York City, expanding their past traditional boundaries of republican motherhood and the cult of domesticity, but, they began to publicly band together into *organizations*. Mothers, wives, and daughters took *systematic*, orderly, and cooperative efforts in order to fulfill their new *duties of practical citizenship*. While women did not gain the right to vote in the United States until 1920, their domain of political responsibility and agency grew tremendously in the new century. As explained by *The Christian Science Monitor's* "Women and Municipal Work" article from 1913, the *league*, or Women's Municipal League, provided a methodical, logical, and businesslike framework for wealthy women to join together, organize, and safeguard the wellbeing of the *chief city of the country* and its citizens. No longer were women repressed and confined to the interior or limited to *indiscriminate agitation* and *demoralization of individual public servants* in order to protect their city. By the end of the first decade of the twentieth century, American women of all classes embraced their newfound *practical citizenship* by organizing into leagues and unions, paralleling the century's new engineering landmark: the Catskills Aqueduct.

¹⁰⁷ "Women and Municipal Work," *The Christian Science Monitor (1908-Current File)*; Boston, Mass. August 23, 1913, sec, Editorials.

This chapter will first explore the great scientific and engineering accomplishment that is the Catskills Aqueduct, a construction that alluded to the gendered morality of New York City public health. The Catskills Aqueduct, similar to Croton, continued to redefine notions of public health in New York City society around the turn of the twentieth century. However, this public water works project pulled water from reservoirs over 100 miles away from the city, much farther north than Westchester, and entailed a level of scientific expertise unknown to Crotona. By 1914, over two years before its waters first reached Manhattan, the new aqueduct had already become the longest tunnel in the world at 110 miles long, cost almost \$200 million, employed approximately 25,000 men for nine consecutive years, and was meant to supply all five boroughs of the city with 250 million gallons of water a day.¹⁰⁸ To provide context, the Catskills project presented more engineering challenges than the famous Panama Canal. With the emergence of a modern scientific methodology, including such hypotheses as germ theory, the beginnings of the twentieth century foreshadowed a century uniquely guided by scientific and objective thought. Similarly, such scientific thought was not only emblematic of and limited to the engineers and leaders of the city, but was mirrored by the growing systematic, well-organized, and solidified role of upper and working-class women in the political public sphere of the new century.

One such example of the new century's objectivity was the curious construction camps that formed along the path of the aqueduct, which often became larger hubs of stimulation, full of social, cultural, and economic activities. Within these camps, laboring men and women attended schools and kept busy during the free time allotted to them by city contractors.

Lastly, this chapter will draw connections between the Catskills Aqueduct and the simultaneous and subsequent unionization of women of all socioeconomic classes. The

¹⁰⁸ "Idaho Statesman, Published as The Idaho Daily Statesman (Boise, Idaho)," *America's Historical Newspapers*, February 8, 1914.

inscription on the commemorative medal created by the Mayor's Catskill Aqueduct Celebration Committee immaculately summarized this parallel relationship of modern science's influence on the city's water supply and women, lauding,

AN ACHIEVEMENT OF CIVIC SPIRIT
SCIENTIFIC GENIUS AND
FAITHFUL LABOR¹⁰⁹

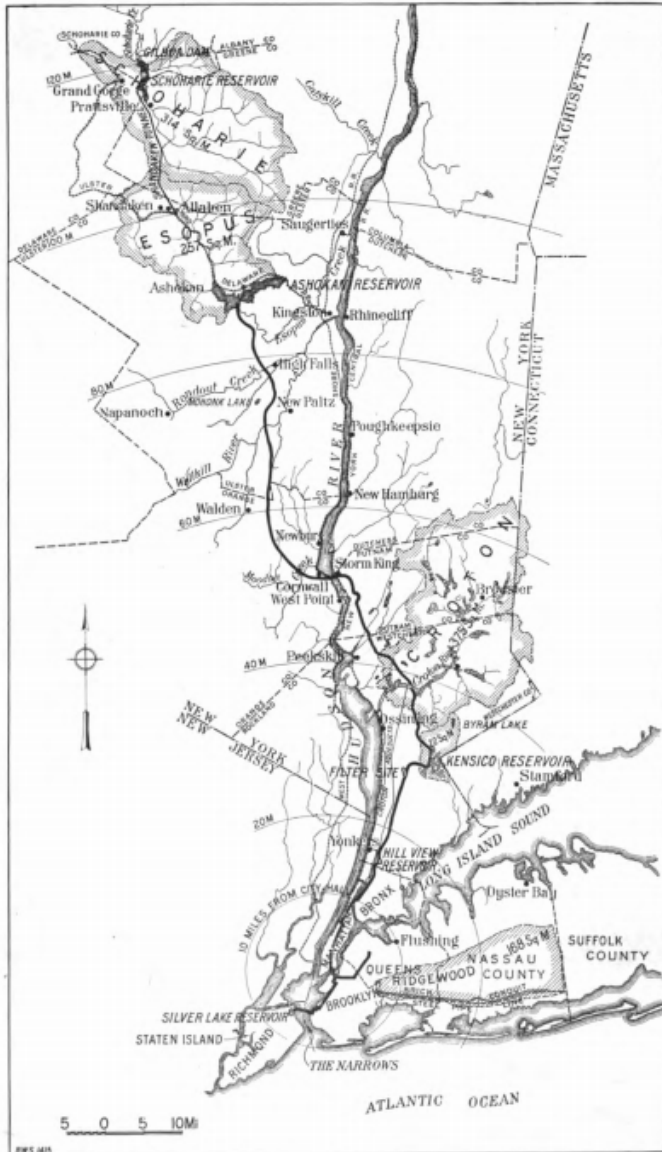
Within the first two decades of the twentieth century, the role of women as organized political agents solidified, reflecting the new age's systematic and methodical *CIVIC SPIRIT*, a gendered term in itself. Simultaneously, thousands of men and women constituted *FAITHFUL LABOR*, who promulgated and protected their city's water supply like republican mothers faithfully raised their children. Lastly, New York City constructed the great Catskills Aqueduct, an infrastructural project requiring and commensurate to *SCIENTIFIC GENIUS*, a genius that still supplies the city with water today. From the building of the aqueduct to the construction of the labor camps and the unionization of women workers, the twenty-first century symbolized a new era of scientific thought and practice within both city engineering and female labor organizations.

The Catskills Aqueduct

In order to comprehend this new scientific emergence and its influence on New York City's water supply, health, society, and women, it is crucial to examine the metropolis prior to the construction of the Catskills Aqueduct. In 1900, 110 out of every 1,000 white infants and 170 out of every 1,000 black infants died in early childhood. Children and adults still fell ill because of contaminated water, polluted milk, and filthy conditions within the home and on the streets,

¹⁰⁹Hall, *The Catskill Aqueduct*, 114.

without running water and sanitation.¹¹⁰ By 1911, according to the New York Health Report of the New York City Commission on Congestion of Population, 25,000 to 30,000 New Yorkers died every year from preventable diseases, 10,000 from consumption, and one of every eight



Map of the Catskill Mountain water system showing its relation to the Croton and Ridgewood systems.

babies, amounting to 16,000 infant deaths out of 125,000 annually. Furthermore, despite spending \$10 million per year to prevent and cure diseases, the city lost \$37 to \$41 million of economic waste from preventable diseases.¹¹¹ There were also filthy streets where, as claimed by the *Morning Oregonian* on November 19, 1911, “one wades through masses of rubbish and filth” when attempting to move through unsanitary, dark, and overcrowded tenements.¹¹² In addition to tenements, a lack of clean running water for working and middle class New Yorkers also contributed to the high mortality rates and economic

¹¹⁰ Katherine Leonard Turner, *How the Other Half Ate: A History of Working-Class Meals at the Turn of the Century*, 2014, 14-19.

¹¹¹ *Report of the New York City Commission on Congestion of Population. Transmitted to the Mayor and the Board of Aldermen, February 28, 1911*, New York, 1911, 165.

¹¹² “*Morning Oregonian (Portland, Oregon)*,” *America’s Historical Newspapers*, November 19, 1911; *Report of the New York City Commission on Congestion of Population*, 164.

waste following the turn of the twentieth century. New York City was not only losing many lives and dollars from preventable illnesses like tuberculosis and waterborne diseases, but she was experiencing a horrendous moral crisis. As caretakers of the interior, women of all classes held a disproportionate amount of responsibility for the health and wellness of the home environment and their children, a responsibility accepted as a distinctly female moral duty.

Despite the fact that disease had held a very individualized, female, and moral denotation prior to the new centennial, as markets developed and medicine and science emerged as credible fields, “Food became political,” according to Katherine Leonard Turner in *How the Other Half Ate*, particularly “when working people asserted that their wages were insufficient to buy bread for their families.”¹¹³ Working class New Yorkers could not afford to put food on their tables and provide safe environments within which to raise children. Turner continued, acknowledging how the new fields of economics, medical science, and nutrition justified the public’s “intensive scrutiny of household cleanliness and sanitation methods,” problems whose solutions “hinged on individual women’s hard work, skill, and discipline.”¹¹⁴ While women in particular remained more often than not responsible for their own economic and health misfortunes, the emergence of economics and nutrition transformed the landscape of blame, transferring some accountability to the city and the public at large. Everyone began to hold a semblance of moral responsibility for their neighbors, social inferiors, and superiors. As Turner claimed, “Every household had a private duty to its members and a public duty to the community to maintain standards of cleanliness and prevent diseases like tuberculosis.”¹¹⁵ The advent of science altered the public’s view of their health, promulgating a collective instead of a gendered perspective towards the problems and solutions facing the City of New York in the early 1900s.

¹¹³ Turner, *How the Other Half Ate*, 19.

¹¹⁴ *Ibid.*, 21-26.

¹¹⁵ *Ibid.*, 22.

While every household had a *public duty to the community*, the contemporary collective thinking of the time coalesced into departments of the city government, which spearheaded efforts to provide sanitary streets, clean homes, and healthy citizens. As J. Lewis Stockton claimed in an *Outlook* article titled “Community Civics” on October 1, 1919, “We need water to keep ourselves clean and our homes and surroundings in a sanitary condition so that we may be healthy. Dirt creates disease and water removes dirt. As citizens of the city of New York, we should realize that it is not Aladdin's lamp that causes water to flow when we turn on our faucets, but that a department of the city government which watches over us is providing us with pure water.”¹¹⁶ Instead of merely mothers, the city now shouldered some of the responsibility for maintaining clean homes and streets. As a means to wash away filth and disease, water was crucial to the health of the city and its citizens, a privilege not to be taken for granted. Although resident tax dollars contributed to the building and maintenance of the Catskills Aqueduct, the women and men in charge of watching over the city’s *pure water* ensured the aqueduct’s success. In short, Stockton summarized, “New York takes care of its citizens by supplying them with water. This is used as a drink and in food. It keeps the inhabitants clean and healthy, also protecting their lives and property.”¹¹⁷

With a population of nearly 3.5 million in 1897, following the consolidation of the boroughs into the Greater City of New York, a democratic municipal government in its truest form would have been near to impossible.¹¹⁸ Representatives were key to the efficiency of the new water supply’s construction. In advocating for the Catskills Aqueduct, Mayor McClellan

¹¹⁶ J. Lewis Stockton, “Community Civics: A Practical Educational Course in Citizenship I--the City’s Water Supply Introduction Fire and Street-Cleaning Departments Industry and Commerce Supply of Water Public Wells Pumps Early Pipe-Line Projects Public Water-Works System Water in Boroughs the Catskill Water Supply Protection of the Water Supply Biological Protection Administration Water Tax Summary,” *Outlook (1893-1924)*, October 1, 1919.

¹¹⁷ *Ibid.*

¹¹⁸ Hall, *The Catskill Aqueduct*, 77.

received the help and cooperation of many civic bodies who later had representatives of their own in control of the aqueduct. Charles N. Chadwick of the Manufacturers' Association, J. Edward Simmons of the Chamber of Commerce, Charles A. Shaw of the Board of Fire Underwriters, John A. Bensel, John F. Galvin, and Charles Strauss all constituted the new Board of Water Supply, which chose the Catskill, Schoharie, Esopus, and Rondout creeks as sources for the new aqueduct.¹¹⁹ The work on the aqueduct was furthermore organized into 5 departments, including the Departments of Reservoirs, North Aqueduct (Ashokan and Peekskill), South Aqueduct (Peekskill to the city), City Tunnel, and Headquarters (in charge of the engineers).¹²⁰ This new project, according to Edward Hagan Hall in *The Catskill Aqueduct and Earlier*



Rondout Pressure Tunnel, 14½ feet in diameter, typical of other pressure tunnel work

Water Supplies of the City of New York in 1917, was a “citizens’ movement throughout, animated by the highest and most disinterested motives.”¹²¹ Whether as mere citizens, constituents of civic boards and departments, or members of women’s leagues and unions, the

men and women of New York City organized and participated in the creation of their new water supply.

Besides the elevated levels of civic engagement, the scientific expertise that went into building a hundred foot tunnel underground was instrumental to the building of the Catskills Aqueduct. Such expertise began with the city’s forethought, as the Grand Rapids Press published

¹¹⁹ Ibid., 84-86.

¹²⁰ Ibid., 88.

¹²¹ Ibid., 78.

in *The Evening Press* on January 12, 1907, “She [the city] is anticipating the needs of the metropolis one hundred years hence. While the Croton watershed appears to be adequate for the present, any serious trouble with it would lead to disastrous results.”¹²² Besides the gendered reference to the city as *she* that fills the historiography of Crotona, the concept of ensuring a new water supply for the ensuing century illustrated a novel maturity of the municipal government, a maturity previously found in republican mothers. While New York City still faced water, health, and sanitation problems, the circumstances in the early 1900s were by no means as dire as those that provoked the building of the Croton Aqueduct. Instead of attempting to save itself, the city was planning for its continued prosperity. The Grand Rapids Press acknowledged such forethought, claiming that the “vast undertaking [of the Catskills Aqueduct] is certainly very creditable to the city and will compel admiration in the engineering world,” admiration for an tunnel that will “carry thirty times as much water as did the famous aqueduct of Rome combined.”¹²³

The man in charge of such engineering prowess was J. Waldo Smith, who became Chief Engineer of the aqueduct on August 1, 1905. Prior to his appointment, Smith led the completion of the new Croton Dam and was the Chief Engineer of the Aqueduct Commissioners of New York. Before drawing up a specific route from the Ashokan reservoir to the city, Smith and his team of engineers and geologists conducted a 3,000-mile survey, over twenty-seven times longer than the actual underground tunnel.¹²⁴ Once the tunnel was complete, the water from the Catskills was treated first at Ashokan through aeration, second near the Kensico reservoir via coagulation, chlorination, and filtration, and lastly at the Hill View Reservoir in Yonkers, just

¹²² “Grand Rapids Press, Published as *The Evening Press*, (Grand Rapids, Michigan),” *America’s Historical Newspapers*, January 12, 1907.

¹²³ Grand Rapids Press, Published as *The Evening Press*.

¹²⁴ Hall, *The Catskill Aqueduct*, 85-88.

north of New York City, in order to ensure its purity.¹²⁵ Furthermore, the city conducted chemical, bacteriological, and microscopic examinations to test and analyze the water at various Catskills reservoirs approximately fifteen times per day, a necessity for a city that consumed about 600 million gallons of water a day.¹²⁶ While women did not necessarily directly contribute to the surveying, building, and chemical processes of the aqueduct construction, they played vital roles in holding the city accountable to the health of laborers and the public as a whole.

Before construction commenced, the Board of Water Supply had to liaise with the engineers to ensure a feasible route for the Catskills Aqueduct. This route unfortunately dislocated many upstate residents. By guiding water from the Catskills southward, New York City effectively acted as a pseudo-imperialist force, colonizing and essentially stealing water from upstate residents. Moreover, in order to build the grand tunnel that surpassed the Roman aqueducts and Panama Canal in engineering prowess, the city displaced about eight villages, consisting of 800 families and 3,000 people, razing and burning the land in order to prepare it for the tunnels. Even more grotesque, the city removed 2,800 bodies from village cemeteries that fell along the new aqueduct path.¹²⁷

Upon completion, the city continued exercising their imperial powers over its hinterlands by passing laws and employing police and guards to protect the land surrounding the reservoirs.

As one “yellow fellow” who guarded the water system observed near a reservoir,

Take these people I've just been to see. They're New Yorkers when they're home. This very water which they were polluting and poisoning with banana-skins, chicken bones, and lunch-boxes is the water which they expect to have delivered in their homes pure and clean. Why, they even pay us fellows for seeing to it and actually protecting them against their own acts...It scares me when I think of the

¹²⁵ Aeration was the process that removed odors and undesirable gases from water by spraying it into the air, coagulation removed turbidity and small clay particles, chlorine sterilized the water and removed harmful bacteria, and sand filters removed the remaining impurities. Ibid., 107; Stockton, “Community Civics.”

¹²⁶ Stockton, “Community Civics.”; Hagaman Hall, *The Catskill Aqueduct*, 114.

¹²⁷ “Idaho Statesman, Published as The Idaho Daily Statesman (Boise, Idaho),” *America’s Historical Newspapers*.

millions of folks down there who would be sick if things were not right up at this end.¹²⁸

Not only did the city employ guards, acting as their own republican mothers, to protect their precious water from upstate residents, but ironically also from themselves. Even with dedicated New York City individuals, civic bodies, and a team of capable engineers, the city justifiably contracted guards to further protect the Catskills Aqueduct. The metropolis applied a novel level of systematic scientific genius in its planning and construction of the Catskills Aqueduct, part of which entailed faithful labor from working class men and women alike.

Even with 283 deaths, 8,883 injuries, and a total of 17,423 men working on the aqueduct line at any given time, the “men and their families were so well cared for,” Haganman Hall claimed, “that there was not a single labor strike during the whole ten years during which the aqueduct was being built.”¹²⁹ Despite deaths and injuries, immigrants and Americans alike worked diligently, never daring to strike against the city because of the provided construction and reservoir camps that lined the Catskills Aqueduct.

Aqueduct Construction Camps

The construction camps that lined the aqueduct path from the Catskill Mountains down to New York City prevented a single labor strike from breaking out because of the incredible amenities afforded workers, described by Lillian Wald and France Kellor, both members of the New York State Immigration Commission of 1908-1909. From their 1,286 mile journey covered over fourteen days along the line of camps and contracts, Wald and Kellor produced and published an article in *The Survey: A Journal of Constructive Philanthropy* called “The

¹²⁸ Stockton, “Community Civics.”

¹²⁹ “Idaho Statesman, Published as The Idaho Daily Statesman (Boise, Idaho),” *America’s Historical Newspapers*; Haganman Hall, *The Catskill Aqueduct*, 92.

Construction Camps of the People: The Findings of an Automobile Tour of Investigation of Camp Conditions Along the Line of New York State's New Barge Canal and New York City's New Aqueduct.”¹³⁰ On their trip, they observed how the “State and city are thus setting up new communities of hastily gathered, ill-assorted groups of men whose only tie on American soil is labor. State and city are thus moulding new elements of our citizenship, at the same time that they are digging an artificial river and damming up a great new lake.”¹³¹ By employing many immigrants to build the barge canal and Catskill Aqueduct, New York and its great metropolis effectively incorporated these newcomers into the fabric of American labor, life, and citizenship. Furthermore, the very claim made by Wald and Kellor mentioning the *moulding of new elements of our citizenship* not only alluded to the Italian immigrants who made up a large part of labor found in New York, but also implied the women's' own inclusion within American citizenship and their superior knowledge of the changing definition of what it meant to be a New York citizen with the influx of newcomers.

However, the barge canal and aqueduct conducted their respective constructions using different methods, discerned by Wald. In her writings, *The House on Henry Street*, Wald recognized, “In the public work the New York City contracts, with few exceptions, showed carefully thought-out and standardized conditions for the men; but examination of the state contracts showed that while elaborate provision had been made for the expert handling of every other detail connected with the work, even to the stabling of the mules, nowhere was any mention made of the men.”¹³² New York City contractors undertook more measures to ensure the comfortable productivity of aqueduct laborers than did the state, limiting opportunities for

¹³⁰ “The Survey: A Journal of Constructive Philanthropy,” The Charity Organization Society, October 1909, HathiTrust.

¹³¹ Ibid., 449.

¹³² Lillian D. Wald, *The House on Henry Street*, New York, 1915, 294.

workers to fall victim to extortionists like camp padrones. Yet, padrones ran the show in state barge canal camps. In return for delivering workmen, often single and alone, to the state and in a



CONTRACTORS' CAMPS—(1) Outdoor stoves at Camp Hill View. (2) Chadwick avenue at "Camp City" at Ashokan. (3) Mess hall, Camp Hill View. (4) Camp Blakeslee near Croton lake, now completely obliterated. (5) Operating room in contractors' hospital. (6) Recreation at close of legal 8-hour day.

few cases the city, padrones had the power to operate construction camp stores and control the employment of laborers. As Wald and Kellor detected, "The *padrone* is the greatest obstruction in camps today to the adoption of American standards of living, because his largest profits come from the ignorance, poverty, disease and vice of his countrymen."¹³³

Furthermore, state camps often lacked provisions for women in the home and lacked recreation for children, mainly limiting

¹³³ "The Survey: A Journal of Constructive Philanthropy," 459.

inhabitants to single immigrant men.¹³⁴

In contrast to the dismal realities of state camps, New York City construction camps along the Catskill Aqueduct path housed families and cared for its laborers to a higher degree. As Wald and Kellor observed, “The city’s contract does protect workmen. It requires a standard of sanitation, of housing, of medical care, and provides measures for the prevention of disease” that other laborers failed to receive.¹³⁵ Moreover, these aqueduct camps provided schools with teachers that did much more than merely educate; they often acted as mediators between employers and employees. As Wald and Kellor exclaimed, “There are many things a teacher can do in a camp community besides teaching English. A man may be dismissed, and the teacher is perhaps the only one who can manage to have both sides understand the reason.”¹³⁶ As teachers, working-class women began to mediate between their male counterparts and city employers, reaching a novel level of authority and independence not found within their city tenements. Furthermore, this article represented a pioneering document, systematically researched and written by two twenty-first century women.

Touched upon in the writings of Wald and Kellor, the relationship between employer and employee began to transform from one of exploitation to one of mutual benefit in order to systematically increase productivity on the aqueduct worksite. The construction camps that appeared near the Ashokan and Kensico reservoirs demonstrated such change.¹³⁷ While there was initially “opposition from contractors who were used to the loose conditions ordinarily obtaining in country labor camps,” according to Lazarus White in his 1913 history of *The Catskill Water Supply of New York City*, “later on, although there was some grumbling over the

¹³⁴ Ibid., 461.

¹³⁵ “The Survey: A Journal of Constructive Philanthropy,” 464.

¹³⁶ Ibid., 463.

¹³⁷ New York (N Y.) Supply, Board of Water, *Catskill Water Supply: A General Description and Brief History*, Board of water supply, 1917.

enforcement of certain regulations, the contractors began to feel that the expense of laying out, building and maintaining the camps in sanitary condition was small and the benefits very large in proportion to the cost.”¹³⁸ The “better sanitary condition and the cleanliness and healthfulness of the camps also made it easier to keep the men” and their families as laborers along the aqueduct construction path.¹³⁹

With a death rate of merely 3.5 per thousandth camp dweller, the sanitation and provisions of the temporary city construction camps made them relatively safe places for workers and their families to live.¹⁴⁰ These contractors deliberately supplied their inhabitants with clean water from springs for drinking, sanitation, and fire, paved streets, sewage disposal plants and sewers that safely removed refuse, incinerators that burned garbage and organic matter, and garbage and ash collection.¹⁴¹ In addition to these conveniences, regulations mandated sanitation in labor camps. According to *The Public Health Manual Containing the Public Health Law, the Sanitary Code and the Provisions in Other General Laws Relating to Public Health*, pollution of waters was prohibited under Regulation 1, health officers were hired to inspect the sanitary conditions of the camps under Regulation 3, and water rules were to be observed under Regulation 15.¹⁴² Because of strict laws and myriad resources, the Catskill Aqueduct camps were remarkably sanitary places to reside, demonstrated by the low death and disease rates exhibited by inhabitants. As White shared, despite an “average population of about 15,000 in 1910, but 321 cases of communicable diseases and 86 deaths were recorded. Of these cases but 6 were typhoid, one a doubtful case of smallpox, 6 scarlet fever, 21 measles, 13

¹³⁸ Lazarus White, *The Catskill Water Supply of New York City : history, Location, Sub-Surface Investigations and Construction*, New York, 1913, 40.

¹³⁹ Ibid.

¹⁴⁰ Ibid., 94.

¹⁴¹ Ibid., 484.

¹⁴² *The Public Health Manual Containing the Public Health Law, the Sanitary Code and the Provisions in Other General Laws Relating to Public Health*, Albany, 1919, 347-349.

tuberculosis, 5 diphtheria, and 250 malaria.”¹⁴³ Furthermore, White continued, “All employees of contractors were vaccinated before beginning work,” a requirement that was strictly enforced.¹⁴⁴

Of course, such provisions were not supplied in state-run barge canal camps.

In addition to providing sanitary amenities for their laborers, aqueduct contractors intentionally introduced eight-hour workdays with schools, clubs, churches, Italian feasts and negro carnivals that occupied the hours when mischief may have occurred. Male laborers lived near their families and their temporary homes had amenities that even surpassed that of local towns, with access to sound dwellings, electric lights, telephones, savings banks, general stores, bakeries, hospitals, police and fire protection, post offices, schools, and churches for boys, girls, men, and women of all ages. Furthermore, local camp schools supplied gymnasium courses, moving picture viewings, dance courses, foreign and American newspaper libraries, storytelling, old-fashioned games, and medical attendance.¹⁴⁵ Consequently, “workers lost their suspicion of the bosses,” according to *The Idaho Daily Statesman* on February 8, 1914, and the building of the Catskills Aqueduct proceeded with what Hall labeled an improved “general tone of the camp and the relationship of the men toward each other and toward the contractor.”¹⁴⁶ The creation of these camps exemplified great scientific forethought, purposefully providing workers and their families with resources that would boost productivity and allay any tensions between employer and employee, often aided by the mediation of female teachers as observed by Wald and Kellor.

Similar to the planning and building of the aqueduct itself, the construction and reservoir camps that lined the route from Ashokan to New York City garnered the support of constituents from various public and private bodies. Such advocates included Commissioner Charles N.

¹⁴³White, *The Catskill Water Supply of New York City*, 40.

¹⁴⁴ Ibid.

¹⁴⁵Hall, *The Catskill Aqueduct*, 94.

¹⁴⁶ “Idaho Statesman, Published as The Idaho Daily Statesman (Boise, Idaho),” *America’s Historical Newspapers*; White, *The Catskill Water Supply of New York City*, 541.

Chadwick, Mayor McClellan, the Italian government and Italian societies, and laudable women like Lillian Wald and Anne Tracy Morgan, the daughter of the famous J.P. Morgan.¹⁴⁷

On the Aqueduct to Republican Citizenship

Analogous to the deliberate, scientific, and well-organized nature of the camps and engineering of the Catskills Aqueduct, women of all classes began to publicly band together in order to systematically protect their homes and communities. While previously individual lobbyists within the home, women like Lillian Wald, Anne Tracy Morgan, and Frances Kellor emerged as public philanthropists, organized into formalized leagues and unions.

Wald, famous for her work as a public health nurse at the Henry Street Nurses Settlement in New York City's Lower East Side, strived not only to help working-class families from a medical perspective, but to uplift working women through collaboration and unionization. Required to live in the neighborhood in which she served, Wald and her fellow nurse, Mary Brewster, observed, experienced, and ameliorated the poverty of lower Manhattan women firsthand. Wald's enthusiasm and passion for improving working-class lives eventually led to the creation of the Federal Children's Bureau under President William Taft. In response, Wald proclaimed "I am bursting with happiness that the Government is now committed to formal responsibility for human welfare," leading to her new title as the "Woman Behind the Bureau."¹⁴⁸ Wald and the other female public health nurses that served the public through the Henry Street Settlement organized as one systematic body to protect and improve the health of working-class families on the Lower East Side.

¹⁴⁷ Hall, *The Catskill Aqueduct*, 94.

¹⁴⁸ "Ovid: The Legacy of the Great Triumvirate:: Annie Goodrich, Adelaide Nutting, and Lillian Wald," Accessed March 29, 2017.

Besides her nursing duties, Wald also aided the unionization of her female neighbors near Henry Street, leading to the eventual establishment of the National Women's Trades Union League in 1903. Following the lead of her working-class neighbors, Minnie and Lottie, Wald observed the "eloquence of the girl leaders, the charm of our back yard as a meeting-place, and possibly our own conviction that only through organization could wages be raised and shop condition improved."¹⁴⁹ Furthermore, Wald "recognized the importance of the [women's union] movement in enlisting sympathy and support for organizations among working women," and the inevitability of the union's "purpose, as epitomized in its motto--'The Eight-hour Day; A Living Wage; To Guard the Home,'" which attracted "effective participants and develop[ed] strong leaders among working women themselves."¹⁵⁰ While Wald did not lead the women's labor movement as the head of the union, she helped develop and empower working-class women like Minnie and Lottie as *strong leaders* themselves.

However, Wald did symbolize the bridge between working and upper-class women, as an individual from money choosing to live with, work for, and aid her laboring peers. As she succinctly stated, "The women's trades union leagues, national and state, are not only valuable because of support given to the workers, but because they make it possible for women other than wage-earners to identify themselves with working people, and thus give practical expression to their belief that with them and through them the realization of the ideals of democracy can be advanced."¹⁵¹ (207-208). Because of the formation of organized women's labor, upper-class women, like Wald, were able to relate to their female working-class counterparts, participating in strikes, picketing, and bailing out imprisoned female protesters. The emergence of unions like

¹⁴⁹ Wald, *The House on Henry Street*, 206.

¹⁵⁰ *Ibid.*, 207.

¹⁵¹ *Ibid.*, 207-208.

the National Women's Trades Union League led to the emergence of fashionable women's clubs and individual leaders who joined working-class women's systematic organization.

Morgan, another upper-class woman born in 1873 to father John Pierpont Morgan and mother Frances Louisa Tracy Morgan, avidly practiced philanthropy both in New York City and abroad. In 1909 she supported shirtwaist factory strikers as an individual and examined the working conditions of factories that employed women. In 1910 she founded the Working Girls' Vacation Association (later renamed the American Woman's Association), which helped working women save money for much-needed vacations. During World War I, Morgan founded the American Fund for French Wounded and later the American Friends of France, both of which fed and sheltered soldiers and noncombatants. By 1927, she envisioned a time when women "will take their places beside men as partners, unafraid, useful, successful and free."¹⁵² However, by then Morgan had already accomplished more than many of her male counterparts, founding formal associations and funds that embodied the scientific nature of the new century.

Moreover, the daughter of J.P. Morgan adopted a hands-on approach to her philanthropy, demonstrated by her underground visit to observe the working conditions of the Catskill tunnels. On June 5, 1910, Miss Anne Morgan, according to the *Plain Dealer*, "went 500 feet below the surface of Rondout valley today and talked for hours with gangs of Italians and negroes," after which she praised the engineers and asked them to "'be kind to the poor fellows.'"¹⁵³ While Morgan clearly sympathized with aqueduct laborers and was impressed by the engineering accomplishments of the water tunnel, she was primarily concerned with the promotion of women and girls, as demonstrated by her founding of the American Woman's Association.

¹⁵² "Women and Social Movements in the United States," Accessed February 21, 2017.

¹⁵³ "Plain Dealer (Cleveland, Ohio)," *America's Historical Newspapers*, June 6, 1910.

Another contribution that exemplified Morgan's dedication to ensuring the future of women was her 1915 article from *Woman's Home Companion*, "The American Girl: Her Education, Her Responsibilities, Her Recreation, Her Future." As a source, this article was one of the first of its kind, women aiming to help their younger counterparts through widespread media texts (versus interpersonal guidance). Within the text, Morgan acknowledged, "Our girl must look upon herself as a link in the chain of life. Receiving her gift from her parents, she must forge it and beautify it in every way in her power, but only to hold it in readiness for the child that she will bear. Her power is the power of creation, but she must learn to receive before she can freely give."¹⁵⁴ Even Morgan conceded that a girl and woman's primary responsibility at the birth of the twentieth century was to bear children, a duty closely related to the home and community.

However, children and the home acted as microcosms of life, as Morgan continued in her article, "She [the American girl or woman] must feel that the home is the unit of life, the object for which all science becomes worth while; that, far from a limit of a hindrance to her development, it is the center from which all effort springs and to which each new interest and higher ideals must be brought in turn."¹⁵⁵ Instead of representing a physical and social barrier, Morgan argued that the home symbolized just one small *unit of life* to girls and women in the early 1900s, a unit within larger categories tied to the larger umbrella of science. Women's interests, efforts, and *higher ideals* all stemmed from this one crucial space of the home, whose relevance in turn derived from the notion of Republican Motherhood and the bearing of children in the interior. Similarly, the home unit, or the family, acted as the foundation of larger communities. When homes and families were well organized and established, these

¹⁵⁴ Anne Morgan, *The American Girl; her Education, Her Responsibility, Her Recreation, Her Future*, New York, 1915, 22.

¹⁵⁵ *Ibid.*, 23.

characteristics, according to Morgan, transferred over to the community at large, affecting girls and women particularly acutely because of their close proximity to such basic units as child rearing and the home. Morgan's philanthropic work, founding organizations for women to help women and providing accessible materials to guide the new generation of working girls, was just one example of the organization of women, mirroring the prevalence of systematic scientific thought in the early twentieth century.

Another such leading figure, Frances Kellor, became the Chief Investigator of the New York State Labor Department, in charge of the new Bureau of Industries and Immigration.¹⁵⁶ In addition to being a "wonderful woman," according to the *New - York Tribune* on May 12, 1912, Kellor "will impress you with the burning, courageous enthusiasm of a modern woman in action, and you will just naturally reform."¹⁵⁷ Modern women possessed political power. The *Tribune* continued, "No introduction was necessary. Miss Kellor is a personality. You feel at once upon seeing her that you are in the presence of the boss. Miss Kellor pulls strings."¹⁵⁸ She was effective as head of the new department, the *Tribune* headline reading, "Since She Became Head of the New York State Bureau of Industries and Immigration the Business of Fleecing Foreigners Has Lost Much of Its Popularity. Her Remarkable Grasp of Details Is of Immense Value in Guiding Many a Trusting Stranger Away from the Guileful Confidence Men Who Lie in Wait at Every Corner."¹⁵⁹ Not only did Kellor help immigrants successfully settle in New York, but she protected them from *Guileful Confidence Men*, reinforcing the gendered notion of moral women

¹⁵⁶ "WOMAN CHIEF INVESTIGATOR: Miss Kellor Appointed to Place in Department of Labor," *New - York Tribune (1900-1910)*, *New York, N.Y.* October 5, 1910.

¹⁵⁷ "A Good Samaritan for Hapless Alien Hosts Is Miss Frances A. Kellor: Since She Became Head of the New York State Bureau of Industries and Immigration the Business of Fleecing Foreigners Has Lost Much of Its Popularity Her Remarkable Grasp of Details Is of Immense Value in Guiding Many a Trusting Stranger Away from the Guileful Confidence Men Who Lie in Wait at Every Corner," *New - York Tribune (1911-1922)*, *New York, N.Y.* May 12, 1912.

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

and immoral men. Although Kellor did not establish associations and funds like Morgan, she held a position of considerable political power in New York State and acted as both an exemplar woman in the public sphere and a republican citizen, expanding the role of municipal housekeepers.

Wald, Morgan, and Kellor achieved many accomplishments as individuals and leading figures who organized women. However, they were unable to reach as many women and girls as larger organizations of women, like the Women's Municipal League. Founded in 1897 by Mrs. Charles Russell Lowell, "The purpose of the league," according to a league report on March 31, 1919, "is to promote among women an intelligent interest in municipal affairs, and to aid in securing permanent good government for the City of New York without regard to party or sectional lines."¹⁶⁰ Similar to Morgan and Kellor, the women of the Women's Municipal League contributed to the city housekeeping, realizing that "there is nothing [in the city] that does not directly affect the home."¹⁶¹ Yet, the league participated as an organization, a body of women working together to ensure female participation in good government. Such systematic organizing, like unions, proved more effective than individual women lobbying city government. As *The Christian Science Monitor* acknowledged, when the league "points out flaws in the public service, seeks their correction, [and] does not rest until they are corrected," they are successful as a group;

If they call for it [civic reform] as individuals only, they are not likely to accomplish much; if they call for it, and, when necessary, demand it, through an organization like the New York Women's Municipal League, they are pretty certain to have a satisfactory response. Moreover, a well-managed organization may inquire carefully into complaints, and discuss them intelligently with the

¹⁶⁰ "Women's Municipal League Reports," *New - York Tribune (1911-1922)*, New York, N.Y. June 22, 1919, sec. Children's Page.

¹⁶¹ "WOMEN AS MUNICIPAL HELPERS: Their League Has Become a Power," *The Christian Science Monitor (1908-Current File)*, Boston, Mass. August 21, 1913, sec. Fashion & The Household.

proper authorities, with the result that municipal administrators are helped rather than harassed in the performance of their duties.¹⁶²

As a union, the Women's Municipal League successfully reformed city government because they had a formal platform on which to complain and suggest solutions to municipal challenges. The systematic organization of women into this municipal league worked to solidify female roles in the political sphere of New York City. Despite the fact that women had yet to gain the right to vote during the period of aqueduct construction, "These women," according to *The Christian Science Monitor* in 1913, "are not waiting for suffrage, they are doing the work that lies at hand, and they are blazing a broad trail to power--whether to suffrage or not does not matter to them."¹⁶³

From Republican Motherhood to Republican Citizenship

After the turn of the twentieth century, science reigned supreme in New York City, from the engineering and construction of the Catskills Aqueduct to the organized presence of women as public political actors. These two accomplishments, one of engineering and one of influence, highlighted a new method of productivity, valuing objective, deliberate, and organized action instead of that from individual actors. As Mary P. Ryan claimed in "The Public and the Private Good: Across the Great Divide in Women's History," "Republican wives, mothers, and founders of women's charitable societies were critical and creative political actors. They may have taken a separate path to modernity, operating in social spaces more remote from the political spotlight, but as architects of domesticity, civic educators, and private providers of social services, they

¹⁶² "Women and Municipal Work," *The Christian Science Monitor* (1908-Current File).

¹⁶³ "WOMEN AS MUNICIPAL HELPERS," *The Christian Science Monitor*.

acted in the public interest.”¹⁶⁴ From the family and home unit outwards, women of the early twentieth century utilized civic virtues taught by republican mothers and strived to serve the public in unions, laboring to transfer morality from the cult of domesticity into the streets of New York City. As inscribed on the Catskills Aqueduct commemorative medal, the aqueduct and success of organized women following the turn of the twentieth century embodied,

AN ACHIEVEMENT OF CIVIC SPIRIT
SCIENTIFIC GENIUS AND
FAITHFUL LABOR¹⁶⁵

¹⁶⁴ Mary P. Ryan, “THE PUBLIC AND THE PRIVATE GOOD; Across the Great Divide in Women’s History: [1],” *Journal of Women’s History; Baltimore* 15, no. 2 (Summer 2003): 10.

¹⁶⁵ Hall, *The Catskill Aqueduct*, 114.

CONCLUSION

The historiography of New York City water systems is full of rich political, economic, cultural, and social histories, but has lacked a gendered female narrative that acknowledges and salutes the women of the city who brought commensurate change to the metropolis. This thesis has sought to periodize the mutually shaping emergence of women and water into the public sphere of New York City from the early nineteenth to the early twentieth century.

Jumping forward to 2017, today, thirteen out of fifty-one Council Members of New York City's five boroughs are women (25%), nine out of twenty-seven New York State representatives of the House are women (33%), and one of the state's two senators is a woman.¹⁶⁶ Women are not only public actors, but are political leaders, representing men and women of the city and state. Similarly, according to the city's Department of Environmental Protection website, "New York City drinking water is world-renowned for its quality. Each day, more than 1 billion gallons of fresh, clean water is delivered from large upstate reservoirs—some more than 125 miles from the City—to the taps of nine million customers throughout New York state."¹⁶⁷ New York City women and water have permeated into permanent places within the public sphere. Consequently, the landscape of the public sphere of New York City and what is considered a public right has completely transformed.

However, New York City's public landscape remains a unique example of a successful public water system with female leaders in various districts. In other parts of America and the world, water remains or has returned to the private sector, and minority actors, such as women and ethnic minorities, still lack sociopolitical power in the public sphere. The most recent

¹⁶⁶ "Council Members & Districts," *New York City Council*, Accessed April 9, 2017; "New York Senators, Representatives, and Congressional District Maps," *GovTrack.us*, Accessed April 9, 2017.

¹⁶⁷ "Drinking Water," Accessed April 9, 2017, http://www.nyc.gov/html/dep/html/drinking_water/index.shtml.

example that comes to mind is the fight over the Dakota Access pipeline that has incited protests across the country. This past February, President Trump approved the final permit for the pipeline construction to commence, empowering companies and individuals invested in the fossil fuel industry while alienating both the Standing Rock Sioux Tribe and anyone concerned with the public's health. If the pipeline were to leak or burst, oil would pollute the Missouri River, the only source of drinking water for the Standing Rock tribe.¹⁶⁸ As a minority, the Sioux Tribe evokes women of the early republic in New York City, seemingly disenfranchised. As a wealthy man, our President symbolizes the greedy interests of private actors like the Manhattan Water Company, despite the fact that he is supposed to represent the public's interest. While New York City may have elevated the public status of her water and women, the rest of the United States is still playing catch up, and in some cases, regressing. For both women and water, there remains much to be built and accomplished. As Bella Abzug claimed in 1995 at the UN World Conference on Women:

Change is not about simply mainstreaming women. It's not about women joining the polluted stream. It's about cleaning the stream, changing stagnant pools into fresh, flowing waters...For women in the struggle of equality, there are many paths to the mountain top.

Inevitably, our world will continue transforming the lives of all women and men, polluting and cleaning the stream of equity.

• • •

¹⁶⁸ Erin Brodwin, "Protesters Say a Leak in the Dakota Access Pipeline, Which Trump Just Advanced, Could Be a 'Death Sentence,'" *Business Insider*, Accessed April 9, 2017.

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Indigent. IV. A List of the Names of the Dead ... V. A Comparative View of the Fever of the Year 1798, with that of the Year 1795. Hurtin and M'Farlane, at the Literary printing office, no. 29 Gold-street, and sold by the author, no. 1 Rider-street--by John Low, at the Shakespeare's head, no. 332 Water-street, the other booksellers, and the printers. 1799.

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