CREATING A NARRATIVE OF LIFE: PUBLIC HEALTH THROUGH THE EYES OF DR. SARA JOSEPHINE BAKER

A dissertation in American Studies by Rebecca K. Cecala

© 2016 Rebecca K. Cecala Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

December 2016
The dissertation of Rebecca K. Cecala was reviewed and approved* by the following:

Charles D. Kupfer  
Associate Professor of American Studies and History  
Dissertation Adviser  
Chair of Committee

Simon J. Bronner  
Distinguished Professor of American Studies and Folklore  
Program Director, Doctor of Philosophy in American Studies

John Haddad  
Professor of American Studies and Popular Culture

Anne Rose  
Distinguished Professor of History and Religious Studies

* Signatures are on file at the graduate school.
ABSTRACT

During the Progressive era (1890-1920), New York City was the largest city in the United States and its bacteriological lab and health department helped pioneer American public preventative health. New York was likewise home to a rapidly growing population of immigrants made vulnerable to disease through the unlivable conditions of tenement housing and poverty. Living from 1873-1945, Dr. Sara Josephine Baker was director of New York City’s Bureau of Child Hygiene: the first woman to be appointed a municipal public health official in the United States. Baker witnessed the professionalization of the field of public health and participated in its transition from municipal sanitation to preventative medicine. Baker is chiefly remembered in scholarship for her role in the apprehension of typhoid carrier Mary Mallon (“Typhoid Mary”) and for using preventative health to reduce infant mortality. However, Baker’s perspective on the meaning of her work and the larger role of public health in American society has not been examined, and is relevant to twenty-first century preventative health strategies for mothers and infants.

In this study Baker’s perspective on the role of public health in society is examined through her autobiography and public writing, couched within the cultural context of progressive reform, the professionalization of the fields of public health and medicine, and the national discussion surrounding individual vs. state and expert vs. non-expert responsibility for child welfare. Key issues to the development of public health are examined, putting Baker’s voice in conversation with other public health officials, reformers, physicians, and politicians of her time. Through Baker’s perspective the role of public health in society clearly emerges as a “narrative of life.” Utilizing Baker as a lens, this study argues that as a new field public health had an opportunity to help define modern industrial American society as one that demonstrated its value for life through the protection of its most vulnerable citizens: infants. Baker recognized that a public service requiring the cooperation of federal and local governments, families, public health workers, nonprofits and medical experts required a narrative that made the work meaningful to all stakeholders. For publicly funded preventative health to maintain the long-term support of those groups and to remain relevant to those it served, Baker believed that the narrative would have to be rewritten for each new generation.
# TABLE OF CONTENTS

Introduction ......................................................................................................................................................... 1

Methodology ....................................................................................................................................................... 11
Chapter Summaries ........................................................................................................................................... 12

Chapter 1. BAKER, PUBLIC HEALTH, AND NEW YORK CITY IN CONTEXT .................................................. 20

  The City and Its Narrative .......................................................................................................................... 24
  The Individual and Society ......................................................................................................................... 29
  Baker and Public Health ........................................................................................................................... 34
  Conclusion .................................................................................................................................................... 41

Chapter 2. TYPHOID MARY ............................................................................................................................. 45

  Historical Context ......................................................................................................................................... 47
  Bacteriology Reinvents Public Health ....................................................................................................... 52
  Baker and Soper Compared ....................................................................................................................... 65
  Private/Public Boundaries of Public Health ............................................................................................... 72
  Conclusion .................................................................................................................................................... 83

Chapter 3. THE BUREAU OF CHILD HYGIENE ............................................................................................ 87

  A Woman Heads the Bureau of Child Hygiene ......................................................................................... 88
  Babies Die in America’s Most Modern City ............................................................................................. 97
  Baby Health Stations ................................................................................................................................ 101
  Little Mothers’ Leagues ............................................................................................................................ 107
  Fostering Foundlings ............................................................................................................................... 118
  Conclusion .................................................................................................................................................... 121

Chapter 4. THE MILK QUESTION .................................................................................................................. 125

  Rhetoric of Perfection ............................................................................................................................... 130
  The City and Sheffield Farms .................................................................................................................... 135
  Mothers’ Milk .............................................................................................................................................. 141
  Conclusion .................................................................................................................................................... 154

Chapter 5. BABIES AND SOLDIERS ................................................................................................................ 159

  Child Welfare and the War ....................................................................................................................... 163
  Wars on Multiple Fronts ............................................................................................................................ 174
  The Power of Institutions ......................................................................................................................... 187
  Conclusion .................................................................................................................................................... 197
INTRODUCTION

The role and responsibility of science to public wellbeing has been frequently contested and continues to evolve in American society. Bridging medical expertise, politics, and culture, public health is one of the most publicly visible and straightforward examples of the use of science to benefit society. In the early twenty-first century the Zika and Ebola viruses and the growth of refugee camps from political conflicts have created globally visible public health crises on a scale requiring the cooperation of public health officials and aid organizations from multiple nations.¹ The complex of environmental factors contributing to poverty and crime, and their threat to both individual and societal wellbeing are increasingly being addressed at the municipal level by public health.² That public health organizations are available to respond to such crises is now often a given, but the infrastructure required to provide municipal, national, or international coordination in a globally connected world was in its infancy just a century ago. The professionalization of the social sciences, medicine, public health, and epidemiology, as well as discoveries such as healthy carriers and germ theory made the early twentieth century a key moment in the development of public health and the emergence of the medical expert to mediate individual and state responsibility for societal wellbeing.³

In twenty-first century America, issues surrounding the federal government’s authority to quarantine infected and potentially infected citizens as well as its responsibility to provide preventative care to those in need are the same issues that dogged the nation’s early public health efforts at the turn of the twentieth century. Crowding resulting from immigration and migration in response to industrial growth created urban environments of unprecedented interconnectedness and anonymity within what was often described as a huge “machine” of moving organic and man-made parts. With little thought to the long-term safety or wellbeing of its inhabitants, tenement buildings were quickly constructed in cities like New York to house low income families at an often advantageous profit. Socioeconomic and environmental factors combined to place the poorest New Yorkers at high risk of contagious disease, and one of the chief anxieties of the time – infant mortality. The new knowledge that diseases such as typhoid could be transmitted between people and that diarrheal diseases could be transmitted by impure milk meant that public health initiatives called for both individual and societal obligation. Municipal systems of public health staffed by experts developed to facilitate public education in medical knowledge, making public health one of the earliest institutionalized examples of a practical application of science to society’s (literal) wellbeing. The questions of how much authority the expert should have in the life of a citizen, the relative importance of medical expertise and personal experience, and whether public health initiatives were most effective under local or federal control are perennial. The early twentieth and twenty-first centuries are equally times of unprecedented interconnectedness that present a variety of public health issues, and this study presents an historical examination of one way that public health’s role in American society was imagined at its genesis for its relevance to public health’s continuing task to guard societal wellbeing.
I argue for the significance of a unifying narrative for public health’s role in society through the lens of one early twentieth-century public health pioneer in maternal and infant preventative care - Dr. Sara Josephine Baker - and its continued relevance for public health in the early twenty-first century. Reflected in her autobiography and other public writing, Baker consistently articulates what I call a “narrative of life,” emphasizing public health’s power and obligation to save the lives of society’s most vulnerable citizens: infants. In Baker’s eyes infants were simultaneously unique individuals with the “right to live” and the collective foundation of future society, carrying “all the potential possibilities of all humanity.” Baker was the head of a municipal institution, New York’s Bureau of Child Hygiene, and recognized that modern cities as large as New York required institutional infrastructure to deliver services to all those in need. However, her rhetoric and preventative care strategies consistently reflected the belief that the needs and circumstances of individual infants should direct the bureaucratic and political forces involved in their support: “If we are to save babies, the only thing to consider and act upon is the baby himself, his needs and how we may best meet them.” Through Baker’s perspective it becomes clear that as a publicly-funded enterprise involving the collaboration of medical experts, government officials, nonprofits, the press, and voters, public health requires a unifying narrative to explain its role and purpose in individual’s lives and in society to maintain that support and collaboration for each successive generation.

Through Baker, this study asserts the importance of an organizing narrative for the role of public health in society, taking as a jumping off point Priscilla Wald’s examination of early twentieth-century medical experts’ power over the outbreak narratives about who is healthy,

---

who is diseased; who is safe and who is dangerous. With the advent of germ theory and the discovery of healthy carriers, Wald notes that “narrative evidence” was a key companion to diagnostic evidence in identifying healthy carriers (such as Mary Mallon) of disease in the early twentieth century; the story of how a person caught and transmitted a disease “explained [to society] how epidemiological investigation worked, as well as why it was so important.”6 In the early twentieth century the narratives told by experts helped to popularize and justify the importance of institutionalized public health and its authority in society. Acknowledging that such narratives do not represent the perspective of those served by public health, I argue that narratives told by experts can be capable of leaving positive afterlives in public health policy and practice by challenging and reframing why and how science is used for the public good. Few scholars have spoken to the power of narratives and the afterlives of those narratives in determining what role public health has played and will play in American society.

I draw attention to aspects of the historical and cultural context in which Baker was working and writing - including progressivism, the modern industrial city (specifically New York), the professionalization of the fields of medicine and public health, and the importance of women to American infant welfare reform - to contextualize Baker’s perspective and to illustrate the impact that cultural context has on the practice of public health. Key historical events relevant to public health’s fight against infant mortality that intersected with Baker’s work with the Bureau of Child Hygiene between 1902 and the early 1920s were chosen to serve as case studies to present a chronological picture of how Baker’s work to fight infant mortality in New York City created a narrative of life that became part of the city’s identity, and eventually started to spread to the role of public health at the national level. The resulting narrative history is my interpretation of

6 Wald, 70.
one conception - Baker’s - of how scientific knowledge can be cooperatively utilized by both individuals and institutions for the wellbeing of society. At a time when American mothers and infants do not have equal access to preventative pre- and post-natal care, and the role of government in preventative care is still questioned, it also provides a potentially “usable past” for perspective on the trajectory of preventative health services for American mothers and babies in the present and future.

On any day of the week during the first several years of the twentieth century, a member of the audience attending Proctor’s Vaudeville Theater on West Twenty-Third Street in New York might have spotted a girl in her late teens, dressed in the familiar “street-sweeping skirt and an elaborately feathered hat” which was very much the style of the time. If that audience member had looked more closely at this particular girl, however, they would have noticed that her hands were busily occupied by a small bag in her lap, fingering a set of human bones and rehearsing in her mind where the “imaginary muscles” would have attached. The young medical student and avid fan of vaudeville was on her way to becoming Dr. Sara Josephine Baker, noted during her lifetime as a pioneer in public health who designed innovative strategies for preventative healthcare among New York’s tenement mothers and babies.

Dr. Sara Josephine Baker, director of the New York City Health Department’s Bureau of Child Hygiene from 1908-1923, was a physician and the first female appointed municipal public health official in the United States. She is most often mentioned in scholarship to discuss her leadership in saving the lives of thousands of infants, or her participation in the apprehension of typhoid carrier Mary Mallon (“Typhoid Mary”). Rather than attempt to further categorize Baker or the

---

early field of public health that she represented, this study examines Baker’s interpretation of the larger meaning of her work in public health through an analysis of her own strategies and public rhetoric, and that of her contemporaries in medicine, public health, politics, and social reform. Within the context of progressive-era New York City, Baker’s vision of the function of public health in American society exemplifies one response of medicine to an incredibly dynamic and complex moment in American history. Baker’s life and career as a physician, public health official, and New Yorker made her a unique witness to key moments in the development of maternal and infant public health in the United States and in the American cultural response to modern industrial cities like New York.

In her position as Director of the first Bureau of Child Hygiene in the nation’s largest city she was one of a very few women physicians with the power and influence to broker relationships with some of the main players involved in the trajectory of the field of American public health and its embrace of preventative medicine. Strategies used in the preventative health of mothers and babies by Baker’s Bureau influenced those developed in other large cities such as Chicago, and ultimately at the national level by the Federal Children’s Bureau. Yet unlike figures such as Jane Addams of Hull House and Julia Lathrop of the Children’s Bureau, Baker’s perspective on child welfare remains comparatively unexamined. In some scholarship her professional motivations and achievements have been summed up as typical of white, middle-class women who joined the workforce through social reform movements, or of medical experts with a zeal to educate the irrational and ignorant immigrant masses.8

It is indisputable that women, many of whom spent part of their careers in settlement houses, were integral to the successes of progressive era reform. Like Julia Lathrop, Florence Kelley, and Lillian Wald, Baker was a white, middle-class woman who advocated for child welfare. The many women involved in social and civic reform in the early twentieth century were, of course, still individuals with different training and motivations for their involvement. However, middle class ideals were included in much of the work of reformers that targeted the immigrant working class, including that of the self-supporting nuclear family and the mother as educated home manager. Baker’s autobiography makes clear that she shared a bias for middle class ideals, but those ideals do not fully describe her agenda as a physician or public health official. Nor do they encompass the meaning that she took from her work among New York City’s immigrant poor.

Between the late nineteenth and early twentieth centuries, a disparate collection of nonprofit charities, women’s groups, religious organizations and food kitchens provided milk, food, and basic medical care to mothers and infants who could not afford private care. When Baker began her work with the Bureau and municipal public health began to take over primary responsibility for those services in 1908, she had to reorganize and unite the varied constituencies in a narrative that all involved could relate to and support. That narrative attempted to answer complex questions, such as: Should preventative care for mothers and infants be considered of interest to society, and therefore a right, or is government only obligated to provide such services to those who cannot otherwise afford them? Are physicians, public health officials, nurses, or the mothers themselves the experts in the preventative care of women and infants? Historians such as Sheila Rothman and Robyn Muncy have explored these questions in the transition that infant and child welfare made in the early twentieth century from a focus on socioeconomic and environmental factors toward institutionalized public health services emphasizing medical factors. Addressing potential power imbalances between those considered experts and non-experts,
scholars such as J. Andrew Mendelsohn and Judith Walzer Leavitt have critiqued the expectations imposed by institutionalized public health on minority populations such as immigrants.

Recent scholarship has attempted to rediscover a more complex picture of Hull House alumna and social reformer Julia Lathrop and the relevance of her perspective for public welfare in the twenty-first century. Scholars such as Dulcie Straughn, Camilla Stivers, and Emily K. Abel endeavor to illustrate more of the nuance and complexity of Julia Lathrop’s work, beyond her shared identity as a white, middle-class, progressive woman reformer. These scholars argue that Lathrop’s acknowledgement of the combination of socioeconomic, cultural, and political influences on poverty has potential relevance for current American approaches to issues surrounding public health and social welfare. I argue that Baker’s likewise multifaceted perspective as a woman, physician, and public health official contribute valuable perspective on the role of public health in American society when that role was first being negotiated in American society. In a similar spirit, this study therefore complicates the portrayal of Baker as white, female, middle-class, social reformer, and medical expert, examining her public health strategies and her own descriptions of her work in order to elucidate her belief that public health could help create a narrative of life for American society. This narrative began as an urban one, in direct response to the high infant mortality rate suffered by New York City’s tenement neighborhoods.

In literature, popular press, and scholarly research, the city was depicted as place of unprecedented opportunity and danger, a simultaneous promise and warning of what modern

---

American society could become. The image of an organism or a machine was often used to describe cities like New York. Cities’ size, movement, opportunities, dangers, and sometimes their foreignness and unpredictability, were more easily understood as the image of a large being with its own identity than as a collection of buildings and streets where people worked and lived. Progressive conceptions of the city were key to the civic and social reforms they advocated, and provide vital background for an examination of Baker’s perspective on public health. Robert Crunden describes progressivism as a “climate of creativity” that pervaded the late nineteenth and early twentieth centuries. Creative responses to the dangers and opportunities of the modern industrial city united many similar and disparate people in their efforts to make cities evidence of the progress rather than the degeneration of American society. A progressive view of society characteristically manifested itself in efforts to fight the anxiety about cities using education and scientific efficiency. In this view, scientific specialization and business-like efficiency had moral underpinnings based on set (often middle-class) ideals about society. While it was not easy to draw a line between them, many progressive reform efforts harnessed what William James would have called rationalism and idealism rather than pragmatism. That is, the

---

10 Chudacoff and Smith note that Progressive reformers, who believed in the progress of society, were both drawn to and repelled by the potential of industrial cities. Howard P. Chudacoff and Judith E. Smith, *Evolution of American Urban Society* (Upper Saddle River, NJ: Pearson, 2005), 190. In some ways their response to the city resembled that of the Puritans to the wilderness. It was both a venue in which to test their individual and societal mettle, and an immediate danger to their individual and societal salvation.


desire for the progress of society toward a set ideal sometimes got in the way of establishing effective systems that could respond dynamically to both societal and individual needs.

Baker’s approach to public health constantly navigated the tension between these two conceptions of society, though her own perspective tended toward pragmatism. She held a dynamic and practical rather than static and elite view of science and its role in society. Once medicine had advanced to the point that specific steps could be learned by mothers and taken to prevent illness in their infants, for Baker it was inherently wrong (or “infamous”) for mothers not to have access to that information. Individual physicians and the city (and she argued, the nation) had an obligation to make the knowledge and resources available to those in society who needed it. For Baker, moral obligations existed for individuals and for societies, but they were based on the continuing accumulation of knowledge and not on abstract, absolute truths. Baker conceived of her work in public health as something that at once had a hopeful view of the future and medicine’s utility to society, but was also incredibly pragmatic as it adjusted to the practical experiences of the citizens it served.

As a narrative of life, the work of publicly-supported preventative health for mothers and infants was meant to help other New Yorkers and Americans believe that the city could be better when science was utilized for and by the public. Baker’s strategies also demonstrated that those who facilitated public health services were constantly required to pay attention and adjust accordingly. As James’ pragmatism envisioned, the truth that an individual or a society discovers is only recognized as the truth for as long as people agree that it is useful and functional. Baker notes that during the first half of her career she and other physicians believed strongly that infants under the age of one should never eat solid food, but by the time she wrote her autobiography in 14

Baker uses the word infamous to describe the fact that New York City was allowing the disease and squalid conditions of the tenement districts to go on. Fighting for Life, 60.
1939, she reflected that “Today, babies are fed vegetable purees even as early as five months... and we are catching up with the old time mothers.” To remain relevant, public health needed to respond to the dynamic needs of the organism-machine-city and its individual members; the strategies for producing that narrative and identity must be able to change. The narrative of life that emerged from Baker’s work in public health in New York City held life as an ideal to be constantly reached for by science, society, and all of its members. In so doing, public health would help define their identity as New Yorkers and Americans.

**Methodology**

Critical analysis of Baker’s preventative strategies and the public rhetoric she used to discuss the work of the Bureau of Child Hygiene in official reports, journal and press articles consistently presents preventative healthcare for mothers and infants as a counter to infant mortality, poverty, and disease. Public and professional documents make up the source base of this study for two reasons: First, opinions and interpretations taken from personal writing are not available because Baker’s private papers were destroyed, and aside from her autobiography, press coverage and her professional writing are what remain; second, a great deal can be learned from publicly-available documents. The way that a person wishes to be seen by others, how they wish to conceptualize their own story, and how they present themselves and their work to those they serve are available for interpretation in public documents.

Baker admitted openly that she courted press coverage for the Bureau’s work, and so it is available for the major strategies and events that she mentions in her autobiography. Press coverage is represented heavily (but not exclusively) by the *New York Times* for the practical reason that much of its archives has been digitized, and also because as a publication it

---

represented and was targeted toward the middle-class and elite New Yorkers whose popular support was key to continued municipal public health funding. Visual analysis of milk advertisements from Sheffield Farms, the New York Health Department’s official milk distributor, contributes a large proportion of source material for Chapter 4. Much of the discourse by Baker’s fellow public health officials and physicians is represented by either press coverage or by academic journals such as the *Journal of the American Medical Association* and the *American Journal of Public Health*. *JAMA* was considered an authoritative source by the newly-professionalized field of medicine in the early twentieth century, and as discussion of the Sheppard-Towner Act in Chapter 6 will demonstrate, was also seen as a politically influential medical journal.

**Chapter summaries**

The historical and cultural context of Baker’s career in public health is introduced in Chapter 1. Baker’s career began just as public health was becoming a professionalized field, strategies based on germ theory were replacing municipal sanitation protocols, progressive reform was trying to tackle the suffering of the immigrant working poor in New York City’s growing tenement districts, and women were carving out professions in public life. To gain a more complete understanding of the challenges and resources that Baker had available to her as director of the Bureau of Child Hygiene, early twentieth-century anxiety about the modern industrial city, tension and overlap between progressive and modern ideas, and a brief history of both Baker and the field of public health are explored. The historical and cultural context of early twentieth-century New York City is specifically relevant to Baker’s work because that city’s Bureau of Child Hygiene addressed the tensions between individual and societal responsibility for health that came to a head during that time.
Chapter 2 examines Baker’s encounter with Mary Mallon (“Typhoid Mary”) to introduce the limited but growing authority that public health held in New York at the start of the twentieth century. Mary’s case brings to light the tension between individual and societal responsibility for public health, and the challenge of utilizing new bacteriological diagnosis to identify people as disease carriers without letting that identification subsume their entire identities. These themes were all particularly relevant to New Yorkers in the early twentieth century. When Mallon was apprehended by Baker in 1907 the simultaneously fast growth of industrial capitalism, immigration, and tenement neighborhoods in New York, and the perceived decline of a public morality shored up by organized religion converged to produce a general feeling of chaos, uncertainty, and physical danger. Mallon’s story of diagnosis and quarantine as America’s first identified healthy carrier is an excellent example of the potential overreach of medical and municipal authority into personal privacy in the name of public safety.

In past scholarship the overreach of power demonstrated by Soper, Baker, and most other public officials involved, as well as the nativist impulses so influential in the culture at the time, have been a focus of Mallon’s case. As Wald notes, the narrative of “Typhoid Mary,” is an example of the growing power of public health to frame the reasons why bacteriology, epidemiology, and the experts they required were necessary to keep disease at bay in large modern cities like New York. The cultural tendency at this time to point the finger of blame toward immigrants for a variety of fears and anxieties was an inherent component of the anxiety about cities, but nativism and the use of the healthy carrier narrative to bolster the necessity of greater authority for public health are aspects of Mary’s case with continuing relevancy for the twenty-first century.¹⁶ Chapter

2 thus explores how Mallon’s case reveals a unique cultural moment in the development of the field of public health in New York City, and examines in greater detail how scholars have portrayed Baker’s role as an authority figure in Mallon’s case. The perspective on that role changes when we put Baker’s involvement within the larger context of her later work against infant mortality. The narrative of the healthy carrier is open to interpretation as one of either life or death.

Baker’s specific strategies in infant and maternal preventative care that acknowledged the lived experiences of tenement families are the focus of Chapter 3. Baker’s work with the Bureau demonstrates her unique position as a female official in a still-professionalizing field and the variety of relationships she had to broker to maintain support for the Bureau’s mothers and babies. When Baker became the Bureau’s Director at its creation in 1908 she had to quickly learn to negotiate with Tammany politicians, city officials, male colleagues and private practice physicians for support and funding, and with the countless nonprofit and philanthropic groups that had sustained public health initiatives for the poor in the previous century. Just as public health was creating a new identity and authority in society, so was Baker. The process of developing preventative health strategies to reduce infant mortality in New York by the Bureau further demonstrates an inherent tension within public health raised in chapter 2 - individual versus societal responsibility for health - as well as between public and private funding and leadership, and between public health officials and private physicians.

---

Public health had some opportunity for creativity at the beginning of the twentieth century because it was still gaining authority in society and was still in the process of becoming a recognized professional field. This left room for innovation for a woman official, because when fields professionalized they tended to begin excluding women from leadership. Unencumbered by the economic competitiveness that private physicians felt, Baker and her colleagues were able to implement strategies that could be flexible, responsive, and adaptive to the diverse needs of patients over time. Chapter 3 focuses on three of these strategies – baby health stations, little mothers’ leagues, and the fostering of foundlings – in order to illustrate how Baker’s Bureau was in many ways successful in negotiating the responsibilities of the individual and the municipality in reducing infant mortality. The Bureau’s approach to preventative maternal and infant care recognizes the complex and dynamic interconnections among New Yorkers and between the organism/machine city and its numerous living parts.

Press coverage of Baker’s Bureau during the first two decades of the twentieth century is littered with anxiety regarding the milk question: the debate about how to safely feed infants who were not being breastfed. An examination of the anxieties expressed by health experts regarding infant mortality is explored through the “milk question” in Chapter 4. Baker’s early career in public health coincides with a decrease in breastfeeding in Europe and the United States and the attendant debate among physicians and public health officials on the safest way of providing fresh,

---

modified cow’s milk. Cultural critics and physicians alike were aghast at the moral and societal implications of women apparently refusing to breastfeeding, what The Independent called “A Great Refusal.” A tremendous amount of anxiety over a suspected decrease in birthrate and breastfeeding, and the logistical nightmare of regulating, testing, and transporting clean, fresh milk to a city the size of New York, is almost always in the background of discussions regarding the Bureau’s infant preventative care strategies.

In regulating its regional milk supply New York City responded to the milk question in a way that demonstrated one of the first examples of effective preventative care for infants at the regional level, and made it first large city in the nation to successfully do so. In this moment the concept of a scientifically perfected milk supply-as-antidote to infant mortality was so great that the city was able to exert powerful economic influence over dozens of farms in surrounding states, expanding the reach of public health from the city outward, and acknowledging further interconnections between people and resources outside the machine/organism of the city. Baker was involved in negotiating relationships and regulations with milk distributors like Sheffield Farms; as a member of the executive committee of the New York Milk Committee she helped consolidate and organize philanthropic milk stations; as a physician she argued against the assertion that infant formula must be prepared and prescribed by physicians. The milk question thus serves as an example of the way that early public health acknowledged and responded to a factor that impacted infant mortality beyond the boundaries of the city.

Chapter 5 explores how the idealization of milk as a key source of nourishment for vulnerable infants expanded when the United States entered World War I to include its necessity for another vulnerable class of Americans: soldiers. Some New Yorkers and Americans, more

18 “A Great Refusal,” The Independent, July 18, 1907, 168.
broadly, took special pride in the fact that American cities like New York had taken steps to lower infant mortality before the nation had entered the war, whereas nations such as France and Britain had only combated infant mortality in the face of shocking loss of adult life in battle. This sense of pride and triumphalism in the proactive nature of preventative infant healthcare in the U.S. subsided a bit once the nation entered the war. Just as it had in Europe, fighting infant mortality in the face of battlefield mortality gained new vigor and anxiety in the U.S. in 1917. Anxiety over milk shortages as a result of supplies sent overseas subtly grouped together convalescing soldiers and infants into a special kind of protected vulnerable class.

By 1918 the narrative of life being woven by public health efforts for babies and soldiers had national as well as municipal support. The federal Children’s Bureau was established in 1912, and a preventative health approach to infant welfare produced national “Baby Week” in 1914, and “Children’s Year” in 1918. During Children’s Year, Baker was chairwoman of the Health Committee of the Mayor’s Committee of Women on National Defense, which was involved in saving 4,700 babies as part of the larger national campaign endorsed by President Wilson to save 100,000. The scale of the narrative of life had broadened, and more than ever New York public health saw itself as an important participant in creating that narrative. The war gave large-scale public health infrastructure as well as the efforts of individual New Yorkers and Americans new relevance in the fight against infant mortality. It also created one of the few moments of hesitation that Baker admits to in her book. Taking into consideration all of the progress toward life that public health had made for infants leading up to the war, Baker questions whether the Herculean effort and coordination is worth it when the infants saved will only grow up to be

\[19\] For example, the subtitle of one article is, “War Prompted Europe to Preserve Its Children, but in America the Work is Altruistic,” and Baker is quoted as saying that “It was the fear of war that started the work in France.” “20,000 Babies Saved in City in 8 Years,” New York Times, November 18, 1915.
soldiers. The question of whether public health was fighting a losing battle was thrown into stark relief by the war.

The power of municipal and federal public health to influence or combat corruption and mismanagement in larger structures such as governments was called into question by Baker, who saw that every baby saved through the Bureau’s efforts might be taken in war within a generation. The scale of effort by public health seemed to matter more than ever. In chapter 6 an examination of the federal Children’s Bureau (1912) and the impact of the Sheppard Towner Act of 1921 on the effectiveness of national-level infant preventative care is examined. Infant and maternal care provided by the federal Children’s Bureau in comparison to the Bureau of Child Hygiene reveals that some types of preventative care work better at the municipal rather than the federal level. Baker’s Bureau was part of the New York Department of Health, which meant that its physicians and nurses were allowed not only to educate mothers about infant care but sometimes actually provided that care. While the Children’s Bureau had physicians on its staff, the Bureau’s function was relegated solely to research and education.

A comparison of New York’s municipal Bureau with the federal one also illustrates that public health at both scales faced pressure from politicians and social commentators on the role of the government, medical experts, and women in maternal and infant care. Whereas the strategies of Baker’s Bureau and the initial strategies of the federal Bureau both acknowledged the capabilities and experiences of individual mothers to care for their infants, sociologist Kristin Barker notes that the federal Bureau increasingly emphasized that mothers should consult medical experts before and after childbirth, particularly under the new restrictions of the Sheppard-Towner Act. Kristin Barker, “Birthing and Bureaucratic Women.”
the welfare of children,” but it was also an organization run by women that was overseen by a male Congress and in competition for authority with a newly professionalized and male-dominated medical establishment. The as-yet-undefined space available to professional women in the field of child welfare while medicine was still professionalizing was in some ways beginning to close. In comparing the two bureaus it becomes evident that these increasing pressures on the work for maternal and infant public health care were more successfully dealt with at the municipal than the federal level in the early twentieth century. The state of the two Bureaus by 1921 provides a relevant point of comparison to municipal and federal public healthcare for mothers and infants and the issues they face in the early twenty-first century as well.
CHAPTER 1 – BAKER AND PUBLIC HEALTH IN CONTEXT

People didn't really like to see children die.

But any large body of people grouped by common interests will never behave with a tenth the intelligence that its individual members will show in their daily lives. That is true of nations, street-corner gangs, prayer-meetings – and large groups of doctors.

I do not want to be led into this blind alley. I am interested in the child and want to keep first in our minds that we are talking about children and not about their representation as fractions. In dealing with children we are not facing a scientific problem which can be measured wholly in percentages. We are dealing with a human group with only one factor in common - that of age.21

Living from 1873-1945, Sara Josephine Baker’s career spanned the most dynamic and productive years in the development of American public health and child welfare, the exponential growth and modernization of New York City, Progressive era social reform, and the moral and economic upheaval of World War I. As the first director of the first Bureau of Child Hygiene in the nation, Baker’s name is not remembered by historians as widely as Julia Lathrop’s - first director of the federal Children’s Bureau - or Dr. Alice Hamilton’s, who pioneered the field of industrial medicine.22 Beginning her work as an inspector with New York City’s Health Department in 1902, Baker was witness to the professionalization of medicine and the growing authority of public health. And, as a single professional woman in America’s most modern city, Baker did not escape the personal impact of changing and contradictory expectations of women. Baker’s involvement in the apprehension of “Typhoid Mary” and her association with the progressive women’s reform and suffrage groups who sought government protection of children and mothers can situate her work within the larger child welfare movement, led by members of the settlement house movement such as Lathrop and Hamilton. In some respects, Baker’s Bureau was one small arm of a much broader progressive agenda for social reform managed by experts. However, Baker makes

21 Baker, Fighting for Life, 146; 137-138; 252.
clear that she entered the fields of medicine and public health in order to support herself and make money. Unlike Lathrop, Baker did not begin her career at a settlement house or out of a desire for social reform. Like those of other progressive reformers, though, some of her comments about working-class immigrants like Mary Mallon demonstrated nativism and class bias. However, to label Baker’s life and experience neatly under the labels of “progressive,” “nativist,” or “medical expert,” as some scholars have done, is to miss the details of a complex and incredibly productive public life.

The history of public health, as well as that of Baker, can be labeled and categorized by its origins in middle-class social reform movements, the professionalization of science, and the ideal of societal progress toward perfection. Immigrants were routinely blamed by “native” Americans for the diseases brought to port cities like New York: the hygiene habits of Irish immigrant Mary Mallon were easier to doubt than the rich families she served as cook, and the ignorance of tenement mothers regarding the proper feeding and care of their infants was an easy finger to point in response to high urban infant mortality. A label which might encapsulate this moment

---

24 Hasian, 123-139; Alan Kraut provides a more nuanced view of Baker than some other scholars, but does associate her with nativist attitudes toward immigrants. Silent Travelers, 237; Leavitt, Typhoid Mary: Captive to the Public’s Health.
25 Elizabeth Fee and Evelynn M. Hammonds discuss some early prejudice against immigrants and the poor on display in the New York Health Department’s efforts to diagnose and contain diphtheria. “Science, Politics, and the Art of Persuasion: Promoting the New Scientific Medicine in New York City,” Hives of Sickness: Public Health and Epidemics in New York City, edited by David Rosner (New Brunswick: Rutgers University Press, 1995), 171-174; Alan Kraut, “A Plague of Nativism: The Cases of Chick Gin and ‘Typhoid Mary,’” in Silent Travelers: Germs, Genes, and the “Immigrant Menace” (New York: Basic Books, 1994), 50-77; Edward Marshall, “‘A Regiment of Babies’ Lives Were Saved Here in 1912: Dr. Josephine Baker Tells How Thought, Care, and Money Lowered the Mortality of Infants Under One Year of Age Six Per Cent,” New York Times, January 12, 1913, SM5. This last article is one example of the times that Baker herself refers to tenement mothers (and mothers in general) as “ignorant” about caring for and feeding their infants. This discourse about ignorance comes up quite a bit among physicians and public health officials as they describe mothers, but I will argue that rather than being a simple insult to the intelligence of mothers, officials like Baker ascribed ignorance to those who were faced with keeping their baby healthy in the chaotic environs of a city. The context of the mothering is taken into account by Baker and others in their efforts to disabuse mothers of that ignorance.
in public health more completely than progressivism, nativism, or even scientific efficiency, however, could be “productive contradiction.”\(^{26}\) As will become evident in the moments of Baker’s career highlighted below, an incredible number of mothers and babies were given the tools and knowledge to help themselves in direct response to a new urban environment full of practical and ideological contradictions. In the first years of the twentieth century the impulses of efficiency, collaboration, morality, and perfectability that infused Progressive era reform collided with the sense of anonymity, chaos, and cold scientific precision of modernity. New York and others cities had unimaginable poverty and crowding, but also immense amounts of abundant resources. As David Nasaw summarizes, even for the poor working class, “The city was many things at the same time to the same people.”\(^{27}\)

Growing cities like New York epitomized the complex societal structure that was emerging as Baker began her career in public health. In her examination of early epidemiology and its influence on the narratives of disease outbreaks, Priscilla Wald characterizes cities like New York in ways that illustrate the contradictory nature of urban life in the early twentieth century: shifts between individual and social responsibility for health and disease, between local and national authority over resources, and the extreme interconnectedness of city dwellers at a time of increasing anonymity.\(^{28}\) The development of public health in New York during this period

\(^{26}\) In describing the approach of Progressive artists during this time, Crunden uses the phrase “innovative nostalgia,” an appropriately contradictory phrase for the period. As Crunden notes, no one should read his book “without sensing the ironies involved in the word ‘progressive’.” Ministers of Reform, x.

\(^{27}\) David Nasaw, *Children of the City, At Work and At Play* (New York: Oxford University Press, 1985), 12.

\(^{28}\) Priscilla Wald, “The Healthy Carrier: ‘Typhoid Mary’ and Social Being,” in *Contagious: Cultures, Carriers, and the Outbreak Narrative*, 68-113. Wald also brings up E.A. Ross’s concept of social control, and how the type of interconnection among urban dwellers changed as cities grew: “it is a time, he writes, of consolidation, in which ‘powerful forces are more and more transforming into society, that is, replacing living tissue with structures held together by rivets and screws.’” Wald, 72. There is irony here, which Wald points out. In cities Americans become more interconnected than ever before, but because many of the connections are anonymous, they have more freedom about how they act as individuals. This then requires more social control to oversee all of these individual actions. It’s the type of connection and the
illustrates an adaptation of science and medicine to the practical experience of this cultural context; to include both individual and societal utility, and both expert and public participation in the application of new discoveries like germ theory to public health. An examination of this moment when the realities of modern urban life were first confronted by programs for preventative health care also reveals connections between the way public health has been viewed and put to use in the interest of mothers and babies at the start of both the twentieth and twenty-first centuries. The idea that “social welfare was the responsibility of individuals” remains a contested perspective, government control of healthcare remains controversial, and the interconnections among disparate Americans and a variety of distant resources have only increased. As Baker’s experience will demonstrate, the scale and complexity of people’s interconnections in cities like New York were in some ways successfully confronted by creative efforts at public health, and in other ways have never been fully confronted by the nation’s cities or by the nation as a whole.

One goal of this study is to illustrate a perspective (Baker’s) that science and medicine are tools to be used toward the benefit of individuals and of society as a whole. Unique and responsive strategies for maternal and infant health were pioneered by New York’s Health Department at a moment when new medical advances and unprecedented urban living conditions most challenged medical experts to make practical application of what was considered expert knowledge. The examination of key events and issues that occurred during Baker’s career in the following chapters is meant to address the second goal of complicating and personalizing the view of what public health could accomplish for a city when the role of public health in American

number of connections that matters, that fundamentally changes human relationships to each other and their environment.

29 Wald, 72.
society was just being determined.\textsuperscript{30} Both preventative health and New York City itself were (and to some extent still are) dynamic concepts to pin down. In order to pursue these goals some background context is therefore required to explain: the competing narratives of what cities like New York could be; progressivism and modernism and how they shaped ideas of individual versus societal responsibility; who and what Sara Josephine Baker and the field of public health were when she began her work in 1902. The events and issues to be explored in Baker’s life in the chapters that follow will trace the development of a creative and pragmatic public health approach to maternal and infant welfare uniquely suited to the dynamic beginning of the twentieth century. By extension they also reveal some of the progress and stagnation that has resulted in approaches to maternal and infant welfare at the beginning of the next century.

\textbf{The City and Its Narrative}

New York City is the focus of this study, as the professional home of Baker, but at the turn of the century it was also the largest city in the United States and became a nationally and internationally recognized leader in public health during Baker’s career. As social gospel reformer Walter Rauschenbusch asserted, though, New York was also a concentrated microcosm of the social issues that plagued communities all over the nation, and as such, the lessons it learned were of interest to all.\textsuperscript{31} One of the key accomplishments of New York’s early twentieth century

\textsuperscript{30} Public administration and policy scholar Camilla Stivers takes a similar approach in an examination of Julia Lathrop, in that she tries to complicate one-dimensional perspectives on her work and her philosophy of public health. Lathrop can be easily (and correctly) labeled a Progressive and a settlement worker, but Stivers argues that Lathrop’s approach to her work acknowledged both the individual and the societal factors in poverty, both the scientific record keeping and the personal connections between patients and administrators necessary for providing effective medical education and care to mothers and infants. In short, Lathrop and Baker and the movements they intersected with still have important insight for the twenty-first century approach to the public health of mothers and infants. “Unfreezing the Progressive Era: The Story of Julia Lathrop.”

experiment in public health was to negotiate how the public use of science and medicine could reimagine the idea of what cities were. Wald notes that as bacteriology began to be practically applied to public health strategies, this “allowed experts to make sense of a new situation [living in modern cities].”  

Wald’s research focuses on the narratives that medical experts created to explain to the public and to one another how medical science would increasingly influence individual and societal experience. Wald asserts that the narrative created surrounding sickness and health during the case of Irish immigrant Mary Mallon (‘Typhoid Mary’), for example, demonstrates a direct response to the changing conditions of urban modern life: “It harnessed the authority of science to depict the medical implications of the changing spaces, interactions, and relationships attendant on urbanization and industrialization.”  

The carrier narratives created by medical experts in the case of Mary Mallon explained the potential dangers of the multiple anonymous bodily connections that modern New Yorkers experienced, and subsequently the important role that epidemiology would play in giving that narrative the prospective happy ending of a healthy society.

Medicine was just the latest in a long line of responses to the perceived danger and degeneration of modern industrial cities. Louis Joughin notes that Lincoln Steffens’s 1904 book The Shame of Cities demonstrates that there existed an “insatiable appetite of Americans for virtue in all things – even government.” While both sacred and secular calls for reform in cities developed into the twentieth century, Protestant social reformers emerging from the Second Great Awakening were among the first to target cities as loci of greed, temptation, and overall

---

32 Wald, 1.  
33 Wald, 71.  
34 A healthy carrier is a person who has been infected by a contagious disease and has the potential to transmit that disease to others, even though they have never suffered symptoms of the disease.  
35 Wald, 70.  
As some reformers and politicians became disillusioned with the relevance of a religiously-based morality to the problems of the cities, the efficiency associated with both science and business held appeal. Competition between machine politicians (like Tammany) and reform politicians for control of New York City and other American cities demonstrated a conviction that modern cities were too unwieldy, and required more effective physical and political infrastructures. Machine bosses argued that receiving a little “boodle” was fair compensation for making personal connections to their working-class constituents that enabled bosses to deliver them the services and resources specific to their needs. Reform politicians argued that cities ought to be run like businesses in order to increase efficiency, fight graft, and save taxpayer money, though one of Steffens’s main arguments was that business people were in fact the cause rather than the cure for urban corruption. Still reminiscent of the idea from Protestant reformers that the experience of the city’s most vulnerable citizens reflected a moral deficiency in society as a whole, investigative journalists such as Steffens and Jacob Riis argued in words and pictures that poverty and corruption were threatening to outweigh cities’ potential to demonstrate the progress of a modern industrial society. While American cities might have been some of the

37 Responses to a sense of anxiety about modern industrial cities manifested in a variety of ways. Susan J. Pearson notes that one of the reasons why the rights of animals became an important topic for romantics in the nineteenth century was because cities and modern civilization were seen as evil and corrupting in contrast to nature and animals. Parents were encouraged to have their children keep pets in order to stay in contact with nature and safe from becoming “overcivilized.” The Rights of the Defenseless: Protecting Children and Animals in Gilded Age America (Chicago: University of Chicago Press, 2011), 33. David Nasaw relates that child labor activists and social reformers in general spoke out against the inhumane conditions under which many children under the age of sixteen labored in mines and textile mills. Some targeted what they saw as the moral dangers that child street peddlers faced by coming in contact with sex and vice in the city every day. The dangers were there, but Nasaw argues that the anxiety about moral danger was felt more by parents and reformers than by the children: “The reformers and parents were too worried by the potential dangers of city life to notice how well the children handled their environment.” Nasaw, 144.

38 Chudacoff and Smith discuss the appeal of running cities with the efficiency of businesses, and how those in the elite business class increasingly idealized the utilization of experts such as city managers rather than mayors. Of course some of the motivation behind this preference was the desire give increased control to officials who could be appointed by elites rather than elected by the general populace. “City Politics in the Era of Transformation,” in The Evolution of American Urban Society, 152-175.

39 Chudacoff and Smith, 157-158.
largest and most productive in the world, Steffens argued that both the inherent potential and the corruption in cities needed to be recognized.\(^40\) To borrow a theme from Henry Adams, some Americans identified with the fast-paced mechanical blur of the dynamo, and some were overcome by it.\(^41\)

Competing narratives of life and of death increasingly fell under the jurisdiction of medical experts and public health officials during Baker’s career. What had begun as neighborhood-wide sanitation efforts in the nineteenth century became a more targeted action as public health utilized germ theory to fight disease in cities. It was not at all clear at the start of the twentieth century whether a narrative of life or of death would prevail, or how many would have to sacrifice their lives or individual freedoms in order for life to win. While it was often upper and middle class reformers who publicly discussed it, those who would be the most impacted by the winning narrative would be the working class immigrants and “native” working class Americans. As Alan Kraut has ably documented, immigrants to the U.S. between 1880 and 1921 increasingly faced hostility from “native” Americans and from previous immigrants, fearing competition for work, radical political ideas, and disease.\(^42\) Already facing plenty of prejudice once they arrived, economic and infrastructure constraints forced immigrants to live densely in tenement or shanty houses in neighborhoods like Hell’s Kitchen in New York. Poor living conditions and lack of access to clean food and water made immigrants especially susceptible to disease, and their identification with disease only intensified once germ theory allowed public health officials to diagnose specific individuals.\(^43\) While she is remembered in part for her role in Mary Mallon’s case,

---


\(^{43}\) This association of immigrants with disease will be further explored in chapter 2’s examination of Baker’s involvement in the case of Typhoid Mary.
Baker’s creation of a public health narrative in response to urban anxiety came to focus on infant mortality rather than contagious disease. During Baker’s career, the simultaneous use of medical knowledge by the likes of immigrant mothers and the government to provide New York City – and American society – with what this study names a “narrative of life” in the face of economic disparities compounded by crowded urban anonymity is a subtle but key facet of early twentieth-century public health that largely remains unexplored.

During the first two decades of the twentieth century an increasingly influential Department of Health emerged in New York, fueled both by the energy of Progressive social reform and by the promise of modern medicine to offer control and order in the face of poverty and death in America’s largest city. Gaining a sense of control of the city appealed. Crunden writes that as modern New York emerged, the tenements that so many thousands of New Yorkers called home were “the products of machines,” and that in those neighborhoods “neither the structures nor the scale of the poverty” would have previously been imaginable to anyone. Baker’s engagement with the mothers and infants of those tenements through the work of her Bureau allows us to examine the creative application of medical science to those New Yorkers potentially digested rather than nourished by their connections to the larger machine/organism that was New York City. Her work provides a window into the narrative of life that public health could potentially write for the city specifically in response to high rates of infant mortality. If the lives of the smallest and most vulnerable New Yorkers were made a priority by publicly-supported preventative health efforts, then that made a statement about the identity of the city. The

---

44 Crunden, Body and Soul, 32.
45 In describing the “physiology” of New York City portrayed in Manhattan Transfer, Crunden notes the process of characters arriving (being ingested), and the “diastole and systole” of migration. When they arrive at the center of the city, “they conceive of that center as a place of employment, sensory stimulation, and enlightenment.” What they actually find, however, is “an urban environment that is literally heartless but functionally digestive.” Crunden, Body and Soul, 99.
complex and contradictory image of New York City as a cold and efficient machine and a giant insatiable organism portrayed by John Dos Passos in *Manhattan Transfer* demonstrates that it is no coincidence that portrayals of futuristic modern cities were being depicted with frequency in dystopic science fiction stories during this time. Cities and their complex, almost organismal structures alongside their cold efficiency were the perfect setting to imagine and warn about the possible dystopic futures of a technologically advanced society. Though she wrote her version of the city’s narrative through public health strategies, funding appropriations, and press releases rather than fiction, Baker was determined that life rather than death would be the identifying narrative of New York City’s future.

**The Individual and Society**

One of the reasons that the city produced so much anxiety was that it was so easy for an individual's entire existence to remain anonymous. The middle-class ideals of personal moral responsibility and a self-sufficient nuclear family were complicated by the reality of the city’s dynamic enormity. The complex systems of infrastructure, economy, and politics that ran the city made it nearly impossible – particularly for the working class – to utilize anything like the control necessary to live up to such ideals. Not surprisingly, one key aspect of the Progressive era to collide with the modern was a tension between individual and societal responsibility for public welfare. While Baker’s perspective will help illuminate one way that the public health response to this tension was negotiated at the turn of the twentieth century, it will become clear that in some ways this tension still exists and influences public health’s approach to maternal and infant care.

46 The over-mechanized and impersonal city is a common setting for dystopic science fiction still today. Some examples from Baker’s time include H.G. Wells’ *A Modern Utopia* (1905), Milo Hastings’ *The City of Endless Night* (1920), and Fritz Lang’s *Metropolis* (1927). David Seed mentions these books and several others in his examination of the recurring setting of the city in his discussion of how science fiction deals with issues surrounding new technologies in his introduction to the genre of science fiction. David Seed, *Science Fiction: A Very Short Introduction* (New York: Oxford University Press, 2011), 54-56.
The question of responsibility for public health had dire relevance to cities like New York in the early twentieth century in response to a population that was outgrowing its living space and experiencing high infant mortality. A variety of New Yorkers with any voice in public discourse raised them to assert that babies should not be dying in such high numbers in America’s most modern city. Progressive and modern impulses both responded in different ways to a perceived loss of religion-based morality and responsibility in the public sphere, and both acknowledged that institutions could have a disproportionate impact on individual lives in industrial cities.

In the case of establishing an effective public health system, the unwieldy size that would be large

---

47 Part of the reason that maternal and infant preventative care are still an important public health issue in twenty-first-century America is that income inequality and access to resources continue to be a problem. Camilla Stivers notes that “The facets of poverty - ill health, immiseration in urban ghettos, numbing low-wage employment, and crime, schools that warehouse children instead of teaching them - shine as malignantly at the beginning of the 21st century as they did at the beginning of the 20th.” Stivers, 537.

48 As an example of discussion of infant mortality in popular press, one article from 1909 details the coordinated effort of many city organizations to provide visiting nurses to tenement mothers in order to reduce infant mortality during the summer months. Its discussion includes an implicit belief that medical expertise is required in order to keep a baby healthy during a summer in the city. “Visiting nurses to aid poor mothers,” New York Times, April 9, 1909, 7. An example from medical journals includes a description by Dr. Getty of Yonkers of the best ways for preventative medicine and a clean milk supply to reduce infant mortality during summer months in New York. S.E. Getty, “Infant Mortality in the Summer Months,” Journal of the American Medical Association 50, no. 13 (March 1908): 1008-1011. In the New York Milk Committee’s 1912 publication their descriptions of the work of milk stations during the past several years is entirely couched within the context of their utility in reducing infant mortality within the city. New York Milk Committee, Infant Mortality and Milk Stations (New York: New York Milk Committee, 1912). Beyond the urban context, John Spargo’s The Bitter Cry of the Children (New York: Macmillan Company, 1907) spoke to the broader spirit of indignation at the dangers children faced at the turn of the twentieth century.

49 T.J. Jackson Lears discusses the perceived decline of the moral influence of Protestant Christianity on American society during the Gilded Age and extending into the Progressive Era. Lears, No Place of Grace, xv-xviii. Manhattan Transfer by Jon Dos Passos aptly illustrates the disproportionate influence of the larger structures of the city upon its individual members. Walter Rauschenbusch and the social gospel movement within liberal Protestant Christianity advocated for the Church to acknowledge both the individual and societal contributions to the epidemic of poverty in industrial cities like New York. He called for the Church to work at the level of both the individual tenement resident (who both Howard Thurman and Reinhold Niebuhr would call “the disheirnered”) and the social and political “Super-Personal forces” that condemned such a large proportion of the population to lives of poverty with no practical means of escape. Rauschenbusch argued that Americans had the choice between two organizing principles in the twentieth century to establish “industrial and commercial organization” in American society: “the capitalistic and the co-operative.” One produced wealth and one satisfied human wants. Walter Rauschenbusch, “The Salvation of the Super-Personal Forces,” in A Theology for the Social Gospel (Louisville: Westminster John Knox Press, 1997), 110-130.
enough to serve the entire city without neglecting individual needs of mothers and babies required serious consideration.

Americanist Robert Crunden’s characterization of the impulses of Progressivism and modernism are helpful here in revealing the tension between societal and individual scales that impacted public health in a modern, urban environment. The artistic expression of modernism itself was “essentially a language that outsiders developed as a way of expressing their inability to find psychologically satisfying places in the larger society.” Individual identity and experience were immediately swallowed by the larger body of the city, and it could become impossible to distinguish the story of an individual within that of the city. Granted, the expression of this outsider ethos was coming from predominantly educated, white artists rather than tenement mothers. However, the feelings expressed by writers such as John Dos Passos and William Carlos Williams help illuminate that cities like New York were the subset of American society in which an organized, public preventative health program would be simultaneously the most complicated and the most needed. In New York, and in the overlap of progressive and modern ideals, contradiction would be a constant companion of any effort for public welfare.

For example, Crunden emphasizes the progressive belief that Americans need only be aware that the disparity in living conditions in modern cities should inspire moral indignation. Once informed, individual Americans could enact and demand change: societal sin had only to be acknowledged in order to be remedied. Many Progressives, like Julia Lathrop, believed that

50 Crunden, Body and Soul, 2.
51 Camilla Stivers also refers to reformers like Julia Lathrop as outsiders, in their desire to live professional lives in public service rather than pursue a traditional family role. Stivers, 541.
52 Williams himself was a physician of pediatrics and general medicine in New Jersey. While we cannot assume that Baker read Williams’ poetry, the two physicians would likely have had much in common in their experience of the rapid scientific and technological advances in medicine that occurred during their early careers.
53 Crunden, Ministers of Reform, 164.
federal laws could enact this moral indignation at the societal level, and to some extent they certainly did.  

Particularly during WWI, when food and other resources became more scarce at the national level, support was high for national “baby week” in 1914 and “children’s year” in 1918 to make awareness and resources for infant care more accessible to mothers. But alongside this optimism for the power of moral indignation at infant mortality lay modernity, the reality of being “abandoned in the world,” and of “the dehumanization of modern American life,” of being dependent upon a much larger machine.

As an examination of the Bureau of Child Hygiene in chapter 3 will demonstrate, some “baby saving” campaigns worked better at the local level, where the needs of individual mothers and babies were more easily known. The exponential growth contributing to the scale of cities like New York, the movement of diverse peoples into and within them, emphasized the enormity of the task of allowing each of those people a voice and connection to public health resources. On one hand public health required infrastructure and administration in order to provide those resources, but on the other hand the resulting institution ran the risk of ignoring individual needs. As tenements and their inhabitants grew in number, one might assume that the physical structures were built to accommodate the people who lived in them. However, as Crunden asserts, “the American city novel,” Manhattan Transfer, demonstrates something closer to the reality of the modern situation: that the people who lived in the city became nearly incidental to the larger process of the city building itself.  

Moral indignation at the growing poverty and anonymity of so many New Yorkers might be an important beginning to social reform, but altering the structure of the city for the life and benefit of those who inhabited it rather than for the city itself turned

---

54 For example, Pure Food and Drug Act of 1906; Federal Trade Act of 1914; Sheppard-Towner Act of 1921.
55 Crunden, Body and Soul, 30, 32, 82.
56 Crunden, Body and Soul, 98-99.
out to be no simple task. As will become evident in chapter 6, in creating a public health structure capable of providing preventative care to the mothers and babies of the entire nation through the federal Children’s Bureau, this tension between individual and societal scales became even more impactful to that type of care.

The moral indignation that could move an individual to try to reform society was rooted in the larger assumption that both individuals and societies could be perfected. As the “milk question” in chapter 4 demonstrates, progress toward a more perfect society could be influenced by ideas of moral indignation rooted in the Second Great Awakening’s emphasis on individual moral agency, and increasingly on advances in science. Modern science’s belief in the perfectability of society was inspired by recent discoveries such as germ theory, and was another potential source for optimism about modern urban life. Perhaps moral indignation in the face of inequality needed a frank and detailed scientific eye to reveal what individual New Yorkers experienced in their lives as the tiny appendages of an unprecedentedly enormous, living system. Crunden writes that Dos Passos was trying to characterize this dynamic system in Manhattan Transfer, by making “the city itself the protagonist” and describing its growth and movement as “in essence physiological.” Baker’s task at the nexus of public health’s response to infant mortality was, at its most essential (and complex), to provide individualized medical care to tenement mothers and babies within the larger context of the city to which their lives intimately (and often anonymously) connected. Because New York was inherently a dynamic system, those connections constantly shifted, and Baker and the Bureau’s response to that dynamism acknowledged a view of public health that required both individual and institutional effort; that targeted practicality over perfection.

57 E. Melanie DuPuis, Nature’s Perfect Food.
58 Crunden, Body and Soul, 98.
Baker and Public Health

It is easy and in many ways appropriate to characterize Baker as one of many white, middle-class, educated women who used the emerging fields of public health and child welfare to seek a professional life in the early twentieth century. Baker and her approach to early twentieth-century public health were indeed steeped in a context of progressive ideals alongside the professionalization of modern medicine, just as Julia Lathrop and Jane Addams were. Baker’s approach to preventative maternal and infant care certainly demonstrated a progressive desire for scientific efficiency. In its early years the Bureau ran on a tight budget, and Baker later recalled her obsession with the reduction of all kinds of waste in the name of economy and efficiency.59

As scholars of the Typhoid Mary case are quick to point out, Baker’s comments on the Irish immigrant populations she initially served as a medical intern in Boston are not flattering, and certainly her language regarding the falling birth rates of “native” Americans does sometimes sound sympathetic to nativism.60 If people were willing to “face facts” and participate in the ameliorative systems being developed to improve quality of life in inner cities, her writings suggest that she was willing to embrace their proactivity and good common sense regardless of their background or class. This study argues that Baker did not show the immigrant and class bias in the Typhoid Mary case that some scholars have implied, but does point out that Baker had little time or compassion for those who refused to learn or try to implement preventative healthcare strategies for the benefit of themselves and others. Mary Mallon certainly belonged to this latter category for Baker, but as the quote at the beginning of the chapter suggests, so did many of her fellow physicians. Willful ignorance, rather than class or ethnicity, was most often the fuel for her words of criticism or disapproval.

Baker’s approach to public health cannot be said to have wholeheartedly shared the aspect of progressive reform that imposed the ideals of “native,” white, middle-class family life on tenement mothers. Historian Molly Ladd-Taylor has asserted that the publications of Lathrop’s federal Children’s Bureau reflected a progressive “faith in social science, efficiency, and reform,” but also “Holding up white middle-class childrearing norms as the ideal, they stressed the importance of feeding by the clock and the dangers of cuddling and spoiling the baby.”\textsuperscript{61} While individuals like Lathrop may have personally valued the role of affectionate care in child health, both the national stature of the Bureau and its place within a professionalizing field led it to emphasize the scientific aspects of parenting.\textsuperscript{62} Baker’s perspective on the proper care of infants was just as straightforward but decidedly more flexible. She repeatedly used the phrase “common sense” and even once “old-fashioned, sentimental mothering,” to endorse the capability of mothers to properly care for their babies.\textsuperscript{63} Implicit in the strategies that Baker’s Bureau used to connect tenement mothers and babies with the lifelines of the city was a conviction that mothers would be intelligent and experienced enough to adapt new medical knowledge to their own lives. Medical expertise was needed, but it was not the sole determinant in the relationships required for raising a healthy child. There is no doubt that middle-class family ideals and a belief in the perfectibility of society entered in to the work of the federal Children’s Bureau and of Baker’s Bureau of Child Hygiene as well, but those beliefs and ideals were only one ingredient in a variety of converging influences on the development of public health at the time.

Other factors such as modernism, nativism, and mass consumer culture helped to make New York and other cities like it a new kind of society at the beginning of the twentieth century.

\textsuperscript{61} Molly Ladd-Taylor, \textit{Mother-Work}, 83.
\textsuperscript{62} Ladd-Taylor notes that Lathrop believed that “infant health and welfare depended on much more than medicine.” Ladd-Taylor, \textit{Mother-Work}, 83.
\textsuperscript{63} Baker, \textit{Fighting for Life}, 121, 127, 128.
As historians have noted, between the Gilded Age and the 1920s American urban life became successively unmoored from rigid religious morality, and single men and women left their family farms to become tiny, anonymous parts of the city’s huge, machine-like creature. In early twentieth-century New York, all of these forces converged to profoundly change the way that New Yorkers related to one another, and those changes proceeded apace. One key aspect of the approach of public health within this context was keen attention and dynamic response to those changing relationships. Funding sources available during one political administration would be gone with the next. The number of milk stations for one neighborhood would not be sufficient for another. The formula used for one infant’s food would have to be tailored to the unique needs of another. Local milk sources that served one neighborhood might not be safe by the time they were transported to the next. Scientific knowledge alleged by physicians to be too specialized or complex for tenement mothers to understand was nonetheless successfully adapted to their personal use. Boundaries between science and the people it served, between the experts and the public who used that science, were not easily drawn; they were constantly renegotiated. New sciences like bacteriology entirely reimagined the boundaries and capabilities of the human body and its influences on others. The scale of communal life and interconnectedness on every level had become so great that public health had no choice but to adapt medical science to practical circumstances in ways that had not before been possible.

While the field of public health began as temporary medical boards formed in response to epidemics of contagious disease in large cities like New York, Baker’s experience of the development of the field reminds us that public health gained much needed public support and funding when it took on the welfare of mothers and infants. New York City’s Board of Health

64 Lears, No Place of Grace; E.A. Ross, Social Control: A Survey of the Foundations of Order (Cleveland: Press of Case Western Reserve University, 1969); Wald, Contagious, 72.
became a permanent body in 1866 once it had become clear that the prevention of contagious disease would be an ongoing endeavor, but the embarrassing conditions of New York’s tenement districts and their high infant mortality rates by the turn of the twentieth century would turn the eye of public health toward mothers and the extraordinary challenges they faced in keeping babies alive. The unprecedented variety and interconnectedness of the relationships between the members of this dynamic city did not remove the social expectations for women’s involvement with family and children. Nor did the increased dynamism of the moral landscape entirely free those women from being stigmatized based on economic, ethnic, or racial status. What was available during this period, though, was a tenuous space provided by public health that straddled science, child welfare, and government, into which educated women like Baker could insinuate themselves, creating new structures and assumptions for what constituted a useful life. Likewise, the preventative health strategies designed by public health officials like Baker gave some measure of acknowledgement and agency to the mainly working-class women who utilized them.

When Baker began her work with the New York Health Department in 1902 the professionalization of public health and its attendant social authority were still being established. The field itself was still new enough that there was no precedent one way or another for a female physician within it. Physician involvement in pre- and post-natal care, and

66 Starr notes that physicians in private practice increasingly chaffed against any healthcare provided as a public service as the medical profession gained its own authority, so the authority of public health took a while to establish. Paul Starr, *The Social Transformation of American Medicine*, 27-29.
67 Starr discusses the particular innovation in public health that occurred in New York City at the turn of the twentieth century. Its bacteriological lab and the leadership of Hermann Biggs made New York’s public health service a pioneer in adapting the knowledge of bacteriology to practical public use. The conditions in New York were unique at the time and allowed the city to experiment with public health tactics that were not yet observed in other parts of the country. In some ways it’s appropriate that New York was the first city to appoint a woman to direct a Bureau. Starr, *Social Transformation*, 184-189. Baker notes in her book
certainly in infant feeding, was still new enough that the medical profession had not yet fully come into conflict with public health over the authority each should hold in the eyes of their patients. Baker’s work confused the distinctions which had earlier defined what a successful woman should be: she became a doctor (“expert”), she never married or bore children, she was a government official, she was a female boss. Yet her work focused on mothers and babies, and her written words and preventative healthcare strategies suggest that she respected mothers’ experience as much as their ability to follow medical instructions. As will become more apparent in chapter 6, at the scale of the city, Baker’s Bureau was allowed to influence policy, education and to practice medicine, so her work never became limited to the more traditionally female role of education as did the contested federal Children’s Bureau. In short, Baker’s work in public health allowed her to be identified for what she did for society rather than for who she was: a white, “native” American, educated middle-class woman. Where many of her contemporaries became doctors to individual patients, in some ways the Bureau’s work made Baker and her colleagues doctors to the city itself.

Baker’s experience in public health also provides a unique and illuminating window into the transformation which the young fields of public health and professional medicine made during the first several decades of the twentieth century, from a focus on disease crises to one of prevention. An eminent bacteriologist divided the field of public health into three stages: “empirical environmental sanitation” (1840-1890), “the first applications of bacteriology”

---

that “It was never quite clear in my mind whether in pioneering in child hygiene being a woman was more of an asset than a liability.” Baker, Fighting for Life, 88.

68 A difference in the work of private physicians and public health officials was acknowledged early because they were initially working at different scales: individual vs. community. John Duffy notes that when the city finally appropriated funds to the Health Department in order to pay school health inspectors, “Acutely conscious of the delicate sensibilities of the medical profession, the Health Department stressed that the school inspectors were to give no professional treatment.” John Duffy, A History of Public Health, 219. When Baker left her private practice after her part-time work for the Health Department became more permanent, she (and others like her) were acknowledging a separation in medical practice that would increasingly come to be contested over the course of her career.
including “isolation and disinfection” (1890-1910) and “an emphasis on education in personal hygiene” alongside “the use of the physician as a real force in prevention” (1910-). The dynamism of Progressive era New York is perhaps the first time in American history that medical science was truly forced to grow and change in ways that impacted its use for both private and public good. The progressive emphasis on consolidation of effort at this time required physicians in public health and in private practice, philanthropists and non-profits, and city officials to find ways to work together amid growing professional and economic tensions. In the first decades of the twentieth century bacteriological science was being wielded by physicians and public health officials alike as a preventative and diagnostic weapon against contagious disease and infant mortality, whereas only a few years earlier a focus on hygiene was the main tactic. As the focus of public health transitioned from crisis to prevention the tension between social and individual responsibility for disease continued, taking into account new scientific discoveries such as germ theory and healthy carriers.

Germ theory was developed through the work of Louis Pasteur in France and Robert Koch in Germany in the late nineteenth century, and held that specific diseases were caused by infection with specific microscopic organisms. Healthy carriers were people who had become infected with a disease-causing microbe and were capable of transmitting that disease to others, even

---

69 Starr is quoting Charles-Edward Amory Winslow (1877-1957), bacteriologist and public health expert. Starr, Social Transformation, 190-191.


though they may never have suffered any symptoms themselves.\textsuperscript{73} While personal and municipal hygiene continued to be part of public health’s plan of prevention, its focus became increasingly individualized once bacteriological practices were utilized with greater frequency: “Armed with the new weapons of science, the New York City Health Department and health departments everywhere were in a position to make a major assault on the causes of infant mortality with the opening of the twentieth century.”\textsuperscript{74} As a result, the relationship between scientific experts, science, and the public continued to develop and be reimagined in New York’s maternal and infant healthcare strategies during Baker’s career. As new medical knowledge became commonly adapted and discussed in the press, New Yorkers had a broadened sense for the potential of preventative medicine. Preventative medicine included a new combination of individual and societal responsibility for public health: just as the diagnoses of individual disease carriers put a focus on one-to-one bodily connections within the city, the living conditions which impacted the ability of those bodies to resist and fight disease remained a societal concern.

Tenement mothers could mix their baby formula to perfection, swaddle and bathe their babies with the utmost care, but the ability to expose their babies to fresh air and sunlight and a safe place to play often stretched beyond possibility. Alongside Baker and other public health officials’ belief in mothers’ capabilities was the reality of their physical situations within the city.\textsuperscript{75} Comparing the idea of prevention of crime to that of illness, Baker stated in 1911 that “The minute they [Americans] are willing to make a provision for the saving of a life, as they are for the prevention of crime, just so soon will they find the death rate among these preventable diseases

\textsuperscript{73} For example, see “Recent Studies of Diptheria Carriers,” \textit{Journal of the American Medical Association} 66, no. 14 (1916): 1030-1031.
\textsuperscript{74} Duffy, 213.
\textsuperscript{75} Baker notes that the city only has so much outdoor space, but that all parks, empty buildings, and rooftops need to be creatively utilized in order to get children exposure to fresh air and outdoor play. Baker, “Deliberate Waste of Life,” \textit{New York Times}, June 4, 1911, SM9.
being reduced to a minimum.” Throughout her career Baker would focus on using the press to reach the public with new medical information, to gain their support for preventative health strategies that utilized medical advances like bacteriology to put that knowledge into the hands of mothers, and to argue the importance of both individual and public support for those strategies. The success of preventative health at the individual and societal levels depended upon both individuals and society: “I shall not say that we have wiped out all that tragically great percentage of preventable deaths, but we have made a start toward doing it. We must do more, of course, and, in order to do more, the work must have the full support of the public. It cannot get this full support unless the public understands it.” As would be reflected in her work throughout her career, Baker insisted on the equally active participation of both individuals and the institutional structures of public health that served them to take responsibility for the practical application of medical knowledge to preventative medicine – to saving lives. Physicians and public health officials had the responsibility of effectively communicating preventative health strategies to the public, but individual citizens and the local and federal policymakers who impacted their access to those resources and strategies, ultimately impacted whether infant mortality or thriving would be the predominant narrative of New York City and the nation as the twentieth century progressed.

Conclusion

Eighteen-year-old medical student Baker’s tendency to mix vaudeville with the study of anatomy was most certainly not the last example of the unique and adaptive strategies that she employed in order to build a life and a career for herself as a single woman physician in a diverse and chaotic city. Categorizing Baker with other progressive reformers, professionalizing doctors

---

76 Baker, “Deliberate Waste of Life”.
and nativists of the early twentieth century, or even as a government official who helped save thousands of babies, as some scholars have done, overlooks another aspect of her story. Baker’s life and work as a public health official, an educated woman, and a physician, illuminate the complexity of the development of American public health and its relationship to those it served in ways that still impact the twenty-first century. It would have been nearly impossible for Baker to avoid being influenced by the reform-minded Progressive era and the moral middle-class ideals it included. Likewise, as a physician and a New Yorker, Baker’s work was embedded within a growing sense of the city and the nation as modern and scientific. The confluence of Progressive and modern impulses in the New York Health Department’s response to high infant mortality in the tenements are showcased through Baker’s work. The creative authority she held as director of the nation’s first bureau of child hygiene illuminates the uniquely inventive strategies that public health was able to make in that specific time and space as the field’s authority in relation to the medical field and the larger culture was still being negotiated. The creativity exhibited in that historical moment - that mix of individual and social responsibility, of common sense and medical expertise - has relevance for current public health within a similar context of growing medical specialization, disagreement about the role of the government and physicians in preventative care, and about individual vs. social responsibility for health. A closer examination of Baker’s work within its cultural context therefore not only reveals the inherent complexity that exists within one professional life, but also suggests possible creative paths in public health that have been forged in the past and may be forged again.

Crunden writes that modernism was an ethos of outsiders which we know existed because the people who recognized it as an ethos existed. It was an ethos which sought, through a wide variety of expressive methods, to give narrative voice to unseen or unacknowledged realities of modern city life; of a sense of separateness in the midst of deep interconnection. Writers,
journalists, reformers, politicians, and religious leaders sought to give voice to the feelings of dehumanization that city dwellers experienced as the Gilded Age ushered in the twentieth century. Through her work in public health with some of the city’s most vulnerable citizens, Baker’s pragmatic approach and creative strategies wove a narrative of life into the city that she loved both during the Progressive era and beyond the First World War. Of course the voices of both Progressive reform movements and medical science which heralded the advances in public health were primarily those of the elite in New York society at the time, as is evident in the press coverage of the Bureau’s campaigns for infant welfare. Baker and her Bureau worked in the tenements but she did not live in them. It is therefore acknowledged from the start that Baker’s voice and that of her fellow medical officials and the press who covered their work are not those of the mothers and babies who seemingly benefitted from it. However, while grass-roots advocacy has been a part of the narrative of public health since neighborhood bosses first began distributing supplies to their constituents, in the early twentieth century it was a primarily elite endeavor, requiring political and taxpayer support to cover the scale of need in cities like New York. Baker and other health officials had the knowledge of medical science and of the city’s political machine to help working-class mothers’ own stories hold more potential for life rather than death, and their acknowledgement of and responsiveness to the realities of those mothers’ experiences are evident in the constant adaptation of public health strategies to their needs. This emphasis on adaptability to the needs of individual New Yorkers alongside a municipally-supported infrastructure to connect them to the larger body of the city provides an excellent window into the challenges that American public health for mothers and babies still faces to this day. Public funds at the local and regional level are still used to provide the material resources, educational classes and nurses to oversee the pre- and postnatal care of women who cannot afford that care themselves. An emphasis on the financial deservedness of the recipients is still
stressed. Significantly, from Baker’s perspective, nationwide programs for pre- and post-natal healthcare and well-baby care are not readily available to all the women who need them.

In the interest of elucidating one response of public health to the challenges of American cities in a way that sheds light on one of the most dynamic and most studied periods, this study takes the lead of Robert Crunden, who asserts that "It is the historian's job to steer a course between biography and theory in order to rediscover history."78 Ultimately Baker’s approach to medicine and public health, and to the city, reveal a long-recognized need in American culture for balance between the public and private use and understanding of science, and the medical boundaries which both protect and endanger human lives and bodies in American society. Baker’s perspective demonstrates that medicine was only as good for the public as the structures and institutions which made it available to them, and that those institutions needed to continually adapt to the people they served. Just as relevant to a twenty-first century American context, Baker recognized that responsibility for the health and well-being of Americans rested both in individual and institutional hands, as the factors which shaped Americans’ health first broadened to a truly national level. The following chapters are organized by key events or issues that Baker encountered during her work with the Bureau of Child Hygiene that are of particular relevance to the relationships among New Yorkers, their complex network of connections to the city, and to the challenges involved in making medical knowledge practically applicable and available to their lives. As much as possible these events and issues are couched within their relevant cultural context in order to illuminate the unique situation that Baker and her colleagues experienced in New York in trying to develop a strategy of public health that would tell a narrative of life triumphant over death.

78 Crunden, Body and Soul, xiii.
CHAPTER 2 – TYPHOID MARY

From my brief acquaintance with Mary, I learned to like her and to respect her point of view. After all, she has been of great service to humanity.

Such persons [healthy carriers] are at present terrifying, if unwitting enemies to society.

Are we indeed reaching toward the simpler life? If one unfortunate woman must be labeled 'Typhoid Mary,' why not send her other companions? Start a colony on some unpleasant island, call it 'Uncle Sam's Suspects,' there collect Measles Sammy, Tonsillitis Joseph, Scarlet Fever Sally, Mumps Matilda, and Meningitis Matthew. Add Typhoid Mary, request the sterilized prayers of all religionized germ fanatics, and then leave the United States to enjoy the glorious freedom of the American flag under a medical monarchy.79

Baker appears in much of the scholarship on the case of “Typhoid Mary” (Mary Mallon), the Irish immigrant cook in New York City who was the first identified “healthy carrier” of a contagious disease in the United States. Baker was early in her career with a Health Department that was struggling to establish public trust after years of disorganization and corruption. New leadership combined with an early effort at implementing the diagnostic technologies made available by germ theory were just beginning to repair the city’s trust and encourage the Health Department to produce observable progress in the prevention (no longer just the treatment) of common communicable diseases like typhoid and tuberculosis. As one of the health officials who apprehended Mary Mallon, Baker experienced the growing power of public health to name and identify disease carriers and risks, and to invade individual privacy when public safety seemed to demand it. Baker and many that she worked with experienced both a conviction that bacteriological advances came with increased responsibility as well as an ambivalence about that responsibility’s attendant power.

 Scholars of the case, such as Priscilla Wald, Judith Walzer Levitt, Marouf Hasian, and Andrew J. Mendelsohn, have examined the case of Typhoid Mary and Baker’s role within it as one of the overreach of the power of scientific experts into the lives of citizens made vulnerable by class, gender, and ethnicity. However, it was not only nativist prejudice that made officials target Mary. Baker and several of her colleagues were still negotiating what it meant to have the power to diagnose, to target, to control, and wanted people to keep their own autonomy. Like the Progressive era in which they lived, they wished people to learn about germs and to change their own behaviors; to avoid losing anymore agency in a large modern city than the small amount they

still had. In the response of public health to Mary’s case is a modernist anxiety about the bigness of the city and the bigness of public health’s task to protect it. As a new public health official still developing her own philosophy of public health, Baker was not one of a nameless group of scientific experts asserting their power over the “immigrant menace” to protect the city, so much as a unique and observant witness to one of the moments when public health was first negotiating its place in society.

Mary was a special case as the first identified healthy carrier of a common disease, but also because she was recalcitrant. Considering the impacts of new medical science on society, Priscilla Wald notes that it required “new models of being in the world.” When individuals acknowledged an understanding of their potential for germ transmission, they were acknowledging a new responsibility to their own welfare and to that of society. Mary Mallon refused to do this. Though news articles from the time illustrate that germ theory and healthy carriers of disease were becoming more widely understood topics, it took a while to counter the long-held idea that a person felt and acted sick when they were sick. It hardly seems surprising now that Mary would have refused to give her bodily fluids to a strange man (George Soper) who kept seeking her out in the places where she usually felt most in control and at ease. One of the unfortunate aspects of sanitary engineer George Soper’s involvement in the case of Mary Mallon is that he took for granted that Mary would believe everything that he told her about how healthy people could carry invisible germs, and that she would willingly give samples of her blood and urine to a stranger knocking on the door as she cooked dinner for her employer. Soper’s assumptions in this case are an excellent example of the Progressive tendency to believe that once the facts clarifying good and bad outcomes are related to a person they would immediately understand and accept them. Robert Crunden discusses this tendency within the context of the muckraking journalists who tried to expose the need for the Food and Drug Act of 1906. He sees a point of similarity between the muckraker’s tactics of exposing evil through print and the Protestant tradition of exposing sin in

80 Wald, Contagious, 70.
81 Leavitt notes that most Americans outside of the health professions at this time were unaware of germ theory, but Tomes acknowledges that disagreements among physicians and public health officials regarding the theory and how to implement it in public health work continued from the late-nineteenth into the early twentieth century. As Mary was literate and living in a city full of media it is certainly possible that she had at least heard of germs prior to her surprising introduction to Soper. Leavitt, 19; Nancy Tomes, The Gospel of Germs: Men, Women, and the Microbe in American Life (Cambridge: Harvard University Press, 1998), 1-20.
82 Robert Crunden, Ministers of Reform, 163-199.
society, with the belief that people will immediately recognize it and amend their ways. When a person refused to be educated in a context in which "Social welfare was the responsibility of individuals," the officials felt they had no choice but to infringe on individual rights for the good of society.\textsuperscript{83}

The polarity between Soper and Baker as health officials and Mary as disease carrying immigrant only needed to impinge on Mary’s individual agency if she refused to learn and alter her behavior in light of her interconnectedness to the city. In the “new models of being in the world”\textsuperscript{84} which the urban environment and latest medical science shaped, a person like Mary Mallon need only be lumped into the older category of “shiftless,” dangerous immigrant if she refused to participate.\textsuperscript{85} Wald asserts that the growing authority of medical science in public health matters helped shape a narrative of the healthy carrier that superceded Mary’s own identity. While the power of this narrative is not in doubt, there was another, as yet unexamined narrative of life that public health was beginning to write as officials like Baker tried to implement medical advances through practical strategies that would benefit individuals and society alike. The interconnectedness of the urban environment could create fear and anxiety, but with preventative health strategies, it could also foster life. After giving some historical context for Mary Mallon’s case, this chapter examines how the case illustrates the impact of bacteriology on public health practices, teases apart the different approaches of Soper and Baker in the case, and explores the resulting private and public responsibilities for disease prevention that continued to influence Baker’s subsequent work to combat infant mortality.

\textbf{Historical Context}

During the first decade of the twentieth century outbreaks of typhoid fever were not uncommon in New York City, but in 1906 it was the source of such an outbreak which initially made “Typhoid Mary’s” story famous, and which drew Baker into a narrative of Mary’s life in

\textsuperscript{83} Wald, \textit{Contagious}, 72.

\textsuperscript{84} Wald, \textit{Contagious}, 70.

\textsuperscript{85} Both Leavitt and Wald quote Baker’s autobiography when she says that the Irish are “shiftless” as evidence that Baker and other officials in the case were nativist. Leavitt, \textit{Typhoid Mary}, 114; Wald, \textit{Contagious}, 97. In both Mendelsohn and Hasian’s descriptions of the case, they associate Baker and the Department of Health with Soper as one powerful and opposing force to Mary and other immigrants. Hasian, “Power, Medical Knowledge,” 133.
which medical authority sometimes mixed with class prejudice and nativism.\textsuperscript{86} Several members of Charles Henry Warren’s family fell ill with typhoid fever on their summer vacation in Oyster Bay, NY. As was common practice in the many cases of typhoid outbreak in the city, investigators first tested the water and milk consumed by the family for bacterial contamination. When both water and milk proved uncontaminated, civil engineer George Soper was asked by the vacation house’s concerned owner George Thompson to investigate.

George Soper was already known for investigating typhoid outbreaks, and when the search for contaminated milk or water produced no evidence, he eventually traced the outbreak to a contaminated human: Mary.\textsuperscript{87} Soper followed Mary back to the city, where he found her working for Walter Bowen’s family, whose chambermaid and daughter were both ill with typhoid fever. During her illness Bowen’s daughter was cared for by Mary, and unfortunately died. Soper confronted Mary in her place of employment in March of 1907, explaining to her that she was a carrier of typhoid germs and that she had been unwittingly infecting people. Explaining that small organisms invisible to the eye had set up residence inside her body, he asked her for samples of her feces, urine, and blood to confirm the presence of the bacteria. According to Soper’s account, Mary kicked him out of the house while wielding a large cooking fork.\textsuperscript{88} Soper then sought Mary at her friend’s home to ask her for samples, which she again refused to provide.\textsuperscript{89} Mary’s refusal to participate in a medical system that implicated her in the transmission of invisible disease-

\textsuperscript{86} Wald, \textit{Contagious}, 71, 83. As Wald points out, 1906 was also the year of the Naturalization Act. The idea that incoming individuals needed to be categorized and tracked in order to control disease and protect society permeated several facets of official procedure in cities at this time.
\textsuperscript{87} George A. Soper, “The Discovery of Typhoid Mary,” \textit{The British Medical Journal} 1, no. 4070 (1939): 38; Leavitt, 14-17.
\textsuperscript{89} Leavitt, 19; Soper eludes to the assumptions about the promiscuity and potential for disease of single women in the city here, unnecessarily noting that he went to visit Mary at the home of a “disreputable looking man” whom she was “spending the evenings with.” Soper also notes that the man’s apartment was “a place of dirt and disorder.” Soper, “The Curious Career of Typhoid Mary,” 704-705.
causing organisms is not surprising, when she was occupied in the very practical task of supporting herself and her reputation. However, two situations continued to coexist throughout her case: a system of rules that seemed obscure to her was trying to keep her from her livelihood, at the same time that she was posing a physical, biological threat to those with whom she worked.

Soper was an engineer in the United States Army Sanitary Corps and not a health inspector, so he appealed to the Department of Health's experienced medical officer Hermann Biggs to obtain the needed samples. It was as an assistant to Biggs that city health inspector Baker was sent to obtain the samples, and she was received in a manner similar to Soper.90 After Mary refused to give Baker any samples, Baker was instructed by Biggs to return to the house with policemen. In her autobiography, Baker relates that Mary saw her coming and answered the door holding a cooking fork, causing Baker to lunge backward, after which Mary slammed the door shut and disappeared into the house.91 After searching the house for hours the police found Mary hiding in a closet and dragged her to an ambulance, where, as scholars have noted, Baker had to sit on her in order to restrain her on the way to the hospital. Baker said that taking Mary to the hospital was “like being in a cage with an angry lion.”92

Anecdotes such as Baker’s about the capture of the woman who became “Typhoid Mary” demonstrate for many historians that Baker and the Department she represented used their medical expertise and influence to expand the authority and reach of the emerging field of public health far into the private and public rights of the most vulnerable New Yorkers.93 Taking a more

91 Baker, *Fighting for Life*, 74. Soper notes that Mary slammed the door in Baker’s face as well, though he was not present at the event. Soper, “The Curious Career of Typhoid Mary,” 706.
93 Hasian; Kraut, *Silent Travelers*; Leavitt; Mendelsohn.
nuanced approach, Priscilla Wald convincingly argues that between personal accounts and press coverage of the case, “Typhoid Mary” developed into a “healthy carrier narrative” which called attention to the dangers of human interconnectedness in growing cities like New York, “showing how the realization of those connections required new models of being in the world.”94 These new models could be influenced by prejudice and fear, but they were also guided by science and welfare, and would bring into question “the state’s obligation to safeguard both civil liberties and public health and well-being.”95 Not surprisingly, it was the personal liberty and well-being of immigrant laborers rather than their upper class employers which were under greater threat of compromise in this new model of being.96 However, the potential health risk associated with urban interconnections97 was a reality for which the expanding Department of Health98 was obliged to use a variety of techniques to deal with at this time. Broadening the scope of Baker’s work with the Department beyond her brief encounter with Mary, the “angry lion” in the ambulance, reveals that Baker utilized the governmental and medical authority of New York’s public health to provide some of the required personal agency to change the amount of influence New Yorkers’ held within the “social organism” they inhabited.

94 Wald, Contagious, 70
95 Wald, Contagious, 70.
96 Kraut, Silent Travelers, 79.
97 Wald, Contagious, 14. The fear of interconnectedness manifested itself in different ways. As Meyerowitz explores in the context of Chicago, single women who came to the city looking for work made middle class reformers nervous because there was no one to influence their behavior and keep them from vice, as their families would have done. Joanne J. Meyerowitz, Women Adrift: Independent Wage Earners in Chicago, 1880-1930 (Chicago: The University of Chicago Press, 1988). The older stigma of sexual proclivity and venereal disease attached to single women who worked in the public sphere was easily associated with these young, unattached women roaming the city. Wald, Contagious, 71. Soper hints at this when he mentions that Mary tended to move around a lot to different jobs, using different agencies, making it difficult to track her movements among the anonymous interactions of the city. George Soper, “The Curious Career of Typhoid Mary,” 702. See also Soper, “The Work of a Chronic Typhoid Germ Distributor,” Journal of the American Medical Association, 48, no. 24 (1907): 2022.
98 Duffy notes that the Health Department had “an annual budget of about $1,000,000 and employed less than 1,000 persons” in 1900, whereas it “had increased to $2,750,000 and the employees to 2,500” in 1910. By 1913 the budget had already gone up to $3,882,000. Duffy, A History of Public Health, 264.
It is unclear from her writings whether Baker considered herself a Progressive, but her work with the New York Health Department cannot be separated from its progressive context. Her approach to public health suggests that at the individual level, Baker considered people capable of being educated in habits that would benefit their own lives, and that at the societal level public health sometimes required private rights to be overridden for social benefit. Regarding her involvement in the case of Typhoid Mary, as in her later work in child hygiene, Baker consistently explained the reasoning behind public health policy to her patients, her staff, and to the public. Thus it is ironic that a greater part of Baker’s legacy has been her involvement in the case of a woman who seemed to refuse to learn. It is in her autobiography that Baker describes the scene of Mary Mallon’s first apprehension in 1907. Accompanied by police, Baker literally sat on top of a recalcitrant Mary in an ambulance in order to get her to the hospital to have blood and waste samples collected and examined for typhoid bacillus. This is one example which illustrates Baker’s willingness to play, in her words “an active – rather too active, in fact” role in the service of public health. As a public health official, Baker did physically restrain a woman and describe it as “like being in a cage with an angry lion,” which has led some historians to label her as a stereotypical

99 In her autobiography Baker mentions that healthy typhoid carriers identified after Mary generally went right back to living their lives by promising not to handle others’ food. Baker believed that people were fully capable of understanding the basic gist of germ theory and keeping themselves out of the food service industry. Baker, *Fighting for Life*, 76-77. In discussing Mary’s case Baker acknowledges how much power New York’s public health officials had to invade personal privacy and freedom, but comments that overall she feels those officials have wielded that power responsibly. Later on in her work with immigrant mothers Baker comments that most women are happy to learn some medical knowledge about baby care and are “fine when they are given half a chance to know how to be...” Baker, *Fighting for Life*, 86.

100 In these *New York Times* articles, Baker is either quoted as stressing the importance of providing mothers with education about keeping their babies healthy, or is credited with coordinating local organizations in an effort to make this education available to mothers during the summer: Baker, "Deliberate Waste of Life"; Edward Marshall, "A Regiment of Babies’ Lives Were Saved Here in 1912"; “Dirt fattens flies and kills babies,” March 24, 1913, 8. Baker mentions in her autobiography that other nations such as France had developed milk stations earlier than the U.S., but the stations in New York were probably the first to combine the provision of clean milk with preventative health education. Baker, *Fighting for Life*, 127.


culturally obtuse public official. An examination of Baker’s involvement in Mary’s apprehension interpreted within the broader context of how bacteriology was transforming the preventative capabilities of public health, and the resulting shared individual and societal responsibilities involved, reveals an early impulse toward using public health to create a narrative of life. Key to the twin participation of individuals and public officials in this narrative is the implementation of two incredibly influential medical discoveries and the resultant responsibility that ordinary citizens held in their own and others’ health: germ theory and the healthy carrier.

**Bacteriology Reinvents Public Health**

One of the main reasons Baker still appears in historical scholarship today is because she was personally involved in the apprehension of “Typhoid Mary,” an Irish immigrant accused of unknowingly infecting several upper-class households through her work in and around New York City in the early years of the twentieth century. Germ theory, the idea that contagious diseases originate from and spread through microscopic disease organisms, had just been demonstrated by German physician Robert Koch in the late nineteenth century, as his laboratory identified the bacteria that caused anthrax, cholera, and tuberculosis.\(^{103}\) A subsequent discovery was that individuals who had never become symptomatic with diseases such as typhoid fever could nonetheless transmit the disease to others. These two discoveries meant that public health officials were in a bind to quickly implement the new science of bacteriology into their work in ways that would prevent disease epidemics without compromising the rights of infected individuals. The original strategy of public health to sanitize the urban environment now became much more individually focused onto disease organism and carrier.

\(^{103}\) Alan Kraut notes that although some in the medical community were familiar with Koch’s discoveries, many American epidemiologists and certainly the American public in general were not yet familiar with them at the beginning of the twentieth century. Kraut, *Silent Travelers*, 97.
The developments in medical science of the key concepts of “germ theory” and the “healthy carrier” during the late nineteenth and early twentieth centuries dramatically shifted the focus of American public health right at the beginning of Baker’s medical career. For the first time in medicine, infectious diseases were recognized as being caused by physical organisms such as bacteria rather than by bad luck, spiritual forces, or “miasma.” Whereas for millennia people had struggled to describe the widespread and often mysterious threat of communicable disease and death, germ theory allowed those in charge of public health in newly modern cities like New York the luxury of prevention, and to some degree, prediction. Mythical and supernatural explanations for what Alfred Crosby called “the world’s greatest demographic disaster” in his discussion of the historical decimation of indigenous peoples to European diseases, were no longer humanity’s only possible response to communicable disease. The enemy was becoming known, and with the advent of the “healthy carrier,” that enemy could materialize in the environmental conditions that encouraged the spread of bacteria, or in a specific person. The new field of bacteriology advanced by Louis Pasteur in France and Robert Koch in Germany in the late nineteenth century advocated germ theory to describe the primary cause of communicable disease, and the new concept of the healthy carrier – someone who felt and appeared outwardly healthy but still carried disease - lent new credence to the theory.

---

104 At the level of the vernacular, the words infectious, contagious, and communicable are often interchanged. Infectious refers to diseases that are caused by a “germ” such as a bacterium or virus. Contagious diseases are spread through bodily contact (rather than through actions like sneezing). Communicable diseases are those that are infectious, and can spread from one person to another. Communicable diseases are always infectious, but infectious diseases do not have to be communicable. I will endeavor to use these words according to their correct meanings in this chapter.


106 Crosby, 208-209.

107 Several scholars mention the significance of being able to diagnose and label specific disease carriers: Kraut 1994, 4, 22-23; Leavitt, 26; Mendelsohn, 268-270. As Mendelsohn points out, the episode involving Typhoid Mary prompted New York City public health officials to screen 90,000 cooks for typhoid within the year following Mary’s second and final apprehension in 1915. As he describes it, “In sum, Mary Mallon’s
health officials and city sanitarians had spent much of their time targeting large groups of people or neighborhoods in an effort to clean up the city and reduce the transmission of diseases such as cholera and typhoid through vaporous “miasmas.” Now the emphasis on cleanliness shifted in focus from the community to the individual carrier of disease. This focus on individuals developed alongside the new possibility of diagnosing with laboratory tests disease carriers who did not even appear to be sick.

The New York City Health Department rose in size and power around the same time as these advances in medical diagnosis and microscopic techniques, and some scholars have argued that public health officials began to neglect the social causes of disease in the excitement of being able to target and diagnose individuals. While Mary Mallon, or “Typhoid Mary” has been a well-known public health case since she was first apprehended in 1907, an emphasis on the shift from social to biological causes for diseases like typhoid were explored in several works of 1990s, as historical interpretations from the perspective of class, gender, and ethnicity came to prominence. In his book on the history of immigrants and medicine in the United States, Alan Kraut explains that each new advance in medical science during the nineteenth and twentieth centuries potentially presented a new way to exclude immigrants, depending on the mix of

resistance helped justify the intensification, not the moderation, of bacteriological hygiene.” Mendelsohn, 272.

Kraut mentions that tenements became the place where most newly-arrived immigrants lived, and that because of their crowded spaces and cheap construction, many tenements made it difficult for immigrants to keep their living spaces clean and ventilated. This is one of the reasons why immigrants and the tenements they inhabited became associated with communicable disease. Kraut, 144, 249.

Tomes 1998, 12, 94-5, 237.

Hasian, 125; Leavitt, 26; Mendelsohn, 276; Wald, 78. As of 1892, New York City had the first municipal bacteriological laboratory in the world. New York City Department of Health, Public Health Laboratory, 2016, accessed September 10, 2016, https://www1.nyc.gov/site/doh/providers/reporting-and-services/public-health-lab.page.

Mendelsohn, for example, argues that a new medical emphasis on individual carriers of disease had a tendency to target neglect the social causes of disease, such as malnutrition and lack of fresh air, which could be just as influential to chances of infection as the exposure to the microorganisms. Mendelsohn, 269.

Kraut; Leavitt; Mendelsohn; Tomes.
assimilationist or nativist leanings at the time. Kraut discusses “Typhoid Mary” as one of the most famous (and infamous) stories of immigrants and disease in United States history, becoming “synonymous with the health menace posed by the foreign-born.” By the time Mary was first apprehended as a carrier of typhoid bacteria by Soper and Baker in 1907, a generation of Irish immigrants arriving in early-nineteenth-century New York had already made the city their home, and had become one of its most hated scapegoats for a variety of social ills. The persona of “Typhoid Mary” was able to develop because, as communications scholar Hasian describes, working class disease carriers like Mary tended to be viewed through the lens of “socially constructed ‘race,’ class, or gender,” and Kraut mentions that Irish women in particular were associated with an abnormally high incidence of institutionalization for insanity at the time. Thus, when germ theory emerged and the phenomenon of the “healthy carrier” gave medical and public health officials another category in which to classify people who potentially posed a danger to society, it is not surprising in the least that immigrants, who were already associated with undesirable characteristics, would be one of the groups often associated with this new category. As a single, female, Irish immigrant who had lived for several years in New York City, Leavitt asserts that Mary’s social position would have already been quite tenuous even without the label of “healthy carrier,” because public perception held that domestic servants and single women always carried the potential for danger to others. With the obstacles of nation of origin

113 Two examples of this include the cholera epidemic of 1832, when many new Irish immigrants to the US became ill with the disease, and subsequently became associated with it; and the AIDS epidemic in the 1970s and 80s, when immigrants began being denied entrance to the US if they tested positive for HIV. Kraut, 32, 4-5.
114 Kraut, 97.
115 Kraut, 39-43.
116 Hasian, 129; Kraut, 40.
118 Leavitt, 125.
and gender stacked against her professional respectability, Mary understandably resisted the additional label of disease carrier.

Like others involved in the case of “Typhoid Mary,” Baker has been criticized for neglecting Mary’s individual rights in the name of public health. Baker’s statements about Irish immigrants are used to argue that though Baker “saw herself as compassionate,” she was ultimately just one of many public officials with new municipal power, nativist prejudice against immigrants, and an impersonal drive to target all disease carriers in the city.119 Leavitt quotes an excerpt from Baker’s autobiography in which Baker describes the unlivable conditions of the tenement homes where she visited mothers and babies in Hell’s Kitchen: Baker identifies the tenants as “largely Irish, incredibly shiftless, altogether charming in their abject helplessness. . .”120 Baker and George Soper are often grouped together in narratives describing Mary’s case in order to illustrate a tension between expert and disease carrier. Compared to Soper, who first identified Mallon as a potential typhoid carrier, Baker is considered by historian Priscilla Wald to be “generally enlightened,” but she nonetheless quotes the same phrase from Baker, including the end where Baker describes her Irish patients as being “wholly lacking in any ambition and dirty to an unbelievable degree”.121 Sometimes Baker is not identified as an individual person at all, so much as part of a growing medical authority that denied non-experts their rights: “Mallon and Soper/Baker thus both became reciprocal typologies, mutually dependent on each other for cultural sustenance and social signification. Soper and Baker represented the relentless, Progressive social reformers, willing to use social control where necessary in combating vice, filth, and immorality.”122

119 Leavitt, 114.
120 Baker, Fighting for Life, 57; Leavitt, 115.
121 Wald, 97. Wald is quoting Baker from her autobiography here.
122 Hasian, 127-128.
George Soper makes an easy antagonist of Mary because it was his initial investigation into several outbreaks of typhoid fever that required the assistance of Health Department inspector Baker in the first place. While Soper and Baker shared respected positions of authority in society, as well as the desire to keep New Yorkers safe from typhoid, their approach to Mary’s case is more different than similar. Soper’s writings reveal that he took great personal and professional pride in his ability to track disease, and that this pride was obviously hurt by Mary’s refusal to cooperate. As will be examined, Soper came up with unflattering theories about Mary in order to justify his failure to win her understanding and trust. In contrast, Baker admired the solidarity of Mary’s coworkers in obscuring her location when Baker came to collect her, and said that she grew to like her self-respect and determination. Yes, Baker physically sat on Mary to keep her still on the way to hospital, but in published descriptions of the case Baker never denigrated Mary to defend her own ego. When Baker’s own perspective on Mary’s case is put into the larger context of her work in public health, it becomes clear that assuming public health officials took advantage of their newly expert status simply to wield power and a progressive agenda obscures a much more interesting and complex portrayal of the struggle to integrate bacterial science into public health in a way that benefitted the most Americans possible.

Historians have illustrated that Mary’s story is an important example of the potential for medical and municipal authorities to stereotype minority individuals and impinge on their rights. However, Mary’s story is also a key illustration of how those in public health began the long and complicated process of mediating the use of bacterial science in the interest of both individual Americans and American society as a whole. Through Baker’s perspective this latter point is just as worthy of exploration as the first, because as a woman at the very beginning of her career in a male-dominated (and still emerging) field, her view had little chance of being colored by professional ego, pride, or desire for advancement. Baker’s experience with Mary’s case also gave
her a unique perspective on the emerging authority of municipal public health in the early twentieth century that likely influenced her later work with the Bureau of Child Hygiene. Experiencing this growing authority helped to prepare Baker for the challenge of coordinating the support of politicians, public, and charitable agencies in the effort to make the benefits of medical science practically available to the underserved thousands of immigrant mothers living in the growing tenement communities of New York City.

Examination of Mary’s case illustrates that both her resistance of authority and her freedom to resist authority are key aspects of the notoriety of her case as the first documented case of a healthy typhoid carrier in the United States. Judith Walzer Leavitt has discussed the known facts of several other cases of healthy carriers around the same time who were not forced to remain isolated on North Brother Island, in part to argue that Mary’s gender and her role as a domestic servant were important reasons why she was considered particularly dangerous. While Leavitt makes a good case for this interpretation, Mary’s resistance -- or recalcitrance -- as several people referred to it, is also a key difference between Mary’s and the other cases that Leavitt discusses. Mary resisted Soper and Baker at every turn, refused to try to understand the biological explanations they repeatedly gave, and by all accounts continued to see herself as persecuted by government officials. In the current climate of scholarship which seeks to understand power relations, it is tempting to utilize Foucault’s “The Subject and Power” to picture Mary as an agonist who chooses recalcitrance in relation to the emerging institution of public health. While power relations can certainly be a useful perspective for the way that Mary’s case relates to a broader history of the social and political authority of medicine in public life, it does not illuminate: the personal motivations of New York City public health officials, the practical and herculean task of

123 Leavitt, 97-99.
educating the public to understand germ theory and healthy carriers, or the very real fear of urban mortality rates. In the hands of politicians and medical experts, germ theory could become just another weapon of power, but it also had the opportunity to become a subtler, and even hopeful, tool for the participation of Americans of all classes in the project of public health. Particularly in contrast to George Soper, who more closely epitomizes the stereotypical progressive ideal and took a great deal of personal pride in his ability to ferret out disease carriers, Baker’s perspective in Mary’s case reveals that there was more meaning for the potential of public health than a struggle for power between a disadvantaged immigrant and overzealous medical authorities in the case of Typhoid Mary.

Whereas immigrant neighborhoods as environments had originally been targeted for sanitation efforts by public health workers, identification and control of the individual disease carriers themselves increasingly became the goal of public health after germ theory and health carriers were identified. Not surprisingly, those New Yorkers who had become associated with dirty or polluted neighborhoods, such as immigrants or domestic workers who handled the milk and food of others, tended to be suspected when diseases like typhoid surfaced. However, as Nancy Tomes has argued, it is a mistake to assume that a dramatic shift in scientific theory like germ theory was used by public health officials and the American upper classes en masse as an excuse to develop policies that targeted social undesirables: “Without denying that the cultural construction of dirt reflects more than just the fear of disease, my interpretation emphasizes how everyday encounters with illness and death reinforced the lessons of germ avoidance.” The very real and visceral encounter with disease, suffering, and death made more insurmountable

---

125 Hasian, 129; Leavitt, 53; Tomes, 177.
126 Tomes, 16-17. Tomes mentions in her introduction that her work is in part an effort to broaden the somewhat single-minded scholarly interpretations of public health which focus on the fear of germs as a manifestation of nativist and racist cultural anxieties about social order.
by the close interconnections of modern city life in New York clearly affected Baker, as she vividly writes almost forty years after the fact of the “sluggish, crawling misery” she encountered among the immigrant poor of Hell’s Kitchen.\textsuperscript{127} By the time Baker began work for the Health Department, her experience of the desperate conditions of the tenements had been shared, if vicariously, by many New Yorkers through the publication of Jacob Riis’ photo essay \textit{How the Other Half Lives} in 1890. Of the tenements Riis writes that “The story is dark enough, drawn from the plain public records, to send a chill to any heart. If it shall appear that the sufferings and the sins of the ‘other half,’ and the evil they breed, are but as a just punishment upon the community that gave it no other choice, it will be because that is the truth.”\textsuperscript{128} Individual disease carriers were now more easily targeted in the fight against disease mortality, but a sense that municipal public health shared responsibility with those individuals in that fight was also being established.

The tenements were not only the most practical part of the city to target from a public health perspective in order to aid the largest group of New Yorkers, but also signified a great moral failing for which the city must seek redemption through collaborative action. While one of Riis’ main points was how little control poor New Yorkers had over their living situations, the idea that they would be able to improve those conditions with the right education was still present in the Progressive response. A network of both Progressive private charities and municipal funding advanced the cause of public health in New York during Baker’s early career, and from the rhetoric surrounding Mary’s case the Progressive assumption that people only needed to be educated in the right way in order to change their habits for the better is certainly apparent. As Robert Crunden has noted, this tendency to assume that facts were all a person (or society) needed to

\textsuperscript{127} Baker, \textit{Fighting for Life}, 57-60.
\textsuperscript{128} Jacob Riis, introduction to \textit{How the Other Half Lives} (New York: Charles Scribner’s Sons, 1890; Bartleby.com, 2000): 4.
improve their lives often fell short of helping those who had little control over their circumstances.\footnote{Robert Crunden, *Ministers of Reform*, 164.} An unfortunate result of this assumption was that when individuals such as Mary Mallon would not believe in germs, officials such as George Soper found her reaction rather incomprehensible. However, as Baker’s perspective reveals, it was a combination of factors rather than simple nativist leanings which led her and other public health officials to the conclusion that individuals who could not or would not understand how they could use medical science to keep themselves and others safe needed to be kept from harming society.\footnote{Soper, “The Work of a Chronic Typhoid Germ Distributor,” 2022. Also, in a 1919 article Soper comments that before his first interview with Mary “I expected to find a person who would be as desirous as I was for an explanation of the way in which the typhoid had followed her.” George A. Soper, “Typhoid Mary,” *The Military Surgeon: Journal of the Association of Military Surgeons of the United States* 45, no. 1 (1919): 7.}

Another aspect of Mary’s case which helped determine the developing narrative of “Typhoid Mary” as a healthy carrier was the still-ambiguous nature of the authority of New York public health officials. Baker, Soper and their superiors were not unaware of the public reaction which their apprehension and labeling of Mary Mallon as a disease carrier would have: they recognized the demonstration of power by public health as potentially dangerous to personal liberty and social equanimity.\footnote{Other scholars have convincingly argued that Soper’s perception of Mary had some gendered and nativist influences not uncommon for the time period, as will be mentioned later. However, Soper does go to some pains to explain how many times he tried to explain germs and how they were spread to Mary, how she could continue to be contagious, and how willing he was to try to help her within the limits of his authority. It is clear that by the time an international group of physicians met in New York in 1912 it was generally not seen as necessary to quarantine healthy carriers as long as they agreed to stay away from jobs involving food or water. Soper’s desire to explain his actions in great detail as well as to show how unwilling Mary was to listen to him illustrate that Soper was conscious of a need to justify her long-term quarantine. George A. Soper, "The Work of a Chronic Typhoid Germ Distributor; George A. Soper, “Typhoid Mary”; "Doctors describe disease carriers," *New York Times*, September 26, 1912.}

Mary’s case occurred just when medical science and a changing urban environment had begun to vest

\[\text{\footnotesize 129} \text{ Robert Crunden, *Ministers of Reform*, 164.} \]
\[\text{\footnotesize 130} \text{ Soper, “The Work of a Chronic Typhoid Germ Distributor,” 2022. Also, in a 1919 article Soper comments that before his first interview with Mary “I expected to find a person who would be as desirous as I was for an explanation of the way in which the typhoid had followed her.” George A. Soper, “Typhoid Mary,” *The Military Surgeon: Journal of the Association of Military Surgeons of the United States* 45, no. 1 (1919): 7.} \]
\[\text{\footnotesize 131} \text{ Other scholars have convincingly argued that Soper’s perception of Mary had some gendered and nativist influences not uncommon for the time period, as will be mentioned later. However, Soper does go to some pains to explain how many times he tried to explain germs and how they were spread to Mary, how she could continue to be contagious, and how willing he was to try to help her within the limits of his authority. It is clear that by the time an international group of physicians met in New York in 1912 it was generally not seen as necessary to quarantine healthy carriers as long as they agreed to stay away from jobs involving food or water. Soper’s desire to explain his actions in great detail as well as to show how unwilling Mary was to listen to him illustrate that Soper was conscious of a need to justify her long-term quarantine. George A. Soper, "The Work of a Chronic Typhoid Germ Distributor; George A. Soper, “Typhoid Mary”; "Doctors describe disease carriers,” *New York Times*, September 26, 1912.} \]
\[\text{\footnotesize 132} \text{ Baker, *Fighting for Life*, 77, 84. Duffy, xx.} \]
public health more authority, and the diagnosis and control of disease carriers thus became one of the important ways that the Health Department made their service to society visible and gained monetary support through appropriations.133 In a meeting of physicians described in the New York Times five years after Mary’s initial apprehension, it is taken almost for granted that public safety requires expert physicians and public health officials to identify healthy disease carriers, and that these experts have already done much to improve urban health conditions for cities all over the world.134 While it was agreed at this international meeting of physicians and scientists (which included Soper) that healthy carriers of typhoid need not be quarantined as Mary was, it was agreed that they should be barred from jobs which included the handling of food or milk. Thus, while quarantine was not considered the right solution for typhoid carriers after Mary, the mobility and professional options for carriers remained under the control of public health.135

As noted, progressives had faith in their belief that once presented with the facts people would amend their behaviors accordingly. Adhering to the formula laid out by such progressive theorists as John Dewey, this reliance on experience led to better decision-making that should uplift society as a whole, and could therefore result in well-intentioned progressive reforms.136

133 Wald mentions that because healthy carriers could only be diagnosed with lab tests, experts were needed in order to find them. Wald, Contagious, 69-70.
135 Ibid.
136 Philosopher Bruce Wilshire writes that in forming his theories about experience and education, Dewey drew from William James, who denied “the distinction between knowing and doing.” Wilshire, Metaphysics: An Introduction to Philosophy (New York: Pegasus, 1969), 163. When a person shows interest in the world, or their attention is directed toward something in particular, their experience of it does not just reveal truths about it, but the person helps create that truth through their interaction with it. Dewey continues this emphasis on experience to develop “the idea that all truth is co-created by the active organism and the ever active, abiding world.” Bruce Wilshire, The Primal Roots of American Philosophy: Pragmatism, Phenomenology, and Native American Thought (University Park: Pennsylvania State University Press, 2000), 97. It was through the experience of the natural and cultural (which Dewey considered to be part of nature) world that people had the best chance of using their full selves or capacities, and he felt that education was an important part of making that possible. Wilshire, Primal Roots, 103; Alison Boardman Smuts, Science in the Service of Children 1893-1935 (New Haven: Yale University Press, 2006), 44. Thus, alongside progressive social reform, there was a great deal of emphasis coming from American psychology and philosophy in the early twentieth century that emphasized the important role that a conscious engagement with and
Importantly, an aspect of these reforms that separated progressives from those who held more revolutionary ideas is that such reforms happened within the system that already existed, rather than completely destroying the structures that constricted people’s options. However, as related in her autobiography and the press coverage of her Bureau’s work, Baker’s interactions with immigrants illustrate that she recognized New York City as a large and complex organism/machine of which everyone formed a part, but in which most had little individual control. While the case of Typhoid Mary continues to illustrate the potential for public health interests to place the burden of this urban interconnectedness squarely on the shoulders of certain classes and genders, the work of Baker’s Bureau consistently revealed an encouragement of personal agency amidst the tension between individual and social responsibility for, and causes of, disease. Baker likely knew that Mary Mallon’s circumstances as a female Irish immigrant could become part of a narrative that would turn her into “Typhoid Mary,” but the main criticism Baker had was that Mary refused to accept what little agency was left to her by public health officials, and also took agency away from others through her subsequent actions.

education about the world played in the making of society. While progressives may have often run short of their goals by peppering Americans with sobering facts and expecting them to jump into action in response, their emphasis on continual learning and experience as a way to change society for the better was not unrelated to the pragmatist tradition. Progressives could slide into idealism/rationalism sometimes, but Baker’s perspective is more consistently pragmatist.

137 Robert Crunden, *Ministers of Reform*, 164. In *Amusing the Million*, Kasson notes that Russian revolutionary Maxim Gorky was disappointed when he visited Coney Island in 1906 because “Entertainers and customers alike appeared to be wearily going through the motions of amusement . . .” rather than enjoying an environment in which they had control over their own amusement and could indulge their own imagination. Kasson sums up this perspective that while amusements were now available to Americans of all social classes, mass culture ran the risk of becoming just another “opiate of the people.” John F. Kasson, *Amusing the Million: Coney Island at the Turn of the Century* (New York: Hill and Wang, 1978): 108-109.

138 Three years after Mary’s apprehension a guide in the Adirondacks was discovered to be a typhoid carrier who was inadvertently infecting well-to-do vacationers. An article in the *Times* takes pains to explain how his case is similar and different from Mary’s and that there are no laws in New York that allow government officials to keep typhoid carriers from infecting others. The main difference between the guide’s case and Mary’s is that he does not resist the suggestions of the health officials and instead cooperates with them. “Guide a Walking Typhoid Factory,” *New York Times*, December 2, 1910, 6.
In addition, Mary’s refusal to choose cooperation with the Health Department in many ways forced health officials to limit her agency in unprecedented ways that went beyond a level of authority with which some officials felt comfortable. In 1910 new health commissioner Dr. Ernest J. Lederle freed Mary from North Brother Island after she promised to periodically check in with the Health Department and to cease cooking for others. While it was certainly a step down in terms of the professional level of her employment, Lederle also found her a job as a laundress.\textsuperscript{139} Leavitt notes that both Charles Chapin and Milton Rosenau, health officials outside of New York, agreed with Lederle that there was no need to isolate a healthy typhoid carrier from society.\textsuperscript{140} From a twenty-first century perspective informed by years of social history and race and ethnic studies, it can be challenging to recognize that many officials in the growing field of public health were uncomfortable with the precedent for state control that Mary’s case potentially set. Germ theory and the healthy carrier gave public health officials a new way to personally identify disease carriers, but increasingly widespread knowledge of these theories among the populace demanded that they make these identifications. Fear of an amorphous and sudden threat of disease became more predictable, but not any less threatening or frightening. In a city the size of New York with immigrants and migrants adding to the movement of germs among the growing population, public health began to be tasked with relieving the fear and anxiety of its citizens. As Baker’s work illustrates, the progressive stance that everyone should be capable of understanding facts and correcting their own behaviors not only reflected a middle-class, white, Protestant ideal; it also reflected an acknowledgement of and deep ambivalence about the growing institutional power required to support America’s largest interconnected, modern city.

\textsuperscript{140} Leavitt, 65.
Baker and Soper Compared

Mary’s unique and unfortunate situation as the first ‘discovered’ healthy carrier of typhoid did make her a kind of exemplar of the threat that immigrants and disease had always posed to the United States, and the healthy carrier narrative\textsuperscript{141} spun by the writings and actions of health officials and the press made it difficult for Americans to “discern the difference between the disease itself, nationalities, races, genders, and classes. The power to define and label became a political, medical, and legal act.”\textsuperscript{142} From this perspective it is clear why Soper and Baker are two of the most prominent individuals mentioned in scholarly accounts of Mary’s first apprehension.\textsuperscript{143} Their roles in the story are often interpreted as polar opposites to Mary’s, with Soper and Baker possessing all of the power to “define and label” and Mary bearing all of the burden of gender, class, and ethnicity in a situation made possible by advances in germ theory.\textsuperscript{144}

Even aside from the polarity of power between Mary and Soper, the only possibility for Mary to have had any agency in this situation would have been for her to understand and accept that she was a disease carrier. She could not escape the institutional authority which medical science had helped to build in the New York Health Department, but she could work with it by allowing herself to be educated about germs and to change her behavior. That she would indeed do this never

\textsuperscript{141} Wald, *Contagious*.

\textsuperscript{142} Hasian, 133. Soper mentions that she was the first carrier identified in any English speaking country. Soper, “The Curious Career of Typhoid Mary,” 701. As the existence of health carriers becomes more widely known among New Yorkers, Mary and other healthy disease carriers are referred to in the *New York Times* as “menaces,” “enemies,” “danger,” or “repositories,” and “culture tubes,” of germs. “Typhoid Mary must stay,” July 17, 1909; “‘Typhoid Mary’ asks $50,000 from city,” *New York Times*, December 3, 1911; “Typhoid Carriers,” August 15, 1912; “Doctors describe disease carriers,” September 26, 1912, 6; “Typhoid Mary has Reappeared: Human culture tube, herself immune, spreads the disease wherever she goes,” April 4, 1915.

\textsuperscript{143} For example, in Leavitt’s *Typhoid Mary: Captive to the Public’s Health* and Wald’s *Contagious: Cultures, Carriers, and the Outbreak Narrative*.

\textsuperscript{144} Nancy Tomes notes that germ theory itself had “no fixed moral or social message,” but in this case was used within a cultural context of anxiety surrounding immigration and the lower classes. For example, once Mary’s case was known nationally more Americans learned about germ theory and what a healthy carrier was, leading many cities to institute new rules for all food handlers. Tomes, 177.
seems to have been a question in Soper’s mind, for he memorizes speeches to explain germ theory to her, and thinking that cost is an issue, hastens to offer her free medical care. Whether Mary was the least bit interested in or capable of understanding the brief explanations that Soper made were in some ways irrelevant at that moment, because both of them were under very real pressure to see the results that they each wanted. Soper wished to keep the public safe from a health hazard, and as a domestic worker, it was in Mary’s best interest to become as uninvolved in any kind of scandalous activity as quickly as possible.

While Soper seemed indignant and flabbergasted that Mary would not believe in germs or their presence in her body, Baker was disappointed but not surprised. Similarly, while both Soper and Baker retrospectively acknowledged Mary’s agency and perspective in the matter, Soper additionally characterized Mary as recalcitrant, dirty and unfeminine in order to make sense of her actions. There is no doubt that Soper and Baker had the official authority and power in the situation, but to say as some scholars have that Mary’s case shows Baker as a polar opposite of the immigrants she worked with - that her very professional identity depended upon this polarity - overgeneralizes the situation. In some accounts of Mary’s case it is implicitly assumed that as a woman, Baker should have been somehow more sympathetic to Mary’s situation than Soper: that Baker is all the more complicit in the class snobbery and authoritative excess which some associate with the actions of the Department of Health in Mary’s case. Leavitt acknowledges

---

146 Baker certainly placed Mary in an economic class just as Soper did, which is illustrated in her admiration of the “class solidarity” which leads Mary’s coworkers to hide her when Baker comes to collect samples. Baker, Fighting for Life, 75. However, unlike Soper, Baker does not seem to feel the need to describe Mary as dirty, unprofessional or willfully obstinate when she refuses to cooperate with health officials. Baker simply acknowledges that while the Health Department did have all the power in the case, Mary had choices; by continually refusing to cooperate by giving samples and continuing to cook, over a period of time she lost them. Baker, Fighting for Life, 76-77. Soper, “The Curious Career of Typhoid Mary,” 698, 701, 707.
147 Hasian, 127.
148 Leavitt, 117.
similarities between Mary and Baker, pointing out that both “experienced a certain lack of power within her own world”: Mary as a single, female Irish immigrant and Baker as a single, female physician in a public position.\textsuperscript{149} However, when mentioning that Baker writes that she eventually “learned to like her [Mary] and to respect her point of view,” Leavitt interprets this to mean that Baker simply felt sympathy for Mary as a fellow woman.\textsuperscript{150} In Leavitt’s reading of the relationship between the two women any other cause for positive feeling becomes incomprehensible, because in addition to a refusal of womanly sympathy Baker is labeled with prejudiced feelings toward all Irish immigrants and members of the lower classes. Leavitt’s implicit conclusion is that if Baker had proper womanly sympathy for another woman then she should not have been able to apprehend Mary. But, “Believing as she [Baker] did, she was able to carry out her duties.”\textsuperscript{151} Putting aside the assumption that all women should automatically feel sympathy for other women, the conclusion that Baker’s feelings toward all immigrants (particularly the Irish) fueled her career in public health simplifies and obscures both Baker’s future work and her work in that infamous case. Leavitt and others have quoted Baker’s comment that Irish immigrants are “shiftless” and “numb” to argue that while Baker worked for over thirty years to care for immigrant mothers and babies, she actually had no respect for them.\textsuperscript{152}

Baker’s interaction with immigrant tenement communities began during her time as an intern at the New England Hospital for Women in Boston and remained nearly continuous during her thirty-year career as a public health official, first in New York’s Hell’s Kitchen, and then as director of the Bureau of Child Hygiene. Scholars of Mary’s case have made much of the fact that Baker worked early and often during her career with Irish immigrant communities, and was not

\textsuperscript{149} Leavitt, 117.
\textsuperscript{150} Leavitt, 117.
\textsuperscript{151} Leavitt, 117.
\textsuperscript{152} Baker, 48, 57; Leavitt, 114.
shy about describing her negative reactions to them. Leavitt quotes Baker’s description of the Boston Irish as “Numb – that seems to be the right word for all of them,” to support her conclusion that “Baker’s attitudes toward the Irish were on the whole condescending and negative, although she saw herself as compassionate.” 153 Two considerations complicate this generalization, however. First, Baker’s descriptions of the Irish as a group are always couched within their tenement environments and secondly, Baker never references the Irish as a group when discussing Mary’s case.154 In her autobiography Baker does describe the Irish immigrants who she met in Boston and in Hell’s Kitchen as “numb,” “shiftless,” “fatalistic,” “lackadaisical,” and “dirty to an unbelievable degree.”155 However, Baker’s initial descriptions of Mary include none of these words; in fact the first mention of Mary Mallon in Baker’s autobiography is: “Mary was a clean, neat, obviously self-respecting Irish-woman with a firm mouth and her hair done in a tight knot at the back of her head.”156 Baker’s description of Mary on their first encounter reflects none of Baker’s earlier impressions of Irish tenement communities, but rather evokes a particular person who is clean, efficient, and competent. Leavitt interprets Baker’s passage to mean that Baker must have pointed out Mary’s cleanliness simply because Baker was surprised to encounter it, instead really expecting Mary to be dirty and “shiftless.”157

To Baker, a woman who is self-respecting is not shiftless. The rhetoric in Baker’s autobiography and the press coverage of her work with the Bureau illustrate that – not unlike many progressives - Baker liked people who made an effort to take care of and better themselves. In her initial description of Mary, Baker illustrates her as making an effort to be professional and

153 Baker, 48; Leavitt, 114.
154 Baker’s account of Mary’s case is covered in pages 72-77 of her autobiography, after she has related her experience as an intern among the Irish immigrants of Boston in the previous chapter.
155 Baker, 57, 58.
156 Baker, 73.
157 Leavitt, 115.
competent, so Baker may have been quite disposed to like her and to assume that Mary would understand and accept the medical reality of her situation. Indeed, while Soper sometimes found it necessary in his accounts to associate Mary with immigrant stereotypes when it became clear that she would not believe him – indeed that she would not willingly cooperate within the “new models of being”\textsuperscript{158} which medical science was establishing – Baker’s descriptions of Mary stay consistent during her brief recollection of the case.\textsuperscript{159} In publications written after his initial encounters with Mary, Soper acknowledges her literacy and intelligence, but also focuses on her “soiled” hands, “strong” will and body, “obstinate” refusal to believe him, and “distinctly masculine” mind and walk.\textsuperscript{160} As Leavitt summarizes, Soper’s descriptions of Mary illustrated “her deviance from acceptable female norms,”\textsuperscript{161} and his subsequent recounting of Mary’s refusal to believe him and her lack of cleanliness as a cook reveal Soper’s class bias.\textsuperscript{162} As Leavitt relates, Soper acknowledges Mary’s capacity for literacy, writing, and understanding, but as it becomes increasingly clear that she is not willing to participate in the “new models of being in the world”\textsuperscript{163} which medical science is building through the New York Health Department, his descriptions of her do emphasize her deviant and dangerous behavior as a lower class, immigrant woman.\textsuperscript{164}

In contrast, Baker’s physical descriptions of Mary betray no such bias as Soper’s. Baker’s criticism of Mary is respectful and centers on the fact that Mary refuses to use the agency that

\textsuperscript{158} Wald, 70.
\textsuperscript{159} It does have to be noted that while Soper continued to write about Mary’s case during his career, Baker’s writing focuses on her work with the Bureau. Thus, we have much less to work with when it comes to Baker’s understanding of the case as with Soper’s.
\textsuperscript{160} Soper, “Curious Career,” 698, 704, 707; “The Work of a Chronic Typhoid Germ Distributor,” 2022
\textsuperscript{161} Leavitt, 107.
\textsuperscript{162} Leavitt, 109.
\textsuperscript{163} Wald, 70.
\textsuperscript{164} Soper, “Typhoid Mary,” 1919; “Curious Career,” 1939. It’s also clear that Mary was an intelligent person who understood or was willing to learn about the rights and responsibilities that she had in society, because she sues the city and five doctors involved in the case (not Baker) in 1911. “’Typhoid Mary’ Asks $50,000 from City,” \textit{New York Times}, December 3, 1911, 9.
she possesses within her situation. When relating the first time that Mary refuses to give
specimens to Baker, Baker comments that her immediate reaction was that “here was another
case of that blind, panicky distrust of doctors and all their works which crops up so often among
the uneducated – and among the educated too, for that matter.” Baker never assigns Mary to
any class or category other than that of those who are determined to remain ignorant about
medical science and their individual ability to contribute to public health. In her own way, Baker
recognized that by chance Mary unfortunately stood at the very cusp of what historian of science
Thomas Kuhn would much later call a ‘paradigm shift’; in this case in the science of medicine.
But Baker did not use Mary’s tenuous social status as an excuse for blaming her or, conversely,
for endangering the lives of others. Baker acknowledges Mary’s class in society by frankly admiring
the “class solidarity” shown by the fellow workers who hide Mary, and reflects that over time she
“learned to like her [Mary] and to respect her point of view.” However, Baker never assigns
Mary’s inability or unwillingness to understand to her gender, ethnicity, or social class. Leavitt
argues that “Baker did not regard Mary Mallon as an individual but rather as someone
representing a class, the uneducated, who behaved as Baker would expect, irrationally,” but in
her writing Baker consistently asserts that people of any social class, cultural background, gender,
or education level can decide to ignore how medical science impacts the way they live and move
in the modern, interconnected world. Baker’s ultimate criticism in the case of Mary Mallon and
her later work in infant and child hygiene is for those who irrationally refuse to confront facts or
ignore them out of self-interest. Taking an even broader view, if Baker categorized Mary with a

165 Baker, Fighting for Life, 74.
167 Baker, Fighting for Life, 75, 76.
168 Leavitt, 115-116.
169 Baker, Fighting for Life: Doctors 113, 129, 137-8; Midwives and obstetricians 111-113; Parents 147-148.
170 Baker, Fighting for Life: Mothers 58-59; Doctors 76-77; Doctors and Congressmen 138-140
group of immigrants who could not be educated, it makes little sense why she would have then spent the next thirty years of her life developing ways to deliver them that education.

Baker may well have been angry at Mary – as one intelligent woman with a respectable job to another – for deciding to remain ignorant and hurt others by that ignorance when she could have taken the new information about her situation and done good with it. This reflects a common progressive criticism when faced with public reluctance to embrace positive change, but also Baker’s personal affinity for what she termed “hopeless situations,” and the enjoyment she felt in being able to mentally and physically work toward solutions for them.\(^{171}\) Mary was released from a two-year quarantine in the hospital in 1910, only to be apprehended five years later in 1915 for causing a typhoid outbreak as cook for a women’s and babies hospital. In possibly one of the greatest understatements of Mary’s case, a reporter for the *New York Times* commented in July of 1909 that “Her case has gained a notoriety that will follow her, and will deprive her of a means of livelihood until the doubt about her unique propensity is dispelled.”\(^{172}\) While it had been building over time, by 1915 that notoriety came to be more specifically associated with Mary’s position as an agent of infection in a place where the most vulnerable members of society – mothers and babies – were supposed to be safe. Aside from Mary’s inability to believe in germ theory, Baker saw Mary’s stubborn persistence in her occupation as a cook as her primary obstacle to freedom.\(^{173}\) There can be no doubt that Baker did see differences between herself and

---

\(^{171}\) *Baker, Fighting for Life*, 1.

\(^{172}\) “Healthy Disease Spreaders,” *New York Times*, July 1, 1909, 8.

\(^{173}\) There is a clear moral judgment of Mary expressed in *New York Times* articles from 1915, expressing that Mary had gone too far in becoming employed in a hospital for women and babies. While discussions about possible cures for typhoid continue in the paper after this incident, it is made clear that Typhoid Mary has been given her chances for freedom and now cannot be trusted. It is also clear that the physical and the social movements of identified typhoid carriers are acceptable subjects for “surveillance.” “Hospital Epidemic from Typhoid Mary,” March 28, 1915, 11; “Typhoid Mary has Reappeared,” April 4, 1915, SM3; “A cure for Typhoid Mary,” April 8, 1915, 12. In the first two articles it is made very clear that Mary will not have another chance to live freely in the city. The possibility of a cure is discussed in all three of these articles, but in the last one a letter to the editor from a Dr. A.H. Werner argues that he knows he could cure
Mary Mallon, and that in her autobiography she did certainly describe some Irish immigrants as “shiftless.” By Baker’s own description, however, Mary was not shiftless. As Baker mentions, typhoid carriers after Mary were usually allowed by the Health Department to remain freely mobile in society as long as they took jobs that did not involve food handling, and “It was Mary’s tragedy that she could not trust us.” In Baker’s estimation, by refusing to believe in germs or to change her behavior in ways that would keep others out of danger within an interconnected urban environment, Mary essentially sentenced herself to exile. The modern urban environment would be one aided by science.

Private/Public Boundaries of Public Health

It would be easy to consider Baker a cog in the expanding machinery of public health, carrying out the prescriptive procedures necessary to minimize disease risk at the municipal level. To do so would be to project back a twenty-first century consciousness of the continued struggle between individual and societal interests in American public health. In her autobiography Baker acknowledges that the complex components of a social system that produced a lower class and confined it to ill-equipped tenement districts would need to change before public health would be able to make substantial progress: “It was going to take a world of change to better all this; I knew that many people of many minds might ponder and work for generations before any change could be made in the social organism.” While Mary Mallon did have the agency to voluntarily

Mary (and other carriers) and would be willing to in order to engage the services of a good cook. The tone of this discussion is clearly that of upper-middle class New Yorkers who feel anxious about their servants.

174 Baker, Fighting for Life, 57.
175 Baker, Fighting for Life, 77.
176 Baker also notes how she finds it ironic that if Mary had acquiesced to giving Baker blood and urine samples she might never have been bothered by the Health Department again, because typhoid bacteria were only later found in her stool sample after she was taken to the hospital. Baker, Fighting for Life, 75.
177 One need only consult 2015 news headlines regarding the conflict between parents who wish to have the choice to inoculate their children and the schools who wish to require those inoculations.
give samples of her waste and bodily fluids to Dr. Baker, that agency was limited by the bounds of a growing medical authority in New York City. Mary’s transformation into “Typhoid Mary” occurred at a moment when the power and jurisdiction of the New York Department of Health to impinge on individual rights was still being negotiated.

At the turn of the twentieth century public health underwent a profound transformation in response to the rapidly changing demands of “World” cities like New York, expanding its authority from responses to disease outbreaks to year-round surveillance and the ability to invade personal and bodily space in the interest of society. New York City’s public health officials were able to quarantine a healthy carrier of typhoid for the remaining twenty-six years of her life in part due to the need of the city’s newly-reorganized Department of Health to prove itself as a competent protector of its citizens, and the growing wave of anxiety surrounding the “immigrant menace,” invisible germs and healthy carriers. In part, Mary’s quarantine was also due to the fact that she was the first identified healthy carrier in the United States, and a precedent for the degree to which the Department could impinge on her rights did not at first exist. The Department and its physicians occupied an as yet liminal space of authority in the life of the city in 1907. As Julia Lathrop and her federal Children’s Bureau would find out beginning in 1912, the medical establishment associated with research hospitals did not view public health research as “real” science. However, increasing respect for medical experts by the upper and middle classes and

---


180 Reports regarding the large suspected number of healthy carriers in the U.S. and abroad, and anxiety about the ability of public health efforts and inoculations to protect the public from these people show up quite frequently in the New York Times after “Typhoid Mary” is identified in 1907: “Doctors Describe Disease Carriers,” September 26, 1912; “Typhoid Carriers,” August 15, 1912; “A Typhoid Mary’ Found in Alsace,” March 30, 1913, C4; “Typhoid Carriers,” November 29, 1914.

181 Barker, “Birthing and Bureaucratic Women.”
anxieties about social cohesion did, as historian Priscilla Wald argues, help create a narrative of the healthy carrier which helped solidify the efficiency and effectiveness of the emerging field of public health to protect the city.\textsuperscript{182} In the expanding practices of the Department of Health was also reflected a new and ongoing kind of tension between the responsibilities of individuals and of society for that sense of protection. One of the consequences of the ability to scientifically identify a human being as a disease carrier was that “social welfare was the responsibility of individuals.”\textsuperscript{183} A government organization charged with keeping the safety of both individuals and society had to invade the privacy of those individuals in ways that were not possible with older medical diagnostics, and which carried the authority of science.\textsuperscript{184} As Baker notes in her reflection on Mary’s case, “Boards of Health have judicial, legislative and executive powers. They are the only public agencies that combine all of these powers.”\textsuperscript{185}

For Baker the medical and eventually political authority which the Department of Health began to develop during the first decade of the twentieth century was tempered from her

\textsuperscript{182} Wald, 70.
\textsuperscript{183} Wald, 72.
\textsuperscript{184} The right to privacy was a contemporary legal issue. In Warren and Brandeis’ classic paper “The Right to Privacy” they give several potential examples of when the legal concepts of libel or property rights did not quite cover the threats to “an inviolate personality” that modern times presented. One example given is that of a drawing of a person or comment about a person’s domestic life being published in the press without their desire or consent. As they suggest, “If you may not represent a woman’s face photographically without her consent, how much less should be tolerated the reproduction of her face, her form, her actions, by graphic descriptions colored to suit a gross and depraved imagination.” Not to mention identifying a woman as a healthy carrier of typhoid fever, and creating cartoons of her cooking with human skulls, as the press did with Mary. New Yorkers were therefore familiar with conversation about the right to privacy, and were sensitive to the fact that very personal information was being revealed about Mary to the public by the Health Department and by the press. One key aspect of her case is that she did not cooperate in sharing her blood and waste samples with the Department, who presumably would not have published the results. Another is that as a cook, the Department clearly considered her health status as more of a public concern than it would normally be considered for another private citizen. As Warren and Brandeis note, personal behavior or quotations from a private citizen should not be considered fair game for the press, whereas they might if the person is running for public office. As a cook, it was not entirely true of Mary that her status as a healthy carrier of typhoid had “no legitimate relation to or bearing upon any act done by him [her] in a public or quasi public capacity.” Samuel D. Warren and Louis D. Brandeis, “The Right to Privacy,” Harvard Law Review 4, no. 5, (Dec. 1890): 214, 216.
\textsuperscript{185} Baker, Fighting for Life, 77.
perspective by her experience as a part-time school inspector beginning around 1902. She writes that she avoided spending any time in the Department’s offices because she felt surrounded by what she called an aura of “negligence and stale tobacco smoke and slacking.”\textsuperscript{186} Most of her fellow school inspectors avoided having to physically go to the schools to inquire after sick children by calling the schools on the phone instead.\textsuperscript{187} To put it mildly, the Health Department prior to Mary’s case was not known solely for its efficiency and thoroughness.\textsuperscript{188} Shortly after Baker began her part-time work in public health to supplement the income from her private practice, two new departmental appointees, Dr. Ernst J. Lederle as Commissioner of Health and Dr. Walter Bensel as assistant sanitary superintendent, began the slow process of improvement which would give Baker just enough hope to see the Department become one of the nation’s most creative and efficient implementers of scientific knowledge to both individual and social well-being.\textsuperscript{189} This reputation took time to develop, however, and when Baker found herself being ordered to collect blood and urine samples from suspected typhoid carrier Mary Mallon, the

\textsuperscript{186} Baker, \textit{Fighting for Life}, 56.
\textsuperscript{187} Baker, \textit{Fighting for Life}, 56. By 1918 as the head of the Bureau of Child Hygiene, Baker was still having to cajole the city for enough appropriations to hire enough good school inspectors to care for all of the children in the city’s schools. In addition, when her report on the state of school inspections and other responsibilities of the Bureau went to the Mayor that year, the Chairman of the Civil Service Commission James MacBride delivered an edited version that did not ask for all of the appropriations. “Dr. Baker’s report cut to fit M’Bride,” \textit{New York Times}, April 28, 1918, 12. Though many of the individual inspectors themselves did not exude efficiency, the Health Department had been routinely inspecting schools since 1886. “Chronology of New York City Department of Health (and its predecessor agencies) 1655-1966,” \textit{New York City Department of Health Centennial}, 1996, 8.
\textsuperscript{188} John Duffy’s chapter on “The Flowering of Public Health” covers several changes in administrations which impacted the quality of the work and the appropriations available for the Health Department. Just before Baker joined the Department, a reform administration was elected to replace the previous Tammany-controlled one in 1901. This is when Dr. Ernst Lederle was appointed health commissioner and began to overhaul the department alongside previous commissioner Dr. Biggs in 1902. Duffy, \textit{A History of Public Health}, 238-276. As a later example, Mayor Hylan asked Commissioner of Accounts David Hirshfield to begin an investigation for graft in the Health Department in 1918, just after Dr. Baker’s report was tampered with by Chairman of the Civil Service Commission James MacBride. “Dr. Baker’s report cut to fit M’Bride.”
\textsuperscript{189} Duffy, 252; Leavitt, 40-42.
debate which ensued over the power and the role that public health should play in the lives of urban Americans was at that point just waiting to happen.

One window into that debate regarding the authority of the Health Department can be seen in the coverage of Mary’s case in the *New York Times*. Public anxiety about the need for the protection of the Health Department and its potential invasion of the rights of citizens in order to provide that protection is plain in articles between 1909, when Mary filed a writ of *habeas corpus* from North Brother Island, and 1915, after Mary was released into society for five years and then again apprehended for causing a typhoid outbreak at Sloane Women’s Hospital. A 1909 letter to the editor signed “A New Thought Student” illustrates anxiety about the power of the Health Department to detain people who have not committed a crime, calling a new “medical monarchy” the plan of “religionized germ fanatics.” The author argues that with a faith comparable to that of a religion, public health officials and citizens of New York are trying to create a “simpler life” and social cohesion by labeling people as diseased undesirables\(^\text{190}\) with the authority of medical science: “If one unfortunate women must be labeled ‘Typhoid Mary,’ why not send her other companions? Start a colony on some unpleasant island, call it ‘Uncle Sam’s Suspects,’ there collect Measles Sammy, Tonsillitis Joseph, Scarlet Fever Sally, Mumps Matilda, and Meningitis Matthew.”\(^\text{191}\) For this author, the power to label a person with a scientifically-endorsed identity and to physically separate them from society in the interest of easing the anxieties of the elite clearly mirrors that power historically wielded by religious authorities, also pointing to the criticism that an enforced social cohesion via American Protestantism may now be replaced by that of medical science. Describing him or herself as “A New Thought Student” suggests that

\(^{190}\) The imagery used here to describe a colony of diseased social outcasts certainly harkens back to the ancient practice of establishing leper colonies.

he/she would prefer individuals to have sovereignty over their own health and well-being, a response that T. J. Jackson Lears might have recognized as impotent in its mixed dependence on both religious and secular/scientific norms. The letter also illustrates the keen interest of individual New Yorkers in Mary’s case and what it meant for individual rights and public safety in the growing city.

Health Department physicians are often quoted by the New York Times, recognized as the experts in Mary’s case, acknowledging the anxiety expressed by the public on Mary’s and its own behalf. When Mary is released from North Brother Island in 1910 it is explained in an article that she has promised she will not work as a cook and will check in periodically with the Health Department. Health Commissioner Lederle is quoted as saying that he has “a personal interest in her,” and feels that being detained for three years has given her plenty of time to understand how and why she poses a danger to others and now knows “the precautions which she ought to take.” Though Dr. Ernst Lederle represents a bureaucratic institution with, as Baker noted, “sweeping powers” to invade personal privacy, he is presented as a particular person in this article, with a personal connection to his patient Mary. While “Typhoid Mary” clearly signals to readers the subject of the article, the subtitle reads more specifically that “Lederle thinks she’s learned to keep her germs to herself,” assuming that readers will also be familiar with who he is, and will trust him. Certainly the tone of these and many other articles in the New York Times regarding Mary’s case are directed toward New York’s elite classes, and acknowledge the fears they have regarding foreign or low-class domestic workers all secretly being healthy carriers of diseases like typhoid. Domestic and food workers could expect to have their privacy invaded in the interest

192 Lears, No Place of Grace.
193 “‘Typhoid Mary’ Freed.”
194 Ibid.
195 Kraut, Silent Travelers, 50-77; Soper, “Typhoid Mary”; “‘Typhoid Mary’ Asks $50,000 from City.”
of public safety much more than the kinds of families for whom Mary Mallon worked. Germs and healthy carriers brought to the fore both the potential invasion of upper-class domestic spaces, and of Mary’s physical person in the dynamic relationships of interconnection within the city. Just as germs crossed boundaries of class and physical bodies, affecting both individuals and society, the Health Department’s reach extended past those boundaries in the form of regulations carried out by individual experts.

Disease *prevention* rather than treatment required the cooperation of individuals as much as of institutions, and it would not have benefited Ernst Lederle or his colleagues were they to be seen by New Yorkers as wielding their power to invade private boundaries anonymously and without cause.196 Scholarly analysis clearly demonstrates that Mary’s personal agency was limited by her gender, ethnicity, and class, but the Health Department was keenly aware that she was still entitled to some agency and that it behooved them to make her choices plain to both her and to the public.197 Lederle and others in the Department took pains to make clear that they felt it was wrong for Mary to be detained for so long, particularly once other healthy carriers were identified and allowed to remain in society.198 Aside from the fact that Mary was the first, and so no set protocol had yet developed for healthy carrier cases, it is clear that Mary was detained for so long in part because she refused to accept that she carried a disease and to do anything to prevent herself from spreading it.199 Again, the progressive stance that education should cause people to act properly can be seen in the actions of Lederle releasing Mary in 1910, Soper memorizing speeches to repeat to her explaining how important her case and her cooperation were, and the easy and familiar way with which the topic of healthy carriers is discussed in the *Times* in the years

196 At the very least, the Health Department depended on support from local taxes and charitable organizations, and thus were never free to conduct their work in ignorance of their audience.
197 Hasian; Leavitt; Mendelsohn.
198 “Typhoid Mary’ Freed.”
just after Mary’s 1907 apprehension. Mary’s ability to understand the medical science which explained her new identity was not questioned by health officials such as Lederle, Soper, or Baker, but it was clear that those health officials and the readers of the New York Times hesitated over how much authority the Department of Health should have with personal liberty in cases where a healthy carrier did refuse to acknowledge that new identity. In refusing to acknowledge the potential of her interconnections with the city to infect other people with typhoid, Mary also essentially refused to acknowledge that her work and her body were part of “new models of being” in the much larger “social organism”: the city itself.

Within the context of her autobiography, what Baker calls the “social organism” can be partially explained by her use of the phrase “human machinery” just above it in a chapter about her first years as a physician in Fayette Street in Boston and Hell’s Kitchen in New York City. Not unlike the imagery evoked in Manhattan Transfer, Baker describes her work as taking place amid a complex web of interconnections among people and the man-made landscape of the city, in which the agency of individuals seems to be overtaken by the dynamic movement of the complex organism/machine. Baker notes that her work delivering babies and checking on school children in the cities’ immigrant tenements exposed her to “The problems of food, clothing, shelter and children” that the families bore: what Baker refers to as the “injustice that human.

201 Wald, Contagious, 70
203 Robert Crunden writes that Manhattan Transfer is a novel about the city itself and is “in essence physiological,” in that its huge dynamic body feeds while at the same time digests its individual members: “It begins with the act of ingesting, as the water washes in a ferry that disgorges people even as it wallows in garbage; it will end when the city excretes the only character to retain his humanity more or less intact. . . In-migration and detritus are diastole and systole....” Crunden, Body and Soul, 98-99. See Crunden’s chapter on the way that Williams’ profession as a physician influenced his poetry about the modern condition. “William Carlos Williams and the Suburban Doctor’s Eye,” in Body and Soul, 107-132.
machinery should always be in need of repair.” For Baker this injustice was compounded by the “official negligence and dishonesty” she encountered in her first years as an inspector with the Health Department. By the time Mary’s case became known to the Department it had “shuddered at the shake-up and house-cleaning that occurred” with the appointments of Dr. Ernst Lederle and Dr. Walter Bensel. Though the extent of the power which the Department had to detain Mary and other carriers continued to be debated after her case, it was no longer as much a question that Baker and her colleagues could have some impact on the nature of the city’s interconnections between people. As Wald explains, “the story of the first known healthy carrier of typhoid did more than influence public-health policies. It harnessed the authority of science to depict the medical implications of the changing spaces, interactions, and relationships attendant on urbanization and industrialization. And it entrusted the fate of the white race and the health and welfare of the nation to social engineers such as George Soper.” While this new medical depiction of the city’s space, or “models of being in the world” certainly was sometimes entrusted to people like Soper, it was also entrusted to people like Baker, who respected Mary as a person but not her refusal to protect others from disease.

Baker’s work in public health during Mary’s case and afterward in her work with the Bureau of Child Hygiene consistently illustrates her acknowledgement of and engagement with the interconnections among New Yorkers and their built environment that became a new and dynamic “social organism” in the first decades of the twentieth century. Likely due to the wide range of interconnections within this social organism that could potentially hurt Mary’s tenuous

---

205 Ibid.
207 Wald, 71.
208 Baker, *Fighting for Life*, 76-77. Articles from both Soper and the *New York Times* paint cooks to be a class of persons especially important to monitor as they can potentially infect many people through the preparation of food: Soper, “Typhoid Mary”; “‘Typhoid Mary’ Asks $50,000 from City.”
economic and social status as a female Irish immigrant, Mary neglected to acknowledge the hurt which she could cause through those same connections. Baker’s later work to decrease the city’s infant mortality rate not only depended on her knowledge of the city’s interconnections but also her endeavor to improve them.209 A majority of infant deaths occurred among the poor, and for reasons that better economic and logistical connections would solve. Many babies died during the summer months due to heat and malnutrition because they were housed in small apartments with no air circulation and many tenement mothers did not have access to clean, pasteurized milk. Baker and her Bureau focused on the connections that harmed or were lacking by making that milk available for free or a discounted rate within the tenement communities, and by visiting mothers in their own homes to show them how to store and prepare it. Baker was also keenly attuned to institutional connections that harmed rather than helped babies. When data from the Bureau suggested that premature or “foundling” babies of the upper classes were still dying at a rate of 50% in foundling hospitals, Baker acknowledged the positive potential of direct maternal care over clinical efficiency by placing the babies with experienced tenement foster mothers.210 The promise of medical science to better the social organism known as New York substantially influenced Baker’s work as she concentrated on making connections between the city’s resources and its tenement communities. As evidenced by the foundling foster program, throughout her

209 Baker notes in her discussion of her early days with the Health Department that “There can hardly be an obscure corner of Manhattan Island into which I have not poked my official nose at one time or another.” Fighting for Life, 69. Baker’s Bureau became a bit famous for its map of the five boroughs, which Baker tacked up in the main office and with the help of her team of nurses and doctors covered with red and blue pins, indicating all locations in the city with decreased babies or children, respectively: “Another Campaign to Save the Babies,” New York Times, June 5, 1910, 10; “Infant Death List Cut 50 per cent,” July 25, 1909, C7; “Saving the Lives of Babies in Congested Districts,” July 3, 1910, SM11; “Twenty Years’ Work for Our Babies,” September 9, 1928, 117.

career Baker also began more blatantly to acknowledge the useful contributions of the experiential or non-scientific aspects of those tenement communities to that interconnectedness.

In the case of Typhoid Mary, the *New York Times* acknowledged the growing perception that public health required an examination of the interconnections that built an organism like the modern city, as demonstrated in their 1915 clarification of George Soper’s credentials in the case: "Dr. Soper, best known perhaps for his work as Chairman of the recent Metropolitan Service Commission of this city, is not a physician. He is a sanitary engineer, which is, after all, only another name for the doctor to sick cities, rather than to sick individuals."\(^{211}\) Sick cities required doctors, but sick individuals still did as well. Unlike Soper, Baker was a physician of cities *and* of individuals.

History of medicine scholar J. Andrew Mendelsohn argues that, in general, public health policies in New York City after Typhoid Mary were "humane, but not social,"\(^{212}\) meaning that social factors of disease such as poverty, pollution and lack of access to resources were still present, and often acknowledged, but could not compete with the perceived efficiency of trusted public health officials targeting the disease organism where it originated – within the body of an individual.\(^{213}\) Through Baker’s subsequent work with tenement mothers and babies, her approach to public health does not negate the biological reality of the existence of infectious disease, but rather supplements it with some practical awareness. In her autobiography, Baker questions the amount of power that Health Departments after the case of Mary wielded over their citizens, but never negates the usefulness of new scientific theories and methods like the identification of healthy carriers in helping to make the interconnections between people safer and less anonymous. She acknowledged individuals’ responsibility to the safety of society while affirming their agency

---

\(^{211}\) "Typhoid Mary has Reappeared."

\(^{212}\) Mendelsohn, 269.

\(^{213}\) Nancy Tomes describes the shift in attention among public health officials from a focus on cleanliness to one of diagnostic accuracy of disease detection, which placed more emphasis on individuals. Tomes, 237-241.
within it. While Leavitt argues that Baker only “saw herself as compassionate,”\textsuperscript{214} it makes more sense to see the strategies of her work as compassionate. As Nancy Tomes describes, “the gospel of germs did its share to divide Americans along lines of class, gender, race, and ethnicity,” but, “The fact that the microbe preyed upon all bodies, regardless of their racial and social characteristics, opened up some avenues of moral and social discourse that did not simply encourage suspicion and hate.”\textsuperscript{215} In light of her later work with immigrant mothers and their children, it becomes clear that the main class that influenced Baker’s philosophy of public health was that of the most vulnerable members of the social organism, and those who were put in danger during Mary’s last job as a cook at Sloane Women’s Hospital: babies.\textsuperscript{216}

**Conclusion**

It is important neither to neglect nor overemphasize the very real social bias that haunted immigrants like Mary Mallon in the early twentieth century. Certainly Mary’s socioeconomic position meant that her profession of cook was one of only a few paths of advancement available to immigrant women in New York’s urban environment. It was perhaps unrealistic of Baker and Soper to expect Mary to accept the label of healthy carrier, when her success as a professional depended upon a persona of cleanliness and efficiency. However, Baker’s interest was ultimately the health of the city, and as a healthy carrier Mary posed a threat to all for whom she cooked, of any social class. Baker’s realistic assessment of and simultaneous engagement with both individuals and the “social organism” which surrounded them during her career illustrates that

\textsuperscript{214} Baker, *Fighting for Life*, 48; Leavitt, 114.

\textsuperscript{215} Tomes, 266.

\textsuperscript{216} Baker was not the only health official concerned with the potential for disease outbreaks to affect infant mortality. In a *New York Times* article from 1912 an international meeting of physicians discussed the transmission of typhoid and its potential impacts on infant mortality. “Doctors describe disease carriers.”
Baker and many of her colleagues did acknowledge the institutional power and control which were developing in response to the city’s unprecedented web of interconnectedness.217

Biased quotations about Irish immigrants and her description of sitting on Mary in the ambulance are the portions of Baker’s autobiography cited by most scholarly accounts of the case, but a broader examination of Baker and her work in public health after Mary reveal a deep ambivalence about the appropriate role of institutions in the lives of individuals and society. Historian J. Andrew Mendelsohn acknowledges that Baker was not a power-hungry government official counting on her involvement in Mary’s case to advance her career. He argues that, in general, public health policies in New York City after Typhoid Mary were “humane, but not social”; what we would now call social factors of disease were still present, and often acknowledged, but could not compete with the perceived efficiency of trusted public health officials targeting the disease organism where it originated – within the bodies of individuals.218 Also, improvements to the infrastructure of tenement neighborhoods, while key to the improvements of the quality of life of New York’s working class, did not fall under the purview even of public health, even if their importance was recognized.

Mendelsohn recognizes that Baker’s later work exhibited social sensitivity to the conditions in which her immigrant patients lived, but asserts that it was not learned from her early experience in public health during the case of Typhoid Mary.219 He argues that the conditions in which tenement communities lived: dirt, air pollution, crowding, lack of plumbing, lack of access to clean water, milk, and refrigeration, shifted from being causes of disease to conditions associated with those who carried disease.220 Clearly the families for whom Mary Mallon worked

218 Mendelsohn, “‘Typhoid Mary’ Strikes Again,” 269.
219 Ibid., 276.
220 Ibid., 277.
were not robbed of their identities and means of earning a living by their encounters with typhoid as Mary was. Classism and nativism were inescapable aspects of life in early twentieth-century New York. It was not that public health officials were unaware of the environmental conditions that became associated with certain social classes, but that there was a danger of Progressive complacency about them: if individuals could be taught how to recognize and avoid disease, then there was hope that they would take care of their living conditions themselves. \(^{221}\) Baker acknowledges multiple factors in tenement neighborhoods that truly fell under the responsibility of landlords and city regulations to monitor. Poorly designed and maintained infrastructure and predatory landlords impacted the effectiveness of Health Department efforts to bring preventative health to tenement districts. However, much of Baker’s early work acknowledges her lack of immediate influence and utilizes what agency she and her patients did have available to them. \(^{222}\) As will be demonstrated in further chapters, Baker’s approach to public health was one that always looked toward improvement, but which took every practical step possible to improve health conditions for New Yorkers in the present moment. Perhaps most importantly, Baker’s main strategies with the Bureau of Child Hygiene to help New York City fight infant mortality.

---

\(^{221}\) Edward Marshall, “A Regiment of Babies’ Lives Were Saved Here in 1912.” Dr. Baker is quoted extensively in this article, emphasizing that city conditions are “man-made,” and that when immigrant families are educated in how to keep their surroundings hygienic and healthy for their children, fewer babies die even though they are still living in tenements. “Finds country baby in greatest peril,” New York Times, March 10, 1922, 13. The following New York Times articles do not all quote Dr. Baker as reference, but also illustrate the idea that the education of mothers will lead to the direct improvement in living conditions in tenements: “Chances of living against children of poverty,” April 10, 1910, SM11; S. Josephine Baker, “Deliberate Waste of Life,” June 4, 1911, SM9; “Dirt fattens flies and kills babies,” March 24, 1913, 8.

\(^{222}\) In her writing Baker steadily maintains the perspective that the community does have a responsibility to take measures to reduce mortality (for most of her career she focused on infant mortality), and that public health should use that responsibility to provide whatever services it can to better the situation in a given moment. There is always something more that can be done, such as improving housing conditions, but Baker believed that while public health could get involved in discussions about housing, city businessmen and politicians ultimately would have to acknowledge and improve infrastructure issues. Baker, “Deliberate Waste of Life.”
mortality demonstrate her continuing faith in the ability of all citizens to understand and work with the science that would help them counter urban anxieties about crowding and chaos with a narrative of life and potential.
CHAPTER 3 – THE BUREAU OF CHILD HYGIENE

The death rate has been reduced 20 per cent, but Dr. Baker, who organizes the campaign, (a woman, please,) declares that the general opinion among authorities is that the mortality could be reduced 60 per cent, if every baby had pure milk, good air, and fair sanitary conditions.

In this country the Federal Government itself has not taken up the question of infant mortality, but practically every large city has, because they realize the enormous detriment to the community itself if this tremendous waste of life should go on.

That is a fair sample of the way we were always having to use our mother-wit and invent something which had not existed before because no one had taken into account the practical circumstances under which underprivileged children are born and brought up.223

When it was created in 1908, New York City’s Bureau of Child Hygiene was a unique public health response to a unique set of early-twentieth century issues made manifest in high urban infant mortality rates. New York City was America’s largest urban center, a gateway for influxes of immigrants through Ellis Island, a growing center of mass production and mass marketing, a modern metropolis. Concomitant with the new kind of city that New York was becoming was a broad set of cultural anxieties. Mothers were increasingly working outside the home, breastfeeding less, depending more on consumer goods to raise and care for their children, facing unprecedented crowding and dangerous urban living conditions. High density populations in the poor living conditions of growing tenements fostered the spread of disease, and the infant mortality rate was high. There was a sense in the popular press, in the work embraced by charities and philanthropists and artists like Louis Hine and Jacob Riis, in the agendas of politicians, that a city as scientifically advanced and modern as New York should be able to care for its most vulnerable citizens. Anxieties about death, disease, and disorder needed a counter, and in the Bureau of Child Hygiene, public health attempted to provide it.

The Bureau itself was the first of its kind in the nation, and likely the world. Likewise, as its director, Baker was the first woman in the nation to serve as an appointed public health official of a major municipality. Being a woman holding a public office in a still-professionalizing field placed Baker in a situation where most other city officials had no precedent for what to expect from her. As a physician who constantly sought to combine scientific efficiency with practical application in her approach to public health, the confusion occasioned by her gender sometimes gained her support for her projects. Baker sought out good relationships with the press and utilized data in

order to keep New Yorkers informed of the Bureau’s progress and the good work to which their tax dollars contributed. Lastly, the Bureau’s strategies most often targeted tenement mothers, but were relevant to all mothers. Infant mortality was greatest in the tenements, but it impacted every ethnicity and every class. The challenges that modern mothers faced meant that all required an education in scientific motherhood. Through the Bureau’s programs and the press, Baker continually urged all mothers to breastfeed their babies when possible, and to seek preventative care from a clinic or physician both before and after childbirth. For Baker, infant mortality mattered in the long term to individual families, but also to the entire city as a whole.

This chapter examines three early strategies of New York’s Bureau of Child Hygiene that elucidate an approach to public health that includes both individual and institutional effort against infant mortality, and acknowledges the public’s capacity to understand and practically implement medical science in infant preventative health. Just as was evident in Chapter 2, Baker’s belief that everyone was capable of utilizing science to benefit their own lives is one that infused her approach to public health. Once the Bureau’s baby health stations, Little Mothers’ Leagues, and foundling foster programs began to produce the desired result of healthier babies, both the citizens of New York and other American cities embraced the narrative of life these strategies held up against what people had begun to believe was the dark inevitability of infant mortality. That narrative was helped along by public health experts like Baker, but also by the press, the support of taxpayers and politicians, and by the mothers themselves. Some of the Bureau’s most effective educators were the babies’ older sisters who attended “Little Mothers” classes. As Baker would continue to assert through the Bureau’s creative health strategies and her own writing, “In my experience, nearly all mothers are fine when they are given half a chance to know how to be. As soon as they saw that their babies were flourishing, despite the cruelly hot weather, they became our most efficient aides.”

By making their individual connections to the larger resources of the city clear, mothers had a modicum of control in the preventative health of their babies.

A Woman Heads the Bureau of Child Hygiene

Specific projects undertaken by New York’s Bureau of Child Hygiene, as well its relationship with the popular press, demonstrate an institutional understanding of the need for balance

---

224 Baker, Fighting for Life, 86.
between the societal and individual use of science for urban public health in early twentieth-century New York. Beginning her work with the Department during a time when its ability to keep up with the increasingly dynamic nature of teeming city life was still in question, Baker recognized that medical science was only as good for the public as the structures and institutions that made it available to them. Institutions intending to aid the public needed to continually adapt to the people and the city they served. As Chapter 6 will demonstrate, Baker identified that at the national level responsibility for the health and well-being of Americans also rested in both individual and institutional hands. In the twentieth century public consciousness of the factors shaping Americans’ health first broadened to a truly national level.

Indeed, Baker’s early career coincided with a moment when germ theory helped to make public health an (inter)national issue. Medical events could no longer be seen as individual or separate, particularly within the context of an increasingly expanding, increasingly international, city like New York. Vastly disparate access to resources experienced by individual New Yorkers within the larger body of the city and the nature of their interconnections with that body likewise suggested a need for expert, scientific advice in the rearing of children. The Bureau’s strategies for maternal and infant preventative care under Baker acknowledged the importance of those connections and the unique health challenges faced by women raising children in a modern city, such as living in close proximity to thousands of other families simultaneously struggling for vital

---

225 Indeed, as is explored in the conclusion, an understanding of this balanced partnership of individual and institutional use of scientific knowledge for public health efforts is still relevant today. New York Times columnist Nicholas Kristof writes in his book A Path Appears about early childhood preventative health initiatives that are still most effectively carried out by volunteers and nurses at the community and state levels, and are still woefully underfunded over 100 years after Dr. Baker’s work began. Nicholas Kristof and Sheryl WuDunn, A Path Appears: Transforming Lives, Creating Opportunity (New York: Alfred A. Knopf, 2014), 33–71.

226 Baker, Fighting for Life, 235-238. After a trip touring the state medical facilities of the Soviet Union, Baker reflects on her beliefs about how state medicine will be implemented in the United States in order to keep up with the challenges that, particularly poor Americans, still faced in receiving preventative healthcare.

227 Robert Crunden, Ministers of Reform, 163 – 199; Smuts, 7, 47-50.
food, clean water and air. An important reason why Baker and her Bureau are remembered for successfully saving thousands of babies in early-twentieth century New York is that the authority of public health as well as women’s role within it during that period was still unstructured and liminal: that is, a state of becoming rather than being already institutionalized. Public health was, therefore, open for shaping creative solutions to identified problems. Focusing on some specific initiatives of Baker’s Bureau --- baby health stations, little mothers’ leagues, and foster mothers for foundlings, --- best illustrates the Bureau’s approach to a creative individual-societal partnership in the use of scientific knowledge for public health. Baker believed that these initiatives and the way they were covered by the press would give public health its best chance to protect mothers and babies and their sustaining connections within the body of the city. She understood that framing the stories of public health was an important part of the Bureau’s mission to fight infant mortality.

Still very much under the influence of Tammany Hall, and years before the existence of a civil service examination, the Health Department Baker joined as a part-time school inspector in 1902 was still in its formative stages when it came to an organizational role and authority within the city. After all, patronage and close attention to one’s constituents helped elected officials drive the urban political machine in New York City. Since the notorious cholera epidemic of the mid-nineteenth century, public health in New York had become a permanent institutional presence, accepting medical and also some moral authority in the fight against disease epidemics that were increasingly viewed by the public as having biological rather than spiritual or moral causes.\footnote{Kraut, 38; Major Chas E. Woodruff, "New Science of City Sanitation," \textit{New York Times}, October 12, 1907, RB612.}

Alongside the professionalization of medical science, the private progressive charities, churches, politicians, municipal government and philanthropists historically involved in the city’s social
welfare all continued to influence the strategies of the Department. In the case of healthy disease carriers like Mary Mallon, this combined and sometimes conflicting influence on public health helped call into question how much power the Department might, or even could wield over its citizens' individual rights in the control and prevention of disease. Seen another way, though, multiple influences on the Department also helped to render it a somewhat undefined professional space where medical science could be implemented in new and creative ways in response to the increasingly dynamic character of the city it served. In simple terms, both the city and the field of public health were changing dramatically when Baker began her career, and the combination of those two dynamic environments put the city’s Health Department in the perfect position to design creative methods for serving baby New Yorkers.

The growth of public health in New York which the Bureau of Child Hygiene embodied was unique in other ways. Robin Muncy writes that many women reformers during the progressive era took advantage of the fact that the field of child hygiene was still in development and lacked an official authority that ordinarily may have kept women from serving in its leadership roles. Child hygiene was not only an agenda bred from the growth of the modern city but also an opportunity for women to enter public life as professionals. However, while New York’s Bureau of Child Hygiene administered the kind of preventative infant care and education for mothers that those in the emerging field of child hygiene advocated, Muncy’s argument that women child

---

229 Kraut describes the role of the Roman Catholic Church in establishing several major hospitals in New York City, partly in response to waves of Irish immigrants who could not afford medical care. Kraut, 43-49. Coverage of the Bureau of Child Hygiene by the New York Times often mentions that announcements were made in the city’s churches, or that philanthropic organizations aligned with churches were lending the man and woman-power needed to carry out the Bureau’s activities in the community. On churches as locations for announcements, see: "Babies get ready; this is your week," June 21, 1914, 12; "Women to See Dairy Show," April 29, 1919, 17. On the myriad of public and private institutions involved in the Bureau’s activities, see: “Another Campaign to Save the Babies”; "To end the scandal of slovenly dispensary work,” February 16, 1913, 43.

230 Muncy, 16 – 22.

231 Smuts, 1 – 11.
hygiene reformers found it easier to pioneer the field at the national level by not directly competing for jobs with men does not reflect Baker’s experience in New York.

It was very unusual for a woman to be placed in the director’s position of the Bureau when Baker was appointed to the “nation’s first tax-supported child health agency” in 1908, despite the societal expectation that women should be in charge of the welfare of mothers and babies.\textsuperscript{232} These conflicting expectations for women exemplify the tension between the role of women as managers of household issues of import to both their individual family homes and to the larger society. In Baker’s case it is certainly possible that her medical qualifications and her gender made her an excellent choice as a leading voice in the care of New York’s mothers and babies in the eyes of politicians. But there was still another tension, which would eventually plague the federal Children’s Bureau, between the role of the individual and the role of the community or government in the bearing and rearing of the nation’s children.\textsuperscript{233} Women were still expected to be the experts on children, but they were also supposed to be too emotional and irrational to serve in public office.\textsuperscript{234} Letting a physician into one’s home for advice on maternity or baby care was one thing, but allowing municipal authorities to advise and dictate on the proper care of the city’s children created a public involvement in private life that potentially made people

\textsuperscript{232} Ladd-Taylor, Mother-Work, 90. While previously it had rarely voiced opinions on public issues, in 1899 the American Medical Association formed a lobbying group to influence health legislation and potentially get physicians elected to public office. Robert Crunden, Ministers of Reform, 177. At the time most of the members of the AMA were men, as were the majority of those in leadership at New York’s Health Department. Robin Muncy asserts that part of the reason that women were able to play public roles in issues of child hygiene was because of the old Victorian societal expectation that women should be involved with family and babies. Muncy, 20-22.

\textsuperscript{233} Smuts, 117.

uncomfortable. In many ways Baker had the advantage at this moment because she held both the authority of a medical degree and she served in a city that respected those who could talk a good game and produce results. Baker’s original staff of physicians was entirely men. Thus, while some similarities in progressive impulses and preventative health initiatives can certainly be drawn between Baker’s Bureau and the national Bureau which would follow four years later, to categorize Baker in the company of all progressive women child hygiene advocates is to overgeneralize her experience.

The structures and policies that Baker’s Bureau of Child Hygiene developed over the next thirty years represented the kinds of creative efforts to utilize medical science on behalf of the public made possible in an organization simultaneously “outside the academic and medical establishments.” Muncy notes of the women and men in emerging fields related to public health at the turn of the century that “the refusal to hoard esoteric knowledge lowered the prestige of the new professions relative to the older male professions,” but thankfully this did not stop many of them from achieving their goal of using medical science to achieve widespread

235 The line where public authority was welcome into people’s family lives and homes concerning their children was sometimes difficult to navigate but was often present. Smuts notes that prior to 1920 in particular, there was “public antipathy to child study.” When Franz Boas wanted to weigh and measure children for his research in 1891 he experienced resistance from parents, as did the federal Children’s Bureau when they tried to do the same thing in 1918. Smuts, 42. As an interesting exception which carries from Baker’s early career to the present, DuPuis notes that Americans have been surprisingly comfortable with the government regulation of milk that impacts both individual producers and consumers, even during political periods when “big government” is seen as bad. DuPuis, 39.


237 Muncy discusses at length in her first two chapters the idea that progressive women reformers in the child hygiene movement were able to achieve public office and the federal Children’s Bureau because their efforts were seen as in alignment with Victorian ideals of womanhood and also because at first they did not directly compete with men for those leadership positions. As I will continue to argue more specifically in Chapter 6, Baker’s experience was different and more specific to the conditions of New York City than others in the federal Bureau such as Julia Lathrop.

238 Smuts, 8. Smuts is speaking here about the child hygiene movement more broadly, rather than Baker’s Bureau of Child Hygiene specifically, but the statement applies to both.
preventative care. Baker and her team of nurses and physicians had the authority of medical experts with the public, but unlike professional medical societies and universities they lacked the growing rigidity of a professionalized field that might have otherwise constricted their options in providing preventative care for tenement mothers and babies. As Baker reflects in 1939:

We did not have time to dramatize ourselves... There were no precedents to hamper us, no body of established knowledge to prevent us from seeing needs and remedies clearly and directly. Our one guiding principle was to start babies healthy and keep them so, and if that objective led us into far fields, all the way from the young east-side bride’s diet to the habits of certain herds of cows in Jersey, we could go right along without wondering if our procedure were orthodox.

Likewise, through communication with the press, women’s clubs, philanthropists, Tammany, and city officials, Baker had access to a potentially large audience of parties with interest in making maternal and infant health in New York City live up to its reputation as the most modern city in the world. The flexibility afforded to Baker and her Bureau by the still-emerging nature of its scientific authority, and their access to what became the birthplace of mass media, did not mean that her gender never impacted Baker’s experience as a public health official. In her autobiography Baker reflects that her status as a part-time employee and a woman was likely why she was initially assigned by the Health Department to multiple different odd jobs during her first years, giving her a more holistic perspective of the different ways that the Department connected to the total organism of New York than most of her more specialized colleagues possessed: “And during nearly all of these years I was what might be called a ‘trouble shooter.’ Anything which did not fit into the assignments of the regular staff of inspectors fell to me.”

---

239 Muncy, 21. As will be seen in Chapter 6, Baker and her Bureau encounter several tense moments when physicians or medical associations try to stand in the way of their programs because they feel the medical technique being used is not rigorous enough, or that those administering it are not properly trained.
In addition to protecting her from monotony, Baker asserts that her varied assignments made clear to her that public health was a far different type of medicine than the case-by-case, patient-centered training that she received in medical school. The public duty of caring for the babies of New York City required Baker and her colleagues to acknowledge the whole body, or “social organism”\(^\text{242}\) of the city, for which Baker’s experience as a jack-of-all-trades health inspector in her early career gave her excellent advantage. It is worth noting the holism at work in this view of the city as a body or organism in need of care. That image supported the emphasis on a kind of preventative care that required keeping the entire city in mind while treating its individual members. Baker asserts that “There can hardly be an obscure corner of Manhattan Island into which I have not poked my official nose at one time or another,”\(^\text{243}\) which is reflected in the approaches to preventative care often taken by the Bureau that recognized the vast interconnections among the individual bodies that made up the city. Also germane to her work with the Bureau, Baker’s variety of jobs within the Department made her aware early of the political nature of several of these interconnections that she would have to negotiate in order to receive the funding or public approval needed for its strategies. The complexity of influences Baker was required to navigate was apparent to her early, as she describes, “the Department was part of the political set-up of a politics-ridden big city and on many and many an occasion not even an apprehensive innocent like myself could avoid becoming a part of this game.”\(^\text{244}\)

In fact, Baker discovered to her surprise that just as she and her partner in private practice Dr. Laighton had gained some of their patients specifically because they were women doctors,\(^\text{245}\)

\(^{242}\) Ibid., 62.
\(^{243}\) Ibid., 69.
\(^{244}\) Baker, *Fighting for Life*, 91.
\(^{245}\) Against the advice of their professors, Baker and her schoolmate Dr. Florence Laighton began a private practice on West Ninety-First Street after finishing their medical internships in 1898. Baker chalks their “imbecile optimism” up to a youthful confidence in their abilities and a personal desire to live in New York. In her autobiography Baker mentions that somewhat ironically, their main advantage for the first several
some of her dealings with Tammany Hall were also positively impacted by her gender. Exactly because they were so unfamiliar with women in leadership roles, “being a woman was an enlightening asset in dealing with the old-time Tammany crew of chieftains and hangers-on.” Baker never insinuates in her autobiography that she completely avoided being hampered by gender discrimination, but her desire for public health policies to achieve measurable progress and her opportunistic nature often allowed her to exploit the newness of her position. No one in Tammany yet expected a female government official, so Baker surmised that in their “bewilderment over that anomaly” they often ended up listening to her requests and working with her, at first out of politeness and eventually out of camaraderie. She made her novelty into an advantage.

It helped that Baker often personally liked the Tammany officials she dealt with, though she recognized that their brand of doing things was often technically less than official. Part of Tammany’s appeal for Baker was the colorful and compelling nature of the men who ran it. Her frank enjoyment of working with them evidences a shared motivation toward outcomes rather than ideology. At the time Baker took the directorship of the Bureau and for several years afterward, the most effective way to get things accomplished for individual families was to ask directly for help from Tammany rather than municipal officials: “To be quite honest, I must confess that I would rather work with a Tammany administration than with a reform administration.” Baker felt that the urgency of the Bureau’s work could not always operate effectively on the slow and procedural timeline of municipal authority, and “organized charity acted too slowly in such cases” where a Bureau nurse discovered a family with a baby and small

---

246 Ibid.
247 Ibid., 91-92.
248 Baker, Fighting for Life, 94.
children “completely on the ragged edge, starving and freezing.”\(^249\) When a baby was found by the Bureau to be in need and not yet benefitting from life-giving connections to the larger resources of the city, in light of the Bureau’s small initial appropriations Tammany was often the most expedient and reliable way to make that connection. Finally, alongside the politeness Baker was usually greeted with by Tammany men due to her gender, her argument to them for assistance was water-tight: as one boss commented to her after agreeing to help, “but then it’s always a good idea to help babies.”\(^250\) Baker’s situation in an emerging but liminal space of medical authority at a moment when anxiety and moral indignation at high infant mortality rates was particularly high in New York City thus allowed her, in partnership with a variety of other charitable and political players in the New York scene, to encourage and create unique connections among individuals and social services that required “large spending and innate humanity.”\(^251\) While their comparatively high mortality rate made babies Baker’s most immediate concern, it should be remembered that reports on infant mortality came alongside the revealing photographs of tenement house and child labor conditions by Jacob Riis and Lewis Hine during the 1890s and 1900s.\(^252\) New Yorkers were often as ready to hear Baker’s plans to fight infant mortality as was Tammany.

**Babies die in America’s most modern city**

The Bureau of Child Hygiene was created at a time when infant mortality rate and the moral indignation it caused in New York seemed scandalously high for what New Yorkers believed to be a civilized and modern city.\(^253\) This anxiety is evident in the coverage by the *New York Times*

\(^{249}\) Ibid., 93.  
\(^{250}\) Ibid., 95.  
\(^{251}\) Ibid., 95.  
\(^{252}\) Jacob Riis, *How the Other Half Lives*.  
leading up to and directly after the creation of the Bureau of Child Hygiene in 1908. A representative perspective of the growing belief that modern cities like New York demanded new kinds of public health is that of Major Chas (Charles) E. Woodruff, surgeon in the Army Medical Corps.\footnote{As will become more apparent in Chapter 5, it may be particularly appropriate to consider the perspective of a military physician on the issue of public health, as rhetorical parallels would be drawn between the physical and psychological vulnerability of soldiers and babies with increasing frequency during and after WWI.} Not atypical of an educated, middle-class “native” American at the time, Woodruff’s wide range of commentary on the health of the city includes classist and gendered opinions as well as an implicitly eugenic reading of New Yorkers as a biological population straining its resources in ways that allowed the fragile to survive.\footnote{Appeals to evolutionary theory for explanations of how human societies progress was not uncommon during this time, though they manifested in a wide variety of ways. Though not always explicitly combined, progressive reform and evolutionary theory sometimes combined in the interest of improving modern society. As Gregg Mitman notes, “emphasis on social reform, rational planning, and the professional expert was expressed in a number of guises within the biological sciences... One favored avenue of social reform advocated by American biologists was that of eugenics.” Later, once the U.S. became involved in WWII, some American biologists emphasized the importance of cooperation rather than competition to evolutionary progress. Mitman, ”Evolution as Gospel: William Patten, the Language of Democracy, and the Great War,” Isis 81, no. 3 (1990): 462.} In a characteristically contradictory assessment of New York, Woodruff’s negative interpretation of humankind’s evolutionary progress is balanced by his excitement about the “lusty youth” of the science of sanitation in a 1907 article, illustrating many of the challenges in preventative care for infants in New York City that Baker’s Bureau was created to fix.\footnote{Woodruff, “New Science of City Sanitation.” Major Woodruff’s perspective on the need for increased public health infrastructure is also interesting alongside another of his other loosely evolutionary-based theories about the health of humans: his 1905 book on the maladaptation of the Anglo-Saxon race to sunlight. His assertion was that Anglo-Saxons (blond hair, blue eyes) had become uniquely adapted to a cloudy environment, and that their migration to sunnier climates such as in the United States would lead to their eventual insanity and die-off. Anglo-Saxons were intellectually superior to other races, but had unfortunate physical limitations in the wrong climate. Major Chas E. Woodruff, \textit{The Effects of Tropical Light on White Men} (New York: Rebman Company, 1905).}

In a comment that potentially implicates all classes of New Yorkers for their negligent apathy in the face of scientific knowledge, Woodruff notes with impatience the individuals who
will not be prevailed upon to do their part to improve the city's overall sanitation: "Even the milkmen, now as ever, claim the right to furnish what they please, whether it kills the babies or not. Public opinion will not permit laws to enforce cleanliness and the consumers have not yet realized their power to compel producers to supply what is needed." Consumers with the power to influence the creation of more sanitation laws were predominantly the upper and middle classes, who did not experience quite the same deleterious health impacts of living in the dense populations of the crowded tenements. However, keeping to the evolutionary biological themes within which Woodruff's anxieties are couched, what particularly alarms him is a kind of city-wide positive feedback loop in which sanitation and preventative care lead to more and longer lives, which leads businessmen to greedily build more densely populated tenements, which then leads to yet more crowding and more need for organized sanitation efforts.

Positive feedback loops are rare in nature because they cost great expenses of energy. Thus, by his frequent use of the words “nature” and “natural” in the article as contrast to the living conditions of the city, it is unsurprising that Woodruff concludes that “sanitation is wholly responsible for the possibility of the huge modern cities made necessary by modern industrialism.” The huge organism/machine of a city that “modern industrialism” has built by the early twentieth century is unnatural and therefore requires more organized help alongside individual effort. A feeling that only municipal-level medical support can allow people to survive

258 “Chances of living against children of poverty.” Historian Thaddeus Russell does make the point, though, that by the 1920s working class women were having an important impact on consumer culture because such a large proportion of them were in the work force and purchasing consumer goods. Russell, 207-228.
261 Robin Muncy identifies this general anxiety that the problems of modern cities are too big to be corrected by individuals as characteristic of Progressive reform movements. Proposed reforms to public health, education, and any number of societal issues at the time “constituted a period of vital response to the social and economic changes wrought by industrialization in the previous half-century.” Muncy, 27.
the modernization of New York was therefore one anxiety reflected in the press prior to the creation of the Bureau of Child Hygiene. A 1908 investigation into the statistics of infant mortality conducted by the Bureau of Municipal Research also played a role in galvanizing public support for the Health Department to expand its institutional reach into the lives of New York mothers, as did a belief that modern, industrial city living included such a variety of physical and psychological dangers to children that the innate knowledge mothers were assumed to possess was simply no longer adequate to raise a healthy child; they needed help from science. The emerging belief that motherhood was a vocation which women needed scientific training to effectively perform was not limited to one class or ethnicity of women, but municipal preventative care particularly targeted those mothers and expectant mothers who could not afford the help of a private physician. A municipal structure was required to connect tenement mothers with the resources that location and finance gave middle and upper class mothers’ greater ease of access. Major Woodruff’s anxiety about the energy-consuming positive feedback loop created by America’s most modern city existed alongside a progressive faith that well-organized and scientifically efficient preventative care could yet keep the city from chaos.


263 Baker notes the influence of Jacob Riis’s How the Other Half Lives and John Spargo’s The Bitter Cry of the Children on her approach to preventative healthcare. Alice Boardman Smuts also mentions these two texts as influences on middle and upper-class mothers’ anxiety surrounding the dangers that modern city life held for their children. While still regarded as having a kind of innate wisdom about children, women with the time to read Riis and Spargo’s books were exposed to the idea that no one is innately equipped to raise a healthy child without the aid of science in the chaotic milieu of a modern city such as New York. Muncy, 56; Smuts, 21. In two articles from The Independent about a supposed overall modern decline in breastfeeding the author makes clear that any woman who is not breastfeeding is shirking her moral and civic duty. “A Great Refusal,” July 18, 1907; “A Mother’s Duty,” August 15, 1907. A third article two years later again summarizes findings of a visiting physician to the New York City Children’s Hospital that love and care from mothers are just as important as medical technique in keeping babies alive, and implies that poor women who have to work will lose more babies because they have less opportunity to provide this care. “Maternal Care and Infant Mortality,” August 5, 1909.

264 “Chances of living against children of poverty.” Muncy notes that in the twentieth century motherhood was becoming a task for which mothers required special scientific knowledge. Muncy, 56.
Baby Health Stations

One arm of the Bureau’s municipal reach into the lives of working-class mothers consisted of a series of locations around the city where they could buy clean milk for discounted prices, consult a nurse or doctor, or have their baby weighed and medically evaluated. The stations linked food and medical resources of the city to primarily tenement-dwelling mothers whose connection to these resources was otherwise obscured financially or physically by the boundaries of the tenement neighborhoods themselves. Milk stations had existed in New York for years and were primarily maintained by a diverse collection of private charities by the time Baker’s Bureau began work in the summer of 1908. In 1909 Wilbur C. Phillips, secretary of the New York Milk Committee, wrote a letter to the editor arguing that the milk stations supported by Nathan Straus and the Committee had done good work but were struggling financially to staff physicians and nurses at the stations. He estimated that 9,000 Manhattan children were still without access to clean milk. Based on the Times’ coverage of the Bureau’s early involvement in milk stations, an increasing number of those involved in philanthropy were becoming convinced that the key to success would be to organize the amalgam of private efforts under the public direction of the Bureau in a way that more effectively connected mothers to resources, yet employed the well-intentioned man-and-woman-power of a large volunteer force. In his letter to the editor Mr. Phillips calls for the various charities currently involved in milk stations to unite and organize their

---

265 Still two years later in 1910 an article describes the latest effort of the Bureau to save the lives of babies during the dangerously hot months of summer and mentions that a new initiative will involve the coordinated effort of “sixty different private agencies and charitable organizations working with the Department of Health.” “Little Mothers’ Write Playlets with Helpful Plots,” New York Times, July 10, 1910.
266 Wilbur C. Phillips, “Mr. Phillips Outlines a Plan to Reduce the Death Rate,” New York Times, January 30, 1909, 8. Nathan Straus’ stations were in cities all over the nation, as well, which is likely why Mr. Phillips feels it unfair that New York should expect him to provide the city with even more. John Steele Gordon, “The Milk Man,” Philanthropy Magazine, Fall 2011.
efforts until the stations could be staffed with physicians and nurses and “municipalized.” He warns that if philanthropists and the public do not coordinate their efforts to act on behalf of the city’s babies, “the alternative of providing this money or of permitting infants to die must be placed succinctly before it.” The well-intentioned generosity of organizations such as the New York Milk Committee is not questioned, but a sense that the size and dynamism of the city itself requires a “municipalized” preventative effort against infant mortality is palpable. Public health might involve connecting individual New Yorkers with the resources of the city, but those connections were becoming the business of the public and its agencies.

Anxiety that the scope of the need would prove too great for the efforts of individual charities manifests itself in coverage of the Bureau even for several years after its creation. By 1911 the Bureau had already begun to station its nurses at established milk stations and to create new ones. The Association of Infant Milk Stations was also created in an effort to organize and compile the records of all the babies in the city who required aid from the stations so that the Bureau could keep track of and check on their patients as they grew. The Association had an office in the same building as the Bureau, and Baker served as chairwoman of its executive committee. Faith in a centrally-organized effort grew, as that year “showed a death rate of 112

---

267 Phillips, 8. This emphasis on centralized organization in philanthropic work was becoming common during this period. For example, a 1913 article discusses the incompetent state of many medical dispensaries across the city and how they need to take a cue from other types of charitable organizations and cooperate in order to provide better service to those in need. “To end the scandal of slovenly dispensary work.”

268 Phillips, 8.

269 Baker, Fighting for Life, 127-129. An article from early June, when danger of the “summer complaint” begins to threaten babies during the summer, discusses a combined effort of milk/baby stations, outdoor recreation and “little mothers” leagues overseen by the Bureau in order to lower summer infant mortality. The title signals that readers of the Times were by this point well-versed in the idea that babies were annually in danger from disease and death in the summer: “Another Campaign to Save the Babies.”

as compared with 125 in 1910, or an actual numerical decrease of 1,162 deaths.”

Even as mortality numbers improved, however, anxiety continued to be expressed that the complex problems caused by a modern city might prove too much for preventative efforts. Dr. C. Ward Crampton is quoted in 1911 as saying that “the problem which the city has in trying to make a child fit to cope with the complex social conditions of modern life is a difficult one. There is about as much space for each child below Fourteenth Street to play in as there would be to mark off its grave.” However, alongside the anxiety expressed in the coverage of infant mortality and the Bureau’s efforts was also often data. While data could alarm, it could also bolster.

The publication of and commentary on mortality data was a constant in the Bureau’s effort to provide preventative care for the city’s babies. It was not uncommon during the first several years of the Bureau for the Times to print tables of infant mortality data whether a physician or bureau official was quoted in the article or not; particularly in the summer when the “summer complaint,” or diarrhea, was an infamous killer of infants. Indeed, part of the efficacy

---


273 Tichi mentions that in her work as a factory inspector and later for the National Consumers League, Florence Kelley was one of the first to pioneer “the use of scientific data to shape public opinion and to promote child labor legislation.” Tichi, 27. It is worth noting that during this period leading up to the 1920s psychology was undergoing a dramatic shift in its attitude toward data as behaviorism emerged, demanding objectively measurable data rather than qualitative data obtained through “introspection” of its human subjects. An argument for that shift is summarized nicely by John B. Watson, “Psychology as the behaviorist views it,” Psychological Review 20:2 (1913): 158-77. Lastly, particularly in emerging fields of public health which focused on the child, the influence of Progressive reformers and their emphasis on presenting the facts through education cannot be neglected. Starr, 18-20. Robert Crunden explains that the Protestant religious influences on Progressivism and also in a chapter about the muckrakers who led to the Pure Food and Drug Act of 1906 how deep was the belief that if the populace was informed with facts, they would modify their behavior accordingly. All that kept the general populace from ignorance about medical science, or from lending their support to the increasingly more powerful institutions like the Health Department that carried out reform measures was an education in the facts. Crunden, Ministers of Reform, 163-199.

274 “Summer complaint” included dangerous bouts of diarrhea caused by the ingestion of food or milk that had spoiled in the heat. Gretchen Condran and Harold R. Lentzner, “Early Death: Mortality Among Young Children in New York, Chicago, and New Orleans,” Journal of Interdisciplinary History 34.3 (2004): 315; “Tells Public How to Aid Heat Victims,” New York Times, July 6, 1911, 3. For example, each of these New York
of the milk (eventually “baby health”) stations overseen by the Bureau was made manifest on
the Bureau’s city maps and in its press coverage by an almost constant presence of data. Data,
and the maps and tables they populated, made the connections among the tenement mothers,
their babies, and the resources of the city visible and comprehensible. Both to the public health
workers who were daily walking those connections and to those New Yorkers who read the
newspaper and applauded their successes, data represented the results of the Bureau’s efforts to
fight infant mortality. These data were made possible by the fact that Baker received a list of the
names of new babies each day from the Registrar of Records at the Department. Knowing the
names of its smallest citizens enabled the city, through the Bureau, to keep an eye on their
progress and to see that they were connected to the resources they needed. Thus mortality
numbers that fell but remained alarming in their scope interspersed a narrative co-written by
officials like Baker and their press contacts, making the plight of the tenement mother and her
baby an integral part of the identity of the city itself. Speaking from the perspective of the city as
a whole, Baker is quoted in a 1911 article as saying, “This city, by taking up the milk station work
recently, has committed itself to a very definite social policy... It is determined from now on to
see that every one of its tenement children is healthily born, and shall grow up in good health.”
A growing list of names and data helped Baker and the Bureau’s creative efforts in public health

---

*Times* articles contain infant mortality data in tables, in-text, or on a map: “Infant Death List Cut 50 Per
Cent,” July 25, 1909, C7; “Chances of Living Against Children in Poverty”; “Health Department Appeals to
Mothers,” July 27, 1910, 8; Baker, “Deliberate Waste of Life”; “Saving the Lives of Babies in Congested
Districts.”

275 Chapter 6 explores the transition from milk stations to baby health stations in more detail, as an example
of the wide range of services increasingly provided by the stations that came under the jurisdiction of the
Bureau of Child Hygiene.

276 Baker, *Fighting for Life*, 85. Receiving daily notices of births was key to the success of the Bureau’s efforts
because families tended to move around quite frequently in early twentieth-century New York, making it
otherwise quite difficult to locate new babies. Chudacoff and Smith, 146.

277 “For Mothers and Children.”
reframe an anxiety-ridden narrative of the city in which close connections among people led to sickness and death, to one where connections among New Yorkers and their city enhanced life.

Reminding us that this was a golden era for data-driven social science, references to data occur fairly often during hot summer months in the early years of the Bureau, when clean, fresh milk was of utmost importance in preventing infant mortality. While Baker’s Bureau worked to prevent infant mortality year-round, their most concentrated and collaborative efforts were launched at the beginning of each summer, when mortality was known to increase. Alongside the proper preparation and storage of milk, Bureau nurses and physicians at baby health stations urged mothers to allow babies to wear fewer clothes in summer and to get fresh air whenever possible. Pushing against some cultural traditions of keeping babies tightly swaddled in layers of clothing even during hot weather, Dr. Baker made national news the summer of 1916 by telling a reporter that babies should be bathed and allowed to “go naked” during hot summer days. The fact that the reporter had come to her in need of a story in the middle of a hot summer could be taken in itself to be testimony to the effectiveness of the Bureau’s summer campaigns to fight infant mortality. The “September morn theory” of summer couture that emerged in the press took even Baker by surprise, who was by then used to a frequent and friendly relationship with

---

278 As examples, these articles all mention the danger of summer diarrhea for children and include some kind of data in discussion of mortality rates or number of babies examined by public health workers: “Tells Public How to Aid Heat Victims”; “Unbottled Milk Peril to Babies”; “Dirt Fattens Flies and Kills Babies.”

279 “Saving the Lives of Babies in Congested Districts”; “Dirt Fattens Flies and Kills Babies.” One particular consequence of the heat of summer which led to illness was that milk used to bottle-feed infants became spoiled easily and could lead to sometimes deadly “summer complaint,” or diarrhea. Anxiety over this circumstance is a focus of the July 17, 1911 article in which Dr. Lederle gives advice to mothers to keep their milk from spoiling and to ask for help from the Health Department if their infant is sick and they cannot afford to see a private physician. “Unbottled Milk Peril to Babies.” Even after Baker’s Bureau had baby health stations and a reliable, clean milk supply for them established, anxiety over the deadly consequences of spoiled milk in summer still surfaced in one of the city’s largest milk distributors, Sheffield Farms. An April 18, 1921 advertisement in the New York Times is titled “Milk Problems Multiply in Summer.”

280 Baker discusses this incident in her autobiography with humor about the scandal that ensued as reporters across the country quoted her as saying that babies should be naked. Baker, Fighting for Life, 105. For example, “Let Baby Go Naked If You Want It To Be Healthy,” Chicago Tribune, August 9, 1916, 1; “Keep the Babies Naked,” New York Times, August 9, 1916, 9.
the press to promote the projects of the Bureau. Some years afterward she wrote that “September morn” “produced elaborate humorous prophecies of the ruin of the cotton industry... I had never realized before how much an ingenious newspaperman could make out of how little when he had to.” 281 There is no record to indicate that Baker kept up with contemporary developments in painting, but those familiar with Ash Can School painter George Bellows’ famous work Splinter Beach would have recognized a common theme of summer nakedness, exercise and poverty.

Baker’s ability to make national headlines with her advice for babies was not limited to her purportedly scandalous comments about summer nakedness. While the settlement house movement in Chicago was making that city the center of innovation in community education, New York City was becoming such a center for innovative techniques in maternal and infant health. Coverage of the Bureau’s early efforts with baby health stations often records the sentiment that New York City was being closely watched with envy by other American cities for their work to reduce infant mortality. Fresh from a meeting with Baker, Dr. Lederle and Paul E. Taylor of the New York Milk Commission in 1911, and Walter Kreusi of the Milk and Baby Hygiene Association in Boston commented that “Every city in the country is watching New York try out this experiment, and everywhere people are pleased with the possibilities being uncovered.” 282 Dr. W.S. Newmayer, Chief of the Department of Child Hygiene in Philadelphia, commented that his city had only eighteen private milk stations and that he wished they had municipally-run stations like New York’s. He referenced the important influence that New York’s success and their coverage in the press was having on other cities, saying that “the press is backing us splendidly in educating

281 Baker, Fighting for Life, 105.
282 "Infant Death Rate Reduced this Year," New York Times, July 30, 1911, C10.
the public.” Coordinated efforts among philanthropic societies, health departments and physicians to run baby health stations required monetary support from taxpayers, and the Bureau’s relationship with the press was instrumental in communicating the need for that support to citizens of New York and other cities.

Baker rarely missed a chance to use the press to tell New Yorkers what a generous, modern, and future-minded city they called home. Discussing the early success of the Bureau’s coordination of baby health stations with the New York Times, Baker asserted that the decrease in infant mortality “must be a matter for some civic pride,” as “the net result is empty graves and crowded cradles. Rather fine, that! New York is the most generous city in the United States, the most generous city in the world, in providing money for the purpose of keeping the graves empty and the cradles full.”

But just as importantly, it mattered greatly to individual mothers that those individual cradles were full, and Baker equally acknowledged a different kind of press for its instrumental contribution to the success of baby health stations: word of mouth among mothers. Sounding every bit the New Yorker who lived through the 1920s’ explosion of advertising, Baker relates that “they say it takes word-of-mouth advertising to make a hit of a play or a movie – that is just as true of any public welfare project.”

Little Mothers’ Leagues

An important part of the effort toward keeping the cradles of New York full of life involved education and aid for the older sisters who were often the primary daytime caregivers for tenement babies with working mothers. As with the milk stations, philanthropic organizations had already been established to educate and care for the “little mothers” of New York before Baker

---

283 "Infant Death Rate Reduced this Year."
began her work with the Bureau of Child Hygiene. Indeed, in an 1899 article about the work of the Little Mothers’ Aid Association it is implicitly assumed that no explanation to readers of who “little mothers” are is necessary. In that year a new house was obtained as headquarters for the Association, where a day nursery was set up on the second floor for the charges of the little mothers while the girls took sewing and other classes on the third floor. Of Mrs. George A. Hearn’s fifty-pupil sewing class, the article asserts that “Her mending class is a unique and practical charity which is deserving of special mention.”\textsuperscript{286} The Association, begun by Mrs. J.H. Johnston in order to help the little mothers that she often saw nearby her home, provided classes, food, presents on holidays, and summer vacations for little mothers in the surrounding neighborhoods of East Thirty-First Street. One of the early goals of the Health Department and its Bureau of Child Hygiene was to organize and expand creative neighborhood efforts such as these to make them available for little mothers all over the city.\textsuperscript{287}

“Little mothers” were widely recognized characters in the drama of modern New York: they were those “. . . whose task of caring for their baby brothers and sisters has made them for some years the heroines of stories and jokes. . .”\textsuperscript{288} Little mothers were simultaneously characterized as innocent, potentially romantic, motherly figures, and as one of the bane of modern industrial society, leaving trails of neglect and infant mortality behind them. The reason for such different characterizations of little mothers was the convergence of a variety of anxieties about their circumstances. Whether for moral or biological reasons, the view that women should

\textsuperscript{287} The exact timing of the Bureau’s involvement in the expansion of little mothers’ leagues to the public schools is a bit difficult to pinpoint: Baker writes in her autobiography that she felt inspired to focus on the cause of little mothers in 1910 after reading John Spargo’s \textit{The Bitter Cry of the Children}. As will be mentioned, the \textit{New York Times} reported that through the health commissioner the Health Department and then the Bureau became involved in little mother education in 1909. Baker, \textit{Fighting for Life}, 132; “Planning to teach ‘little mothers,’” \textit{New York Times}, May 16, 1909, 20.
\textsuperscript{288} “Planning to teach ‘little mothers’.”
stay in the home rather than work was present leading up to the 1920s, as was the idea that what one family chose to do potentially impacted society.\textsuperscript{289} The relationship between what an individual did with their own body and behavior and the impact that had on society or the human race was a comparison drawn in the early twentieth century through a variety of methods. As germ theory became more widely understood, what one family chose to do regarding communicable illness could indeed potentially impact their neighbors and coworkers. As noted in the previous chapter, personal hygiene became an especially anxious topic of public discourse after the identification of healthy typhoid carriers such as Mary Mallon became more frequent. The general fear that the rapid influx of immigrants from southern and eastern Europe would somehow fragment and dilute a unified American society was also prevalent at this time, and experts continued to disagree whether immigrants were genetically, physically, or merely culturally different from “native” Americans.\textsuperscript{290} Many believed both immigrant bodies and behavior changed over generations in their new environment, so the earlier that Little Mothers were educated in scientific childcare, the sooner those new habits would embed themselves in immigrant communities. Above all, concern over the reputation of the city demanded that its infant mortality rate continue to fall. Baker and the Bureau’s close relationship to the press fueled

\textsuperscript{289} The idea that one person’s or one family’s morality could influence another’s and potentially the whole community of course can be traced back through American Protestantism to the Puritans, but also appears in the personal piety of the late nineteenth century that Social Gospel reformers reacted against in the early twentieth century. For example, Walter Rauschenbusch dedicates an entire chapter to a discussion of personal salvation and how Christians had come to put so much emphasis on it as to neglect their impact as individuals and as Christians on the larger society: “Conversion is most valuable if it throws a revealing light not only across our own past, but across the social life of which we are part.” (99). A Theology for the Social Gospel, 95-109. Particularly in large cities like New York, New Thought perfectionism spurred a variety of Americans to alter their diet and exercise regimes in order that their inner health and morality might be reflected in their physical bodies. When individual bodies bettered themselves, the entire nation benefitted: “The early twentieth century also witnessed a rising interest in particular physical routines that proponents taught would have a profound effect upon the strength and longevity of the nation’s populace.” R. Marie Griffith, Born Again Bodies: Flesh and Spirit in American Christianity (Berkeley: University of California Press, 2004), 110.

\textsuperscript{290} Degler, 52-53.
and demonstrated the public’s concern about the contradiction of America’s most modern city inadvertently killing thousands of babies per year.²⁹¹

For author John Spargo, little mothers were both a symptom and a cause of a vast urban disease, one which validated and expanded the poverty arising alongside the skyscrapers still forming the city’s iconic skyline. Baker remarked that Spargo’s 1905 book, The Bitter Cry of the Children, helped inspire her to expand the education of little mothers in the city, but “I could not dodge the issue by merely agreeing with Mr. Spargo’s point that there should be no such thing as a little mother... we could not afford the luxury of saying things should or should not be.”²⁹² As a Socialist, Spargo was concerned with changing the structure of a system which created the need for little mothers in the first place, but Baker’s comment makes clear that she had no time for moralizing or for shaking up the structure of the government.²⁹³ Baker’s pragmatic approach consistently tried to meet both individual New Yorkers and the city as whole where they were at a given moment. In Spargo’s words “These ‘little mothers’ have been much praised and idealized until we have become prone to forget that their very existence is a great social menace and crime.”²⁹⁴ By bringing practical education on infant care to the public schools through Little Mothers’ Leagues, Baker and the Bureau acknowledged the positive impact of efforts by individual reformers and philanthropists like Mrs. J. H. Johnston without romanticizing or remonstrating the role that these little girls played in the drama of an expanding industrial New York: “Since

²⁹¹ A 1910 article notes that the infant mortality rate in New York City dropped between 1907 and 1908 from 17,347 to 16,230. “Chances of Living Against Children of Poverty.”
²⁹² Baker, Fighting for Life, 132-133.
²⁹³ Spargo was not alone in his Socialism, as the party was somewhat popular in immigrant-heavy New York, although it never succeeded in surpassing the Democrats.
thousands of poor families were in an economic situation which made the little mother necessary, we had to turn her into something that suited our purpose.”

The Bureau’s purpose, of course, was the very practical one of increasing the number of healthy mothers and children in the city, and Baker’s experience as a school inspector had convinced her that children were “natural ‘joiners.’” Little mothers, like any other children, would “form mystic secret societies of their own or street-corner gangs” if there were not Little Mothers Leagues to join. Like all residents of New York City, little mothers were daily working out how their individual lives fit into and connected with the life of the city, and Little Mothers Leagues made them aware of some of those connections. As Baker relates, “These youngsters were among our most efficient missionaries, canvassing tenements for us, cajoling mothers of their acquaintance into giving the baby health stations a trial... telling every mother they met all about what they were learning.” As the Times reported, “The League was organized after some instances which brought clearly to the mind of the Health Department doctors what a large part these children play in the social economy of the tenements.” Mothers and fathers had economic connections to the larger industrial life of the city, but it was their children who connected their families to the social mores, resources, and services available to them. In the summer of 1908 before instruction to little mothers had moved into the schools, the Times noted anecdotally that physicians who visited the piers to speak to mothers about infant care sometimes noticed little mothers urging their own mothers to listen, and concluded that tactics for the care

---

296 Ibid., 134.
298 “Planning to teach ‘little mothers’. ”
of babies during the summer months may be even more rapidly transmitted through the older siblings in addition to the mothers themselves.299

When in the summer of 1908 the health commissioner called for the cooperation of 50 city organizations and the Health Department to work together to bring infant mortality rates for that summer down, instruction for little mothers was not yet a top priority.300 Middle-class standards for families involved a mother who stayed at home to raise her children. As is clear from Spargo’s *Bitter Cry*, it was seen as unfair and in many ways immoral that those who were still children themselves, “that most pathetic of poverty’s victims,” should be entrusted with the care of their infant siblings.301 First milk and then baby health stations in tenement neighborhoods, as well as nurse visits to individual families, often did successfully reach mothers in and around their homes. The Conference on the Summer Care of Babies, which emerged from the 1908 initiative, met with some success that first year as well by sending physicians, nurses and volunteers to piers and other recreation areas to give free instruction to mothers on the summer care of infants.302 The Conference focused on getting information about summer infant care directly to the mothers where they were most likely to be, and made them aware of connections to local available services. In the coming summers it was recognized that the physical and educational connections which little mothers made between their households and the vital resources of the city proved to be one of the most influential, though. Baker’s Bureau not only served as an organizing headquarters for the effort, but “Since the formation of the Bureau of Child Hygiene the corps of

---

299 Ibid.
300 *A Bureau of Child Hygiene*, 29-30.
302 “Planning to teach ‘little mothers’.”
nurses has been almost doubled and the staff of physicians largely increased,” making it easier to run the additional Little Mothers’ Leagues in the schools.303

It is clear from multi-photograph spreads and extended quotes from little mothers that the Times often employed in their articles that the press and readers alike were encouraged and charmed by the idea of little girls learning how to be proper mothers.304 Instinctive maternalism was a revered and gendered assumption about women.305 Progressive middle-class female reformers at the time were what Molly Ladd-Taylor refers to as “maternalist” in their “combined concern about poverty and the environment with a cultural bias in favor of middle-class family life.”306 The assumption was, of course, that the girls, rather than the boys of the family, would care for the smaller children.307 Even Baker verges on romanticizing a kind of biological drive in females to care for infants when she describes “the girl-child’s irrepressible impulse to play mother,” and the “fundamental strength of the mothering instinct” that she observed in little mothers.308 Ideals about motherhood were changing from those of the Victorian nineteenth century, but at the beginning of the twentieth century modern American urban society was still negotiating how much of motherhood was instinctual, how much of it was unique to women, and

303 “Visiting Nurses to Aid Poor Mothers.”
305 Muncy, 41. The idea that maternal love and care are instinctual for women soon enters a period of questioning by psychologists in the 1920s, however, when behaviorism becomes a more popular approach to explaining human relationships. Degler, 152-164.
306 Ladd-Taylor, Mother-Work, 87.
307 Interestingly, though, the boys of the neighborhoods must have been feeling left out, because lectures were given for boys on “the general work of the department” at the schools during the summer as well, as noted on June 5, 1910 in “Another Campaign to Save the Babies.” David Nasaw notes that while some girls were newsies, “junkers,” or “scavengers,” the general opinion was that it was not appropriate for girls to work on the streets, and were much more suited to domestic labor such as the care of children. Nasaw, “The Little Mothers,” in Children of the City, 101-114.
308 Baker, Fighting for Life, 134.
The education of little mothers in the scientific care of babies by a team of public health workers, dieticians, medical professionals and volunteers provides a potentially interesting lens to examine the dynamic societal perspective on motherhood at that moment. Most germane to the goals of Baker’s Bureau, however, is the way this education reframed the situation of the little mothers themselves, these small “victims” of poverty. One of the many reasons why pictures of little girls dressed up with serious faces as they heard instruction in the latest scientific knowledge made Baker and other New Yorkers proud was because they emphasized the idea that New Yorkers could thrive in the city under almost any conditions. In the twentieth century America’s most modern city would have citizens who, regardless of social class or birth origin, could use the most modern scientific knowledge to keep the city’s children alive and well. The belief that these methods should be used ubiquitously among all New Yorkers is most easily exemplified by the fact that the press was praising and encouraging little mothers and society women alike to feed their babies a nutritionally sound diet.

Around the same time that little mothers were learning the latest in nutrition and scientific baby care, American mothers as a group were being chastised in the press for increasingly choosing cow’s milk and solid foods over their own breastmilk to feed their babies. Concomitant with the professionalization of science, the banner of nutrition as the key to an intelligent and healthy populace was passing from New Thought lights such as Sylvester Graham

---

309 In general, while they still assumed that maternal instinct existed, some writers of the early twentieth century were urging the importance of scientific knowledge over instinct in the matters of bearing and rearing children. Helen Watterson Moody, “The True Meaning of Motherhood,” The Ladies Home Journal 16, no. 6 (1899): 12; Edward Bok, “The Ratio of Real Mothers,” The Ladies Home Journal 21, no. 2 (1904): 16. Writing about the 1920s, Ann Douglas describes a backlash among modern artists and intellectuals of New York away from the “Victorian Matriarch,” or idealized white, middle-class woman who was wife, mother, and advocate for moral and middle-class causes. Terrible Honesty, 6-7. Rima D. Apple, Perfect Motherhood: Science and Childrearing in America (Piscataway, NJ: Rutgers University Press, 2006), 22.
and Charles Fillmore to physicians, nurses, and dieticians. In the quoted anecdotes of the little mothers relayed by the press, the subject of proper infant nutrition is a recurring theme. Baker comments in her autobiography that at the time the Bureau was first getting started, medical science was absolutely convinced that breastmilk (and formula if necessary) was the only proper food for a baby younger than one year. The comments of the little mothers recorded by the press suggest for babies older than one year cereals were encouraged, while tea, coffee, and sweets were discouraged for lacking nutrition and for wasting precious money. Dieticians who worked with the Association for Improving the Condition of the Poor joined nurses and physicians who stood on piers ready to instruct mothers and little mothers in the scientific techniques of infant care, teaching women how to cook nutritious meals on a meager budget, and visiting them in their homes for further instruction if invited. One article relates the anecdotal success of a cookbook that dietician Winifred Gibbs had written especially for low-income mothers that little mothers were using to cook for their families, and tabulates the amount of money required to prepare several different nutritious meals. Baking bread at home rather than buying it at the bakery, making water ice rather than buying “hokey pokey,” and cutting down on coffee and

---


312 “Planning to teach ‘little mothers’”; “Little Mothers Write Playlets with Helpful Plots”; “Teaching 50,000 ‘Little Mothers’ How to Cook.” Baker quotes from one of the same little mother’s plays as the 1910 article in her autobiography, which warns listeners of the dangers of feeding babies pineapple. *Fighting For Life*, 135-136.


314 “Teaching 50,000 ‘Little Mothers’ How to Cook.”

315 Ibid.

316 Ice cream
tea were all suggestions for getting more nutritious food on the table when family income was low.  

In a city where the largest mass consumer culture was rapidly emerging, however, it is not surprising that an expectation for mothers to use proper scientific methods for feeding their babies was not limited to one class or ethnicity. American mothers of “a generation that is intent on suffering just as little pain as possible...” were scolded in two back-to-back articles in the *Independent* in 1907 for apparently refusing to breastfeed their babies in favor of using formula mixed from cow’s milk. Explicit anxiety is expressed about how high urban infant mortality rates reflect on the reputation of America’s cities as compared to those in Europe.  

Wide speculation on potential causes of a fifteen-year decline in breastfeeding is made, including the negative impacts of women’s education, the type of close-fitting dresses women wore, and the growing availability to mothers of “artificial” food. Women’s magazines also criticized mothers for their lack of knowledge about proper infant nutrition in the same vein as the plays written by little mothers, citing outrageous instances when mothers and grandmothers fed infants too much food or the wrong kinds of food. The type and quantity of food being consumed by the children in one of Edward Bok’s articles (candy, lobster, ice cream, fried pork chops) could have been obtained by working-class, middle, or upper-class mothers in a consumer-friendly city like New York, making maternal transgressions against nutrition all the more widespread and alarming.

---

317 “Teaching 50,000 ‘Little Mothers’ How to Cook.”  
319 Importantly, the data used to back up the idea of this decline in breastfeeding is from Germany and not the United States. As the author freely admits in the second article, “A Mother’s Duty,” data on breastfeeding did not at that time exist for the United States. The author assumes that since German women are known to be educated and good mothers, if they have been shirking their duty to breastfeed, then surely urban American women have as well. “A Mother’s Duty,” 406.  
321 Bok, “The Ratio of Real Mothers,” 16.
Spargo argued that “a striking instance of the ignorance of little mothers to whom infants are entrusted was observed in Hamilton Fish Park when one of them gave a baby, apparently not more than four or five months old, soda water, banana, ice cream, and chewed cracker – all inside of twenty minutes.”

For some like Spargo, it was the little mothers of poor families who posed the greatest danger for a continually abysmal infant mortality rate, while others believed that the science of nutrition and its emphasis on breastmilk and wholesome, inexpensive foods promised a path to health for baby New Yorkers of all kinds, alongside proper hygiene and preventative medical care. It is no wonder that Baker, her Bureau, and the press found both humor and hope for the city in the nutritional advice of the little mothers, who vehemently urged their own mothers “don’t give the baby herring,” and “don’t let the baby eat dirty things from the floor that she threw down at first: also pickle.”

Partly through the efforts of the Bureau and the press, motherhood was becoming a scientific endeavor in modern cities like New York. For the Bureau’s purposes, little mothers were the ones most easily poised to memorize and utilize this information, preaching prevention to their own families and the larger city. Like other physicians of her time, Baker encouraged breastfeeding as the best food source for babies under one year of age, but recognized “It is a fact that if every mother nursed her baby the public would have but a small problem to consider in this matter of high infant mortality; but, as things are, in modern city and industrial life, this is out of the question. We can only encourage women to do the best they can.”

While many of those women were working outside the home, one of the most effective ways to acquaint them with scientific infant care was through their elder daughters.

323 “Little Mothers Write Playlets with Helpful Plots.”
Fostering Foundlings

Baby health stations and Little Mothers Leagues were innovative tactics that helped accomplish multiple goals of the Bureau of Child Hygiene. The infant mortality rate was declining, and Bureau nurses and inspectors met mothers and their families within their own unique circumstances with the scientifically-based knowledge to care for their infants’ long-term health. Considering the increasingly respected place of science and its experts in public life, perhaps most innovative of all was the practice of placing “foundling” and premature babies in the paid care of tenement mothers. 325 Like baby health stations and Little Mothers’ Leagues, the practice of fostering out foundlings demonstrates the acknowledgement by Baker and the Bureau that both individual and institutional oversight, both affection and science were required in the implementation of infant care to decrease infant mortality. 326 Individual efforts and education were combined with strengthened connections of those individuals to the resources of the city, merging scientifically-informed care with individual ingenuity and affection. While tenement mothers and their families were the main focus of the Bureau’s efforts with the baby health stations and Little Mothers’ Leagues, foundling babies came from a variety of locations and social classes within the city. As infant mortality rate in the tenements decreased alongside the Bureau’s efforts, the rate in the foundling hospitals remained unmoved. An article in Current Literature from 1910 laments that medical science had not yet been able to help the foundling:

It seems to us that we have seen of late some sobering confessions in the medical journals that, notwithstanding all their science, their aseptic and antiseptic precautions, their expert nursing and costly devices, the doctors have not been able greatly to reduce the high death rates in foundling and orphan asylums, and that they see no prospect of being able to reduce them even to the level of the death rates in the wretched homes of

325 Starr, 3-9.
326 In a 1911 article Baker is quoted as saying that babies require individual care, and that no matter how clean and professional an institution is, a baby will be better off with a family. “Deliberate Waste of Life.”
crowded tenement districts, where there is at least some mother care and miscellaneous family attention.\textsuperscript{327}

As evidenced by an improved infant mortality rate in the tenements, increasing numbers of baby health stations and Little Mothers’ Leagues, and increased appropriations for the Bureau, the “least” of “mother care and miscellaneous family attention” along with some help from public health workers was accomplishing quite a lot indeed.\textsuperscript{328} One of the chief societal tensions of Baker’s first years directing the Bureau was between a growing appreciation for professionalized medicine and a continuing belief in the innate, intangible talents of mothers. As with her other strategies, Baker did not shy away from utilizing effective means to lower infant mortality, sometimes whether it could be supported by science or not.

As Baker describes it, foundling hospitals had all the advantages that modern science and technology could lend, including an aseptic environment, scheduled feedings and bathings, and sleep schedules set up by well-trained doctors and nurses. She lamented that “the missing element, whatever it was, obviously had nothing to do with care from the hygienic point of view.” Despite excellent hygiene standards and “well-trained nurses carrying out the last technique to the letter,” the mortality rate of infants in foundling hospitals was fifty percent.\textsuperscript{329} Finding nothing amiss in the foundling hospitals in a technical sense, Baker decided that methods combining scientific care with “mother love” would be worth a try, and placed as many foundlings as possible with foster mothers; some of whom lived in tenements. Placing foundlings with foster mothers was not a new idea, but Baker’s acknowledgement as a public health official that foster mothers who had received minimal training from the Bureau’s nurses had a more positive impact on the

\textsuperscript{327} “The Abdication of the Parent,” \textit{Current Literature} 48.6 (1910): 647.

\textsuperscript{328} Baker is quoted in 1913 as saying that the appropriations for the Health Department’s Division of Child Hygiene that year were $600,000, and that the Division was now the largest in the Department. Marshall, “A Regiment of Babies’ Lives Were Saved Here in 1912.”

mortality rates of foundling and premature infants than scientifically-run institutions sent a clear signal that medical science could not by itself solve infant mortality in modern cities.\textsuperscript{330} The Bureau’s solution of placing a greater number of foundlings with trained tenement foster mothers gave the mothers some extra monthly income and also reduced the mortality rate from one-in-two to one-in-three foundlings over a period of four years.\textsuperscript{331}

As fostering succeeded in reducing foundling mortality, the practice was expanded to premature infants of the foundling hospitals. Under the care of foster mothers these “scrawny, bluish, half-alive” cases went from a mortality rate of “practically one hundred percent to a little over fifty percent in one year.”\textsuperscript{332} The press took interest in the practice of fostering just as they did in the baby health centers and Little Mothers’ Leagues, but the mortality numbers of the premature babies were not quite as happy to report as the quotations and antics of the little mothers. Reporting in 1910 on the continued progress of the Bureau’s efforts to reduce infant mortality, a Times reporter followed a nurse on her daily rounds visiting tenement mothers and was introduced to a “Collegio” baby being fostered by an Italian-American mother. In marked contrast to the positive descriptions given of the baby in the previous apartment, who “did look well, this item in the ‘reduced mortality’ list,” was the foundling, who “wailed steadily.”\textsuperscript{333} The degree to which the reporter is impressed by the inconsolability of the foundling despite the caring attentions of the foster mother is evident in this exchange between the reporter and the nurse: “‘Do you have much of this Collegio business?’ the nurse was asked. 'Sometimes six or seven a day,' she said. 'Let me off seeing any more won’t you?' She nodded sympathetically and

\begin{flushright}
\textsuperscript{330} Baker notes that New York’s Assistant Sanitary Superintendent oversaw foundling foster mothers prior to the formation of the Bureau, and that by 1913 2,800 babies were in the care of foster mothers overseen by the Bureau. Marshall, ”A Regiment of Babies’ Lives Were Saved Here in 1912.”

\textsuperscript{331} Baker, \textit{Fighting for Life}, 120.

\textsuperscript{332} Ibid., 120-121.

\textsuperscript{333} The “Collegio” baby referred to in this article was a fostered foundling. “Saving the Lives of Babies in Congested Districts.”
\end{flushright}
we started up to the top floor."334 Reducing the mortality rate from one hundred to fifty percent was a triumph to be reported, but the reality of the other fifty percent of the inconsolable premature babies was a stark reminder of how much public health, and the city of New York, were still up against.

**Conclusion**

The Bureau’s work with foster mothers from the working class helped to demonstrate what the Department of Health wished to be truth in early twentieth-century urban America: mothers of any class could successfully navigate the challenging urban landscape to raise healthy children with the aid of public health. While reducing the infant mortality rate among New York’s tenement districts and utilizing tenement foster mothers demonstrated that the education and affection of mothers and little mothers for their babies resulted in a powerful combination capable of promoting life rather than death, Baker notes that mothers and infants of other classes faced their own unique challenges. The assumption of the Bureau and its cooperating organizations was that working class tenement mothers required the most aid to connect them to the city’s resources such as clean milk and medical care. Upper class infants could receive the best in medical care, but usually from the attention of a trained nurse rather than a mother; middle class mothers sometimes balked at seeking out the free assistance of the Bureau but likewise found they could not afford a good quality personal physician.335 In ruling out any possible errors in hygiene or practice in the foundling hospital, in many ways using foster mothers as a more effective alternative validated the Bureau’s emphasis on combining both individual

---

334 “Saving the Lives of Babies in Congested Districts.”
(experiential) efforts regardless of class, and institutional (scientific) efforts to combat infant mortality.

Despite the important contribution that medical science made to the preventative strategies that reduced infant mortality, Baker relates that “The rich baby’s nurse, who never picked him up and crooned to him, merely fed him the right thing at the right time and kept him properly aseptic, was in the same category as the foundling hospital’s nurse who turned the foundling over at the right time and gave him the best of care with all the impersonal efficiency of a well-intentioned machine.” Babies of any class needed to be protected from spoiled milk and infectious disease, and be exposed to fresh air and nutritious food, but they also needed love: “old-fashioned, sentimental mothering.” Confronted with the unprecedented crowding, growth, and competition to succeed in early twentieth-century New York, the mothers of New York were encouraged to partner with public health in order to connect to the education and resources they would need to reduce infant mortality. Preventative exams for infants became an expected part of infancy, and mothers knew who to ask for help when they had trouble breastfeeding through the work of baby health stations. Daughters got a chance to teach their own mothers the new knowledge they learned about infants in Little Mothers’ Leagues in the schools, and to see their own education make a difference in their families. The programs were far from perfect, and did little to address the issues of pay inequality or corrupt landlords that kept families in poverty. But they did address families frankly and with genuine interest in their wellbeing, right within the circumstances in which they lived. Another almost comical example of Baker’s creative strategies was to practically assist mothers in changing and bathing their babies frequently during hot summer days by designing new baby clothes. She was frustrated by some

336 Baker, Fighting for Life, 121.
337 Baker, Fighting for Life, 121.
immigrant mothers’ belief that multi-layered swaddling was best during any weather, but acknowledged their felt need to protect babies from the elements: “So I worked out the obvious but previously unthought-of system of making baby-clothes all open down the front and laying them out like a fireman’s clothes before the baby appeared on the scene.” The baby could be washed and then their arms only needed to be fit through the armholes for all the layers at once.338

Importantly, Baker and her Bureau acknowledged the essential “missing element” that the individual care, experience, and creativity mothers provided to their babies. The Bureau was created at a moment in New York’s history when public health could combine the latest science with the creative individual efforts of nurses, physicians, mothers, journalists and philanthropists to deal with the problem of infant mortality, an issue that no one felt could be ignored. Baker notes that the professionalizing societies of physicians sometimes disputed the Bureau’s methods, for example calling her a “murderer” when the Bureau simplified the process of cow’s milk modification to teach mothers at the baby health stations.339 At a moment when institutionalized public health was controlled at the municipal level, medical societies were still debating whether to become involved in social and political issues. Mothers faced the challenge of raising healthy children in the largest modern city in America, and Baker and her Bureau had the freedom to test and modify the efforts at health reform that had come before, and to work resourcefully within the unique circumstances of New York mothers’ daily lives.

338 As another bonus to her scheme, Baker notes that the McCall Pattern Company got interested in her design, and that “at a royalty of a cent apiece [for the pattern] it made a very neat addition to a rising young woman’s income.” Baker, Fighting for Life, 118. Baker’s work could not always be viewed as altruistic, but it was nearly always practical.
339 Baker, Fighting for Life, 129.
Couched within a historical moment that saw the rapid professionalization of medical science alongside the efforts of countless private and religious charities, professional organizations, politicians and Tammany henchmen to keep public health on pace with the growth of New York City, the Department’s Bureau of Child Hygiene with Baker at its helm emerged with a unique mix of growing authority and creative freedom to significantly impact the health of New York mothers and babies. Writing about the 1920s, several years after the Bureau’s early childhood preventative health measures had first been deployed, Lost Generation writer Malcolm Cowley identifies “salvation by the child” as one of the important themes of focus for modern society. By saving children (physically and psychologically) society itself could be saved, but only if those in power could be kept from perverting such endeavors for their own benefit.\textsuperscript{340} As Baker’s autobiography and press coverage of the Bureau’s first years illustrate, politicians certainly sometimes used the cause of babies to forward their own careers or agendas, but Baker never hesitated to utilize this cultural attention toward the vulnerability of infants to \textit{their} own advantage. As Crunden asserts about New York, "No one could visit the modern city without depending on the machine," and through the work of the Bureau, that machine/organism could be used to connect babies with life.\textsuperscript{341}


\textsuperscript{341} Crunden, \textit{Body and Soul}, 32.
CHAPTER 4: THE MILK QUESTION

The milk question is simply one of the difficulties of a complex age - one of the difficulties of an artificial civilization to which we have not yet adjusted ourselves. It is part of the great sociologic problem which has arisen as the result of the crowding of great masses of humanity in centres of population... We are simply suffering the inevitable penalties we must pay for modern conditions of life.

Like everyone else in the medical profession of the day, I had been trained in the then unimpeachable Rotch school of milk-modification, which was based on consideration of the baby's age, health, complexion, nationality, color of eyes and numerological and astrological data - or at least so it seemed when you started working with it.

Your milk problems multiply in summer. You solve them all by using Sheffield Milk.342

As mentioned in Chapter 3, the Bureau's work with milk stations demonstrated one way that the always contentious individual vs. social responsibility for public health could be successfully negotiated at the local level. With the milk question the level at which public health's role in infant welfare manifested itself expanded beyond the city's limits with its involvement in the regulation of the entire milk supply entering the city. One thing that helped enable New York City to have such influence over its regional farms and milk distributors was a rhetoric of perfection that tied clean milk to lowered infant mortality and societal progress. A clean and abundantly available milk supply could signal the city's moral and scientific commitment to public health. As E. Melanie DuPuis argues in her examination of historical scholarship on milk, “Ideas about perfection provide a key to understanding modern society. The modern story of the march of progress entails the march to a perfect world.”343 In the discussion of the milk question among health officials, physicians, and social reformers in New York there was a palpable anxiety that the city's approach to infant mortality be one that led to perfection. If a pure milk supply could only be made available to every child, then perhaps infant mortality itself could become a trauma of the past.

Baker sometimes verged on verbalizing this hope herself. Ultimately, though, in Baker's perspective on public health the question of perfection took second place to practicality. As municipal control over the milk supply expanded, a practical application of the medical knowledge involved in infant feeding ended up increasingly in the hands of individual, imperfect, New Yorkers.

343 DuPuis, 4.
Through Baker’s experience we see that public health, like the era in which it developed, involved too many inherent contradictions to fit completely within a narrative of perfection. The milk question’s manifestation in New York City demonstrates that rhetoric of perfection in the conversation surrounding the city’s ability to create a pure milk supply, and its resulting relationship with its regional milk suppliers, but is complicated by the practical demands of the mothers supplied by baby health stations.

Perhaps surprisingly, a seemingly standard farming byproduct became an almost obsessive topic of conversation amongst early twentieth-century Americans. As exemplified by the quotes above, the farm byproduct that only a few years earlier had been called “white poison” due to its alleged propensity to cause illness was now one of the most popular and important topics in the press and medical journals. In the nineteenth century, public health officials, doctors, and health reformers often disagreed about the main cause of infant mortality in New York: was it a lack of breastfeeding, bad breastmilk, contaminated cow’s milk, dangerous living conditions, the weather? By 1910, the New York Milk Committee made an estimate based on data from eight states that the mortality rate for American children under one year of age was between one and six and one in ten. One of the most preventable causes of death was identified as feeding infants contaminated or nutrient-deficient substitute formulas that resulted in diarrheal diseases. Ensuing debates over the merits of breastfeeding, bottle-feeding, and

---

344 DuPuis, 5.
346 New York Milk Committee, 17.
347 The authors note the following as contributors to infant mortality: the physical stresses of poverty, including smalls and poorly ventilated tenement apartments, poor working conditions for expectant mothers, care of infants by “little mothers,” contaminated or nutrient-deficient food, crime, and illegitimacy. New York Milk Committee, 20.
municipal involvement in infant welfare intensified into the twentieth century over what became known as “the milk question.”

The milk question reveals quite a bit about the challenges faced by public health in an increasingly urban and medically advanced society. Before the wide-scale sanitation efforts by public health boards and certainly prior to the application of germ theory to medical practice, parents did not necessarily expect their children to survive. Public health, alongside recent documentary photography by Jacob Riis and Lewis Hine of the suffering masses of poor urban children, were beginning to change Americans’ expectations for children’s survival and quality of life. Writing in 1912, physician Milton J. Rosenau noted that “…we do expect to raise them all nowadays, especially if they can be nurtured upon fresh, clean, and safe milk.” Public health efforts were increasingly utilizing advances in medical science to treat and prevent illness, and expectations about life and death were changing. Indeed, it was in modern cities, rather than in the bucolic countryside often associated with cow’s milk, that there was at first any demand for milk as a desirable food source. Sociologist E. Melanie DuPuis’ description of milk as a quintessential American “perfection” story, and historian Helen Zoe Veit’s analysis of the Progressive Era as a time when food choices became moral choices lend some insight into the fact

348 Two examples of this phrase being used to describe the task of providing a clean milk source to infants are John Spargo’s book *The Common Sense of the Milk Question* (New York: Macmillan Company, 1908) and *The Milk Question* (New York: Houghton Mifflin, 1912), by M.J. Rosenau. This is the context of the milk question that this chapter will examine. The phrase “the milk question” was used earlier than the turn of the twentieth century, though, and in slightly different contexts. For example, in 1839 an article appeared in the *New York Evangelist* decrying the immoral practice of some dairymen for feeding their cows “slop-feed” from distilleries. Not only was association with alcohol repugnant to some religious moralizers of the nineteenth century, but the living conditions of most cows housed next to distilleries were not clean, producing bacteria-laden milk. R.M.H., “Milk Question,” *New York Evangelist* 10, no. 13 (1839): 10, 13.

349 Jacob Riis’s influential *How the Other Half Lives* (1890) gave written and photographic evidence of life in New York City tenements. As a photographer, sociologist, and teacher, Hine photographed child labor in a variety of industrial settings in New York City and Pittsburgh. Their published images helped to make knowledge of the dangerous living and working conditions of children more widespread.

350 Rosenau, 7. Milton J. Rosenau helped establish the Harvard School of Public Health, and was dean at the University of North Carolina School of Public Health.

351 DuPuis, 5.
that the task of providing a standardized, pure milk supply manifested a tangle of early twentieth-century cultural anxieties.\textsuperscript{352}

Veit argues that dramatic changes in American attitudes toward food and nutrition in the first two decades of the twentieth century soothed a variety of modern anxieties: “To many Americans, indeed, a comprehensive overhaul of U.S. food offered answers to a host of social questions, including physical health, wage strife, women's roles, racial fitness, Americanization, international welfare, and world peace.”\textsuperscript{353} It is likely not a coincidence that arguments for the best and most moral food choices in the early twentieth century that Veit discusses were occurring at the same time that arguments were being had over the “perfect” food for infants. Food choices based on rational, nutrition science became the best choices and the most moral. As Veit notes, “for many Americans in the Progressive Era the concepts of rationality and morality were virtually inseparable.”\textsuperscript{354} The anxieties about urban and family life inherent in the milk question and the pressure to respond in a rational and moral way was further complicated by new social structures inherent in cities, the challenges of work outside the home, crowded living conditions, new advances in the science of nutrition, and scientific motherhood. Confusion abounded on the part of mothers and health experts alike in the milk question.\textsuperscript{355} The classic Progressive solution to the confusion would be to allow the science to inform new food policies for the protection of children, but a scientific consensus on the best milk for infants was not immediately forthcoming.

\textsuperscript{353} Veit, 3.
\textsuperscript{354} Veit, 4.
\textsuperscript{355} For a helpful discussion of the multiple issues impacting the breastmilk versus infant formula debate at the turn of the twentieth century: Jacqueline H. Wolf, 9-41.
A key contributor to the confusion about the milk question was the simultaneous advocacy of the superiority of breast milk by physicians and public health experts alongside precise instructions for mixing the “perfect” cow’s milk substitute formulas. While medical experts certainly had an influence on mothers’ feeding decisions, mothers played an equal part, and neither group could escape the growing influence of mass-marketed cow’s milk by milk distributors. All three players had a voice in the milk question, and while this conversation was by no means unique to New York City at the time, New York was the first major city in which these players successfully negotiated a cooperative relationship. More specifically, the conversation about New York’s ability to obtain a pure milk supply, the resulting relationship between the city and its milk suppliers, and the practical demonstration of new nutrition knowledge to mothers, illustrate another aspect of New York public health’s efforts to create a narrative of life rather than death in the face of infant mortality. By creating a feeling of control in the face of chaos, the pure milk narrative that fueled public health efforts soothed anxieties surrounding the competence of mothers versus experts in infant care, and the societal consequences of decreased breastfeeding.

In practice, as Baker and her colleagues found, pure milk would only be one piece of a multifaceted public health strategy to fight infant mortality. One of the aspects of the milk question in New York City that makes it such an interesting moment in the history of public health

356 From a public health perspective, one of the reasons why this cooperation was possible was because the Health Department had been consolidating and reorganizing redundant and absent efforts of local health bureaus so that a small staff of health employees was accountable to each specific neighborhood in the city. The physicians and nurses in each district became familiar with and could advocate for the needs of their specific neighborhoods. For example, in 1914 commissioner Goldwater established districts in the city where “intimate knowledge of and an excellent working relationship with residents” as well as standardized record keeping enabled the Department to serve more mothers and babies more effectively, including at baby health stations. Duffy, 268. DuPuis also notes that New York State had a unique regulatory situation among other dairy states like California and Wisconsin, which will be discussed more below. DuPuis, “Alternative Visions of Dairying: Productivism and Producerism in New York, Wisconsin, and California,” in Nature’s Perfect Food, 183-209.
is the contrast between perfection and practicality that played out in the city’s milk stations. New 
York City was the first major American city to successfully broker relationships with its 
surrounding farms and milk distributors to create a regulated milk supply, and to demonstrate 
that the city and the nation as a whole were modern, scientific, efficient. But New York City’s 
response to the milk question also illustrates an increasingly practical and adaptive approach to 
public health education advocated by Baker and her Bureau. Stories of perfection seemed to 
galvanize and unify the disparate players in the milk question toward the city’s major achievement 
of regulating its milk supply, but the city’s milk stations also acknowledged the very practical ways 
that individual baby New Yorkers could be connected to the resources of the larger body of the 
city. The quest for pure milk was a kind of emblematic endorsement for a municipal role in infant 
welfare and a belief in the perfectability of society, but as the Bureau’s strategies at the milk 
stations demonstrate, Baker and her colleagues recognized that milk alone could not save babies.

Rhetoric of Perfection

New York’s response to the milk question had to be worked out quickly at the start of the 
twentieth century, because by 1912, 2,000,000 quarts of milk from 44,000 area farms in seven 
states were brought into the city each day, and bottle-feeding was becoming a much more 
common practice among women of all classes and backgrounds. Physicians, philanthropists, 
and public health officials alike began calling for organized, municipal oversight of the city’s milk 
supply, requiring the development of a coordinated relationship between New York and its 
regional farmlands similar to Chicago’s relationship to its “hinterland” as a meat-packing center 
the previous century. Just as uniform cuts and quality of meat became available to east coast

---

358 Wolf, 17-23.
consumers year-round, within a short span of years, good quality milk became available year-round to baby New Yorkers through carefully regulated regional milk distributors. Assessment of that quality was accomplished through rigorous scientific management of the milk supply by the Health Department in keeping with progressive-era expectations of perfection. A perfect milk supply to infants could illustrate the nation’s capability for continuously evolving toward a state of perfection: milk could be the life-giving example of that progress.\textsuperscript{360} The importance of clean milk was not solely based on the impact of perfection rhetoric, of course. Cow’s milk was a practical and nutritious substitute for breastmilk when breastfeeding was impossible or inconvenient. Already containing sugar, fat, and protein, the levels of each could be manipulated to more closely approximate the percentages found in breastmilk, and this manipulation would be made easier by standardized grades of milk.\textsuperscript{361} The hope arose that if a clean and graded milk supply could be municipally regulated, infant mortality might end altogether. The successful perfection of milk appeared to fix the multiple problems wrapped up in the milk question all at

\begin{footnotesize}
360 Perfection rhetoric surrounding the milk question can be observed in “Unbottled Milk Peril to Babies” and Marshall, “A Regiment of Babies’ Lives Were Saved Here in 1912.” M.J. Rosenau uses the word perfect several times in his book \textit{The Milk Question}, to describe milk as a perfect breeding ground for bacteria, a perfect food for infants, and the types of perfect processing methods that can be used to clean milk, such as “perfect pasteurization.” These examples showcase how frequently, though inconsistently, the word perfect was used in discussion of the milk question.
\end{footnotesize}

\begin{footnotesize}
361 Part of the issue with modifying milk for infants was that some physicians found it cumbersome to do the calculations to find the appropriate ratio of sugar, fat, and protein for each individual infant. There was some disagreement among physicians as to how individualized the modified milk formula should be. Dr. Thomas Morgan Rotch acknowledged this difficulty and noted that several good standard cards with nutrient ratios had been created by physicians such as Dr. Thompson S. Westcott of Philadelphia, and that milk laboratories like the Walker-Gordon lab in Boston were going to make it easier to obtain infant formulas specific to individual needs. Baker makes a good-natured jab at the complicated nature of Rotch’s own method of milk modification in her autobiography, noting that her system of modified milk was based solely on the weight of the infant. Thomas Morgan Rotch, “The Essential Principles of Infant Feeding and the Modern Methods of Applying Them,” \textit{Journal of the American Medical Association}, August 15, 1903, 416-421; Baker, \textit{Fighting for Life}, 128-129.
\end{footnotesize}
The hope invested in a pure milk supply, as evidenced by a clear rhetoric of perfection, presents itself in the discussion of medical experts, the press, and milk distributors.

The desire for cities like New York to reach a state of perfection, scientific efficiency, and morality is evident in the rhetoric by the participants in the milk question. After all, the milk question occurred during a period when the idea of the progress of civilization had historical support not only from John Winthrop’s “city on a hill” but also from Darwinian evolution. The influence of John Dewey and William James’s pragmatism can be seen in the cultural meanings placed on milk: its promise of life-saving nutrition, prevention of disease, and ultimately the value placed by the community on infant life and nutritional knowledge that its regulation implied. Bacteriological advances were making clear to both physicians and the general public that milk could go from efficient carrier of germs to giver of life-sustaining nutrients. During milk’s transition from danger to savior with the milk question, disagreement among physicians as to the safest kind of cow’s milk to use in infant formulas was understandably keen. One group of physicians formed the American Association of Milk Commissions in 1906 to advocate the production of standardized, “certified milk.” Certified milk was unpasteurized and came from farms that followed a detailed procedure to reduce bacterial contamination during harvest and bottling.

362 DuPuis, 34. DuPuis discusses early milk “boosters” such as social reformer Robert Hartley, who promoted milk as containing all the nutrients needed to solve children’s health problems. To reformers such as Hartley, the perfect qualities of milk included spiritual as well as nutritional undertones. Since many urban dairies were attached to distilleries, if milk production itself was regulated then it could be detached from the moral evil of alcohol.

363 It was not uncommon for participants in the milk question to make references to the idea of the evolutionary progress of humans toward a more perfect ideal. One physician wrote about American women being up to “any test” of “their fitness for maternity.” Ross J. Snyder, "The Breast Milk Problem," Journal of the American Medical Association 71, no. 15 (1908): 1214.


365 Typing two keywords, milk and infant, into the search engine of the Journal of the American Medical Association and restricting the range from 1900-1928, I got 240 results. Physicians of the period talked a lot about milk. Many of the hits that came up were book reviews too, which illustrates that books about milk and infant mortality were being written at the time.
frequent inspections by the Commission’s physicians. In a 1913 article Dr. Thomas McCleave urges all members of the Commission to “advance the doctrine of pure milk by private precept, by public lectures, exhibits, literature, and all other available means,” and asserts that “The control of the commission over the dairy and the entire process of production and distribution of the milk must be absolute.” Education of all members of the community in the promise held by a standardized milk supply was described by McCleave in almost evangelical terms. In milk, science combined with public will had a real chance to fight infant mortality, a sticking point in the progress of civilization.

In McCleave’s choice of words there is clearly an urgency and an anxiety to convince farmers, physicians, and the public of the safety and desirability of certified milk based on its rigorous regulation by trained experts. An emphasis on a perfect and efficiently-made product was of interest to readers of the *Journal of the American Medical Association*, for McCleave’s article was published with responses. Mr. W.E. Miller from Lebanon, Ohio shares McCleave’s desire to “spread this gospel of certified milk among the consumers, among physicians,” asserting that “We should first be sure that we have approximated 100 per cent. efficiency” before deciding on a nation-wide standardized price. Certified milk was only one type of milk favored by physicians for infant formula, but the fervor some physicians held for its perfection illustrates both an example of the perfection narrative itself and the rapid progress that was being made in the understanding of bacterial science at the time that made perfection seem possible. For Robert Koch to identify the tubercular bacilli in 1882 and physicians to be planning a nationwide

---

367 Ibid., 2032.
368 Mr. W.E. Miller does not identify his profession in his response but shares knowledge of the costs involved in producing certified milk and his opinions on pricing that would be fair to both consumer and producer/distributor. McCleave, 2034.
standardized milk supply by 1913 is worth noting as an example of the rapid application of germ theory to the practice of public health, and the earnest hope that medical science promised great improvements for the progress of society.

Rhetoric of perfection in discussion of the milk question was not limited to medical journals. In an article titled “Unbottled Milk Peril to Babies,” the New York Times described the purpose of the city’s newly established Association of Infant Milk Stations: “To perfect the organization of the different committees dealing with the pure milk problem...”369 One of the subtitles of this article reads “Myriad Bacteria in Excess,” signaling the press’s expectation of readers’ familiarity with the danger of bacteria-laden milk to babies. Dr. Charles North, who tested unbottled milk samples from small grocery stores in the city, is quoted at length regarding his findings, reporting measurements of the number of bacteria per cubic centimeter of milk. The inclusion of North’s detailed findings in the article suggest bacteriologists as the newly minted experts in the perfection story of milk. The public documentation of Dr. North’s precision also illustrates the ongoing coexistence of both individual and societal focal points in the city’s efforts to lower infant mortality. Tiny organisms that previously no one had known existed were now counted one by one into the thousands in order to manage a city-wide standard of milk purity. Later, at infant milk stations and countless kitchens all over the city, that milk would then be specially modified for the consumption of the 7,000 babies under the care of those stations.370 The extreme disparity of scales involved in the work of providing “perfect” pure milk to New York’s babies was never more apparent.

370 At the time of this article the new Association, of which Baker was a member, oversaw 90 milk stations throughout the city. “Unbottled Milk Peril to Babies,” 6.
The City and Sheffield Farms

The milk distributors who delivered milk from surrounding farms to the city used and economically capitalized on a similar rhetoric of perfection to that of the medical experts, and in that rhetoric manifested the broadened reach of public health’s response to the milk question beyond city limits. As Rosenau noted, “It is more than a mere figure of speech to say that a river of milk flows from the country into the city,” and through that river, “Infection flows from the country into the city.” Milk distributors such as Sheffield Farms, who signed on to supply the Health Department’s milk stations, literally and rhetorically placed themselves between disease-carrying cows and infant consumers. The Bureau and its milk distributor shared a position between the milk producers and their consumers, and shared an impetus to demonstrate that they had the moral conviction and the expertise to make sure that supply line was trustworthy and disease-free. Also like the Health Department, at the beginning of the twentieth century milk distributors had an ambiguous reputation in New York. Monetary and political concerns sometimes interfered with the delivery of quality services to the citizens they served. For example, in 1916 several janitors of apartment buildings were fined for taking bribes from milk distributors, including Sheffield Farms, for “being recommended to apartment dwellers.” While competition between milk distributors would remain fairly fierce, the rhetoric used by companies like Sheffield Farms in its advertising showed a clear awareness of the role it played alongside medical experts and consumers in the narrative of perfection of milk. Sheffield Farms advertisements in New York during the first two decades of the twentieth century demonstrate that the company understood

---

371 Rosenau, 12.
the influence of perfection rhetoric in the milk question, and also of the fears about milk, disease, and infant mortality which that rhetoric masked.

The ads consistently mention Sheffield Farms’ purportedly unique process of “perfect pasteurization,” which the reader is told is better than regular pasteurization processes used by other companies. A taste similar to raw milk and an absence of pathogenic bacteria were two consistent consumer concerns addressed in Sheffield Farms ads. Several repeated taglines from 1907 suggest that the company was well aware of the widespread anxiety produced by the threat of typhoid during (coincidentally?) the same year that Mary Mallon was apprehended on suspicion of being a healthy carrier. One notes that the “ordinary” (not perfect) “commercial’ Pasteurizing is better than none, but our new ‘perfect’ pasteurizing eliminates every disease germ possible to milk.”

The progressive belief that problems could be solved only once they were publicly exposed manifests itself in Sheffield’s description of pasteurization here. Now that scientists knew that disease germs could live in milk, a process that got rid of those germs should solve any anxiety about drinking milk. New Yorkers were not unfamiliar with the concept of pasteurization, but were not wholly convinced of its desirability; Baker notes that “before the dairies perfected the process, pasteurizing the milk did make it taste as though it had been boiled.” Given the spreading knowledge that contaminated milk was linked to the dreaded diarrheal diseases of infants, the public was willing to hear Sheffield Farms’ claim that its

---

374 A 1907 ad from Good Housekeeping explains that the type of process used by other companies such as Straus conducts the pasteurization step inside individual bottles, whereas Sheffield Farms pasteurizes its milk in a huge tank and then lets it sit at exactly 162° in a special retainer before being packaged into individually sterilized bottles – this latter process is “perfect pasteurization.” The ad includes drawings of the pasteurizer, the retainer, and the bottle sterilizer. More milk is cleaned at one time, but the process is not fast, and so purportedly results in milk that contains fewer bacteria per cubic centimeter than milk pasteurized in bottles. Sheffield Farms, “Perfect Pasteurization” (advertisement), Good Housekeeping, 45, no. 4 (Oct. 1907): 420.

375 Sheffield Farms, “Pure Milk” (advertisement), New York Times, May 21, 1907, 6.

376 Baker, Fighting for Life, 131.
pasteurization process was the most efficient at removing germs; particularly if taste was not also compromised. The ads show an acknowledgement by Sheffield Farms of customers’ taste preference for raw milk, noting that “The taste and nature are unchanged” in perfectly pasteurized milk.377

Ultimately key to Sheffield Farms’ claim of distinction was that in addition to good taste, perfect pasteurization promised to rid families of the worry that milk might be infested with disease-causing germs: “Our perfect Pasteurizing eliminates all possibility of any germ – our milk cannot carry typhoid, consumption, etc., to you”; “You cannot get fever, consumption, diphtheria or any other disease from milk if you use only the Sheffield Perfectly Pasteurized.”378 With the title “No Typhoid at West Point,” one 1907 ad even goes so far as to reprint an excerpt from a newspaper article reporting that typhoid cases among the cadets at West Point had disappeared since the school starting serving only pasteurized milk.379 The familiar-looking Sheffield Farms logo then appears below the excerpt after an invitation that “You may guard your health in the same way by using only... Sheffield Farms...”380 Pasteurized milk protected the nation’s brightest military force, and now New York families could protect themselves by choosing perfectly pasteurized milk. In addition to advocating the perfect nature of pasteurized milk, this ad also touches on other rhetoric shared between descriptions of military and medical forces at the time: “guarding” the safety of citizens against a shared enemy was required of both. Sheffield Farms gave families, in addition to the military, the ability to protect themselves. Just a few years later in 1910, ads increasingly emphasized the relationship between milk producers and Sheffield Farms, showcasing the strength exhibited by a united front providing a clean milk supply to the consumer.

379 It does not say that West Point was using Sheffield Farms milk, just pasteurized rather than raw milk.
380 Sheffield Farms, “No Typhoid at Westpoint” (advertisement), New York Times, June 4, 1907, 3.
One example includes a list of “undersigned” names of farmers, attesting to the fact that Sheffield Farms “paid of their own accord, and without solicitation or request from us, 10 cents per hundred pounds extra over their agreed price... and we feel it our duty to let the public know the principles on which this Company work, and how they show their appreciation of patrons who are willing to produce better milk.” Sheffield Farms’ milk was not only the cleanest and safest milk, but also the result of trusted relationships between the company and milk producers all over the region.

Sheffield Farms continued to use the rhetoric of perfection as the early years of the century proceeded, emphasizing an implicit invitation for New Yorkers to feel that they (the consumers) and Sheffield were in the fight against disease together – allies in the war against infant mortality. Some Sheffield ads are quite dense with text, explaining new improvements to their facilities and pricing in response to consumer demand. A mutual relationship of concern is implied when Sheffield Farms invites readers to “Watch the daily papers and see what we have been doing for the public,” or to “Visit our perfect pasteurizing plant at 524 West 57th Street.” By 1910 an ad proclaimed that “Progress is the motto of Sheffield Farms,” followed by descriptions of the money and improvements the company had devoted to its product over the past several years, while its price per quart was lowered in order to benefit its customers. The rhetoric of progress toward perfection for both Sheffield and the city is implied, as New Yorkers trust Sheffield Farms and buy more milk, believing that “they [Sheffield Farms] are pioneers in the business...” These pioneers acknowledged their partnership with the other pioneers of the

---

381 Examples of this rhetoric of cooperation from Sheffield Farms advertisements in the New York Times include “The Milk Which the 'Sheffield Farms' Offers,” February 2, 1910, 6 and “Read What the Producers Have to Say About the 'Sheffield Farms','” February 15, 1910, 10. The quote is from the second advertisement.

382 Sheffield Farms, “For Many Years the 'Sheffield Farms'' (advertisement), New York Times, February 1, 1910, 4; Sheffield Farms, “You Cannot Get Fever” (advertisement), New York Times, June 7, 1907, 6.

383 Sheffield Farms, “Progress is the Motto of the 'Sheffield Farms'' (advertisement), New York Times, February 4, 1910, 16.

384 “Progress is the Motto of the 'Sheffield Farms','” 16.
Health Department milk stations in demonstrating the life-saving results of a regulated milk supply, noting that “the wonderful work done this year by the Board of Health with pasteurized milk is PROOF of its virtues.” Thus, in the rhetoric of perfection producer, distributor, medical expert, and consumer were united in a circle of trust and assured success in the fight against infant mortality.

By 1921, clean cow’s milk formula was a more accepted food for infants, and Sheffield Farms could specifically say in an ad that “we have accepted the baby’s needs as our standard.” Sheffield Farms’ “standard” was backed up by a lengthy history of the company’s relationship to the city that took up half a page of the newspaper. Still targeting the familiar fear that hot summer days would endanger infants, and after years of touting that their “perfect” pasteurizing process eliminates disease, the ad still reminds readers of the fact that milk in the wrong hands can be dangerous: “The lives of thousands and thousands of precious babies depend on the quality of this milk, even more than its volume.” Sheffield Farms’ half-page narrative of its long alliance with the city in the fight against infant mortality appeals to this idea of a shared fight against a shared enemy (infant mortality), and a reminder that the fears that have united them should not be forgotten just because perfect pasteurization has made such a difference. The company aligns itself with the “scientific men” who helped them develop their special pasteurization process: the “wonderful system that has made Sheffield Milk famous not only in America, but throughout the world.” While Sheffield Farms was doubtless trying to make money alongside producing clean milk, it is interesting to note the sense of pride taken in how far the company and the city have come together, not altogether that different from Baker’s tone when she exclaimed that “New

385 Sheffield Farms, “Hundreds of Babies Saved by the Board of Health” (advertisement), New York Times, October 6, 1911, 6.
386 “Milk Problems Multiply in Summer,” 7.
York is the most generous city in the United States, the most generous city in the world, in providing money for the purpose of keeping the graves empty and the cradles full.” As the ministrations of the Health Department’s milk stations continued to supply the city’s infants with life-giving resources, references to the rhetoric of progress toward perfection seemed to be one factor that united the disparate players in the fight of clean milk against infant mortality, and reinforced the important part that each played in that fight.

The reputation of Sheffield Farms and the Bureau of Child Hygiene both benefitted from the success of coordinating a regulated milk supply to the city, and the rhetoric of perfection used to describe that milk created an impression of calm amid a chaotic battle against infant mortality. The simultaneously modern and progressive era context in New York at the turn of the twentieth century supported the narrative of milk’s perfection, and the blow that perfection would wield in the fight. The milk question disguised a much more diverse cultural conversation than some of its participants let on, though. The potential safety and perfectibility of cities, the importance of breastfeeding to a mother’s identity and relationship to her child, the role of public health vs. individual families in the care and feeding of infants, and medicine’s ability to implement bacteriological science in the perfection of a large-scale food source were all still anxieties present in the milk question. In response to these anxieties Baker and her Bureau witnessed and participated in the transformation of cow’s milk from poison to infant lifeline, the simultaneous romanticization and scientific management of motherhood and milk, and the idealization of mothers’ wisdom and instincts alongside a mandate that they learn the latest procedures in scientific motherhood. While the victories were celebrated, the battle was never quite won.

390 H-Net Roundtable Reviews, Veit, 11.
391 Dupuis, 59-61; Ladd-Taylor, Mother-Work, 74-103; Smuts, 20, 50.
The scale of New York City’s growing population, the living conditions of the tenements where so many baby New Yorkers lived, and the history of contagious disease that had already claimed so many lives and tested the role of public health,\textsuperscript{392} in many ways primed the city to be among the first in the United States to take the task of infant feeding seriously at the municipal level. As regulations were put in place by the Health Department for the milk supply entering the city in the early twentieth century, milk was portrayed by its distributors as a “pure” food produced in the bucolic American countryside at the same time that it required scientific manufacture to avoid becoming a hotbed for deadly bacteria.\textsuperscript{393} In many ways what became “nature’s perfect food” was a perfect companion to New York, “one of the earliest industrial mass markets for fluid milk... [among] the earliest to experience the food supply problems of modern cities, due to rapid increases in urban population density.”\textsuperscript{394} The milk question thus illustrates the familiar contradictions between individual and societal responsibility, practicality and perfection, that Baker and the Bureau faced as they adapted public health to respond to the needs of the city.

**Mothers’ Milk**

Celebration of the Health Department’s success in regulating the city’s milk supply and the Bureau in coordinating its distribution through milk stations exposed the deep cultural anxiety about infant mortality, and also more indirectly about that mortality as a potential consequence of a decline in breastfeeding. What was made clear by the popularity of the milk stations was that not all mothers were breastfeeding their babies, and that as a result infant mortality rates were

\textsuperscript{392} As noted in Mary Mallon’s case in Chapter 2.
\textsuperscript{393} DuPuis, 69–71.
\textsuperscript{394} DuPuis, 18.
high due to the ingestion of spoiled or otherwise contaminated cow’s milk.\textsuperscript{395} When the Bureau began to help coordinate and organize the milk stations, Baker began to refer to them as “baby health stations.”\textsuperscript{396} This subtle change in name encompassed a broader view of the milk question’s practical concerns than merely pure milk: providing the city’s mothers with the knowledge and other resources they would need in order to keep their babies well amid less than ideal living conditions. When women stopped breastfeeding, the expert advice of medical science on infant care became almost inevitably more influential. Baker and her colleagues continued to acknowledge breastmilk as the best food for infants, but the connections to resources and education provided by the baby health stations acknowledged the combination of cultural and environmental factors impacting mothers’ decisions about infant feeding alongside the demand for pure milk.

Milk stations had been present in New York before the Bureau of Child Hygiene sought to organize and improve them. The coordination and expansion of milk stations by the Bureau after 1908 coincided with a general ethos among social reformers of the time that reform was going to have to be consolidated, centralized, and made more efficient in order to succeed. The New York Diet Kitchen\textsuperscript{397} had begun distributing milk to New York’s poor in 1873, and philanthropist Nathan

\textsuperscript{395} DuPuis, 64. DuPuis argues that living in a city detached women from one another, and that this disruption to “an informal exchange relationship” impacted mothers’ breastfeeding habits more than the baby formula industry. Also, Wolf, 1-7.

\textsuperscript{396} In a 1913 article Baker presents data showing that the mortality rate at non-Health Department milk stations was higher than that at those overseen by the Bureau. She attributes the better mortality rate of the Bureau stations to the fact that mothers received both milk and education about general infant care there. "The Reduction of Infant Mortality in New York City," \textit{American Journal of Diseases in Children} 2 (1913): 160. Duffy notes that in 1916 the Department changed the name of the milk stations to “baby health stations, a change which reflected their role as health and educational centers.” Duffy, 467.

\textsuperscript{397} The New York Diet Kitchen was founded in 1873 in order to help those who were both sick and poor. A written request from the sick individual or family as well as a note from their doctor was required in order to get free food. Moses King, \textit{King’s Handbook of New York City: An Outline History and Description of the American Metropolis} (Boston: 1892), 452.
Straus began his famous milk stations for poor mothers and infants in 1892. The New York Department of Health set a limit of bacteria by volume permitted in all milk sold in the city beginning in 1900, and once Baker began her work with the Bureau of Child Hygiene, the department became more heavily involved with providing a regulated milk supply and regular staff to already established and additional stations. So many different private charities alongside the department were running or contributing to milk stations for tenement babies that by 1911 it was clear they would need to consolidate their efforts, forming the Association of Infants’ Milk Stations. Even with its growing immigrant tenement population, coordination between the Health Department and the other members of the Association helped New York City become the first American city to come close to “100 per cent” efficiency in the production and distribution of safe milk to babies. The “river” of diseased milk entering the city from the country that Rosenau had cautioned against was turned into one of life-giving milk.

The sense of control in the face of infant mortality that perfected milk portrayed to the public in part addressed cultural anxieties about motherhood. Alongside the promise of fighting the pathogens that contributed to infant deaths, the task of perfecting the milk supply appealed to many mothers and medical experts as a response to the decline in breastfeeding in the years leading up to the twentieth century. Breastfeeding was (and is) a loaded topic of discussion between women and their physicians, and particularly within a historical moment that associated

---

398 Straus is mentioned and praised in written discussion of the milk question as someone who had the best knowledge and intentions in providing privately-funded clean milk for needy babies. His milk stations had their own laboratory – the Nathan Straus Pasteurized Milk Laboratory – to provide the milk. Baker mentions his stations as “gallant battlers in the cause of pasteurization...” Baker, Fighting for Life, 127. Both of these articles emphasize how single-handedly Straus provided milk stations to the city but now requires municipal support: “Mr. Straus and the New York Milk Committee,” Journal of the American Medical Association 52.9 (1909): 709; Wilbur C. Phillips, “The Milk Stations,” New York Times, January 30, 1909, 8.
399 Smith-Howard, 22
400 New York Milk Committee, 32.
401 New York Milk Committee, 24.
402 “Visiting Nurses to Aid Poor Mothers”; Thomas McCleave, 2034.
breastfeeding with ideals of motherhood, national health, and the future of the “race.” The debate about whether to breast or bottle feed still persists in the early twenty-first century, but the beginning of Baker’s career coincided with one particularly fraught moment of argument among medical professionals about the authority of medical science on this topic. Practically speaking, it was easier for working women to bottle feed in many cases. Some mothers worked or socialized outside the home. Some were new to the city and lived without their extended family or friends: whereas back home their sister, friend, or cousin may have traded wet-nursing and baby-sitting services with them, in the city they might not have those connections.

Women’s choice whether to breastfeed or “hand feed” represented a change in “the most fundamental way that mothers interact with and care for their infants,” and opened another door for medical science to become indispensable to motherhood. While some mothers had the choice to breast or bottle feed, biology or circumstances limited that choice for many, and “In an era of medical advances and scientific motherhood, the fact that physicians were associated with artificial feeding, however warily, seemed to sanctify it.”

Like the standardized, pure milk supply, one of the aspects of artificial feeding that appealed to people at the time was the sense of control it could provide in the face of multiple anxieties inherent in modern life and the “changing views of time, efficiency, self-control, health, medicine, sex, marriage, and nature” that entailed. Historical scholarship has identified several interacting reasons for the decline of breastfeeding in American culture during this time, and one

---

403 Baker references the contemporary early twentieth-century anxiety about “race suicide” that would result from declining birth rates. She argues that what people should worry about is increased infant mortality rates rather than decreased birth rates. She argued for saving the babies that had already been born. Baker, “Deliberate Waste of Life.”

404 Wolf, 22.

405 Wolf, 5.

406 Wolf, 41.

407 Wolf, 3.
common thread is the mutuality of influence of both medical experts and mothers on the feeding standards that resulted.\textsuperscript{408} General anxiety over infant feeding and mortality were common between the two groups. Many women wanted to breastfeed their babies but feared that their milk would somehow be insufficient. The majority of physicians wanted their patients to breastfeed as well, but were stymied as to why so many of them claimed to have difficulty with it.\textsuperscript{409} Some medical experts believed that if American women were going to shirk their societal duty to breast feed, public health would have to respond with some municipal control over milk quality in order to keep babies safe. Of course some medical experts were more sensitive than others to the internal and external stressors influencing mothers’ choices to bottle feed. As Dr. Edward Brush so succinctly put it, “It is easier to control cows than women. Human mothers are often emotional, excitable, indiscreet, sometimes hysterical, and not always able to control themselves.”\textsuperscript{410} One medical opinion of the time was that emotionally unstable and hysterical women produced bad milk, and at the municipal level it was simply easier to control the environment and disposition of the cows on surrounding farms than that of mothers. “Infection flows from the country into the city,” so in order for New York City’s mothers to be provided with clean and safe cow’s milk, the oversight of the city would extend to the country.\textsuperscript{411}

\textsuperscript{408} Wolf, 5.
\textsuperscript{409} Wolf notes that fears about inadequate breastmilk supply became so widespread that “By 1910, women's insistence that their bodies could not produce enough quality milk to feed their babies was so widespread that delegates at child-welfare conferences were discussing the likelihood that the inability to lactate was the next step in human evolution.” A passion for feeding schedules on the part of medical experts was likely one reason why women doubted their milk supply and quality. The trend for mothers to be less physically affectionate and more exact about daily schedules was an influence as well. Pre-measured, timed, and formulated infant formula seemed like the more reliable guarantee of health for babies. Wolf, 31.
\textsuperscript{411} Rosenau, 18.
Clearly a bit of mystery hung over the infant feeding aspect of the milk question because neither mothers nor physicians were quite sure why breastfeeding seemed to be so difficult, or how many women still breastfed at all. While statistics on breastfeeding were not available for the United States when the Bureau was established in 1908, they were available for some European nations, and those numbers scared many cultural commentators involved in the discussion about infant mortality. In 1907 several articles incorporated statistics from Germany showing a decline in breastfeeding to strike fear in their American readers. The Independent laments that “German mothers are usually considered to be more willing to fulfill this obligation than the mothers of most other countries. It would be almost heartrending to think that mothers in our American cities were as neglectful of a simple duty as this,” and JAMA proposed that “it is more than probable that the state of affairs found in Berlin is not worse than that which is developing at the present moment in our own large cities in this country.” 

Though national statistics for breastfeeding were still lacking, physicians in American cities had noticed since the nineteenth century that mothers were increasingly bottle-feeding their babies and coming to them (sometimes with sick and malnourished babies) for advice about the best “artificial” foods to replace their breastmilk. Many of these women also believed that their breastmilk was quantitatively or qualitatively deficient. Both the idea that “the development of a new relationship between commercial infant-food manufacturers and the medical profession,” and that diverse challenges of urbanization “prompted women to doubt the efficacy, propriety, and

413 Wolf points out that physicians took to calling any food other than breastmilk “artificial” because they disapproved of it and wanted to designate this type of feeding from breastfeeding, which was natural. Wolf, 3-4.
414 Wolf, 3-5.
necessity of breastfeeding” have been argued in explanation of why so many American women
turned to cow’s milk substitutes for infant feeding during this time.

Veit asserts that the way Americans thought about food was fundamentally changed
during the first two decades of the twentieth century, and that many seemingly unrelated causes
were caught up in that transformation. This potentially helps explain some of the contradictory
attitudes that existed (and still exist) among infant welfare advocates surrounding milk and
breastfeeding. The “perfection story” that DuPuis discusses in her study of milk is one that
originated in American Protestant Christianity, and was shaped by the ardor for reform following
the Second Great Awakening. The idea that society would proceed toward and actually reach a
state of perfection manifests itself in efforts for reform such as the temperance movement, along
with the “infant welfare” and “social welfare” movements that embraced the idea of milk as a
“perfect” food supply to end infant mortality. While many physicians argued in favor of
breastmilk’s ability to protect infants from the dreaded “summer complaint” or “cholera infantum”
class of diarrheal diseases, there was also a general acceptance within the infant movement that
modern urban conditions were inherently too stressful and dangerous to a woman’s health for
her to produce good (“perfect”) breastmilk. As one physician described the situation, “Whether
it be pain, or work, or play, whatever is immoderate or intemperate in the life of a mother will be
reflected in her milk, whether she indulges in a too exciting game of bridge or has merely engaged
in a hair-pulling dispute with the lady on the next floor, the effect on the milk will be equally
bad.”

416 Wolf, 3.
417 DuPuis, 7.
418 “Infant Mortality and Milk Stations,” _Journal of the American Medical Association_ 59, no. 15 (1912):
1400; Thomas McCleave, 2031-2035.
419 Snyder, 1214.
Mothers of all classes were subject to these kinds of speculations. Several years earlier another physician frankly noted that “The reasons for this [lack of breastfeeding] are plain. Sometimes the mother is overworked, insufficiently nourished, harassed by a vicious husband and many other children, often incompetent by her own unfortunate temper or a vicious appetite and indulgence or a vagrant desire for amusements, sometimes by an inability to secrete milk.” In these physicians’ descriptions of the diverse circumstances endangering mothers’ ability to breastfeed are equal parts first-hand acknowledgement of practical and familial concerns and mother-blaming for those who have been sucked into the artificial fulfillment of mass marketing at a cost to their children. Physicians and mothers were still baffled at the inability to breastfeed in part because it was not yet widely-known that breastmilk is replenished in a healthy woman by supply and demand – work, chores, social engagements, baby nurses, scheduled feedings and innumerable other factors in modern city life could keep women from breastfeeding often throughout the day and result in a depleted milk supply.

Some of this acknowledgement of the practical circumstances challenging mothers’ ability to breastfeed likely stemmed from assumptions made about the inherent frailty or unpredictability of the female constitution, as evidenced by Dr. Brush’s quote comparing cows with women. A shared desire among mothers and medical experts for the control that scientific feeding methods promised was also part of the larger milk question, however. As has been argued, the Bureau’s baby health stations and the services that they provided to poor mothers acknowledged the wide scope of factors influencing infant health in the city, and their success in aiding thousands of infants made the idea of municipal control over the city’s milk source seem

---

421 Wolf, 33.
possible, rational. Emphasizing the importance of overall living conditions on a woman’s ability to care for her infant, Baker commented that “Better housing conditions naturally fall to the supervision of the city,” but in the meantime the baby health stations improved those conditions and acknowledged that “the mother herself is the one who must save her baby.”

A mother may not use her own milk to feed her infant anymore, but the Bureau’s work through the baby health stations illustrated that control over infant feeding could still be ultimately placed in the hands of mothers.

That path toward perfection was always tempered by practicality as New York public health responded to the milk question. Despite the assumptions that some of the players involved in the milk question had regarding competency of modern mothers (including themselves) to provide the right food for their infants, the new urban infrastructure in which New York mothers found themselves enmeshed was also being acknowledged, if not directly addressed. One point of emphasis that Baker and the Health Department took with their milk stations was the task of teaching the mothers they encountered how to prepare infant formula themselves in their own homes, and encouraging them to bring their babies back often so that modifications to that formula could be made specifically for each child over time. It is clear from milk station protocol that physicians and nurses of the Health Department were no less insistent than other physicians at the time that breastfeeding was best. Many descriptions of milk stations during the first two decades of the twentieth century are careful to note that only women who truly needed free or discounted cow’s milk were permitted to use the stations: “No mother was permitted to obtain milk from the station until it was proved that she was unable to nurse her baby, and she was allowed to obtain milk then only on condition that she would bring her baby once a week to be

---

422 Baker, “Deliberate Waste of Life.”
weighed during consultation hours." Breastfeeding was medically considered the best option for mother and baby, but the challenges present in mothers’ urban environment were ultimately acknowledged by making good quality milk and education available at baby health stations.

Ever practical, Baker voiced that acknowledgement in 1913: “It is a fact that if every mother nursed her baby the public would have but a small problem to consider in this matter of high infant mortality; but, as things are, in modern city and industrial life, this is out of the question. We can only encourage women to do the best they can.” Particularly beginning in 1911 when all privately and publicly funded milk stations joined forces, the opportunity for poor mothers to do their best got its most widespread manifestation, with “…ninety milk stations, sixty-six in Manhattan, one in the Bronx, and twenty-three in Brooklyn, in which 7,000 babies are under care. The entire city has been divided into districts with a milk station in each responsible for it, and it is hoped in this way to prevent duplication of effort and to prevent the nurses of different societies from encroaching on each other’s territory.” In that same year a report showed that of the infants seen by New York Milk Committee stations, 33.4% were breastfed, 20.8% had mixed feeding, and 45.8% were artificially fed. Breastfeeding was encouraged but realistic solutions were made available when that was not possible. During a time of population growth when it was becoming easier and easier to remain an anonymous face in the great city, Baker and the Bureau were acknowledging babies as individuals and their mothers as capable of caring for them.

The narrative of perfect milk became the rallying cry of the city to face its infant mortality crisis head-on, but while that narrative shaped and helped support baby health stations, those

---

424 Marshall, “A Regiment of Babies’ Lives Were Saved Here in 1912: Dr. Josephine Baker Tells How Thought, Care, and Money Lowered the Mortality of Infants Under One Year of Age Six Per Cent.”
425 “Unbottled Milk Peril to Babies.”
426 New York Milk Committee, 75.
tasked with the day-to-day deployment of clean milk in the saving of lives knew that clean milk alone did not equal the solution to all child welfare. It was also the partnerships between tenement mothers who visited the milk stations and the attendant nurses and physicians, and between public health officials like Baker and milk distributor Sheffield Farms that were key factors in the success of a regulated milk supply in lowering infant mortality in the city. Initially, most milk stations either had staff physicians or an associated milk laboratory that mixed infant formula for the mothers who sought their services. Around the time that the Bureau became involved in aiding and coordinating the milk stations, though, station staff increasingly gave new infant patients a brief examination, and then accompanied the mothers back to their homes in order to show them how to prepare infant formula for their children.\textsuperscript{427} An article from 1911 reminds mothers to use the milk stations particularly in the summer, when rates of death from diarrheal disease were highest. Much more than clean milk is offered to them: “The [health] commissioner adds, however, a warning that mothers during July and August should take particular precautions about the milk for their babies and should make full use of the milk stations. Moreover, if any baby is sick and the parents are too poor to pay for a physician, a telephone message to the Department of Health will always bring at any hour of the day or night a nurse or a doctor.”\textsuperscript{428} Granted, the family required access to a telephone to ask for such assistance, but the desire to make connections between mothers, infants, and the resources beyond milk that they required to fight infant mortality is clearly demonstrated.

Both Baker and Sheffield Farms were fully aware of the importance that both rhetoric and results surrounding baby health stations held in securing and maintaining the public’s approval and the city’s appropriations. The funds available to pay for the regulated milk and for the station

\textsuperscript{427} New York Milk Committee, 30.
\textsuperscript{428} “Unbottled Milk Peril to Babies.”
staff depended upon consistent publicity by Baker and by Sheffield Farms showing the great success of baby health stations in the fight against infant mortality. Baker noted that the new baby health stations were painted “blue, yellow and white – nice clean colors which also happened to be the colors of the city flag”; a visual demonstration of the city’s support for the mission of baby health stations. In addition to visual representations of the city’s solidarity with infants was continued communication between Baker and the press about the progress and results of the Bureau’s work for infants. After more city appropriations for baby health stations and their continued success in fighting infant mortality, in 1915 Baker spoke to a crowd of concerned citizens at the Free Synagogue House, the reporter noting that “The health of the babies of the city has been improved so greatly within the last two years, Dr. Baker told her audience, that the young doctors in the hospitals are complaining that they have no practice and have begged to have the city milk stations connected with the hospitals on the chance that a sick baby may be brought in once in a while.”

Likewise, Sheffield Farms plainly aligned itself with the mission of the Health Department in its advertisements, noting that its “plants have proved to be one of the greatest public health factors ever devised. They have played a tremendous part in lowering the infant mortality rate in the territory in which they serve,” and “we have accepted the baby’s needs as our standard...” Further demonstrating their alliance with the work of the city’s physicians in the fight against infant mortality, an earlier ad notes tables of data of the milk fat solids measured in their milk by

---

429 The gathering was a conference on “What the City Does for the Child and What the City Should Do.” “20,000 Babies Saved in City in 8 Years.” As a note, to some extent Baker seems to have felt that what the Bureau was doing was good when at least some physicians were against it. As will be explored in chapter 6, Baker had a specific idea of what being a physician meant, and had no qualms about poking fun at her fellows when they strayed from that idea.  
430 Sheffield Farms, “Milk Problems Multiply in Summer.”
their chemists to aid physicians “in writing their formula for babies.”\footnote{Sheffield Farms “The reasons why different kinds of milk have their individual value” (advertisement), \textit{New York Times}, February 10, 1910, 16.} Perhaps most directly of all, one ad shows a graph of infant mortality data for 1910 and 1911 in New York City, pointing out the decline in summer deaths between the two years, and claiming that “This was done by the Board of Health largely through Sheffield Farms Milk.”\footnote{Sheffield Farms, “Hundreds of Babies Saved by the Board of Health.”} In 1911 Sheffield Farms milk supplied fifteen of the Health Department’s baby health stations. The New York Milk Committee Report of the same year gives a more scientifically nuanced description of the data, noting that a continuous trend of improvement in infant mortality cannot be deduced by the numbers from 1901 to 1911 because of inconsistent birth registration and differences in weather patterns during that period.\footnote{New York Milk Committee, 36-42; 47-48.} But it also does note that a substantial decrease in infant mortality coincided with one of New York’s hottest recent summers and the reorganization of the city’s milk stations. The rest of the ad simultaneously lauds Sheffield Farms for supplying the milk stations at a financial loss to provide poor babies with milk “to prove the value of pasteurization” and encourages readers to support the Health Department’s request for an appropriation of $300,000 from the city to expand their baby health stations. Thus, the importance of publicity mixed with the rhetoric of perfection helped lead to the ultimate success of New York’s baby health stations in connecting mothers and babies to resources and education, lowering infant mortality, and retaining voters’ support for the endeavor. As New York’s response to the milk question continued to result in more abundant and tightly regulated milk stations throughout the city, practicality clearly mixed in with the rhetoric of perfection in the approach of public health to infant welfare.
Conclusion

Though it would be lauded as “nature’s perfect food” for infants at the same time that physicians and social commentators wrote polemics in favor of breastfeeding, the milk not used for cheese or butter was for most of American history considered an inedible byproduct. Milk was not consumed by young or adult Americans regularly until the mid-nineteenth century, when growing cities began demanding a supply from surrounding farms: “It began not on primeval farms, but in the burgeoning city; not with the rise of sanitation, but before sanitary production was possible.” Ideas of perfection from the Second Great Awakening, from Progressive reform, and from modern urban culture that all emphasized steady progress over time inflected the early twentieth century discussion about milk, and eventually would give public health the task of overseeing a “perfect” economic commodity. As DuPuis notes, the definition of perfection changed slightly as its primary cultural proponents changed. During Baker’s early career in public health “The professionalization of the ideology of perfection took the impetus away from religious reformers and put it into the hands of experts... With the rise of modern industrial society, a new group of people – the professional elites – became America’s official storytellers... DuPuis identifies economists and historians as the professional elites who have shaped the perfection story of milk, perpetuating the narrative that milk as a commodity can be perfected for human consumption, and that consuming that milk helps propel American society along its own path toward perfection.

434 DuPuis, 4. Chapter 5 will examine how milk became a preferred source of nutrition for soldiers during WWI as well, causing a panic when shortages of milk meant less would be available to America’s most vulnerable citizens: babies and soldiers. In one way, it was incredibly fitting that the regulation of a product from cows would become an example of public health’s ability to effectively apply germ theory, because Robert Koch’s original development of germ theory resulted from his experimentation with tubercular cattle. Dupuis, 39.
435 Dupuis, Nature’s Perfect Food.
436 DuPuis, 11.
One of the first strategies that Baker launched as director of the Bureau of Child Hygiene was to organize and improve the city’s milk stations, which had been largely run through the efforts of multiple, private charities. Cooperation among those agencies committed to lowering infant mortality rates was common sense at the time: one more example of a Progressive impulse for systematic problem solving.437 In her oversight of the department’s baby health stations, Baker directly participated in the process of establishing a municipally-regulated milk supply, arguing that “the habits of cows in Jersey” were relevant to the large web of relationships impacting the health of mothers and babies in New York.438 As E. Melanie DuPuis has noted, milk was made available year-round by the demand large cities such as New York had for it, and particularly for its most vulnerable citizens: babies and children. Articles addressing the safe storage of milk were thus applicable year-round, but show particular concern during summer months, when spoiled milk was associated with and essentially conflated with the “summer complaint” and death of infants. Milk distributors Sheffield Farms and Borden openly competed with one another through their advertisements to assure families that their milk was of the purist quality and would never cause their children the kind of harm that so many parents feared. All the while health professionals and mothers differed in their opinions on whether cow’s milk or breastmilk was best for infants. Indeed, Baker asserted that breastmilk was always best, and that a great many lives could be saved by the practice of breastfeeding.

At the same time, Baker recognized that it was neither possible nor desirable for many women to breastfeed when cow’s milk formulas could free up their time for other demands. Indeed, the unique needs of mothers in an urban setting and the growth of public health as a field in response to the challenges of urban life were incredibly influential factors in the regulatory

437 Veit, 3.
relationship between the city and its surrounding farms. DuPuis notes that dairy policy in New York state differed strongly from the two other two largest dairy states at the time, California and Wisconsin. The ideal of industrial-style, uniform and efficient methods of production and pricing, what DuPuis terms “productivist ideology,” remained popular among politicians, public health officials, and farmers in New York state, even as “alternative visions attempted to create new forms of collective action that challenged productivism as perfection” were established by populist farmers’ movements in the other two states.\footnote{DuPuis, 184-185. DuPuis notes that New York state had a land grant college supported by public funds just as California and Wisconsin did. When it came time to appropriate funds to Cornell, however, “Experts at the state's 'land grant' agricultural college at Cornell University, along with public health officials, supported productivist policies - the encouragement of a large-scale, efficient, highly productive form of dairy farming - in order to provide urban consumers with safe milk cheaply.” In contrast, because the constituencies in Wisconsin and California were not as urban as in New York, lawmakers in these two states were more likely to fund a variety of strategies and programs of what DuPuis calls a more “producerist” nature. In short, the needs of urban New Yorkers held a greater influence on the farming methods and regulation in that state, emphasizing less diversity and more industrial efficiency. DuPuis, 185.} Faced with these unique conditions in New York, when Baker began to shape the policies of the Bureau to improve maternal and infant health the city’s narrative of life and death thus held great influence for the concept that milk could become the latest item to achieve its own “perfect story” in America’s march of progress toward perfection. Milk’s association with whiteness, purity, and nurture was set up in contrast to anxieties of chaos and corruption in urban centers like New York: milk could keep the innocent in the city safe, healthy, and pure.

Baker’s initiative to reorganize and expand New York City’s milk stations for the benefit of tenement mothers and babies thus occurred during a cultural and historical moment when milk was an almost constant topic of discussion.\footnote{Just as it did during Baker’s career, there currently exists a small glut of scholarship on the cultural significance of milk in the United States.} In true Progressive style, Baker simultaneously acknowledged the cultural and medical ideal of breastfeeding while providing a complex and rigorously quality-checked system of cow’s milk distribution to mothers who worked, toiled with
house and family maintenance, or simply lacked enough nutrition in their diet to provide adequate milk for their infants. When some physicians were insisting on ever more complicated calculations for the modification of milk, Baker received criticism for basing her method of modification solely on the babies’ weight: “Once again high and mighty medical associations called me a murderer and once again I was able to demonstrate with figures that the babies I was murdering were much livelier little ghosts than the city had ever known before.” 441 While Progressive stories of milk’s perfection demanded natural purity alongside an efficiently manufactured artificial product, the philosophy and practice of Bureau’s baby health stations exhibit an understanding that stories of perfection inherently conflicted with what public health of the twentieth century was becoming. In this case, in the process of adapting hitherto convoluted prescriptions for milk modification that could only be prepared by a physician, Baker and her Bureau placed a simplified and reliable set of instructions, along with price-controlled quality milk, into the hands of mothers.

In the early twentieth century, the “milk question” harnessed a rhetoric of perfection that tapped into beliefs that modern America was on a path of progress that would only be aided by medical science. Women were breastfeeding less and bottle-feeding their babies more, and the quality of milk they used was contributing to infant mortality. With the help of science and technology milk might have been perfectable, but Baker’s perspective in New York demonstrates that it was still only part of a larger public health effort to fight infant mortality, and it still required the participation of imperfect people. In her approach to public health Baker’s simultaneous focus on relationships at both the individual and societal scale continued to reveal itself with respect to the milk question. Baker’s insistence that the tenement mothers themselves be instructed in the

441 Baker, Fighting for Life, 29.
preparation of their babies’ formula at Department of Health milk stations, while milk stations had initially prepared the formula for mothers, likewise illuminates an ongoing discussion among medical and public health officials and mothers about the place of science and mass consumption in the role of motherhood. As she noted about the baby health stations, “I think we were the first to use milk-distribution as a way of coming into contact with mothers in order to educate them in scientific child care – always modified by common sense as the cow’s milk was modified for human babies’ consumption.” In the case of New York City, the rhetoric of perfection used in the milk question was utilized by public health and other players to continue a narrative of life.

442 Baker, Fighting for Life, 127.
CHAPTER 5: BABIES AND SOLDIERS

Anyone could have noticed, but no one did.

All the country is getting to be New York. Conditions in a great city are not abnormal, governed by different laws of development than the rest of the country. New York is only the most striking manifestation of laws operative elsewhere; it is the vortex of the whirlpool, but every drop of water in the circling mass is swung by the same forces that crowd resistless at the center. The question is not, where are we, but where are we going?

We have repeatedly pointed out that every social institution weaves a protecting integument of glossy idealization about itself like a colony of tent-caterpillars in an apple tree. For example, wherever militarism rules, war is idealized by monuments and paintings, poetry and song. The stench of the hospitals and the maggots of the battle-field are passed in silence, and the imagination of the people is filled with waving plums and the shout of charging columns.

As demonstrated in chapters 3 and 4, the factors impacting the health of tenement mothers and babies required the attention of both individuals and municipal institutions. Particularly regarding the milk question, Baker’s experience as a public health official in New York City provides an example of how the coordinated effort of individual experts, volunteers, and citizens combined with institutional and publicly-backed support successfully challenged the urban infant mortality that had previously seemed inevitable. As Walter Rauschenbusch’s quote above suggests, the battle against infant mortality and other modern societal issues might seem most striking in large cities like New York, but New York and other cities were only experiencing in a more concentrated way what was happening all over the nation. Baker saw President Wilson’s declaration of Children’s Year (1918) as a sign that a national system of child preventative healthcare was a possibility. In cities and across the whole nation, the loss of life in the trenches during the First World War made the national consequences of the loss of life in the cradle all the more apparent.

Child welfare advocates such as Lillian Wald had for years been contrasting generous federal appropriations for agricultural crops with the dearth of such funds for the nation’s “child crop.” When a large percentage of American men physically failed to qualify for the draft, Baker and others saw an opportunity to encourage a national discussion about the benefits that early preventative healthcare had for growing healthy children. Baker believed that many of those soldiers would have qualified for the draft had more of them received preventative care when they were young. Increasingly soldiers and babies were included together in public health discussions

---

443 Baker, Fighting for Life, 186; Rauschenbusch, quoted in Smucker, 4; Rauschenbusch, A Theology for the Social Gospel, 350.
at the national level, emphasizing the value placed on babies as future useful citizens. Babies and soldiers were both vulnerable and valuable populations who required good healthcare and good milk to stay strong. While this comparison did contribute to a national conversation about the importance of infant preventative care, it also ran the danger of viewing babies as future soldiers. During and after the war Baker often used the comparison herself, but feared that one national institution – the military – would end up dominating the narrative that another - public health - had begun. In her mind, a narrative of life could not be combined with one of death.

In this chapter Baker’s simultaneous hope and skepticism for the ability of infant welfare to gain truly national concern is put into conversation with another New Yorker who also held hope and skepticism for individuals and institutions to work together on behalf of society’s most vulnerable. Walter Rauschenbusch is rightly known as one of the leaders in the social gospel movement of the early twentieth century. While the social gospel has sometimes been criticized as ineffectual and idealistic, Rauschenbusch’s idea of the social gospel included the important idea that, like individuals, institutions had personalities and were vulnerable to corruption. A social institution remained relevant and useful only when it remained in close touch with the needs and circumstances of those it was designed to serve. As two professionals who devoted their lives to making their respective institutions (public health and the Church) better able to serve the public, Baker and Rauschenbusch ultimately held hope that the War would bring into focus the importance of holding institutions accountable for serving all Americans and especially for protecting the most vulnerable. Backgrounded by the context of the War, this hope is best illustrated in an examination of Baker’s participation in the baby-soldier rhetoric, New York City’s defense of public health in the face of budget cuts, and Baker and Rauschenbusch’s struggle to hold institutions accountable for citizen welfare.

With the milk question New York public health broadened its focus beyond city limits, taking steps to regulate the entire milk supply to the city and the regional farms that provided it. While the city was increasingly seen as a leader in public health during the early twentieth century, New York City’s public health system was of particular national interest by the time the United States entered World War I. As Baker would discover, for better and worse, the war did much to nationalize American interest in infant and child welfare and to alter the cultural value of children. Child welfare reformers such as Julia Lathrop had insisted for years that if agricultural resources
required their own federal funding and agencies then so, surely, did the nation’s children. If the Smith-Lever Act of 1914 could provide money and manpower to educate the public about agriculture at cooperative extensions, then the nation could pass an analogous law for the education of mothers and the care of babies. As the nation entered the war in 1917 a conversation framing children-as-national-resource became more passionate and widespread, but included an implicit fear of exploitation. Baker noted and participated in this conversation before and after the war, and she was not alone in her fear that children would achieve more cultural value at the cost of becoming viewed for their value as potential future soldiers. During the New York Health Department’s participation in the projects and festivities of Children’s Year, it was impossible for Baker and others to miss the potential consequences of the nation’s youngest members being viewed as a different kind of crop for harvest.

Ironically, growing national interest and support for child welfare and admiration of New York’s public health strategies coincided with an attack on the Health Department’s bureaus closer to home. Mayor John Francis Hylan came to office just after the nation had entered the war and promptly began a lengthy attempt to fire Baker and other bureau directors, investigate the Health Department for graft, restructure the bureaus, and hire his own people. Baker relates in her autobiography that her offices were full of investigators interfering in the Bureau’s work for over two years before Hylan’s assault on the Bureau of Child Hygiene abated. The timing of Hylan’s attempt to restructure a municipal department that was at that moment gaining in national and international fame for its successes in child and industrial hygiene seems foolhardy.

444 Smuts, 99. Leading up to the war several leaders in the child welfare movement made comparisons between the federal funds and attention spent on agriculture as opposed to that spent on children. Reading the newspaper in the Henry Street Settlement one morning, Lillian Wald and Florence Kelley reportedly commented that the current “cabinet meeting to deal with the problem of the cotton boll weevil” would never be called to deal with child welfare. Since children were at least as important a national resource as crops, they should get as much attention and funding. Wald and Kelley (and many others) began campaigning for the federal Children’s Bureau. Muncy, 39; Smuts, 73.
However, Hylan’s stated goal of monetary efficiency was merely one example of the many challenges that sustained public health strategies had always encountered (and still do) when different political administrations cycled through office. In the midst of a world war, and a national Children’s Year, Hylan’s investigation of New York’s Health Department brought a response from New York’s citizens and press which signaled the importance of what Baker and others had built to the identity of the city. New Yorkers may have elected Hylan, but their counterassault to his attack on the Health Department demonstrated an intensity of feeling that the war created, in the desire to save one generation of its population while another was being so quickly lost overseas.

Baker’s experience of the war was on the frontlines of child welfare rather than the European battlefield, but by the time the war ended, a part of her had grown weary. The war gave Baker and many others the perspective to see that child welfare would require institutional funding and support at the federal level. Loss of life on so vast a scale as that in Europe could not be countered otherwise. Yet even at the municipal level, in the city that she called “the most generous city in the world,” Baker’s wartime travails had shown her that institutions could harm as much as they hurt the vulnerable population they were designed to protect. The question of how institutions could provide widespread and efficient services to all Americans while remaining responsive to individual circumstances is one that ties Baker to another social reformer of this period, Walter Rauschenbusch. Rauschenbusch was a Baptist minister, seminary professor, and leader in the social gospel movement. Like Baker, he was someone whose experience as a

445 Marshall, “A Regiment of Babies' Lives Were Saved Here in 1912: Dr. Josephine Baker Tells How Thought, Care, and Money Lowered the Mortality of Infants Under One Year of Age Six Per Cent.”

446 Chudacoff and Smith note that the social gospel manifested one expression of the social reform movement of the early twentieth century that was initially focused on cities. Reformers held a “variety of concerns” that did “not fit a generalized interpretation that can categorize every program and personality.” But, reformers did tend to be “middle-class individuals and groups” who attempted to “control and mitigate the problems of inner cities...” Both Baker and Rauschenbusch were middle-class professionals who,
social reformer in Hell’s Kitchen and during the First World War convinced him that social institutions could become corrupt just like individuals could. And, like individual persons, those institutions would ultimately be necessary for combating the widespread economic inequality that the bottom half of the American population faced. The social institution that Rauschenbusch believed in was the Church, and the one Baker believed in was public health; both acknowledged the constant engagement and accountability required of those institutions to remain the friend rather than the enemy of the people. With the perspectives of Baker and Rauschenbusch, this chapter examines how the war altered the conversation about child welfare in the United States, the importance of child welfare to the identity of New York City, and the way that babies and soldiers were increasingly grouped together as vulnerable resources requiring the protection of institutions.

Child Welfare and the War

Reflecting on her disgust for child labor in her autobiography in 1939, Baker recounts the time when she met a particular boy while giving him a medical examination to determine his eligibility for a work permit from the Health Department. His weight checked out, so they were about to give him the permit, when she noticed his pockets were bulging and asked him to empty them. Out of his pockets came twenty pounds of lead – ballast to ensure that he would get the permit. Of his bulging pockets, she observed “Anyone could have noticed, but no one did.” While she used the phrase to describe a specific case, it also describes the vast majority of the

---

through those they served, encountered inner cities and joined efforts for social reform. Chudacoff and Smith, 180. Rauschenbusch served as pastor of Second German Baptist Church in Hell’s Kitchen in New York City from 1886-1897, after which he took a job as professor at Rochester Theological Seminary, in Rochester, NY. He was and is seen as a major leader in the American Social Gospel movement, and is most famous for his books *Christianity and the Social Crisis* (1907) and *A Theology for the Social Gospel* (1917). Rauschenbusch died in 1918, so while he had time to experience and comment on the first world war, he did not live to see whether American Protestant Christianity developed a more social focus after the war. *Baker, Fighting for Life*, 186.
Bureau’s public health strategies: to notice the things about its patients and their lives that others did not.

Baker notes that at certain points in her career she realized that the changes required in order for all New Yorkers (and all Americans) to have access to society’s resources and opportunities for health were complex, and would require ungainly adjustments at the institutional level. During the first dozen years of her work with the Health Department, however, some of those institutional adjustments were made, and made successfully. Through publicity and campaigning the Health Department increased its monetary appropriations and helped consolidate private efforts on behalf of poor infants in order to get more physicians and nurses in contact with them in their own neighborhoods. Widespread incompetence at several levels of the Health Department, including in school inspection where Baker initially worked, began a rapid improvement with the appointment of Dr. Ernst J. Lederle as Commissioner of Health and Dr. Walter Bensel as assistant sanitary superintendent in 1902; as Baker relates “about the only reason I had seen for changing my opinion of the Health Department and its works.”

In 1903 the Department expanded its summer corps of visiting physicians under the Division of Contagious Diseases in order to visit every family in the city that registered the birth of an infant that summer. By 1908, of course, infant mortality was made enough of a priority to warrant a Bureau of Child Hygiene, and in both 1908 and 1911 there were sharp enough drops in infant mortality to attract helpful attention from the press, and subsequently, from politicians.

448 Discussing the incompetence of some of her fellow school inspectors in her early years with the Bureau, Baker reflects on the fact that in addition to grinding poverty tenement residents should not have to deal with “official negligence and dishonesty.” Still young in her career, she felt that “It was going to take a world of change to better all this; I knew that many people of many minds might ponder and work for generations before any change could be made in the social organism.” Baker, Fighting for Life, 62.

449 Baker, Fighting for Life, 57.

450 A year-by-year summary of the advances in infant welfare conducted by the Health Department and private organizations in New York City between 1901 and 1911 is provided in the New York Milk
Those successes were why New York City had gained national and international attention for its infant welfare strategies. This attention, combined with the U.S. entry into World War I, gave Baker a broader national audience to assert the importance of child welfare at the national scale. It was time that the entire nation noticed the small, preventable things that made children’s young lives harder, and took care of them before they impacted those children for life. The key would be to design a system, like the one in New York City, that was large enough to connect people to resources and education, but responsive enough to meet the needs of individual circumstances. The international costs of the war called for at the national level the complex but achievable connections between children, preventative care, and nourishing resources that Baker and her Bureau were successfully building at the municipal level. But in discussing this need before and after the war, Baker’s rhetoric concerning child welfare was altered by changing cultural perceptions of the value of national resources, and definitions of normality and health. In the same period that the U.S. went to war, it was also establishing federal protection for national parks and for agricultural resources and education.\footnote{The National Park Service was established in 1916, and leading up to the war a series of national monuments were dedicated. The Smith-Lever Act of 1914 established agricultural extensions in cooperation with land grant universities.} The sense that some resources had national value was not lost on child welfare advocates, and the loss of life during the war increased the impetus to value whole generations of young Americans as national resources.

Prior to 1917, Baker and other public health advocates sometimes made biased comparisons of infant welfare efforts in the U.S. to those in Europe, noting in one 1915 headline that “War Prompted Europe to Preserve Its Children, but in America the Work is Altruistic.”\footnote{\textit{Committee’s 1912 report, Infant Mortality and Milk Stations.} The 1908 and 1911 decreases in infant mortality are reported in: “Infant Death List Cut 50 per cent”; "Infant Death Rate Reduced this Year"; Marshall, "A Regiment of Babies' Lives Were Saved Here in 1912: Dr. Josephine Baker Tells How Thought, Care, and Money Lowered the Mortality of Infants Under One Year of Age Six Per Cent."}
Comparing the U.S. effort to save babies to that of France: “’It was the fear of war that started the work in France,’ said Dr. Baker. ‘I will not say that there was not some philanthropy in it, but the French authorities were shocked by the decreasing birthrate and realized that there must be children to fill the ranks of an army.’” To Baker, the effort of those in the United States to lower infant mortality prior to its entrance into the war demonstrated that Americans were proactive about the wellbeing of their children without the motivating fear of military loss. In other words, Baker believed that children in the U.S. were being valued for their individual potential as much as for their future ability to fill the ranks of the military.

By the time the U.S. entered the war, infant diarrheal diseases had been put under such control in New York City that Baker had turned her attention to “congenital” diseases and school-age children, emphasizing the fact that public health was producing measurable improvements in infant wellbeing and broadening its focus beyond one age of child, and eventually beyond municipal boundaries. Baker’s nationalistic rhetoric would change perceptibly, though, along with American conceptions of what gave both children and soldiers their value to society. As Smuts notes, the study and preventative treatment of children “transformed prewar Progressive efforts to reform society for the benefit of the child into postwar efforts to reform the child for the benefit of society.” Increasingly soldiers and babies became grouped together rhetorically, as vulnerable and valuable citizens who required special protection in order to ensure the nation’s future.454

453 “20,000 Babies Saved in City in 8 Years.” Prior to any pressure that the war provided, Americans were proud of their infant welfare efforts and some were apt to demarcate American efforts as being more altruistically motivated than those in Europe. In a 1906 book review in JAMA, the reviewer describes the author’s elaboration of the history of milk depots in various nations, calling the book “extremely interesting” in its account of how a movement toward infant welfare in England and France was motivated by a falling birth rate, whereas it had been “arising in the United States from humanitarian motives, pure and simple.” “Book Notices: G.F. McCleary’s Infantile Mortality and Infants’ Milk Depot,” Journal of the American Medical Association 46, no. 8 (1906): 603.

454 Labor regulations and social benefits programs for mothers received attention at the federal level in the United States in the early twentieth century, just as veterans of the Civil War had the century prior: another tie between babies and soldiers. Theda Skocpol writes that the first “first system of public social provision”
While Baker still acknowledged the power of American institutions to impact and connect children to the resources of the city (or the nation), a larger cultural shift was taking place that emphasized children themselves as the resource.

By 1917 the U.S. was at war and many of its resources, including the clean milk that Baker and others had fought for in New York City, were being shipped overseas to Europe. Once again, the milk question took on another dimension as New Yorkers feared shortages of milk for infants, and milk’s more newly associated vulnerable class, soldiers. Milk scarcity now not only threatened to increase the recently fallen infant mortality rate, but to diminish both the present and future groups of soldiers who would serve to strengthen and preserve the nation after the war. The familiar fears of an inadequate milk supply now potentially impacted infants and convalescing soldiers within the city. By 1919 the quality of the milk supply to New York City had been regulated by the Health Department for several years, but Health Commissioner Copeland was prepared to take that oversight a step farther, warning in an article that the threat of a low milk supply to infants and soldiers was becoming dangerous enough that he would not hesitate to “commandeer” control of the city’s milk should it be required. When milk producers and distributors disagreed on milk’s January price in anticipation of a shortage, he told New Yorkers that “Every adult citizen who will refrain from the use of milk and every housewife who will use milk substitutes in the preparations of foods for the next few days will be rendering humanitarian, economic, and

in the U.S. was created for war veterans, and while she says that social welfare of that scale was not recreated until the New Deal of the 1930s, in the meantime women’s organizations successfully lobbied for social support of mothers. During the period when Baker was with the Health Department, “The United States thus did not follow other Western nations on the road toward a paternalist welfare state, in which male bureaucrats would administer regulations and social insurance ‘for the good’ of breadwinning industrial workers. Instead, America came close to forging a maternalist welfare state, with female-dominated public agencies implementing regulations and benefits for the good of women and their children.” The war only added to the urgency of the call for social support of mothers and babies advanced by organizations such as the National Congress of Mothers. Theda Skocpol, Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States (Cambridge, Mass: Belknap Press, 1992), 2.
patriotic service.” Hotels and restaurants voluntarily gave up their milk supplies to baby health stations and convalescent hospitals to ensure that the two most vulnerable classes of citizens would have enough.

Beyond their shared right to milk, children increasingly came to be viewed as future soldiers in the rhetoric of this time because so many American men had been found too unhealthy or otherwise deemed unfit for the draft. In response Baker urged more nationally available preventative care, asserting that children with inadequate access later became sickly adults: “...the war has brought to this country, as well as it did to Europe, an increase in ill health due to undernourishment among children. This is all the more alarming because it strikes at the very foundation of all good health not only during childhood but in adult life.” Baker was not alone in her interpretation of what the war meant for child welfare. As Smuts notes, “Familiar admonitions to conserve the nation's children assumed new meaning when almost one-third of potential draftees were deemed unfit for military service, mainly because of unhealthy conditions and inadequate medical care in early childhood.” The circumstances of war cast babies and soldiers in a similar light as generations of Americans vulnerable to loss, and even worse still, as one generation unfit to replace the other.

In response, physicians and psychiatrists began busily determining more standardized physical and mental measures of “normality” for the men who would serve in the military, and child welfare workers developed an avid practice of weighing children from birth throughout the

---

455 “Fears Cut in Milk Supply to this City.”
457 Smuts, 95. As will be noted in Chapter 6, even after the war reformers who advocated the passage of the Sheppard Towner Act referred back to that figure of one-third of American men not qualifying for the draft as evidence that early childhood preventative care was key. Alisa Klaus, Every Child a Lion: The Origins of Maternal and Infant Health Policy in the United States and France, 1890-1920 (Ithaca: Cornell University Press, 1993), 274.
first several years of their lives in order to detect signs of abnormality. As pediatrician Jeffrey Brosco describes the attitude of the time, the “military and economic wellbeing” of the nation would depend upon healthy mothers and babies. Weighing children over a period of years at their “well-baby” and then “well-child” visits was an approximation of their nutritional intake: children who weighed less than “normal” were undernourished, and those who had normal weights for their ages were healthy. The old American habit of assuming that people are on the inside what they appear to be on the outside in this case was supported by data of successive weights and the stamp of authority from medical science.

The desire to establish a kind of standard for healthy, normal American babies was in part spurred on by the federal Children’s Bureau’s 1913 initiative to examine 100,000 babies across the nation, but “better baby” contests had been springing up in municipalities all over the country prior to that. Individual localities, like New York City, then established a series of Baby Weeks in 1914-1916, followed by National Baby Week in 1916, and baby contests and a national baby weighing initiative during Children’s Year in 1918. Historian Alisa Klaus notes that the baby

---

458 As examples, in 1918 the column “How to Keep Well” by Dr. W.A. Evans addressed the fears that many Americans had of the nation being full of weaklings who were unfit for the draft. “United States Still Pretty Spry,” Chicago Tribune, December 15, 1918, D6; Louis Warfield discusses a class of cardiovascular disorders that have become better understood by physicians since their identification and study in prospective soldiers. These men are called “cardiovascular defectives,” and are compared to “normal men.” “The Cardiovascular Defective,” The American Journal of the Medical Sciences 158, no. 2 (1919): 165. Jeffrey P. Brosco, “Weight Charts and Well-Child Care,” Archives of Pediatrics and Adolescent Medicine 155 (2001): 1385-1389.


460 There is an old and ongoing Protestant concept in the United States that the outer bodily appearance of a person reflects their inner spiritual and moral aspects. This expectation gained some scientific support in the late nineteenth century from nutrition science when New Age religious movements emphasized that healthy bodies looked a certain way, and that health reflected morality and goodness. The trajectory of this outer-reflects-inner ideology is well explored by R. Marie Griffith in Born Again Bodies: Flesh and Spirit in American Christianity. I believe this perspective ties into the preference for large babies that the subsequent discussion of the baby contests and emphasis on weighing during Children’s Year will illustrate.

461 Ladd-Taylor, Mother-Work, 89. The federal Children’s Bureau issued a publication for national distribution in 1916 explaining how to conduct a Baby Week. The publication was entitled Baby-Week Campaigns: Suggestions for Communities of Various Sizes, and included instructions for both small and large
health contest was “entirely the creation of women, and it opened the door for the infant health movement to spread from the cities into small towns and rural areas...”462 The babies celebrated by these initiatives illustrated an emphasis on plumpness, and a bias toward white ideals of beauty that demonstrated vigorous good health in the newest generation of Americans. 463 Children between the ages of one and school-age in some ways were in particular danger of lacking standardization because they were often not seen regularly by a physician, and “small defects,” “scarcely noticeable to the parental or lay mind,” could wreak their havoc over that period.464 Therefore, the publicity for child welfare that baby weeks, “better baby” contests and Children’s Year produced helped to spread the word nationally that preventative care from a clinic or physician could help produce a nation of robust, future citizens and economic prosperity.465

Baker played her part in these contests for New York’s festivities during Children’s Year. The Health Department was charged with saving 4,700 babies, and Baker gave a talk entitled “the undernourished child” at a women’s gathering for the National Milk and Dairy Farm Exposition, published “Talks to Mothers” with updates from the contests, and chose the judges for some of them.466 The success of these events in getting national interest in child welfare was accompanied

---

462 Klaus, 144. 463 Meckel, 151. DuPuis notes that milk and milk formula advertisements during this time also tended to picture white, chubby, blue-eyed babies. DuPuis, 105. 464 “Will Test Health of 100,000 Children,” New York Times, April 28, 1913, 10. 465 It’s important to note that better baby contests not only used some of the same fervor for standardized physical characteristics as the military’s draft examiners, but some also held an explicitly eugenic ideology. White, chubby, blue-eyed babies tended to be preferred. However, in the context of this chapter, the sudden national attention for infant and child welfare inspired by the war, and the attendant similarities drawn between soldiers and infants, is the reason that these contests are mentioned. Klaus, 146-149; 167. 466 “Open Drive to Save 4,700 Babies Here,” New York Times, May 17, 1918, 13; “Women to See Dairy Show”; Babies’ Welfare Association of New York City, Report of the Babies’ Welfare Association of New York City (New York City: Department of Child-HELPING of the Russell Sage Foundation, 1915), 10; Baker actually chose the committee who would judge the “better mother” contest which pitted the mothers of all the city’s winning babies against one another for a prize. “Babies Get Ready; This is Your Week.”
by an increasing parallel between babies and soldiers and their value as national resources. Klaus notes that “The weighing and measuring tests imitated the large-scale medical examination of young men for the army, and the language of Children’s Year publicity suggested a clear parallel with military recruitment.”467 Receiving national attention during the time of war was a boon to the welfare of the youngest generation of Americans, but Baker reflected that “When a nation is fighting a war or preparing for another, and the European nations have been doing one of those two things ever since 1914, it must look to its future supplies of cannon fodder.”468

Judging children’s or soldiers’ nutritional fitness through weighing was a measurement somewhat uncomfortably reminiscent of the resources to which Wald and Kelley had earlier compared the nation’s children: agricultural crops. Just as for agricultural and other natural resources, the word conservation was used by Baker and others to describe America’s children.469 Unlike for agricultural resources, though, standards used in judging the quality of these child-crops through weight and other measures were not yet established by the time of the war. A diverse mix of volunteer child welfare workers, public health officials, and private physicians all across the country took part in the practice of weighing and judging the infants. No standard practice had yet been set, and so, as Brosco writes, malnutrition was often likely misdiagnosed during the war years, eventually giving pediatricians yet more professional prestige as the only ones properly trained to accurately make those important measurements.470 In addition, Klaus notes that the similarities between judging cattle and judging babies in “better baby” contests, or conferences, as they were eventually called, struck some as wrong or even cruel. Because not all

467 Klaus, 275.
468 Baker, Fighting for Life, 165. Within the context of her narrative this statement is general, and not specifically in reference to the United States. Baker believed that worldwide, “the World War was a backhanded break for children....”
of the contests were run by pediatricians who could give a baby a thorough physical exam and useful recommendations to its parents, some of the contests became based on beauty or charm alone, and were not always safe for the babies. The growing philosophy that standardization in measurements of health could be more easily achieved by conferences of physicians than by Children’s Year volunteers extended to the evaluation of soldiers as well. In his *Chicago Daily Tribune* column, physician W.A. Evans dissected the reasons why so many American men failed to qualify for armed service, including the fact that they were judged to be too short, have bad teeth, hearing, or eyesight. Like Baker, he asserted that fewer men would have these minor physical problems if they were provided regular preventative healthcare by medical experts as small children. Healthy babies grew up to be healthy soldiers.

By 1918 the federal Children’s Bureau had already been in existence for six years, but progress made in those years was challenged by inflated prices and food shortages resulting from the nation’s involvement in the war. Denied a post in Europe during the war because of her usefulness to child welfare in the United States, Baker campaigned vociferously during and after the war for national attention to turn to the cause of American child welfare. Baker’s use of the babies-soldiers rhetoric became a bit fraught, as she now acknowledged that the struggles that France and other European nations faced to preserve one generation to replace another could also impact the U.S. Rather than criticizing France for ulterior motives in child welfare, as she had previously, Baker noted that “we owe that country the honor of having inaugurated all of our

---

471 Klaus mentions several women volunteers and physicians who expressed dismay in letters to the federal Children’s Bureau at the way some contests were run, including L. Emmett Holt. *Every Child a Lion*, 151-152; 154.

472 “United States Still Pretty Spry.”

473 Around the time the U.S. entered the war, Baker was “asked to take charge of give up my New York post and go to France to take charge of all its work with refugee and homeless children,” which she “accepted with joy,” only to be told by the federal government that she would have to refuse the job because she was needed at home. She was, however, appointed “Assistant Surgeon General with the rank of Major.” Baker, *Fighting for Life*, 168, 169.
important health movements for children, from its inception of the system of health supervision of school children in 1842 to the establishment of the first infants' milk station in 1892.”  

Likewise, the U.S. allies sought advice in child welfare from Baker and others in the New York Health Department during the war, as birth rates fell and more children suffered from sickness and malnourishment.

Baker seemed particularly impressed with Sir George Newman of England, who encouraged her to advocate for national child welfare programs before the U.S. faced the population crisis that England did. This she did, commenting in 1918 that with "...rejections for physical disability vary [ing] from 40 per cent in the draft to from 70 to 78 per cent in the navy and army respectively, we may reasonably demand that we have a program of public health which is as widespread and universal as our program of public education.” Indeed, tying the welfare of soldiers and the nation as a whole back to that of the child, Baker comments that “These figures have not caused any surprise to those who have for some time known of the conditions existing among children of school age in the United States.” From Baker’s perspective American public health strategies, which before the war had seemed to be altruistically motivated by groups of reform-minded physicians and citizens, now seemed to contain a dual motivation to produce better and healthier future national resources. At a national scale, Americans had begun to notice the small details of children’s lives that put them at risk, but ran another risk of measuring, standardizing, and viewing children and soldiers through metrics not that different from those used to judge agricultural products. As demonstrated below, a discomfort with this comparison

477 Klaus notes that “The frequent analogy to the stock show and the improvement of livestock suggests that selective breeding was indeed in the minds of the creators of the contests.” Every Child a Lion, 149.
of babies and soldiers did not stop Baker or Lathrop\textsuperscript{478} from using the baby-soldier comparison to advocate for child welfare, but Baker did continue to insist that the value of children consisted of more than their usefulness as a resource. In describing the ideal approach to designing child welfare strategies, she commented that “Instead of looking from the activity inward, let us work from the child outward, so that, whatever else may result from our efforts in building the world anew [after the war], at least we may be able to say that the rights of the child are safe from now forward.”\textsuperscript{479}

**Wars on Multiple Fronts**

The slogan for New York’s baby week in June of 1914 was “Better babies, better mothers, and so a better city,” emphasizing the important connection that infant welfare held for the health and reputation of the city.\textsuperscript{480} The idea that a community held responsibility for the health of its citizens was increasingly demonstrated by the New York Health Department, whose motto Baker summarized as, “Public health is purchasable; within natural limitations a community can determine its own death-rate.”\textsuperscript{481} The efforts of the first years of the twentieth century to fight infant mortality had clearly demonstrated to the public that early mortality was, to a large extent, preventable. The city (and the nation) had the knowledge to prevent infant mortality, so “To let anything interfere with their [infants’] health and development is criminal neglect.”\textsuperscript{482} The city’s campaign to establish a regulated milk supply, the Health Department’s organization and

\textsuperscript{478} Smuts notes that “Lathrop repeatedly linked child-saving to patriotism.” *Science in the Service of Children*, 95.

\textsuperscript{479} Baker, “Reconstruction and the Child,” 188. Note about Lathrop’s opposition to the war but participation in war rhetoric in Ladd-Taylor, *Mother-Work*, 89.

\textsuperscript{480} “Babies Get Ready; This is Your Week.”

\textsuperscript{481} Baker, “The Reduction of Infant Mortality in New York City,” 152. Klaus notes that this idea of childrearing depending on a community was common to the “Better Baby” movement of the time. *Every Child a Lion*, 143.

\textsuperscript{482} Baker, “Relation of the War to the Nourishment of Children,” 292.
consolidation of the public and private efforts to establish baby health stations, and its collaboration with the school board to establish school nurses and good hygiene practices in public schools all demonstrated an ideology that saw public health as a necessary responsibility of the city itself, and of its citizens.

In a 1912 address to the International Congress on Hygiene and Demography, Baker argued that as “the largest city, with the most complex population in this country,” New York’s success in fighting infant mortality could serve as an example to the entire nation.\footnote{Baker, “The Reduction of Infant Mortality in New York City,” 160.} In a 1918 article, Dr. Samuel McC Hamill, a Pennsylvania public health official, held New York City up as an example for child welfare efforts “because her health appropriation is relatively very large, and because, with this measly pittance, she has brought about a remarkable reduction in her infant death-rate.”\footnote{Samuel McC Hamill, “The Influence of War Upon Infant Mortality and its Meaning,” The American Journal of the Medical Sciences, 155, no. 1 (1918): A1. At the time of the article, McC Hamill was the Director of Child Welfare of the Committee of Public Safety for the Commonwealth of Pennsylvania.} In pursuit of the lowered infant mortality rates of New York City, McC Hamill asked Baker for advice, and in reply she emphasized the importance of public health education and the collaboration of all organizations that are “engaged in any work which related to infants” to the success of the city’s campaigns. Baker’s message was clear: infant mortality could be effectively fought by an organized force of experts and volunteers who had continuing moral and monetary support from all citizens.

The years 1918-1919 proved to be a time when the national influence of New York’s infant welfare efforts became evident through two completely different means: in addition to Baker being offered a position to manage infant welfare in wartime France, New York’s new mayor James Hylan challenged every step of progress Baker and her Bureau had made with a months-long investigation of the Health Department for graft. The situation was thick with irony. In the
same year that Baker received international attention for her expertise, received Theodore Roosevelt’s support of the Bureau’s work, and the nation celebrated Children’s Year, New York’s mayor was trying persistently to get Baker fired. The vociferous response to Hylan’s investigation by the press, Baker’s colleagues, infant welfare advocates, and mothers who had used the baby health stations clearly demonstrated that Baker’s work and the work of the Health Department, in general, was by 1918 seen as a key component of the identity and pride of the city. It was also ironic that in a moment when the cause of infant welfare was broadening to the national and international level because of the war, the success of New York’s initiatives at the municipal level came into question. However, the incident also demonstrated how much public support those initiatives had earned over the previous decade.

For M.J. Rosenau the milk question exemplified “one of the difficulties of an artificial civilization to which we have not yet adjusted ourselves,” and Americans were “simply suffering the inevitable penalties we must pay for modern conditions of life.” While New York City in many ways was a locus of that suffering because of its size and its influx of immigrants, the increasingly national recognition of the need for preventative maternal and infant care demonstrated that the problems exemplified in the city existed to some extent everywhere. Walter Rauschenbusch asserted that “New York is only the most striking manifestation of laws operative elsewhere,” emphasizing the idea that problems like the milk question were only one example of the age-old and inherently human crises that bubbled to the surface when society’s resources were not equally available to all of its members. Rauschenbusch asserted that these common crises pointed both the city and the nation toward the question, “where are we going?” It seemed obvious to Baker that “…during any war no part of the civilian population

485 Rosenau, 21.
486 Rauschenbusch, quoted in Smucker, 4.
suffers so severely as do the children and this suffering and reaction seem to be in inverse proportion to their age.” 487 America’s children, and the soldiers who were overseas fighting the war, were its most vulnerable citizens. If those two most vulnerable populations could not successfully be tapped in to the preventative care and resources they required, that seemed to throw the direction of the city, and the nation, into question.

Consciously or unconsciously, one of the tactics Baker used to remind her fellow citizens of their responsibility toward its most vulnerable members was to use language that directly compared the welfare of babies to that of soldiers. Analogies between military engagements and the work of baby saving had appeared before in the rhetoric of infant welfare advocates in the early twentieth century. After describing the hard work of New York’s visiting nurses in 1910, for example, a reporter boasted of them: “Soldiers in the Board of Health army, no campaigner in the field works harder than they, and they save even more lives during the summer season than a good marksman could kill off in a period of similar length.” 488 Continuing this idea of baby-saving-as-military campaign, Baker’s rhetoric during the war makes direct comparisons between the mortality rates of soldiers and babies. When the Bureau was tasked with saving 4,700 babies during Children’s Year, Baker reminded New Yorkers that while 4 out of 100 soldiers in the allied armies had died during the past year, 12 out of 100 babies had died: “‘one way of putting it would be to say that it is three times safer to be a soldier in the trenches in this horrible war than to be a baby in the cradle in the United States.’” 489 After the war had ended in 1919, Baker continued using the analogy between babies and soldiers, noting that in the United States, “For every soldier

488 “Saving the Lives of Babies in Congested Districts.” Of sanitation efforts prior to germ theory, Major Chas E. Woodruff, notes that “Fighting is poor business when you do not know who the enemy is.” “New Science of City Sanitation.” It could be argued that once germ theory gave a “face” to the enemy that caused typhoid, or tuberculosis, or infant diarrhea, what was already pictured as a fight became even more personal.
489 “Open Drive to Save 4,700 Babies Here.”
who has lost his life abroad, nine children under five years of age have lost their lives here.”

Again, Baker was not alone in her use of military rhetoric to make comparisons between babies and soldiers at the time, but those comparisons clearly remained meaningful for her throughout her life. In her 1939 autobiography, she describes the number of babies saved during the summer of 1908 – 1,200 – as being equivalent to “a regiment of soldiers,” and mentions that during the war she often repeated the claim that it was “six times safer to be a soldier in the trenches of France than to be born a baby in the United States.” As will be explored below, her rhetoric comparing infant to infantry mortality pointed to personal feelings of conflict surrounding the ultimate success of her work, but within the context of New York City during the war, it served as a rallying cry to keep the war against infant mortality going at home while the nation fought abroad.

Ultimately demonstrated in reaction against Mayor Hylan, New Yorkers took up that rallying cry against infant mortality with gusto when he investigated the Health Department for graft and threatened to replace many of its key bureau directors with new hires. 1918 began well enough for the Bureau of Child Hygiene, when Theodore Roosevelt asked for a tour of the Bureau’s initiatives and gave them his stamp of approval. After some humorous posturing about whether the press could accompany them or not, Roosevelt went with Baker and Dr. Charles Chapin and a large group of reporters to see several baby health stations and hospitals, ending up at Post Graduate Hospital on East Twenty-Second Street, where “...he stood up and made a

491 Baker, Fighting for Life, 86.
492 Baker, Fighting for Life, 170.
493 “Roosevelt Studies Child Malnutrition,” New York Times, January 18, 1918, 13. Baker notes in her autobiography that when she and Dr. Chapin went to pick up Roosevelt at his office on the appointed day, he was upset with them for alerting the press to his plans even though he’d asked them not to. Baker and Chapin insisted that they had not alerted the press, but Roosevelt showed them “a tiny paragraph at the foot of a column on one of the back pages” of a newspaper. He refused to go with them. In the end he
speech brimming over with intelligent eulogy of child welfare work. It was old stuff to the assembled press, but it had all been new and glorious to him and he said so as emphatically and at as much length as if the entire Bureau of Child Hygiene had been his own baby. In April, just a few months after Roosevelt’s January tour, the New York Times began a series of reports that, at the Mayor’s request, the Civil Service Commission was investigating whether seven of the nine bureaus in the Health Department and their director positions had been created illegally during previous administrations. Quickly, the reason for the investigation changed to suspected graft, and two bureau directors were particular targets in the investigation. No names were given and the hearings were initially closed to the public, but outrage at the investigation seems to have been almost immediate. Concerned citizens and physicians are quoted mentioning child and industrial welfare, as well as public health education, as services potentially endangered by the Mayor’s desire to reorganize the Health Department bureaus and replace some of the directors. The quick response of the public’s outrage to the Mayor’s investigation suggests that public confidence in the New York Health Department had increased considerably since graft,

invited them to sit back down and then gave them a thrifty-minute oration on his opinion of how the war was being handled, and agreed to go with them another day – with the press. Baker, Fighting for Life, 178.

495 “Denounce Economy at Cost of Health,” New York Times, April 15, 1918, 7. The two original bureaus in the Health Department mentioned in the city charter were the Bureau of Records and the Bureau of Sanitation. The seven newer bureaus whose legality Hylan questioned were the Bureaus of Child Hygiene, Preventable Diseases, General Investigation, Public Health Education, Laboratories, Food and Drugs, and Hospitals. “Now Sees Graft in Health Bureau,” New York Times, April 14, 1918, 19.
496 The directors were not publically named by Mayor Hylan but they were likely Charles F. Bolduan, director of the Bureau of Public Health Education, and Lucius B. Brown, director of the Bureau of Food and Drugs. Dr. Bolduan resigned during the investigation, and Dr. Brown ”was suspended under charges.” “Health Board Muddle,” American Druggist and Pharmaceutical Record, June 1, 1918, 66.
497 Dr. Harry Isaacs, President of the Eastern Medical Society, specifically mentions the importance of the “Child Welfare Bureau.” “Now Sees Graft in Health Bureau”; Dr. Lee Frankel was appointed head of the “Committee of Twenty-One,” a group of concerned citizens who demanded that the investigation of the Health Department proceed with public hearings so that the community knew what was being investigated and why. Frankel was an executive with the Metropolitan Life Insurance Company at the time, and he comments on fears that Dr. Louis J. Harris’ work with the Bureau of Industrial Hygiene and the Bureau of Preventable Diseases will be hindered by Hylan’s reorganization of the bureaus. ”Denounce Economy at Cost of Health.”
“negligence and stale tobacco smoke and slacking” had characterized the first years of Baker’s employment. While incompetence and graft had not disappeared from the ranks of New York’s public servants, the tangible benefits being produced by the seven more recently created bureaus obviously resonated with New Yorkers.

By that time Health Department employees were required to take civil service exams, meaning that the Mayor could not fire them unless it could be proven that they had done something really wrong, or their bureaus no longer existed. On top of the secret hearings, it became evident that James E. MacBride, Chairman of the Social Service Commission, who was overseeing the investigation, had also edited Baker’s annual report to the mayor without her knowledge. Before the press had discovered the incident, it was reported that Baker had advised the Mayor that the budget of the Bureau of Child Hygiene could be cut $105,000 to save money for the city. That recommendation turned out to be an edit that MacBride had made. In actuality, “the entire ‘conclusion’ submitted to the Mayor by Dr. Baker had been suppressed,” and Baker was later quoted as saying, “As far as I am personally or officially concerned, I cannot consistently recommend that any lines of effort now carried on by the Bureau of Child Hygiene be abandoned.” As far as she was concerned, the recommendations she had made that year were much the same as those she had made to previous mayors, and she had asked for a larger appropriation. Even before it became evident that Baker’s report had been edited, given the fact that the Mayor could not directly fire Baker or any other bureau director, the New York Times surmised that he was planning to look for evidence of any wrongdoing by the Health Department until he found it, then had the right to fire anyone responsible, and replace them with his own

498 Baker, Fighting for Life, 56.
499 “Dr. Baker’s report cut to fit M’Bride.”
500 “Dr. Baker’s report cut to fit M’Bride.”
appointees. There is a sense from the press coverage that the stories that MacBride and the mayor were telling about the Health Department conflicted with reality. It was a clear example of how even popular public health measures endorsed by the likes of Theodore Roosevelt could still face danger when a new municipal administration took office.

Attacks on the Mayor’s actions in the press focused on several points, including the fact that the hearings he was ordering were initially closed to the public, that no evidence of graft or mishandling of funds had been released by investigators to the press, and that a reorganization of the Health Department during wartime would endanger the health of the city. The rallying around Baker and other bureau directors by their fellow physicians and concerned citizens during this investigation clearly demonstrates the importance that public health held by this time as a component of civic identity and pride. The added stress of the loss of life during the war only added to the response. In addition to forming a “Committee of Twenty-One” concerned citizens to visit the Mayor and demand that his investigations be made public, physicians and public health officials from all over the nation wrote letters of protest to Mayor Hylan, criticizing his actions as dangerous to public health. At the meeting of citizens that elected the Committee of Twenty-One, “one speaker declared that the abolishing of the bureaus of the Health Department was a sure means of wrecking the health of the community, particularly in the grave hour of war.”

James J. Bagley, Secretary of the Labor Sanitation Conference, expressed concern that the city would not be able to properly respond to a disease epidemic if the work of the bureaus of Child Hygiene or Industrial Hygiene were hindered by the Mayor’s investigation, and Leon H. House, President of Typographical Union No. 6, commented that “At no time in the history of our civil and national

501 “Now Sees Graft in Health Bureau.”
502 Dr. Frankel was selected as chairman of the committee at this “meeting of civic and social workers at the Bar Association.” “Now Sees Graft in Health Bureau.”
life should the health of the workers of this community be neglected, and least of all in the present crisis with which our country is confronted.”

Several articles particularly mentioned the national approbation that the most recently created Bureau of Public Health Education had received, and in a letter to the mayor, Dr. R. H. Bishop, Jr., Commissioner of Health of Cleveland commented that: “To my mind, any one who interferes at this time with the proper running of the Health Department, who curtails in any respect the activities of any bureau having for its object the prevention of disease and the protection of the public health, gives aid and comfort to the enemy of his country, for in so doing he is making it possible for disease to incapacitate the worker; he is making possible the spread of epidemics with consequent loss and a lowering of morale.”

Dr. Bishop’s letter was accompanied by letters from Dr. M.J. Rosenau, director of the School of Public Health at Harvard, and Dr. B. Franklin Royer of the Pennsylvania State Department of Public Health, protesting the Mayor’s actions in a similar vein. In the midst of the war in Europe, public health advocates identified the New York Health Department’s preventative health strategies as points of pride and stability among chaos. A telegram from Dr. Rupert Blue, the surgeon-general of the federal Public Health Service to Mayor Hylan was also quoted, urging him to consider the important role that publicity (part of the job of this particular bureau) held for public health strategies.

While soldiers were vulnerable overseas there was no wish to disturb the mechanisms that seemed to be working to keep vulnerable populations safe at home. In some ways the war solidified the expectation that the welfare of babies and soldiers should be increasingly under the watchful eye
of medical experts, whether through baby health stations, convalescent hospitals, or military physicians. The future wellbeing of American society depended upon expert knowledge of the unique stresses and challenges that these populations faced. The public reaction to Hylan’s investigation of the Health Department suggests that, at least at the municipal level, New Yorkers were not willing to allow politics to interfere with the work of Baker and other experts, especially during wartime.

Interestingly, Baker goes into some detail in her autobiography about the Mayor’s investigation, but centers the story specifically on his attack on the Bureau of Child Hygiene and on herself. Press coverage makes it clear that over a period from 1918-1919 potentially seven bureaus, including those of Child Hygiene and Public Health Education, were in danger of reorganization or dismissal, but Baker mentions none of the uproar created on behalf of these other bureaus. It is certainly possible that Baker wished to speak to her own experience in her autobiography rather than to speculate on Hylan’s larger intentions, for she does not mention any suspicions about Hylan wanting to replace her with someone of his own choosing, nor does she comment on the pressure that her fellow bureau directors faced from the hearings. The result is that her account of Hylan’s investigation of the Bureau of Child Hygiene reflects how extremely personal it felt to her, and her increased frustration at having to simultaneously fight offense on infant mortality and defense on her own work while the nation was at war. Baker was used to the

Barker notes that correspondence between mothers and the federal Children’s Bureau illustrates that the advice of medical experts was increasingly recommended and favored over time. As infant and child welfare became a more accepted national public health issue, it was also becoming more professionalized, and eventually, male-dominated. This will be further explored in Chapter 6. “Birthing and Bureaucratic Women,” 8.

fact that convincing politicians and citizens of the Bureau’s need for more appropriations from the city was an important part of her job. She and others in the department worked hard to produce the results – falling infant mortality rates – that demonstrated the value of the endeavor. Having her own integrity and that of her staff questioned, however, was something different.

A brief look at Baker’s account as a subject of Hylan’s investigation illustrates that even when national attention turned to New York, a balance between political and public support and individual collegial relationships between officials were both keys to the success of preventative public health efforts. Unable to fire her because she had passed a civil service exam, Baker relates that Hylan “filled my office with investigators, combing through the files, asking everybody questions, looking mysterious and getting sadly in the way.” Eventually Dr. Amster, Hylan’s appointed Health Commissioner, appears to have become so tired and disgusted at having to investigate Baker and other bureau directors, he stepped down from his post in May of 1918. Baker relates that he told her as much personally, commenting that “To have been Commissioner of Health, with all the prestige and power that position carried, and then drop it because you were asked unreasonably to persecute an under-official whom you had never known before – that was real integrity.” A new political administration was threatening the work and reputation for infant welfare that had come to distinguish New York’s Health Department, but here was evidence that the work of Baker and others was simply too valuable to New Yorkers for Hylan’s assault to go unchallenged. Nonetheless, Dr. Royal S. Copeland was appointed Commissioner shortly thereafter, and he continued at the Mayor’s request, as Baker described it, “the game of ‘Get Dr. Baker’.”

509 Baker, Fighting for Life, 100.
510 “Endangering the Health of New Yorkers.”
512 Baker, Fighting for Life, 100.
It appears that Dr. Copeland continued pursuing the investigation of other bureau directors as well, because beginning in 1919 there is another small uproar in the press about Dr. Louis I. Harris’s Department of Industrial Hygiene being reorganized under Copeland’s supervision.\textsuperscript{513} However, in her relation of the story, Baker’s focus remains on the hours of work she and her colleagues at the Bureau of Child Hygiene lost to the investigation and the “heartening” show of support that she and the Bureau both received from colleagues and patients. In addition to the letters mentioned above that the Mayor received from physicians and public health officials, Baker notes that eventually “a group of mothers whose babies had been cared for by the Bureau marched in a group to the Mayor’s office to protest against his incomprehensible behavior.”\textsuperscript{514}

After months of searching and no luck finding evidence of graft or incompetence, the mayor lessened his assault and Baker had more time for her work. The reason for the Mayor’s focused efforts to get Baker out of her position was finally surmised by her by accident, and while it does not confirm that the Mayor was trying to appoint his own choice as Bureau director, it certainly supports a political motive.

Baker had been flabbergasted early on in the investigation when she was accused of being a former employee of Rockefeller – a “capitalist spy” – who was still in his pay, even though she had only ever worked for the Health Department.\textsuperscript{515} After months of investigation, Baker eventually met the Mayor for the first time. She notes that he wanted to have his picture taken with one of the Bureau babies, and that when they spoke he repeatedly called her “Dr. Davis.” She relates that she “gave Dr. Copeland one look and rushed into the back room where I could laugh by myself.” It was Baker’s belief that all during the investigation the Mayor had thought she

\textsuperscript{513} “Again Accuse Hylan of Health Politics”; “News of the Week,” \textit{Medical Record}, 95, no. 3 (January 1919): 109.
\textsuperscript{514} Baker, \textit{Fighting for Life}, 102.
\textsuperscript{515} Baker, \textit{Fighting for Life}, 98.
was Dr. Katherine Bement Davis, who had once worked for the Rockefeller Foundation, and “since she had had the bad luck to be the only woman in a public job who had ever penetrated Mr. Hylan’s consciousness, it followed that, whatever anybody said, or my birth-certificate certified, I, as a woman in a public job, would always be Katherine Bement Davis so far as he was concerned.” The investigation into the Bureau of Child Hygiene ultimately resulted in a demonstration of support for Baker and the Bureau’s work by local and national officials, and importantly, also by the public. The war on infant mortality was becoming an accepted cause steeped in multiple kinds of value, that even a personal political vendetta was unable to supersede.

One tremendous side benefit of the Mayor’s lengthy investigation into the Health Department and Baker’s Bureau, as evidenced above, was a great deal of press coverage. Still using combative, military-style language, Baker notes that “Publicity was our best defense against budget-cutting and inter-departmental sniping, and, as a natural result of our willingness to oblige, reporters came to count on us for copy.” Just as she compared the number of babies saved in a year to a regiment of soldiers, amidst wars being fought on multiple fronts, Baker’s focus remained on the Bureau being able to protect those whom they were charged to protect. The added anxiety created by the war likely only added to New Yorkers’ willingness to step up in defense of her Bureau and others, as attention turned to the city as an example of the public health strategies that Americans increasingly realized were required at the national level. As one man commented to James MacBride at a public hearing during the investigation, “Your ideal of democracy is to save $30 to stop the publication of a pamphlet giving the history of the Health Department. My ideal of democracy is to spend $300 for the printing of that pamphlet. My ideal is to have the greatest number of persons in the country read that pamphlet so as to know exactly

---

516 Baker, Fighting for Life, 102-103.
517 Baker, Fighting for Life, 103.
what the Health Department of this city is doing.” As Hylan’s success in disrupting public health efforts, if only temporarily, illustrates, it still remained to be seen whether the institutions and officials in place to make those efforts national would ultimately have more or less long-term success than the New York Health Department.

**The Power of Institutions**

In his plea to the commonwealth of Pennsylvania to take up the fight against infant mortality in the face of the war’s great losses, Dr. Samuel McC Hamill verbalized what Baker, Lathrop, and others both embraced and feared about the nation’s renewed interest in child welfare: a generation of children noticed for their economic value. After discussing the loss of life suffered in Europe due to war, low birth rates, and infant mortality, he says “The figures are appalling, and they emphasize the fact that we must dwell upon today and use as the basis of our fight for the rights of the child to live, viz., that the life of child has a greater economic value than it has ever had before.” Using the now familiar analogy between agricultural and child resources, McC Hamill notes that while the federal Children’s Bureau had recently received an annual budget of $296,250, that for “the battle against hoof-and-mouth disease among cattle” was “increased by $2,500,000” and that for “control of hog cholera” was $360,000.

Using this analogy, the value that a cause held for the public was reflected in the presence of an institution to administer it, and a monetary appropriation to run it. Agricultural resources and the military both had federal institutions and budgets to support them. Since 1912 there had been a federal Children’s Bureau, but its budget was still smaller than that for cows or soldiers. It

---

518 “Health Witnesses Attack MacBride.” The quote is from James Bagley, mentioned above, who was Secretary of the Labor Sanitation Conference.


was a common and valid comparison to make, at a time when the U.S. and its allies faced the added stresses of war, and decisions about the allocation and care of national resources needed to be made for the present and the future of the nation. As always, simultaneous need for well-established institutions run by experts to administer the care of these resources, and for those institutions and experts to remain tapped in to the dynamic particularities of those resources, were both key.

Rauschenbusch’s comment at the beginning of this chapter alludes to this need for institutions to be simultaneously bigger than the people they protect and to continue to value individual experience. At all costs the institution could not lose touch with those whom it was designed to protect: “We have repeatedly pointed out that every social institution weaves a protecting integument of glossy idealization about itself like a colony of tent-caterpillars in an apple tree.” That protective integument could change with political administrations, as in Hylan’s emphasis on monetary efficiency, and allow the institution and its experts to lose touch with its potential beneficiaries. As noted above, by all accounts one of the reasons why New York City’s infant welfare initiatives were so effective at saving lives was because the strategies continued to adapt to the needs of the infants they served. Milk was made available in the babies’ neighborhoods, sold at affordable prices, and the knowledge to make the milk into infant formula was spread individually from person to person, allowing for adaptations in procedure among the different circumstances of different families and different babies.

Rauschenbusch, A Theology for the Social Gospel, 350. Rauschenbusch was particularly attuned to how laws and institutions produced under industrial capitalism created a society of rich and poor classes. Evans notes that “The idea that capitalism creates a parasitic class of the wealthy is one of the most persistent themes in Rauschenbusch’s writings, dating back to his ministry in Hell’s Kitchen.” Christopher H. Evans, “Ties that Bind: Walter Rauschenbusch, Reinhold Niebuhr, and the Quest for Economic Justice,” Soundings 95, no. 4 (2012): 359.
However, as social reformers - from public health workers to social gospel evangelists - in New York City acknowledged, the institutions that constituted the “machine” of the city had the power to either nourish or to crush individual New Yorkers. Institutions, once created, took on their own personalities, goals, and narratives of progress just as surely as the individuals who made up or were served by them did. The idea that human history is a narrative of progress toward a better society is a characteristic shared by progressivism and the social gospel. History was peppered with particularly ripe moments for change, however, and the early twentieth century was viewed, by progressive reformers and social gospelers alike, as one of them. While their own areas of expertise differed, the writings of Baker and Rauschenbusch during the first two decades of the twentieth century reflect a shared deep awareness of the personality, or “integument” of the city’s and the nation’s institutions; personalities that had the power to make those institutions both allies and enemies of the citizens they were designed to serve. For Baker that institution was the Bureau of Child Hygiene, and later the federal Children’s Bureau: educators of the public in medical science, purveyors of resources both intellectual and material to infant welfare. For Rauschenbusch, that institution was the Church: the body of Christ on earth charged with the task of bringing about the Kingdom on earth, where all people had equal

522 This idea relates to Reinhold Niebuhr’s later assertion in the vein of Moral Man and Immoral Society (1932) that the moral responsibility felt by individuals is nearly impossible to translate to larger groups or organizations of people. Both Rauschenbusch and Niebuhr were influenced by liberal Christianity as the sons of German immigrant pastors, and acknowledged the role that the idea of the Kingdom of God held in a discussion of the capacity for individuals and society to be moral. Rauschenbusch biographer Christopher H. Evans notes that while Niebuhr had both affection and criticism for Rauschenbusch’s earlier interpretation of the Social Gospel, the two men “were united in the belief that central to the social mission of Christianity were issues of economic justice.” “Ties that Bind: Walter Rauschenbusch, Reinhold Niebuhr, and the Quest for Economic Justice,” Sounding 95, no. 4 (2012): 353. See also, Matthew Burke, “A Century of Books, An Anniversary Symposium: Reinhold Niebuhr, Moral Man and Immoral Society (1932),” First Things 101 (March 2000): 41-42.
opportunity for wellbeing. Baker pictured the Bureau and its work making connections between people within the larger “social organism” of the city and the nation. Rauschenbusch was convinced that the “social organism” needed to be saved as much as individuals did, and pictured the Church being influenced by larger “superpersonal forces” of society. Baker and Rauschenbusch both use the phrase “social organism” in a way that emphasizes the relevance that societal structures had on the opportunities and quality of individual lives. Superpersonal forces, for Rauschenbusch, were the circumstances tied to that specific historical moment driving the lives of individuals within that social organism. Both Baker and Rauschenbusch believed that in order for the social missions of public health and the church to succeed in influencing the social organism and the forces generated by it, national attention and support needed to consider the social as well as the economic value of national resources such as children.

---

524 Evans notes that followers of the Social Gospel were sometimes criticized by followers of Reinhold Niebuhr for being too optimistic about individuals’ ability to allow God to work through them to bring about the Kingdom on earth. The concept of the Kingdom is a familiar one to American Christianity because of the widespread popularity of an apocalyptic view of history, but it has been understood in a variety of ways. The social gospel expressed by Rauschenbusch embraced a view of the Kingdom that depended upon economic justice for all members of society, rooted in reaction to the disparity between classes that industrial capitalism had helped create at the turn of the twentieth century. It was a vision of the Kingdom that depended both upon the work of the church and of secular institutions in society for the betterment of all. Evans asserts that one of the key differences between Niebuhr and Rauschenbusch, for example, is not their conceptions of sin or “the ability of humans to approximate a just social order,” as some scholars have noted, but instead their conception of the importance of “history in the interpretation of Christian theology and ethics.” Like other Progressive reformers, Rauschenbusch believed that he was living at an opportune moment when social change was possible, but also that God was working through people in that moment to help them move closer toward the Kingdom. The idea of progress held by progressives thus meshed well in many ways with ideas of progress embraced by the Social Gospel. After the first world war this progressive view of human history (both secular and sacred) was becoming more broadly criticized for being idealistic and naïve, but Evans points out that Rauschenbusch “was always clear that the achievement of a just social-political order was never a foregone conclusion.” Rauschenbusch knew that public attention to social inequity would allow the present moment of opportunity for only so long, and that reformers needed to move quickly if they were to accomplish their goals. Christopher H. Evans, “Ties that Bind: Walter Rauschenbusch, Reinhold Niebuhr, and the Quest for Economic Justice,” 354, 355, 356.

525 Baker, Fighting for Life, 62.

526 Rauschenbusch, A Theology for the Social Gospel, 24, 74.
As seen with the renewed national interest in infant welfare, the war attracted attention to the social inequalities that had plagued American society long before troops were sent to Europe, but it also ran the risk of obscuring those inequalities with its own importance. Citing the fact that many soldiers were asking about how their friends and families fared back home, McC Hamill queried, “Do you believe they want the answer to that question to be the babies are dying, the children and grown-ups are sick, the efficiency of the workers has been reduced, and the supplies that should come to you will be delayed because the civil population has been neglected?”  

Arguing for increased social consciousness in public health and the Church, respectively, Baker and Rauschenbusch recognized that the war was both an opportunity and a dangerous moment in which to find out if – for the benefit of all Americans - social institutions could effectively keep one another in check.

In her autobiography Baker claims that the knowledge that institutional public health could greatly help or harm New Yorkers was an early realization for her, because of her experience with Mary Mallon’s case. The power to override Mary’s personal liberty in that case, and the cases of graft and incompetence that Baker observed early in the Health Department, were clear examples of how an institution designed to benefit the vulnerable could end up targeting them instead. In both of his major works on the Social Gospel, Rauschenbusch discusses the historical

---

528 Baker, Fighting for Life, 77.
529 Evans notes that the social gospel was one stream among many within the theological liberalism in Protestant Christianity developing through transatlantic theological conversation from the late nineteenth century. What distinguished it from other theological streams, he argues, “was how the social gospel called for theology to engage questions of systemic institutional reform.” Rauschenbusch and others referred to this transformation of social institutions as “social salvation.” Coming back to the importance of history, Rauschenbusch and other social gospelers believed that “Christian theology had a politically progressive mission to transform the social structures of modern society.” Christopher H. Evans, “The Social Gospel as ‘the Total Message of the Christian Salvation’,” Church History 84, no. 1 (March 2015): 196, 198. Rauschenbusch also held to the belief that theology was not set in stone, but required a practice of reevaluation and reapplication to contemporary societal context. This process of continual practical application and dynamic conversation between theology and social context was in some ways similar to
role that the Christian Church has played in society, and how it has always fallen short of the ideal as an active participant and moral conscience. At one point he explains practically, that “Nothing lasts unless it is organized, and if it is organized of human life, we must put up with the qualities of human life in it.” Like Baker, he saw institutions as extensions of the persons who established and participated in them, requiring constant dynamic responsiveness to the needs of both individuals and society as a whole. Both the Church and preventative healthcare had been intended to connect individuals to the resources they required, but sometimes ended up placing conditions of belonging on those resources that resulted in them effectively helping fewer and fewer people. Sometimes, even the crucial focus of an institution on the individuals it served could turn detrimental when it lingered on specific characteristics rather than the whole person and the social world they inhabited. At the time, mainline Protestantism (Rauschenbusch’s perspective as a Baptist minister) had become highly focused on individual sin and salvation, sometimes to the complete neglect of societal sin and salvation. Eligibility for receiving milk and education at New York’s milk stations likewise depended on a mother’s individual economic circumstances, her address, and her ability to breastfeed. In short, the success of public health and of the Church in improving social equity and access to resources was a complex and continually moving target. The loss of life and shortage of resources caused by the war only intensified Baker’s and Rauschenbusch’s resolve that the war would end having strengthened the work of their respective institutions and educated the public about the importance of holding those institutions accountable for their social purpose.

---

Baker’s practice of continually evaluating the relevance of public health practices to patients and their individual surroundings. For both reformers, context mattered.

Rauschenbusch, A Theology for the Social Gospel, 120.
The histories of public health and the social gospel are certainly not always told together, but Baker and Rauschenbusch’s experience of them reveal quite a few shared traits of relevance to the fight against the impacts of poverty. They acknowledged that when a person’s place in the larger social organism was neglected and often anonymous, that person had little agency to exert against, what Rauschenbusch called, superpersonal forces. A conviction that social institutions like public health or the church could connect tenement New Yorkers to the social organism in ways that helped them use their agency motivated the careers of Baker and Rauschenbusch. Both were considered experts by society, one in medicine and one in religion. The social gospel “joined Christians with the social and political world of their daily lives,” during a time when faith had become increasingly personal and private.\textsuperscript{531} Infant preventative care made medical resources and knowledge available to those who could not afford the care of private physicians. Their expert status gave both Baker and Rauschenbusch access to the heart-breaking inequalities between the families of New York’s upper class and those of Hell’s Kitchen, inspiring them to participate in efforts to articulate and address those inequalities with the help of their respective institutions.

Baker’s descriptions of her visits to hundreds of “fatalistic” mothers who held no hope of their babies’ survival echo Rauschenbusch’s description of the state of continuous exhaustion that members of his Hell’s Kitchen congregation suffered: “This condition of exhaustion tends to perpetuate itself. Children are begotten in a state of physical exhaustion. Underfed and overworked women in tenement and factory are nourishing the children in their prenatal life.”\textsuperscript{532} Baker recognized that “nearly all mothers are fine when they are given half a chance to know how to be,” and Rauschenbusch asserted that “When men are hardly able to keep their head above

\textsuperscript{531} Tichi, 221.
\textsuperscript{532} Rauschenbusch, \textit{Christianity and the Social Crisis}, 242.
water, they fear to carry a child on their back.” Rauschenbusch and a few friends produced a newsletter for the neighborhoods that his church served, containing “stories and informal short pieces, written in a simple style, to help awaken the minds of men and women who were habituated to taking orders in mute silence for hours on the job.” Baker’s Bureau circulated pamphlets to tenement mothers explaining how to care for their infants, and “Pocket cards giving the location of milk stations have been given to every available person in the city who is in a position to direct needy mothers to the milk stations.” Institutions could help correct the economic and social inequality these families faced by connecting them to resources and educating them to navigate the institutions themselves. From their experience in the tenements, Baker and Rauschenbusch were both keenly aware that people who were relegated to the margins of society and perpetually physically exhausted by work had little sense of their own agency.

In addition, at the turn of the twentieth century public health and the church both faced impulses of privatization and specialization that threatened their ability to make their services universally available. The increased specificity of diagnosis and measurement that medical science was making available to infant preventative care provided the opportunity to keep more useful records of birth, death, health and disease. However, it could also reduce infant patients to collections of data points held up to normative ideals of health. In 1919 Baker commented on her fear that child welfare ran the risk of becoming too specialized; too focused on the individual ailments and systems of children rather than addressing the needs of the whole child in its unique

---

533 Baker, Fighting for Life, 86; Rauschenbusch, Christianity and the Social Crisis, 274.
534 Tichi, 231-232.
surroundings. Rauschenbusch feared that the Church at the time represented a “system of religious individualism in which the social forces of salvation were slighted, and God and the individual were almost the only realities in sight.” The war was an important influence on American society at that moment, but both Baker and Rauschenbusch recognized that it only intensified societal inequities that had existed beforehand: “The ultimate cause of the war was the same lust for easy and unearned gain which has created the internal social evils under which every nation has suffered. The social problem and the war problem are fundamentally one problem, and the social gospel faces both.” Baker speculated that because the U.S. had not (until 1917) had to deal with the numerous economic and health consequences of the war, “we have not yet awakened to our continued negligence with regard to the excessive waste of life at its beginning.” Whether God and the individual or the physician and the individual, the larger “social organism” to which those individuals belonged still had great influence upon them, and both Baker and Rauschenbusch asserted the key importance the personality of that organism held for both individual and societal wellbeing. For both, the situation of mothers and children in American society seemed especially tenuous, and reflective of the unequal access to resources that economic and political interests (or superpersonal forces) seemed to inevitably establish.

Personal experience as a physician and as a minister, respectively, to tenement families also seems to have convinced both Baker and Rauschenbusch that another institution was required to counter the economic, social, and political systems that maintained the status quo of the class structure. Individual effort mattered, but volunteerism and philanthropy alone were not going to help half of the American populace rise up from grinding poverty. The Health Department

536 Baker, “Reconstruction and the Child,” 1919, 188.
537 Rauschenbusch, A Theology for the Social Gospel, 123.
538 Rauschenbusch, A Theology for the Social Gospel, 4.
and the Church both had expert authority and intimate contact with those they were trying to serve, and were powerful enough to lobby for economic and political aid. Echoing Baker’s experience of Mayor Hylan’s attempted sacrifice of Health Department bureaus in the name of economic efficiency, Rauschenbusch commented that “Politics is embroidered with patriotic sentiment and phrases, but at bottom, consciously or unconsciously, the economic interests dominate it always.” Rauschenbusch expressed more direct distrust of economic and political motivations for war than Baker, but those motivations and their long-term consequences did lurk in the periphery of her efforts to fight infant mortality.

Baker’s voice is predominantly good-humored and candid in her autobiography, but one of the passages in which she reveals any fears or doubts she felt during her work is in reference to the war. At the corner of Fifth and Forty-Second Street one day, Baker relates that she had “stood there and wondered. Wondered deeply and been sadly perplexed. Should we bring more and more babies into this troubled world? Should we try to keep them alive and well? What is to become of them? Are they to be simply more cannon fodder?” A well-established public health system could well counter the losses that the war claimed, but Baker wondered whether its focus on saving lives would influence the nation to avoid joining other wars in the future. The public outrage at Hylan’s attack on the Health Department demonstrated that a narrative of life in the face of death was an important part of how New Yorkers wanted to experience their city, but Baker questioned whether that narrative could be made strong enough at the national level to counter future narratives of war.

Later in her career Baker traveled to visit the state healthcare system of the Soviet Union, and noted that “it is no accident that, in 1934, the two groups of Russians who looked really well

540 Rauschenbusch, Christianity and the Social Crisis, 254.
541 Baker, Fighting for Life, 259.
fed were the soldiers and the children.”542 She comments that she “could not help feeling deeply gratified at the spectacle of a great nation really trying, for the first time in history, to make health the privilege of every citizen,” even if the quality of care was in her mind still below what New York had established.543 Public health had to embody a value for life that could successfully counter, as Rauschenbusch described it, “how the governing classes pour out the blood and wealth of nations for private ends and exude patriotic enthusiasm like a squid secreting ink to hide its retreat - then the mythology of war will no longer bring us to our knees, and we shall fail to get drunk with the rest when martial intoxication sweeps the people off their feet.”544 Baker’s perspective on the war differed from Rauschenbusch’s in that she was actually envious of those who wore uniforms and went overseas to save lives, but she was as convinced as he that it was difficult to reconcile the picture of a nation that valued the lives of children with one that fought wars where thousands died. Fundamentally, physicians and ministers spend their lives as intimate witnesses to life and death in a way that few others do, so it is unsurprising that two contemporaries such as Baker and Rauschenbusch shared the desire for America’s social institutions to reflect the belief that the protection and promotion of life was a national priority.

**Conclusion**

One similarity between Baker’s and Rauschenbusch’s rhetoric is to twenty-first century eyes an unflattering one: their occasional use of eugenic language in their articulation of a better society. As noted above, an underlying impetus for baby health contests and for improved screening techniques for the military was the belief that “unfit” individuals would need to be weeded from American society in order for it to progress and flourish.545 Grouped together

---

545 A good example of this language appears in Warfield, “The Cardiovascular Defective,” 165.
rhetorically as they were, during the war, babies and soldiers were both subject to intense scientific care and scrutiny as future and present resources of the nation. In the same book in which Rauschenbusch sympathetically relates the exhaustion and lack of agency that members of his congregation faced, he comments that “The intellectual standard of humanity can be raised only by the propagation of the capable. Our social system causes an unnatural selection of the weak for breeding, and the result is the survival of the unfittest.”546 It seems that if people were given help to negotiate the social organism but refused to claim their own agency, their contribution to society would remain unwanted. At the same time that Baker gave credit to tenement mothers for having the care and intelligence to prepare infant formula when other physicians doubted them, she also commented that “...we are studying the child from every aspect, and in studying the child we are building up the man and woman of the future. The interest is not New York’s alone - what could have been finer or more wholly modern than the recent Eugenics Congress held in London? They’re signs - such meetings!” 547 Their faith in the possibilities of public health and of the Church were couched within the belief that, once educated and connected to resources, individuals’ usefulness to society was still, at base, a large part of their inherent value. The focus of both medicine and Christianity has an orientation toward the future, and preferably a future that has progressed somehow beyond the present. Eugenic language by no means characterized Baker’s or Rauschenbusch’s writings or work, but their use of it signals the reality that they themselves were part of the social organism they inhabited in that historical moment.

546 Rauschenbusch, Christianity and the Social Crisis, 275.
547 Marshall, ”A Regiment of Babies’ Lives Were Saved Here in 1912: Dr. Josephine Baker Tells How Thought, Care, and Money Lowered the Mortality of Infants Under One Year of Age Six Per Cent.”
One of the things that gives the experience and words of Baker and Rauschenbusch relevance even after the danger of including eugenic ideals in dreams of society’s future has been clearly exposed, is their acknowledgement of the key importance of both individual and institutional efforts toward social equity. Both reformers devoted their entire professional lives, several times risking their expert status and reputations in society, to encourage institutions to remain accountable and relevant to those they served.  

Both individual and collective effort were required, because the economic and political disadvantage experienced by tenement dwellers was both widespread and institutional. As Rauschenbusch described it, “if a man has drawn any real religious feeling from Christ, his participation in the systematized oppression of civilization will, at least at times, seem an intolerable burden and guilt. Is this morbid? Or is it morbid to live on without such realization? Those who to-day are still without a consciousness of collective wrong must be classified as men of darkened mind.” Baker knew that her own individual efforts in her early years at the Department helped a few people, but that access to institutionalized health resources would be needed to combat the scope of the problem her patients faced: “…I did know that it was infamous to let these things go on. I have heard out-of-towners ask the reason for Hell’s Kitchen having that picturesque name. I could give them a good reason and it would not have anything to do with gangsters either.”

Rauschenbusch wrote that political and military organizations were “the most powerful ethical forces in our communities,” but he believed that the Church’s original ethical focus had been the poor and the sick, the widow

---

548 Rauschenbusch spent the first several years of his professorship at fairly conservative Rochester Theological Seminary writing *Christianity and the Social Crisis*, fearing that the book’s radically social focus would get him fired. As the son of German immigrants he had to be careful what he spoke and wrote about during the war. Baker admits in her autobiography that being a woman in a public office was sometimes a blessing and at others a curse. Hylan’s investigation of her bureau is an excellent example of an instance when her status as a woman acted as both. Each time she tried a new strategy, such as teaching mothers to prepare their own formula, or promoting lighter baby clothes during the summer, she faced criticism from other physicians. In short, both faced opposition from members of their own institutions.


and the orphan. Baker sought publicity for her Bureau’s activities like a “press agent” because she knew that politicians had to believe in what she was doing in order for it to get funded, but she also knew that, fundamentally, “People didn’t really like to see children die.”

It seemed possible during that time that the individual efforts of people like Rauschenbusch and Baker within their institutions were capable of influencing the superpersonal forces that influenced the social organism; capable of valuing citizens as more than national resources or military assets. Baker was no minister of the church, but her autobiographical reflection on her life in public health suggests that she saw her career as a calling rather than the means of employment that her initial attraction to medicine had suggested. She described workers in public health as being “consecrated” to their task, and reflected that “You may study and become an average doctor but medicine, like the ministry, is a jealous mistress. Determination, courage, and a love of your fellow-man are its keynotes and nothing less will answer.” Both Baker and Rauschenbusch felt compelled by duty in their professional lives to make the institutions they believed in stronger and more capable influences for equal access to the resources of society. The war made these inequalities all the more stark because the societal progress they both believed in threatened to reverse. During the war Baker called for Americans to heed the warnings of British public health official George Newman, to develop a “...Magna Charta of childhood, and this 'declaration of rights' will not only include the right to be

---

551 Rauschenbusch, A Theology for the Social Gospel, 72.
552 Baker, Fighting for Life, 146.
553 Baker, Fighting for Life, 29.
554 Influenced by religion and by science, Baker and Rauschenbusch’s conception of the progress of society works well with that of William James, who was writing influential essays on pragmatism in the early twentieth century. Heidi White notes that in his essay “The Teaching of Philosophy in Our Colleges,” James explains that “the world of the rationalist is ‘perfect, finished’ whereas for the pragmatists, ‘all is process’ – unfinished but filled with possibility.” Indeed, as Baker and Rauschenbusch believed about public health and the Church, White argues that “James is particularly concerned that philosophy should recognize the central importance of making the world better.” White, 3.
healthy, it will include the right to get the fullest value from life in all its aspects." 555

Rauschenbusch asserted that societal “evils become bold and permanent when there is money in them,” and in many ways the war made it clear to Baker and Rauschenbusch that institutions that valued people rather than solely their economic or political contributions were needed in order to counter the potential evils of inequity that other institutions established. 556 At their most simple, public health and the Church were both institutions with the goal of making help and support available to anyone who needed them. In the successful provision of that help and support – particularly to those whom poverty had made most vulnerable - both institutions could send a clear message that American society valued the potential in each of its citizens.

Even after the darkest moment recounted in her autobiography, when Baker contemplates whether the babies she had saved would only go on to die in wars, she asserted that “I have faith in the ultimate decency of mankind.” 557 Likewise, while believing that humankind would ever be reaching toward the Kingdom that was “always but coming,” Rauschenbusch said that “We can gauge the ethical importance of justice by the sense of outrage with which we instinctively react against injustice.” 558 Had Rauschenbusch and Baker had a conversation about their lives’ work, Rauschenbusch would likely have echoed the importance of the fact that “People didn’t really like to see children die.” 559 Social institutions could be the collective manifestation of a community’s desire for opportunity and justice. Baker and Rauschenbusch were practical and optimistic in their approach to the promise and danger of

556 Rauschenbusch, A Theology for the Social Gospel, 114.
557 Baker, Fighting for Life, 259.
559 Baker, Fighting for Life, 146.
As experts in two professions that both witnessed the most private challenges of life in the city’s tenements, Baker and Rauschenbusch also shared a felt moral obligation for their expertise to benefit society. During the war Baker wrote that “Loss of life during war may be inevitable but such excessive loss of life during times of peace can only be looked upon as the result of criminal neglect.” Rauschenbusch commented that “The decline in the death-rate with the advance in sanitary science, the sudden drop of the rate after the destruction and rebuilding of slum districts in English cities, prove clearly how preventible a great proportion of deaths are. The preventible decimation of the people is social murder.” For Baker and Rauschenbusch, expertise and the institutions that embodied it were only valuable if they were used to benefit individuals and society, in cooperation with individuals and society. During and after the war, both individual and institutional reaction against infant and child mortality would aid the federal Children’s Bureau in moving political opinion toward a national public health effort for mothers and babies with the Sheppard-Towner Act. However, the ability of municipal child welfare tactics to nationalize, after their success at the local level, would continue to be tested.

---

560 Baker, “Reconstruction and the Child,” 188.
561 Rauschenbusch, Christianity and the Social Crisis, 240.
562 As mentioned in previous chapters, progressive social reform included a healthy portion of idealism about society’s ability to produce solutions to problems as soon as the truth about them was known. Baker’s and Rauschenbusch’s personalities and vocations led them more often to take a pragmatic approach to their work. Describing William James’ conception of pragmatism, Heidi White notes that it is a method which acknowledges that “Knowledge is essentially cooperative...” Due to the size and power of modern social institutions, like the military, the municipal government, or the Church, Baker and Rauschenbusch believed that constant communication and cooperation between those who ran and those who were served by those institutions was key to the ongoing process of improving society. White, 10.
CHAPTER 6: MAKING THE NARRATIVE OF LIFE NATIONAL

...Miss Julia Lathrop, the Bureau’s brilliant first chief, thought I was a good ally. I was called Doctor instead of Miss and so could escape from the eternal remark always coming up among Congressmen about giving money to an old-maid to spend.

It must be borne in mind that the Children's Bureau has no power to do administrative work. It can not make regulations concerning children, nor create any institutions for them.

It is only a satisfying ambition to save life if we can see that health, education, recreation, work are all duly secured and harmonized to serve the true ends of life.563

Since the start of the federal Children’s Bureau in 1912, New York City’s team of public nurses and network of baby health centers had been used as models for the kind of preventative health infrastructure recommended by the federal Children’s Bureau to communities all over the nation. Unlike the Bureau of Child Hygiene, the Children’s Bureau had educational and data-gathering functions only, but it could help local communities get the birth and mortality data needed to design effective local programs, and encourage women’s groups to lead local efforts to connect mothers with information and preventative resources. Baker recognized that “In establishing work of this kind [infant preventative care] it is realized that communities are very slow to take the initiative and it is probable that private organizations will have to do the work in many places before the state can be made to realize its own obligation.”564 However, the increased attention to infant mortality that the War facilitated gave her hope that the federal state would eventually recognize that obligation. After the war national concern for infant mortality did remain, as did child welfare advocates’ rallying cry that children were a national resource just as important as the agricultural crops that the Smith-Lever Act helped to protect. Anxiety about infant mortality, the federal Children’s Bureau’s leadership by progressive settlement house reformers, and the intense lobbying and coordination of women’s groups all contributed to the 1921 passage of the Sheppard-Towner Maternity and Infancy Protection Act in 1921. The Act was the first piece of federally-funded social welfare legislation in the United States and allowed the Children’s Bureau to administer matching funds to states for the establishment of preventative infant and maternity services.565 More fundamentally, the Act and its administration by the Children’s Bureau was an

564 Baker, “Reconstruction and the Child,” 188.
attempt to demonstrate that public health services were the right of every mother and child, regardless of need or education level, and had the potential to make the narrative of life that public health had written for New York City a national one.

Opposition to the well baby clinics established throughout the nation ensued amongst some medical professionals, questioning the idea that government was responsible for the preventative care of all mothers and babies, and determining that preventative services should also be the work of medical experts. Thus, if preventative infant and maternity services were going to weave a national narrative of life, it would be the experts who did it, not the government, and certainly not the spinsters in the federal Bureau. As a comparison between the NYC Bureau and the federal Bureau will illustrate in this chapter, the long-term political success of well baby clinics in early twentieth-century America required that they serve those mothers and babies who could not otherwise afford preventative healthcare. It is evident that Baker and the federal Bureau’s Julia Lathrop were both more concerned with the ultimate welfare of mothers and babies rather than which ones deserved free care and who would pay for it, but infant and maternal preventative care during the 1920s clearly demonstrated the difficulties they faced in turning national attitudes toward their view. It is no coincidence that after the Sheppard-Towner Act was dismantled in 1929, when Title V of the 1935 Social Security Act appropriated funds to states for maternal and infant preventative care, it included language stipulating that only needy women and children could benefit. As a social institution, public health would only be permitted to serve who the government determined to be society’s most vulnerable. Thanks to the work of Baker and many others to spread awareness of the fight against infant mortality and medical specialization in obstetrics and gynecology, maternal and infant preventative care was becoming a societal expectation, if not yet an obligation.

As maternal and infant preventative care became an established national concern after the war, maintaining perspective about its end goal to reduce infant (and eventually maternal) mortality was sometimes problematic. The administration of endless detail was required in order

for the federal Bureau\textsuperscript{567} to assist localities across the nation to coordinate the medical, financial, volunteer, and political will involved in establishing public health staff and well baby clinics. The points of resistance felt at the local level, such as standards of eligibility for patients and boundaries between the responsibilities of clinic staff\textsuperscript{568} and private physicians, was multiplied hundreds of times within the Bureau’s national purview. By 1926, retired from the New York Health Department and acting as Consulting Director to the Federal Children’s Bureau, Baker continued to insist that the focus of everyone involved in infant welfare must ultimately remain on the reason behind all of the work: the babies. The title of her 1926 response to several articles regarding well baby clinics in \textit{The Public Health Nurse} sums up the continuing discussion: “Problems in Connection with the Administration of Well Baby Clinics.” The article capped off a months’ long conversation in the journal that raised what had become perennial questions regarding publicly-supported preventative care: Who deserved it? Who should give the care? Who would pay for it? Was it a privilege or a right? Was it a private or a public concern?

In the journal Baker is introduced as “a national authority on ‘the child,’” acknowledging her medical and administrative experience in providing effective preventative health services for mothers and babies. Baker immediately acknowledges the concerns of the previous authors – income limits, investigation of financial status, prescriptions, and the ethics of clinic physicians seeing patients privately – as familiar to the administration of a public health clinic. However, she just as quickly fleshes out her own opinion on the subject, which is that such concerns distract

\textsuperscript{567} To avoid confusion between the two bureaus I’ll be using hereafter “NYC Bureau” to designate the one Baker headed, and “federal Bureau” to designate the federal one which Julia Lathrop, and then Grace Abbott, headed.

\textsuperscript{568} “Well baby clinics” came to be the common phrase by the 1920s for clinics operated by public health workers who educated mothers in infant care and feeding, provided preventative health examinations and milk or modified milk. In Baker’s autobiography and in the press surrounding the New York Bureau, the phrase “baby health stations” is more commonly used. Unless noted otherwise the two phrases are synonymous in this chapter.
from the ultimate reason for the work, and ultimately get in its way. She emphasizes that "...it might be well to consider the reason for the establishment of well baby clinics. There is evidence in this, as well as in many other branches of our health activities, that the multiplicity of detail connected with administration has had a tendency to blind us unwittingly to the real purpose of our efforts. Possibly it is well that we should not forget that the sole and only purpose of well baby clinics is the prevention of sickness in infancy and the reduction of the baby death rate." 569

In Baker’s opinion, an increase in the number of healthy babies at the national level was the main concern of the well baby clinics that the federal Bureau helped to establish; plain and simple. The disagreements concerning how to determine if a family qualified (or deserved) assistance, whether clinics were taking patients away from private physicians who had begun to offer preventative services, only obstructed the original goal of keeping babies well. Baker queries, “Is it not time that someone definitely spoke for the one group most vitally interested? Is it not time that we went back to the simple fundamental proposition of the purpose of these clinics?” 570

As the previous chapters have demonstrated, these questions ably sum up the message that Baker repeatedly used to encourage political and popular support for the NYC Bureau, whether from readers of the New York Times, milk distributors, or Tammany. The success of New York’s baby health centers and other infant welfare initiatives is undoubtedly due in part to the continuing ability of Baker and other advocates to remind municipal and state politicians and tax payers of their contribution to that ultimate goal of saving babies - of allowing public health work to create a narrative of life where there had been one of death. As a discussion of the time period surrounding Sheppard-Towner will demonstrate, New York’s successful strategies in infant

welfare were held up as an example by the federal Children’s Bureau in an effort to make that success more national.

Baker retired from the New York Health Department in 1923, with the city’s baby health stations still going strong. By 1925 New York City had become the world’s most populous city. When she urged her public health colleagues in 1926 to refocus their perspective to that of the well baby, much more than holding to an impossible ideal, Baker knew of what she spoke. If the continuing health of that proverbial well baby was competing with concerns of eligibility or stepping on the professional toes of private physicians as the focus of infant and maternity care, then perhaps it was finally time to decide, “whether or not these clinics are to be considered philanthropic ventures or public health necessities.” As Lillian Wald had earlier asserted, if thousands of federal dollars for agricultural extensions to protect the health of crops and livestock were considered well-spent as a public service, it seemed only logical for similar funds and services to be provided by the federal government for the health of all infants. For Baker, if those involved in well baby clinics and the education of mothers always kept the welfare of the babies in view, healthy babies from all economic classes could be recognized as a public health necessity requiring public service, rather than as either charity cases or the benefit of being able to afford private physicians. The larger community was at least partially responsible for a generation of healthy infants, or it was not.

This chapter explores Baker’s questions, “Is it not time that someone definitely spoke for the one group most vitally interested? Is it not time that we went back to the simple fundamental

---

571 Baker promised herself that when each of the forty-eight states had a Bureau of Child Hygiene she would retire from her job, and this happened in 1923. According to Anne Miller Downes’ article from 1923, 60,000 infants, or half of all infants in New York City, were receiving aid from the Bureau of Child Hygiene. Downes, “Twenty Years’ Work for Our Babies,” New York Times, September 9, 1928, 117; Baker, Fighting for Life, 170.

proposition of the purpose of these clinics?” within the context of the period immediately following the first World War through the 1920s. As we have seen, the war simultaneously triggered national attention and concern for child welfare as well as concern for the increasing power held by the federal government. At the municipal level, in New York City the war combined with a change in political administration threatened to interfere with the work of the NYC Bureau. Thus the challenge of keeping the babies themselves always in view was very much felt during this period both by both bureaus. Both bureaus met these challenges and continued to provide preventative and/or educational services to infants and their mothers, but significant differences in their powers to create new institutional structures, and in the regulations concerning the people they were allowed to serve, meant different kinds of success. In order to examine the different ways in which the two bureaus responded to challenges to infant welfare during this period, comparisons are made between the leadership, public support, and strategies of the federal Bureau and the NYC Bureau, as well as of their respective uses of both experiential and expert knowledge of maternity and infant care. Regarding this last point, an exploration of public and political support and opposition for the Sheppard-Towner Maternity and Infancy Protection Act of 1921 is made in order to illustrate the extent to which Baker’s insistence on the perspective of the infant was able to be addressed at the national level. During this period the efforts of the federal Bureau to help municipalities establish public health nurses and well baby clinics for long-term preventative infant (and eventually maternal) health services, and to gather the data that would allow Americans to see infant welfare as not only a private but also a public concern, were both buoyed and narrowed by the passage and eventual defeat of Sheppard-Towner. Strong opinions from politicians, mothers, federal Bureau employees, and physicians essentially regarding whether healthy infants and mothers were a public health necessity were expressed
when the Act was passed in 1921. These only intensified over its tenure and came to a head when the Act was to be renewed in 1926, leading to its final demise in 1929.

The issues that Baker’s bureau faced throughout her career with the New York City Health Department - increasing conflict over the boundaries between public health and private physicians, the categorization of pregnancy and childbirth as medical conditions, and the health of children as private or a public concern - all came to a head at the national level in the 1920s with Sheppard-Towner. An examination of the main strategies adopted by the federal Bureau reveal the influence of the NYC Bureau, and the key difference that the NYC bureau retained the authority to practice medicine and create new structures while the federal Bureau did not. Using Baker as a lens into the debates over the role and significance of infant preventative care at the national level also reveals similarities and differences between Baker’s and Lathrop’s positions at the head of their respective bureaus, and how Baker’s status as a physician potentially gave her a decided advantage in those debates. Ultimately, the period just before and after Sheppard-Towner demonstrates the precarious balance which Baker’s bureau had maintained between public and private interest, public health and private physicians, and experience and expertise in New York City and why it would not be as easily translatable to a national scale during the first half of the twentieth century.

Goals and Strategies of the Two Bureaus

The first strategic endeavors of the federal Bureau, specifically the collection of birth registration data and the identification of the causes of infant mortality, were directly influenced by those of the NYC Bureau. The education of mothers in infant hygiene and feeding were

---

573 During the first year of its operation Baker’s Bureau of Child Hygiene became known in the press for its large map covered in multi-colored pins to document where and why infant deaths occurred in the city. Reliable documentation of infant births and deaths was one of the first tasks undertaken by the Bureau
likewise among the first strategies implemented by both bureaus in order to lower infant mortality. The baby health centers that Baker helped to develop from New York’s milk stations had similar goals of maternal education and preventative exams to the well baby clinics advocated by the federal Bureau. Both Bureaus were established under the belief that some type of centralized effort, not a collection of philanthropic projects, was required in order to establish a system of clinics and trained staff necessary to combat infant mortality. As has been seen in previous chapters, one of the reasons for a centrally-administered effort at the municipal level was the complex conglomeration of factors impacting health in modern cities. At both the municipal and federal levels, preventative health advocates maintained that such organization was required because of the sheer number of infants and the need to get timely resources and education to those infants’ mothers. Preventative medicine required proactive and continuously available healthcare in order to be effective at a large scale. Baker noted “that treatment of sick babies has little appreciable effect upon the reduction of the infant death rate. The necessity of the city undertaking this work was clearly indicated by the fact that, with the exception of the efforts of a few philanthropic agencies, no systematic effort had been made for any definite work for the reduction of the infant death rate.”

New York City demonstrated that once a

because the information was lacking, but also because the appropriations were so limited that any services needed to be targeted toward the specific areas of the city most in need of them. “Infant Death List Cut 50 per cent”; Downes, “Twenty Years’ Work for Our Babies,” 117. In its first year of operation the bureau also “began to incorporate maternal education and infant examinations in their milk-station activities.” Kotelchuck, "Safe Mothers, Healthy Babies: Reproductive Health in the Twentieth Century,” in Silent Victories: The History and Practice of Public Health in Twentieth-Century America, 107. Likewise, when the federal Children’s Bureau was established in 1912, its first endeavors included a nation-wide survey of the causes of infant death, and a campaign to increase birth registration. U.S. Department of Commerce and Labor, 4; Stivers, 548. Meckel mentions that Lathrop’s proposal for services during wartime was almost a “carbon copy” of what Baker had been doing with her Bureau in New York City. Meckel, 205.

Baker, “The Infants’ Milk Stations: Their relation to the pediatric clinics and to the private physician” (paper presented for the Section on Pediatrics of the New York Academy of Medicine, January 8, 1914.) Emphasis mine.
coordinated effort to use preventative services to fight infant mortality was organized, infant mortality decreased.\textsuperscript{575}

The NYC and federal Bureaus were created at almost the same time (1908 and 1912), in a still-progressive political climate, but with different types of authority and expectation. Over time the shared strategies of the NYC and federal bureaus were likewise met with differing levels of success. Even though the two bureaus both placed the reduction of infant mortality through preventative health education as a main goal, the verbiage describing their creation makes it clear that they were granted very different kinds of control and resource use in order to achieve that goal. As mentioned in Chapter 3, New York’s Bureau was created within the city’s department of health, and its medical personnel had the ability to both educate \textit{and} medically treat the members of the public who used its services. In addition, as a division of the Department, the Bureau had the ability to petition the city government for appropriations and to use those appropriations to create any additional institutional structures needed to carry out its assigned tasks. The variety of tasks assigned to the NYC Bureau are listed in a description of its creation in 1908:

\ldots the board of health voted to establish a division of child hygiene, with one chief official for the entire city. The division is charged not only with the medical supervision of school children, including examination for both contagious diseases and non-contagious defects, but also the instruction of mothers in the care of new-born infants, the regulation of midwifery, the regulation of the boarding out of infants and the examination of children for employment permits.\textsuperscript{576}

The creation of the Bureau of Child Hygiene signaled that New York City considered child health and infant mortality to be public concerns, involving municipally-sponsored preventative health

\textsuperscript{575} In 1907 the infant mortality rate was 144 per 1,000 births, and by 1927 it was 59.4 per 1,000 births. Downes, 117. Likewise, between 1912 and 1930 national infant mortality numbers were cut in half. Susan P. Kemp, Gunnar Almgren, Lewayne Gilcrist, and Alison Eisinger, “Serving the ‘whole child’: Prevention practice and the U.S. Children’s Bureau,” \textit{Smith College Studies in Social Work} 71, no. 3 (2001): 476.

\textsuperscript{576} New York City Department of Health, \textit{A bureau of child hygiene: co-operative studies and experiments by the Department of Health of the city of New York and the Bureau of Municipal Research} (New York: Bureau of Municipal Research, 1908), 31.
programs as well as the education of individual mothers. That is, the Bureau had the authority to address both individual and community needs. As exemplified by the case of Mary Mallon, public health is always conducted in a delicate balance between concern for the health of the individual and for that of the larger community. Baker’s management of an incident with young tonsil patients particularly illustrates her understanding of this balance, as well as the authority granted to her position to create new solutions. In order to maintain that balance, it helped if the public health official had the power to respond to both individual and community needs.

Baker relates a story in her autobiography about the difficulty of providing adenoid and tonsil surgery to the infected school children of the city who could not pay for it. As part of its duties, the NYC Bureau oversaw the examination of school children and recommended certain children with infected tonsils to have them removed by a hospital clinic or private physician. After the Bureau had been conducting school examinations for a while the city’s hospital clinics were so overcrowded with tonsil patients that a group of physicians decided to go into the public schools and “perform tonsil-and-adenoid operations en masse in the schools themselves instead of cluttering up the clinics.”  

Baker relates that she was alerted to a situation at a lower east side school where a group of six to seven hundred parents was threatening to storm in and remove their children. They were demanding the release of the children because several had been sent home that day with fresh blood flowing down their faces from surgeries that the parents had known nothing about. Baker stormed in herself and demanded the physicians to stop, which “required a good deal of pointed language.” Here was a case where the systematic removal of tonsils at the school might make sense from a medical perspective because it removed infected cases from the schools and eased overburdened hospital staff. However, the solution ignored the

---

577 Baker, Fighting for Life, 140.
578 Baker, Fighting for Life, 141.
rights and fears of individual children and their parents. As Baker relates, “No attempt at psychological preparation, no explanation to the child or warning to the parents” had been attempted by the doctors. 579

Shortly after the “tonsil-and-adenoid riot” Baker sought out the Academy of Medicine to ask that the city hospitals accept all tonsil cases referred by the Bureau, and use pre- and post-operative care to avoid emotional distress and post-operative infection. She informed them that if this was not possible, she would build the Bureau’s own hospitals for the purpose. Having been refused, Baker relates that she eventually “caught the city fathers in a melting mood,” and got enough money to build six hospitals for tonsil and adenoid surgery. 580 Some control and responsiveness to patient needs was able to be achieved in this incident because as a Health Department bureau director Baker had the ability to ask the city for more funds, build new hospitals, choose who staffed them, and also to have the Bureau’s own school inspectors be the ones to recommend which students most required the surgery. She reports that to the new hospitals “we started sending them all school cases that were really operable, bringing in the children the evening before, operating under nitrous oxide gas and oxygen in the morning, keeping them all day surrounded by toys and ice cream and sending them home fit and cheerful that night.” 581 Most importantly from a preventative health perspective, the hospitals were in use for six years “without a single fatality or a single instance of septic sore throat or post-operative bleeding.” 582 After six years, the general hospitals agreed to follow the same procedure, and the Bureau hospitals were no longer needed. Infectious tonsils were a public risk among a large community of school children, but because of the flexibility and medical authority held by the

579 Baker, Fighting for Life, 141.
580 Baker, Fighting for Life, 142.
581 Baker, Fighting for Life, 142.
582 Baker, Fighting for Life, 142.
Bureau, the individual aspects of proper diagnosis, allaying emotional anxiety, and preventing further infection could all also be addressed. When the city hospitals refused to take responsibility for the wellbeing of the school children, the Bureau demonstrated it for them until they accepted the task.

The ability to respond quickly to developing needs and to maintain a balance between those that were individual and communal was understandably more difficult at the national level. Part of this was due to the fact that the federal Bureau was established not within the U.S. Public Health Service, but the U.S. Department of Commerce and Labor. The tasks assigned to the federal Bureau are described as investigating and reporting,

to said Department upon all matters pertaining to the welfare of children and child life among all classes of our people, and shall especially investigate the questions of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several States and Territories.583

Thus, becoming an educational “clearinghouse” for research and information on all topics impacting the welfare of children was the federal Bureau’s main purpose. As the Bureau publication concludes, “It must be borne in mind that the Children’s Bureau has no power to do administrative work. It can not make any regulations concerning children, nor create any institutions for them.”584 The right and duty of the states to then implement the information provided to them by the federal Bureau in the creation of child welfare services was scrupulously protected by the boundaries initially place upon the Bureau. These boundaries were also implicitly established by placing the federal Bureau under the Department of Labor rather than the Public Health Service.585 Despite the fact that bureau staff included trained social workers and physicians,

583 U.S. Department of Commerce and Labor, 1.
584 U.S. Department of Commerce and Labor, 5.
585 Just before Sheppard-Towner was passed in 1921 there was confusion among supporters and detractors about why the bill was to be administered by the Children’s Bureau under the Department of Labor rather
these boundaries made clear that the gathering of information and provision of educational material was the extent to which the federal government should be involved in preventative healthcare. Thus, the federal bureau collected and released useful data on infant births and deaths, manuals for infant and prenatal care, and encouraged municipalities to establish their own team of public health nurses and well baby clinics, but could not provide or demonstrate those services itself.

Julia Lathrop could not have established six hospitals in response to local need for tonsil surgery, but one avenue that did remain open to the federal Bureau which was more tightly barred for the NYC Bureau was that a much more diverse group of mothers and babies, regardless of class, could potentially access the information and services which the Bureau’s federal dollars produced. An important example is the federal Bureau’s *Infant Care*, first published in 1914 and “the most popular free federal guidebook ever...”586 The first several editions of *Infant Care* were written by Mrs. Max West (Mary Mills West), a mother who had raised five children.587 Her prose was written to be straight-forward and understandable and included advice influenced by her own experience, infant hygiene, and by popular author and pediatrician Luther Emmett Holt.588 Unlike Holt’s books, though, *Infant Care* was free, and as such was more widely available to mothers, being distributed by mail from the federal Bureau, through doctor’s offices, hospitals, and by women’s groups all over the nation. The NYC Bureau served a distinctly urban, poor

---

587 Abel, 4.
588 Holt authored the popular *The Care and Feeding of Children* (1894), which went through many editions.
population. Using the information and advice provided by the federal Bureau’s collection of statistics and educational materials, the states could potentially design maternal public health services to serve a wider variety of mothers and infants unique to different economic classes and locations, such as those in rural and remote areas. Meckel notes that the federal Bureau received thousands of letters from mothers, some of which “convinced Lathrop and her co-workers that infant welfare’s traditional urban/industrial emphasis was far too narrow.” During and after the war, Baker also advocated for her city’s infant welfare strategies to be adapted to rural municipalities, noting in 1918 that “the infant death rate in our rural communities is higher than it is in our cities,” and in 1922 that tenement babies in New York City had a greater chance of survival than rural babies in other parts of the state. Again, it was clear to both Baker and the federal Bureau that preventative health services to mothers and infants lowered the infant mortality rate, but beyond individual municipalities, the national rate would only continue to go down if those preventative services were available to every mother and baby – not only those who lived in cities.

---

589 Although Baker does note that to her mind, any mother who wanted to learn about infant hygiene should have been welcome at the baby health centers. In her experience, those who could afford private physicians often chose to do so, and there was no real need to restrict the use of the centers to those who were poor. Baker, “Problems in Connection with the Administration of Well Baby Clinics,” 330.

590 Meckel, 195. Sheila Rothman notes that when Sheppard-Towner was enacted, rural women and children were still most in need of assistance and were explicit targets of the newly available federal funds. “Women’s Clinics or Doctors’ Offices: The Sheppard-Towner Act and the Promotion of Preventive Health Care,” in Social History and Social Policy, ed. David J. Rothman and Stanton Wheeler (New York: Academic Press, 1981), 184. The federal Bureau’s focus on reaching rural women who lived in remote areas made perfect sense from the perspective of preventative health, because they often had no access to educational literature or medical care of any kind. The education of rural women through Sheppard-Towner is also appropriately reminiscent of the education of rural men through agricultural extensions provided through the Smith-Lever Act. In fact, at the time social scientist Lawrence K. Frank proposed that the Smith-Lever Act could be extended to include instructions for rural women in home economics: another tie between the cultivation of different kinds of national crops. Julia Grant, Raising Baby by the Book: The Education of American Mothers (New Haven: Yale University Press, 1998), 127.

More complete and reliable birth and mortality data are not only what helped the NYC Bureau and the federal Bureau suggest effective strategies to fight infant mortality, but were also key to the publicity that both bureaus practiced in order to garner continued public, monetary, and volunteer support. Both bureaus began with meager monetary appropriations, which is why their initial agendas were directed straight at collecting better data to design or suggest strategies that would do the most good the most quickly. Communications scholar Dulcie Straughan notes that “Publicity in the mass media, namely newspapers and magazines, was an integral part of the Children’s Bureau campaign to reduce infant mortality.” One need only recall the tremendous popularity of the federal Bureau’s Baby Week campaign of 1916 to demonstrate the effectiveness of the Bureau’s efforts to attract the public’s attention to infant welfare. As was particularly evident during the war, Baker consistently used birth and mortality statistics to remind New Yorkers and Americans alike of the war against infant mortality that still needed to be fought at home. After describing her frequent claim that it was “six times safer” to be fighting in the war than to be an infant at home, she notes that “Although the New York Bureau of Child Hygiene had had plenty of publicity before the war, its example had been followed in only five states by 1914. During and after the war the landslide began, however. State after state wanted to start a Bureau of Child Hygiene.”

The successes of Baker’s bureau in reducing New York City’s infant mortality rate and demonstrating the idea that public health could be used to prevent healthy babies from becoming sick often required the direct involvement of bureau physicians and nurses in the practice of medicine, or intentional publicity to garner the public support required to expand or develop a

---

593 Straughan, 341.
594 Klaus notes that over 2,000 of the communities that contacted the federal Bureau for more information about Baby Week actually ended up holding their own programs. Klaus, 168.
new service.\textsuperscript{596} Having the structure of an organized bureaucracy to depend upon for authority, support, and tax money lent the potentially long-term stability required for preventative medicine to reduce infant mortality, but it also helped when the chief administrator could quickly respond to individual situations as well. Baker noted that when she wanted a quick response to a particular family’s problem, she preferred the prompt help and open pocket of Tammany to the city’s legislature, and as head of a Bureau with the authority only to educate and not to practice, it is conceivable that Lathrop at times wished for her own Tammany.\textsuperscript{597} Though, in a few individual cases Lathrop acted as her own Tammany. Not in a position to provide care or establish preventative care nearby, Abel relates that Lathrop kept up a written correspondence with a “Mrs. C.” in which she not only sent educational Bureau pamphlets but also sympathized with Mrs. C.’s efforts to raise six children on the low income of her husband, and the social slights she received from her more wealthy neighbors. Through consultation with local railroad authorities, Lathrop even tried to get Mrs. C.’s husband a promotion, as Abel notes, “like the female equivalent of a ward boss.”\textsuperscript{598}

Like Baker’s, Lathrop’s approach to maternal and infant preventative health acknowledged both its communal and individual aspects. The strategies of both bureaus espoused twin emphases on maternal education and public availability of relevant data, but the NYC Bureau’s ability to directly respond to local or individual needs and challenges was still far greater.

\textsuperscript{596} For example, physicians at baby health centers examined healthy babies and gave their mothers prescriptions for modified milk, which the nurses then showed the mothers how to make. NYC Bureau staff treated only healthy babies and referred patients to private physicians or hospitals when sick, but they were still practicing medicine, unlike the physicians of the federal bureau. In general, public health workers treated the well and private physicians treated the sick, but there were exceptions to this professional boundary. During the war when nursing staff was reduced, the nurses who visited babies under the care of the baby health centers treated any members of their families who were sick. Baker, “Lessons from the Draft,” 186.

\textsuperscript{597} Baker, Fighting for Life, 94.

\textsuperscript{598} Abel, “Benevolence and Social Control,” 10.
than the federal Bureau’s. Scholars have noted that as the work of the federal Bureau continued, Lathrop’s ability to respond to the individual needs of mothers and children became ever more circumscribed by the federal boundaries placed between public health education and the practice of medicine.\footnote{599} In a way, the NYC bureau was the model of what the federal Bureau hoped would be created in each municipality in the nation. While the programs of the federal bureau were able to reach a wider variety of mothers and infants, the increasing tensions between private and public healthcare and changing definitions of experts in infant welfare during the 1910s and 1920s progressively narrowed the federal bureau’s ability to respond to local needs. The strength of these boundaries was influenced by several factors leading into the 1920s, but in the case of the NYC and federal Bureaus’ female chiefs, increasing tension between expertise and experience in preventative medicine was also influenced by gender.

**Experience and Expertise**

The settlement house movement and other social initiatives run by women’s organizations that benefited mothers and infants had a great deal to do with initiating the national discussion about infant welfare in the early twentieth century.\footnote{600} As official figureheads within government, however, the female identity was at times an advantage and at others a disadvantage. Lathrop and her colleagues were given charge of the federal Bureau at its creation in part because they were women experienced in social reform and infant welfare movements, and supported by the countless women’s groups whose political lobbying helped establish a federal Children’s Bureau. Baker shared the federal Bureau’s initial focus on the broad range of socioeconomic and medical factors that influence infant mortality, and as seen above, the two

\footnote{600} Ladd-Taylor, *Mother-Work*, 74-103; Muncy, *Creating a Female Dominion*, 38-65.
bureaus shared several key strategies. However, unlike Lathrop, Baker’s identity as a public health official and physician are what ultimately gave her authority in her position.

Before private physicians began regularly practicing preventative medicine with their patients, the fact that the federal Bureau was mostly staffed by women seemed to be an asset. Many expected infant welfare to be the concern of women, and the Bureau’s focus on data collection and education would not threaten the authority or livelihood of private physicians.\footnote{Robyn Muncy notes that it was not only social expectation that shaped the female majority at the Children’s Bureau, but also Lathrop’s own hiring practices. When presented with lists of eligible candidates for Bureau jobs Lathrop would often choose only among the women, saying that men did not have the appropriate experience for the job, such as interviewing mothers in their homes. Muncy also notes that one of the reasons infant welfare was able to become a movement among women in the 1890s was because it did not directly interfere with any services or professions that were traditionally male. Muncy, 50-51; 20.}

Given the Bureau’s small initial appropriation and the national scope of its initiatives, it only made sense for Lathrop and her staff to utilize the thousands of volunteer women’s organizations in the collection of birth and mortality data and the development of local preventative services. These groups also often already knew the unique needs of mothers in their communities. In the late nineteenth century “Their [women reformers’] successes increased when they could justify their professional ambitions as fulfillments of the Victorian imperative for women to serve children and the poor,”\footnote{Muncy, 20.} but it became clear that a gendered Victorian imperative was not as useful a justification for women to lead infant welfare work as the early twentieth century progressed. In the 1920s, preventative medicine was increasingly claimed as the work of (mostly male) physicians, and respect for the practical experience of Lathrop and other settlement workers in the Bureau began to give way under a demand for medical expertise in infant welfare. Baker’s experience of authority as a woman in infant welfare work was equally dynamic, but perhaps ultimately more consistent because she was also a public health official and physician. As her quote at the beginning of the chapter demonstrates, Baker’s authority in congressional hearings
on funding for the federal Bureau was not taken for granted because she was a single woman without children; she also wore the mantle of medical expertise.\textsuperscript{603} While their identities as women influenced the work of both bureau directors, Baker’s identity as a physician gave her a bit more flexibility during a time when pregnancy and childbirth were increasingly seen as medical conditions that required the care of a medical expert. Baker did not lose the authority to participate in the narrative of life that preventative health had the potential to write just because private physicians and federal public health officials wanted a greater part.

As demonstrated by the early strategies of the NYC and federal Bureaus, the education of mothers was a key component of early twentieth-century public health care for infants.\textsuperscript{604} The manpower involved in gaining access to as many American mothers as possible was more accurately described as womanpower, due to the large number of woman’s organizations that volunteered time and money for the strategies of the NYC Bureau and particularly of the federal Bureau. Baker relates that she belonged to seemingly endless professional and charitable committees in order to make the personal connections that would inspire people to stayed physically, politically, or monetarily involved in infant welfare.\textsuperscript{605} During the war, when shortages of milk and nurses made fears of infant mortality soar, Baker specifically enlisted the help of the city’s women to take courses to learn how to assist at the baby health stations.\textsuperscript{606} A cultural expectation that women would be the more likely source of help than men has much to do with

\textsuperscript{603} Some of the criticism directed at the federal Bureau from physicians and politicians often referenced the idea that women who had no children were trying to tell mothers what to do. It did not seem to occur to these (often male) officials that men had little first-hand experience with motherhood as well. Meckel, 209. An article from 1922 notes that while the corps of public health nurses established in the fight against infant mortality may be “old maids” and therefore objects “of scorn to certain benighted legislators,” they were doing a lion’s share of the work that was saving babies. “Topics of the Times: A Good Work Already Well Begun,” \textit{New York Times}, March 10, 1922, 11.

\textsuperscript{604} Kemp et al., 482; Rothman, 185.

\textsuperscript{605} Baker, \textit{Fighting for Life}, 145.

\textsuperscript{606} “Open Drive to Save 4,700 Babies Here.”
the fact that women were less likely to be overseas and more likely to have childcare experience. However, Baker also knew that the lobbying and support of the city’s women’s clubs played a part in the continued popular support for the Bureau’s efforts. The medical aspects of infant welfare could be directly addressed by the NYC Bureau through the provision of good affordable milk and free or discounted preventative health exams. However, some of the other socioeconomic factors influencing health, such as safe outdoor play spaces, community gardens, and organized outings for children were more easily addressed by the philanthropic efforts of the city’s women’s organizations.\footnote{Baker specifically suggests the important involvement of women’s groups in the establishment of rooftop gardens and outdoor play spaces within the city for safe access for children to exercise and fresh air. “Deliberate Waste of Life.” As another example, the Women’s Municipal League was represented among those who protested Mayor Hylan’s proposed restructuring of the Health Department during the war. “War in Secret on Health Bureaus,” \textit{New York Times}, April 13, 1918, 9.} Likewise, the federal Bureau utilized the help of such organizations from the General Federation of Women’s Clubs to local municipal leagues – particularly in the implementation of Sheppard-Towner – to be the physical presence and advocates for mothers across the nation which Bureau staff could not always be.\footnote{Klaus, 139-142; Straughan, 341; Muncy, “A Dominion Materializes: The Children’s Bureau, 1903-1917,” in \textit{Creating a Female Dominion}, 38-65.} The federal Bureau’s infant mortality study alone required bureau staff and volunteers to interview any household with a new baby in eight separate cities across the nation. Coordination among local women’s organizations and Bureau staff was integral in collecting that data.\footnote{Julia Lathrop, “Income and Infant Mortality,” \textit{American Journal of Public Health} 9.4 (April 1919): 270-274; Skocpol, 486, 490.}

Robyn Muncy argues that the federal Bureau was a result of the successful advocacy of female social reformers, particularly those involved in the settlement house movement like Julia Lathrop, and that it was staffed primarily by those women in a cultural climate which made it socially acceptable for women to have public roles in communication, education, and self-
The fact that the majority of Bureau staff and its chief were women “suggests both the power of dominant beliefs in women’s responsibility for child welfare and the lack of importance politicians attached to the new agency.” The “maternalist” authority held by the Bureau and its staff was initially culturally and politically accepted in infant welfare because its research and education services did not directly compete with the medical services of physicians or the work of other Bureaus. However, as pregnancy, childbirth, and child development were increasingly medicalized and included in the preventative services offered by private physicians, the authority that came with being experienced settlement workers decreased.

This shift in the expectations surrounding authority in infant welfare from experience to expertise was increasingly felt by the Bureau during the discussion surrounding Sheppard-Towner: “When critics persisted in asking why a nonmedical organization had any responsibility in the field, reformers responded that health maintenance demanded more than medical skills alone could provide.” Lathrop and some other Bureau staff may not have been physicians, but their experience as social reformers as well as the Bureaus’ data on the causes of infant mortality demonstrated that both socioeconomic and medical factors influenced infant mortality. Lathrop’s quote at the beginning of the chapter makes clear that she acknowledged a similar

---

611 Ladd-Taylor, Mother-Work, 78.
612 Ladd-Taylor identifies the Children’s Bureau’s strategies and leadership as maternalist, which she defines to mean “1) that there is a uniquely feminine value system based on care and nurturance; 2) that mothers perform a service to the state by raising citizen-workers; 3) that women are united across class, race, and nation by their common capacity for motherhood and therefore share a responsibility for all the world’s children; and 4) that ideally men should earn a family wage to support their ‘dependent’ wives and children at home.” Ladd-Taylor, Mother-Work, 3. Ladd-Taylor and Apple both note that the Bureau’s ideal of family life was distinctly middle-class. Ladd-Taylor, 87-88; Rima Apple, 47.
613 Rothman, 186.
perspective to Baker: that saving children from disease was not the only help they needed in order to grow into healthy adulthood. Baker would likely have argued that part of this acknowledgment of both medical and nonmedical factors impacting infant mortality was the recognition that the wellbeing of the infants themselves must remain foregrounded in all infant welfare work. Nonetheless, some organizations representing private physicians, such as the American Medical Association, and also other government agencies, such as the U.S. Public Health Service, began to see decreased authority in the Children’s Bureau in the fight against infant mortality: “Public Health Service officials argued before Congress that infant mortality was almost exclusively a medical issue rather than a social one and that infant health work should therefore be integrated into general public health work.”

While the gender of Lathrop and many federal Bureau staff and their experience in social reform initially provided some advantage to their authority on the hygiene, social, and economic factors influencing infant mortality, the developing medical opinion that the factors contributing to infant mortality were primarily medical began to erode it. Even though the federal Bureau’s infant mortality study had revealed a clear link between a family’s socioeconomic status and infant mortality, by the end of the 1920s, “The nature of infant mortality-reduction efforts in the United States, however, had been narrowly focused on a medical/clinical care trajectory led by male obstetricians, with an emphasis on preventive prenatal and enhanced delivery care. Infant mortality began to fade as an identifiable social or public health problem.” A focus on children’s medical statistics at the national level was a key aspect of designing targeted strategies, but it also ran the risk of losing focus on the wellbeing of children as a whole. As Baker asserted, “I have seen

---

615 Klaus, 271.
strong men so disturbed as to the accuracy of statistics that they have forgotten the facts they represent... in dealing with children we are not facing a scientific problem which can be measured wholly in percentages."

Opposition to a broad perspective on the causes of infant mortality advocated by Baker, Lathrop, and others almost kept Sheppard-Towner from passing in 1921. Indeed, part of what enabled Sheppard-Towner to pass was the fact that detractors like U.S. Representative Samuel Winslow, who “Having successfully blocked House action on the bill in 1920... acceded to it coming to a vote in 1921 only after it was amended to limit the Children's Bureau's role and after Lathrop promised to resign as USCB chief.” Many national and local women’s groups and many individual women themselves continued to look to the federal Bureau as an authority on infant and child welfare. However, while gender and experience had helped establish the national authority of the federal Bureau and its first chief, mounting tensions between public health and private practice began to erode that authority in the eyes of the medical community in the 1920s. Additionally, the duality between individual and communal responsibility for public health was starting to swing more fully toward the individual side, as “new public health” emerged onward from about 1910. As noted in earlier chapters, this “new” public health was certainly influenced by advances in the application of bacteriology to prevention initiatives, but “Narrowing the objectives of public health made it more politically acceptable” as well. Scholars have noted

---

618 Meckel, 208.
619 Muncy, 57; After Sheppard-Towner passed the Bureau continued to get thousands of letters from women thanking them for giving such helpful information. Meckel, 213.
620 Apple, 40.
621 Starr, 191. Starr notes that a focus on the individual was also not always a logical implication of bacteriology. In the case of tuberculosis so many people were infected with latent bacteria that it made more sense to improve general living conditions that could help boost resistance, such as “nutrition, housing, and working conditions” than it did to isolate and treat individual patients. So to some extent it’s quite difficult to separate medical and political influences on public health policies.
that federal Bureau responses to women’s letters increasingly emphasized medical rather than socioeconomic solutions to pregnancy and infant concerns between the early years of the Bureau and after Sheppard-Towner had been enacted in the 1920s.\footnote{Kristin Barker, “Birthing and Bureaucratic Women: Needs Talk and the Definitional Legacy of the Sheppard-Towner Act.”} When taxpayer money and the support of politicians and the medical field were required in the prevention of infant mortality, it was clearly difficult to keep the broader perspective that represented the whole child in view. As is clear with Baker’s work as well, these challenges to a focus on the child pervaded the municipal level as well as the federal. As pressure from private physicians continued to call for the importance of medical expertise in preventative health, however, Baker had the advantage of also being a physician.

Baker’s identity as a woman was of note at the creation of the Bureau of Child Hygiene, but her authority as a physician and eventual member of several medical societies made it more difficult for the increasing emphasis on medical authority in infant welfare to impact her work. As her response to the discussion in The Public Health Nurse discussed above illustrates, like Lathrop, Baker’s focus on infant mortality included a broad perspective touching social and economic factors in addition to the medical. A perspective that acknowledged all of the factors impacting the wellbeing of children kept the children themselves, rather than the details of the bureaucracy, the focus of the work. In her autobiography, whenever Baker relates incidents when the NYC Bureau’s ability to serve mothers and babies was threatened in some way, she almost invariably reframes the threat as an opportunity for publicity. As a director of a municipal bureau of public health that oversaw such disparate functions as the examination of school children, regulation of milk supplies, and instruction of mothers in matters of hygiene, Baker’s work potentially involved all the social, economic, and medical factors impacting infant mortality within the city. New
Yorkers needed to be reminded of all of these interconnections within the larger organism of the city, and how they influenced infant mortality. The Health Department was responsible for promoting connections that facilitated life and health, and as previous chapters have demonstrated, its authority in that endeavor was constantly negotiated in response to the changing needs and desires of New Yorkers and of the city itself.

Baker’s own appointment as director of the NYC Bureau was the Bureau’s first opportunity for publicity surrounding its first initiatives for infant mortality data, birth registration, and the education of mothers in infant hygiene. Just as the municipally-organized public health effort itself was uncharted, neither the press nor many of her colleagues knew what to do with the idea of a woman public health official. Baker’s engagement in publicity followed directly in the footsteps of adept mentors in the Department, such as Herman M. Biggs, who with his colleagues in the city’s bacteriological laboratories were “a particular anathema to those physicians who sought to restrict the activities of the Health Department.” She notes that though “It was never quite clear in my mind whether in pioneering in child hygiene being a woman was more of an asset than a liability... From the point of view of publicity, it was superb. I have a well-defined feeling that if a man had been given this position, it would have been just another bureau; but for a woman to get this job, well, that was news.” Public health as an organized field was still in new professional territory, and so were the women within it. The staff of physicians that Baker was assigned by the Department were all men, and ones with whom she had previously worked. Baker describes them as being “able, conscientious, and adjustable” in the face of the challenging task before them. They were not among the physicians that Biggs

624 Duffy, 244.
625 Baker, Fighting for Life, 88.
626 Baker, Fighting for Life, 88.
spared with who would bristle at having a public agency take charge of the preventative care of mothers and infants. Still, they had no prior experience with the idea of a woman executive. All of them told Baker regretfully that they could not work under a woman, but by asking them to ignore that fact and focus on the work for the trial period of a month, she succeeded in getting them all to stay. As she recalls, she pointed out to them, ""See here... you are really crying before you are hurt... But isn't there another side of this question? I do not know whether I am going to like working with you. None of us know how this is going to turn out. But if I am willing to take the responsibility of our success or failure, I think you might take a sporting chance with me."" In short order the interest and uncharted-ness of the work itself was all the inducement the Bureau’s staff needed to continue it. Likewise, when Baker encountered or sought out publicity for the Bureau, she had the support of Bureau and Department physicians to reinforce the data and strategies for infant welfare that she advanced.

Not surprisingly, Baker’s autobiography is full of incidents like the one at the start of the Bureau, when men assured her that their refusal to cooperate had nothing to do with her personally, only with her identity as a woman. Her perspective on these incidents is doubtless impacted by the comfort of some distance from them, and from the knowledge that the implementation of public health work for infants and mothers had achieved a great deal of success at the municipal level by 1939 when she wrote the book. However, alongside the excitement of the work they shared, it took effort on Baker’s part to get colleagues and politicians

---

627 Baker, *Fighting for Life*, 89.
628 Baker notes that since she began work for the Health Department, infant mortality in New York City went “from 144 per thousand births to less than 50 per thousand births this last year.” Baker, *Fighting for Life*, 253. During the years of Sheppard-Towner (1921-1929) estimates are that the Bureau’s services reached 4 million children and 700,000 pregnant women. Kriste Lindenmeyer, “A Right to Childhood”: The U.S. Children’s Bureau and Child Welfare, 1912-46 (Urbana: University of Illinois Press, 1997), 104. She also notes that once the Social Security Act was made into law in 1935, “the children’s programs developed under the Social Security Act would touch the lives of more young people in the United States than all the Children’s Bureau’s investigative and educational efforts during its previous twenty-two years.” Lindenmeyer, 193.
across the city to perceive her as an individual and not a representative of all women. Baker seems to have exhibited a healthy interest and sense of humor about these interactions, and in turn, Baker’s colleagues seem to have greatly respected her, even though being a woman sometimes caused them to lose the focus Baker insisted upon: on the infants rather than the bureaucratic details. She remembers the start of her career as a “time when the world at large seemed genuinely convinced that women were not altogether bright.” In response, Baker on purpose dressed in the “protective coloring” of “man-tailored suits and shirtwaists” in order that the men she worked with would see her as another professional member of the Department rather than as a woman. The clothes she wore were meant to signal herself as a professional; “no feminine furebelows” would make her male colleagues feel like they had to slip into a different set of behaviors socially reserved for women.

Baker relates that after serving in this “uniform” as Bureau director for several years she was talking with a male colleague who was upset that women medical inspectors were being employed by the Department, doubting their experience and knowledge of working in coordinated groups of professionals, of getting “the most out of their subordinates” or of taking responsibility. When Baker reminded the colleague that she herself was a woman in such a position, “His jaw dropped and he blushed purple. ‘Good Lord,’ he said, ‘I’d entirely forgotten that you were a woman.’” Perhaps because Baker had the advantage of personally working with most of the public health, medical, and political figures involved in the coordination of the NYC Bureau’s efforts, she was able to establish a personal rapport that often trumped her identity as a woman. As previously noted, Baker’s interactions with Tammany officials often proceeded in

631 Baker, *Fighting for Life*, 64.
632 Baker, *Fighting for Life*, 64.
her favor because the novelty of her position had no precedent of interaction for them to fall back upon: “They knew well how to make men knuckle down and obey orders, but they had no previous experience of women in a political office. Between their bewilderment over that anomaly and their natural Irish politeness, I could often find my right way out.”634 Indeed, some of those in Tammany with whom Baker dealt knew her only from written correspondence, and thus respected her work in much the same way that they would a man’s. One example of this is the only piece of “graft” that Baker accepted during her work: a shaving mug from Tammany with her genderless name engraved: “Dr. S.J. Baker.”635

Their identities as women at first seemed to aid the work of Lathrop and the federal Bureau in the fight against infant mortality but later detracted from it because of increased emphasis on the need for trained medical expertise in preventative services and infant welfare. In her own reflection on her early career Baker’s identity as a woman is a sometimes ambiguous asset because there was no precedent to attend a female physician public health official. She was appointed to the position not because she had experience in the infant welfare movement (of which she had none) but most likely because she was already a member of the Department, had been working in the Bureau of Municipal Research and begun agitating for something to be done about the city’s infant mortality numbers.636 Also, because Baker’s work was at the municipal level it can be argued that her personal interactions with local public health colleagues, physicians’ associations and politicians enabled her to convince them that infants, rather than womanly experience or even medical authority, was the key focal point for the work of the Bureau. Indeed, as evidenced in Chapter 5, alongside public support it was the personal testament of her male

634 Baker, Fighting for Life, 91.
635 Baker, Fighting for Life, 95.
636 Duffy, 260.
colleagues to the effectiveness of her leadership and the Bureau’s work that made it so difficult for Mayor Hylan to remove Baker from her position when he confused her with fellow-female Katherine Bement Davis.637 Baker’s influence in infant welfare at the municipal level thus depended on her medical expertise as well as her personal interactions with those in positions of influence throughout the city, including women’s organizations, politicians, and fellow physicians.

The federal Bureau did not have the medical or political authority by itself to establish well baby clinics or to train public health nurses, but it did have the influence to convince communities all over the nation that such endeavors benefited individual families, local communities, and the nation, because infants should be a resource whose protection is, as Baker would say, a public health necessity. Both the NYC and federal Bureaus recognized that in order to achieve this nationwide perspective on preventative health, municipally-endorsed and designed services would be the most sustainable in the long term.638 Aside from the both paid and volunteer services of physicians and nurses that were required, it was the volunteer leg-work and publicity from thousands of women’s organizations that ultimately were an important factor in the spread of preventative health services to mothers and babies at the national level. Another important factor was that Lathrop and her colleagues in the federal Bureau encouraged the collection and use of reliable data to influence the design of preventative care strategies. However,

---

637 Citizens who attended a hearing to try to make sense of why Hylan was investigating the Health Department were confused as to how the Bureau of Child Hygiene was even involved, having been told that the Bureau of Public Health Education was the one in question. "Health Witnesses Attack MacBride." A JAMA editorial during the Hylan affair urged that the directors and bureaus currently at work in New York City’s Health Department be allowed to continue their work, calling them a “highly efficient health administration.” “Retrogression in New York City,” Journal of the American Medical Association 70, no. 17 (April 1918): 1232. In her autobiography Baker notes that her employees all continued to work under her direction during Hylan’s months-long investigation, that neither Health Commissioners Amster nor Copeland could find any evidence that Baker was incompetent or dishonest in her work, and that Amster quit his job in part because he was so disgusted with Hylan’s methods of investigation. Baker, Fighting for Life, 88-107.

638 Tichi notes the struggle that Lathrop had in securing enough funding to reproduce at the national level what municipal bureaus were doing. Tichi, 92.
as the conversation turned to Sheppard-Towner and more government involvement in preventative care, physicians increasingly claimed the tools of data collection and preventative medicine themselves. The often careful distance maintained between public health and private medical services that was tenuous at the municipal level became unsustainable at the federal level for any strategies that embraced a broad socioeconomic view of infant mortality. If more federal tax dollars were going to be used for preventative health, then medical factors would take precedence over all others, and that meant that a Bureau of women settlement workers was not the one most qualified to administer it. Muncy notes that “Female dependence on male help in this particular endeavor [child welfare] revealed the special stage of women’s public involvement at the turn of the century. On issues regarding children, powerful men listened to women and were willing to act on female advice.”

As the disagreements between supporters and detractors of Sheppard-Towner commenced during the 1920s, a conflict was made clear between those who would claim expertise in the matter of infant welfare.

**Sheppard-Towner: What works for crops can work for babies**

An unprecedented amount of federal involvement in infant welfare had transpired since Lillian Wald had made a comparison between America’s agricultural crops and “child crop.” The Children’s Bureau had been established, Children’s Year and Baby Weeks had been celebrated, and preventative services for mothers and infants had been established in communities all over the country. In her annual report to Congress in 1917, Julia Lathrop suggested that a law be passed giving federal funds to match those of states in the establishment of public health programs for mothers and babies. The Act went through several revisions, and in its final version included $1.24 million in appropriations. States had to apply for the funds with a proposal outlining the services

---

639 Muncy, 41.
they would provide.\textsuperscript{640} By 1921 strategies like those of the NYC Bureau had become more common in cities, but were often still lacking in rural areas: “The Sheppard-Towner Act enlarged and expanded these original programs of the New York Bureau of Child Hygiene to fit the needs of all children in all types of communities, small towns and rural areas, as well as large cities.”\textsuperscript{641} Sheppard-Towner was to be administered by the federal Bureau, but by 1921 it was less apparent to some physicians and politicians whether Lathrop and her colleagues had the right expertise for the job.

A carefully designated boundary lay between the education and research functions of the federal Bureau and the services provided by medical practitioners. Likewise, from the beginning of the field of public health, a boundary lay between preventative services for well patients and treatment services for ill patients. As discussion ensued about the Sheppard-Towner Maternity and Infancy Act those boundaries became more difficult for the federal Bureau to navigate. Infant and maternal mortality by this time were viewed as two intertwined medical issues, apart from socioeconomic factors, potentially justifying more involvement from the federal government.\textsuperscript{642} While its study into the causes of infant mortality had revealed a correlation with socioeconomic status, the federal Bureau’s later study of the causes of maternal mortality focused on medical causes: “it emphasized that the danger of dying from problems related to gestation and parturition cut across all classes and had as its chief determinants the quality and availability of obstetric services and the willingness of women to use them.”\textsuperscript{643} Once again, the focus of preventative health would be on the education of mothers, but now also on greater access to specialized medical services. Once Sheppard-Towner was enacted, “to further its agenda of

\textsuperscript{640} Meckel, 205-211.
\textsuperscript{641} Rothman, 184.
\textsuperscript{642} Meckel, 203.
\textsuperscript{643} Meckel, 203.
maternal and child welfare and defend its institutional authority under Sheppard-Towner, the Children's Bureau distanced itself from its longstanding commitment to research and services that identified and addressed the socioeconomic basis of infant and maternal health. In addition, the federal Bureau ran the risk of straying into the territory of public health administration rather than its prescribed research and educational functions. The federal Bureau's expertise was thus increasingly claimed “in terms of their professional expertise, not their womanly sensitivity.” In the case of Sheppard-Towner, questions of expertise, rights, and responsibility in the fight against infant mortality ultimately came together in a manner that both validated Baker's years of work at the municipal level and challenged her conviction that such work could be made national.

Whereas Lathrop and Baker both advocated a broad view of infant and maternal mortality that included medical and socioeconomic factors, the field of medicine was trending toward specialization and a view that embraced pregnancy, childbirth, and early development as strictly medical matters. Social service scholars note that “the history of social services in the 1920s is marked by a tilt toward expert models, supported by interventive theories and methods focused on the treatment rather than prevention of personal and social problems.” Advocates of Sheppard-Towner encountered this tilt when some physicians argued that the bill would place the administration of preventative health services in what they saw as the non-expert hands of the federal bureau. Preventative medicine required medical oversight that was increasingly being offered by private family physicians and specialists, such as pediatricians and obstetricians. With Sheppard-Towner, the boundary between preventative and curative medical practice that had precariously existed between public health and private practice was being contested. Not

644 Barker, 12.
645 Ladd-Taylor, Mother-Work, 184.
646 Kemp et al., 490.
647 Rothman, 193-198.
only was the federal Bureau not part of the Public Health Service, but the public health services
to mothers and infants – such as well-baby clinics - which Sheppard-Towner would fund
potentially threatened the livelihoods of private physicians.648

In that it embraced a model of public health that included some of the broad factors
influencing infant mortality, “the Sheppard-Towner program drew heavily on the experience of
the New York City Bureau of Child Hygiene.”649 Indeed, taking into account the diversity of
circumstances encountered by mothers all over the nation, “The Sheppard-Towner Act enlarged
and expanded these original programs of the New York Bureau of Child Hygiene to fit the needs
of all children in all types of communities, small towns and rural areas, as well as large cities.”650
At the municipal level Baker had encountered opposition to New York’s baby health centers early
on from private physicians, but because physicians were not widely offering preventative health
care at the time, public health could still claim authority over preventative services. Indeed, Baker
relates that when a group of Brooklyn physicians sent a petition to the Mayor to stop the Bureau’s
clinic work because it was keeping babies well and costing them patients, the “… petition cheered
me up like a cocktail. I reached for a pen and endorsed it in great big letters: 'This is the first
genuine compliment I have received since the Bureau was established.”651

By the 1920s, however, preventative health services among private physicians were much
more widespread. While Lathrop and others tried to stress that well-baby clinics were not meant
to replace the care of private physicians, some physicians feared the clinics and public health
nurses would work in direct competition with the private medical community: “Up to 1920

648 Meckel, 217.
649 Rothman, 181.
650 Rothman, 184. As we’ve seen, some of the Bureau’s activities included establishing baby health stations,
a large corps of public health nurses, providing clean and cheap milk to families, and health examinations
in schools.
651 Baker, Fighting for Life, 139.
government was the chief ally in setting up and enforcing the standards of medical practice; but when the government threatened to provide certain medical services, the AMA went into opposition.”

In addition, “Public Health Service officials argued before Congress that infant mortality was almost exclusively a medical issue rather than a social one and that infant health work should therefore be integrated into general public health work.”

Not authorized to give medical advice or do public health work, to many physicians the administration of Sheppard-Towner seemed out of the area of expertise of the federal Bureau. Thus, both the federal authority on public health and one of the largest groups of doctors in the world were showing interest in controlling who had the authority to participate in the narrative of life public health had been creating to counter infant mortality at the national level. This version of the narrative would be strictly medical, and the responsibility of patients and their physicians. The narrative of life advocated by Baker and by the federal Bureau’s early work kept the child and its total environment as the focus of prevention for the entire community.

By the time the Act came up for renewal in 1926, the AMA had mounted a much larger defense that helped to lead to the law’s provisional extension and eventual defeat in 1929. Between 1921 and 1926 the AMA encouraged the education of physicians in preventative health services, and “... its success enabled the AMA to persuade Congress during the renewal debate (as it had not been able to do in 1921) that the funded programs duplicated and competed with services sufficiently available from private practitioners.”

During the years of Sheppard-Towner many physicians took to the Journal of the American Medical Association to air their grievances with the law, arguing essentially that “it is not the function of the federal government to provide

---

653 Klaus, 271.
654 Meckel, 217.
either food or care.” Arguing against Sheppard-Towner from the perspectives of medical expertise and of states’ rights, one physician expressed the belief that “There are certain public health functions which are clearly national in character; others which belong to the local government,” when obviously the situation was anything but clear. The framing of preventative health services to mothers and children as strictly medical was perhaps advanced as much to lend clarity to the situation as to assert the expert status of medicine.

Contrary to the perspective of Baker’s work with the NYC Bureau and the early work of the federal Bureau, the broader socioeconomic factors that impacted child welfare were driven to the side of the Sheppard-Towner debate: “After Sheppard-Towner collapsed, responsibility for children’s welfare was indeed separated into its component parts, as [Florence] Kelley and others had predicted, with consequences that persist into the present.” Public health at the national level was only responsible for the medical factors relating to infant and maternal mortality; other factors should be addressed by different experts. In addition, by the 1935 Social Security Act it became clear that the federal government’s responsibility for the provision of medical services would only extend to those mothers and infants who otherwise could not afford them. Again, if the emphasis was on the individual gaining access to a medical professional and being educated enough to know when to seek out their help, it was becoming apparent that “On multiple fronts the assumption thus took hold that ‘adjustment’ and change at the level of the individual person or family was the most feasible and desirable focus of professional intervention.”

656 “Federal Care of Maternity and Infancy: The Sheppard-Towner Bill,” 383, italics added.
657 Kemp et al., 489.
658 Kemp et al., 490.
scale changes in strategy and infrastructure which Baker and the NYC Bureau were able to make in response to the dynamic needs of the city, such as a reliable milk supply and hospitals where infected tonsils could be removed, would not be the responsibility of the federal government.

In addition to questions of expertise, with Sheppard-Towner the rights of states became a contested issue surrounding the role of public health in providing preventative services to mothers and children. When it came to the use of federal tax dollars for funding well-baby clinics and public health nurses, keeping the needs of the infants in view, as Baker advocated, proved difficult for some. When Sheppard-Towner ended in 1929 all but three states had accepted matching federal funds to expand their local preventative health services, but “Sheppard-Towner stipulated that in order to receive funds, states had to pass ‘enabling legislation’ indicating acceptance of the act’s provisions…” and this step took quite a bit of time in some states, including New York.659 Sheppard-Towner’s funds were determined partially by the population of the state receiving them, and some populous states opposed their federal tax dollars going to fund preventative health services for mothers and babies in other states. Massachusetts was particularly vociferous in its opposition, even though “Ironically, at the very time Massachusetts was challenging Sheppard-Towner for violating the Tenth Amendment, the state was accepting money under twenty-two other federal programs which extended from soil surveys, county agents, highway buildings, state militia, and the state nautical school to the eradication of white-pine rust and the European corn borer.”660 Yet again, it was clear that not everyone was ready to accept the idea of children being considered a national resource as deserving of appropriations bills as agricultural crops were.

---

659 Those three states were Illinois, Massachusetts and Connecticut. Kemp et al., 485; Meckel, 211.
660 Lemons, 172.
Perhaps one reason why agricultural crops were more easily imagined as national resources was that a strictly medical interpretation of pregnancy, childbirth, and early development placed a great deal of focus on individuals rather than communities. It is nearly impossible to consider food resources like corn and wheat without considering the soil, water, and nutrients required for their growth. Not so with children. The focus on the individual which medical advances such as germ theory sometimes encouraged did not inherently conflict with a broader view of the socioeconomic and even political factors that influenced infant mortality. However, the insistence of some physicians, government officials, and states that infant mortality was the sole providence of medical experts ran the risk of obscuring the other factors that public health work such as Baker’s had embraced. Baker’s view of the child could not be separated from the proverbial soil, air, and water that gave it “a chance for life”: “This cannot be given by the mother and father alone; it needs more help than that. Our goal will be reached only when public health officials, social welfare agencies, doctors, nurses and parents work together.” After all, the actual child was not divided up into medical, familial, economic, and social pieces.

The narrative of life that Baker’s public health work demonstrated was that health, survival, and ultimately quality of life could be best served by the coordinated efforts of public health, legislation, and volunteer organizations. This coordinated effort embraced a view of the child that was decidedly un-fractioned. One of the slogans of the New York Health Department was that the health of the community was purchasable, if the community had the will to do it. In New York city that purchase involved the approval of municipal tax dollars being appropriated for preventative healthcare, but as has been demonstrated, it also involved public support of the

---

661 Baker, Fighting for Life, 252.
662 Baker, Fighting for Life, 252.
Department’s strategies, coordinated efforts of volunteer associations, and political will. This concept of purchase took on a slightly different tone in reaction to Sheppard-Towner at the national level: “Beginning precisely in 1922, the first year that Sheppard-Towner operated, the AMA and local medical societies urged physicians to transform their practices, and that this encouragement followed so immediately after the passage of Sheppard-Towner that it points to its major motivation: to remove the government from the business of health care.”\textsuperscript{664} From this perspective public health education for mothers becomes the effort to produce educated consumers rather than to establish a coordinated partnership among individuals, educators, physicians, tax payers, and volunteer organizations. Health became purchasable at the community level in New York City only when multiple players with interest in the health of children organized their efforts, but Sheppard-Towner demonstrates that organized effort seemed unable to expand past the state level. Over 1,500 preventative health centers for women and babies were established during Sheppard-Towner, but once the federal funds ended in 1929, “23 states appropriated virtually no maternal and child health funds.”\textsuperscript{665}

In the cultural climate of the 1920s, the federal Bureau’s continued claim of expertise did not go unchallenged by some politicians and medical organizations, particularly the AMA. Sheppard-Towner and its administration by the federal Bureau brought to a head the tensions that had been forming surrounding infant mortality during the early twentieth century, between public health and private physicians, womanly experience and medical experts, medical and socioeconomic impacts on mortality, and individual vs. communal responsibility for preventative health. Two ideas that Baker found key to child welfare that were echoed in the early strategies of the federal Bureau, were that the total wellbeing of the child remain the focus of preventative

\textsuperscript{664} Rothman, 190. Emphasis mine.
\textsuperscript{665} Lesser, 591, 592.
health work, and that the health of the nation’s children as a whole should be viewed as a public health necessity. As the eventual defeat of Sheppard-Towner in 1929 and the subsequent programs for children in the 1935 Social Security Act demonstrate, infant preventative care would be defined as a philanthropic venture rather than public health necessity at the federal level. Title V of the Social Security Act was written with the help of federal Bureau employees to include “maternal and child health, crippled children, and child welfare services,” but these services would be targeted solely at children who could not afford private services in the interest of improving economic security during an economically-turbulent time.666 The national discussion of child welfare that the first World War had fueled was reignited to some extent by the Great Depression. However, with the new legislation, responsibility for the wellbeing of the nation’s children would continue to be divided between the private physicians which some could afford and the public health services for those who could not. As Baker had experienced, the thin line which had to be walked by public health in order to keep the child the focus of child welfare was likely best handled at the municipal level.

Conclusion

While the strategies of the NYC Bureau were adapted by Sheppard-Towner to communities all over the nation, the coordinated support of those strategies by the main players in each community were ultimately required to make them sustainable in the long-term. Baker’s argument in the Public Health Nurse that this coordinated effort had and could be achieved came from her own experience with the successes and challenges of the NYC Bureau. When confronted by Baker to fund new strategies for infant welfare, Tammany officials said “… it’s always a good idea to help babies,” and when the Bureau ran up against political or medical opposition to its

666 Lesser, 592.
efforts, they usually were able to gain support because “People didn’t really like to see children die.”\textsuperscript{667} Baker’s experience in New York led her to assert that “If we are to save babies, the only thing to consider and act upon is the baby himself, his needs and how we may best meet them. Full concentration upon this point will dissipate our other problems in time.”\textsuperscript{668}

Given the opposition that Sheppard-Towner and several of her own initiatives faced it is tempting to view Baker’s rhetoric as the rather optimistic musings of a woman nearing the end of her life and fearing that there is still much to be done. Baker did not see herself primarily as a social or political reformer, however, and she was not sentimental about the opportunities for broad-scale federal preventative healthcare that had been gained and missed during her life.\textsuperscript{669} As mentioned earlier, her approach to public health embraced medical knowledge alongside lessons from the experience of a city in the dynamic process of still creating itself, and that involved changes in political administration, voter approval, and funding cuts. At the national level arguments over private v. public responsibility for the health and well-being of individuals and society loomed large. She saw herself primarily as a physician, and her work, and her opinions on infant welfare through a particular view of medicine: “this profession demands not only stubbornness but a devotion so wholehearted that it amounts to absolute consecration.”\textsuperscript{670} Medical knowledge was a powerful ally for life; carrying that knowledge held a mission-like responsibility, but any idealism she held about her profession was not blind. She acknowledged that “any large body of people grouped by common interests will never behave with a tenth the intelligence that its individual members will show in their daily lives. That is true of nations, street-

\textsuperscript{667} Baker, \textit{Fighting for Life}, 95, 146.
\textsuperscript{668} Baker, “Problems in Connection with the Administration of Well Baby Clinics,” 332.
\textsuperscript{669} She refers several times in her book to herself and to others in her field as “pioneers.” That suggests that she was intending to create something totally new rather than to reform what already existed. In general she downplays herself being the pioneer, and more often refers to others who she looked up to, such as physician Emily Blackwell.
\textsuperscript{670} Baker, \textit{Fighting for Life}, 28.
corner gangs, prayer-meetings - and large groups of doctors.”671 The emphasis Baker placed on developing individual relationships with all of the parties who had a hand in the coordinated effort for infant welfare in New York City, and her repeated emphasis on keeping the child in focus, demonstrate that Baker believed with sincerity that despite the tendency to lose that focus, children could be viewed as a national resource deserving of care by not only a municipal but also by a national community. After all, as governor Al Smith asserted during New York’s decision to accept or reject Sheppard-Towner funds, “Certainly nobody can complain about the purpose for which the appropriation was made.”672 Baker would have agreed.

671 Baker, Fighting for Life, 137.
CONCLUSION: A NARRATIVE OF LIFE FOR THE TWENTY-FIRST CENTURY?

Each one carries all the potential possibilities of all humanity. Whatever the statistics say, each has a right to live. And each one can live.⁶⁷³

Baker’s fight for public health to save the lives of infants in New York City, and advocacy for that fight to become an institutionalized national priority intersected with major shifts in the professionalization of medicine and public health, individual and societal responsibility, expert and experiential knowledge of science, that occurred in America during the early twentieth century. In step with the progressive ethos of her time, Baker’s strategies demonstrated the conviction that new medical knowledge only mattered to the progress of society if both experts and non-experts alike were involved in its practical application to daily life. The application of medical knowledge to preventative strategies that could be easily implemented by those who most needed them was the best use of such knowledge. More specifically, if that knowledge could be provided to and used by those most vulnerable to the biological and environmental impacts of poverty, then medical experts were fulfilling an almost sacred responsibility to society. Modern industrial life was too interconnected, too crowded, too complex for scientific knowledge to be available only for individual purchase; the municipality, the state and federal governments also had a responsibility to provide preventative care based on that knowledge available to all.⁶⁷⁴

During Baker’s career, New York City became known for many things, but one of them was its system of preventative infant and maternal care services that successfully fought an enemy that many thought should no longer be able to plague modern society: infant mortality.

As this study has demonstrated, Baker was by no means alone in her conviction that it was morally

⁶⁷⁴ The view of science as a tool that should be useful and usable by all of society was not unique to the Progressive era, as demonstrated in John P. Herron’s study of three well-known scientists of different time periods who shared that view: Clarence King, Robert Marshall, and Rachel Carson. Science and the Social Good: Nature, Culture, and Community, 1865-1965 (New York: Oxford University Press, 2010).
wrong for so many babies to continue to die when modern society had the medical knowledge to prevent it from happening. Baker, did, however, have the unique opportunity to carry that conviction into public health strategies that influenced the health priorities of America’s largest city and the nation itself. The upper classes could afford private physicians and baby nurses, but if the most poor and vulnerable New Yorkers were saved, for Baker that made a meaningful statement about New York City’s identity. New York was a huge machine of a city known for its juxtaposition of tall buildings, commerce, and bustling industry with crowding, political corruption, and poverty, but the right attitude toward public health could also make it known for investment in its children. At its core, the municipally-funded Bureau of Child Hygiene and its strategies to connect vulnerable mothers and infants with knowledge and resources acknowledged that New York was not only a man-made machine but also an organism, built of thousands of large and small human bodies and their connections to one another. At the national level, efforts toward preventative healthcare for mothers and infants such as Sheppard-Towner and eventually Title V of the Social Security Act promised such an acknowledgement of the organismal nature of the nation itself.

Whether the title Fighting for Life was Baker’s choice for her autobiography or not, it aptly describes the narrative she weaves of the meaning of her work in public health, one that identifies modern American society with life and progress in the face of poverty, crowding, economic disparity, and war. As examined in this study, several key issues embedded in what it meant for America to be a modern industrial society during Baker’s career impacted the municipal and national public health strategies aimed at infants and mothers in the early twentieth century. Anxieties about immigrants and disease, the fact that “little mothers” had to care for their own siblings, that breastmilk could not be counted on to nourish every child, that the institutions set up to help society’s most vulnerable could sometimes end up preying on them, that strategies
used to adapt practical public health to local municipalities might not be directly applicable at the national level, all influenced the national conversation surrounding expert and non-expert participation in the application of medical science, the benefits to both individuals and society of preventative care, and the responsibility of both individuals and society to participate in that care.

Thanks to the federal Children’s Bureau and Sheppard-Towner, a national research base and ideological priority for preventative care at the national level helped spread the cause of infant and maternal care to municipalities outside of large cities, to rural locations where medical care in general was far more scarce.\textsuperscript{675} Indeed, acknowledging the complex and interconnected nature of modern society, Julia Lathrop used the analogy of society-as-organism to lament in 1913 that “We have no national bookkeeping to account for the ebb and flow of human life as an asset and a liability of our civic organism.”\textsuperscript{676} Baker’s experience demonstrates, however, that partnerships among municipally-sponsored players such as public health boards, local physicians, and volunteer organizations had the greatest success in making preventative care available to mothers and babies because they were more likely than a national institution to recognize and meet people within the particular circumstances of their own lives.

Cooperation between the municipal and the federal, the individual and society, the expert and non-expert, seemed key to fighting for life during Baker’s career. While this cooperation proved challenging during and after Baker’s career in public health, she believed that, at base, a focus on “the baby himself, his needs and how we may best meet them,” would “dissipate our other problems in time.”\textsuperscript{677} Outside of the context of her experience, Baker’s assertion can sound

\textsuperscript{675} Rothman, 184.
\textsuperscript{677} Baker, “Problems in Connection with the Administration of Well Baby Clinics,” 332.
idealistic. As noted above, however, couched within the context of her experience, Baker’s belief that the majority of Americans wished babies to live and be healthy was based on years of organizing and cajoling very disparate groups to cooperate on behalf of infants. A moral conviction that those with knowledge (such as physicians) were called to share it with those who needed it most certainly was part of the driving force Baker harnessed as she “fought for life,” but in Baker it was combined with a pragmatic belief that knowledge would develop and change when implemented into people’s daily experience. Therefore, in the fight against infant mortality, both the expert and the non-expert were key to the process of saving babies. The unique organism of New York City and every other community in the nation required local support and knowledge to adapt nationally-sponsored strategies in locally effective ways, supplemented by nation-wide statistics and record-keeping.

Baker’s experience with the Bureau of Child Hygiene also demonstrates the mutual influence between politics and public health. As many Progressive reformers discovered, in order to bring about change moral outrage or conviction ultimately had to result in citizens demanding through their votes to make change happen. The milk stations can be seen as an example of this: dozens of volunteer organizations provided the stations disparately at first, and then together under the New York Milk Committee, but more infants were served and a standardized high quality milk was made available once the Health Department decided to take the stations on as a priority. Tax-paying New Yorkers had to want infant health to be a priority. As Baker argued, New York was certainly one of the most complex and dynamic municipal organisms in which to attempt a wholesale fight for life on behalf of infants. However, as Rauschenbusch asserted, New York was only the most glaring example of economic and resource inequality that plagued a nation experiencing the growing pains of early twentieth-century modern industrial society: the idea that as New York goes, so goes the nation.
That inequality was only one factor in corrupt systems of municipal government in early twentieth-century cities. In a series of articles that became *The Shame of the Cities*, Lincoln Steffens compares the corruption of municipal government and politics between major U.S. cities, and asks “Isn’t our corrupt government, after all, representative?” Steffens argues that in New York, “Tammany’s democratic corruption rests upon the corruption of the people, the plain people, and there lies its great significance; its grafting system is one in which more individuals share than any I have studied.” Reform administrations made it into office, but then they would be replaced. As Baker’s experience with Mayor Hylan (who was a democrat supported by Tammany) demonstrates, a combination of political, professional, and civic backing was often required in order to maintain support for the idea that public health was both an individual and municipal responsibility. Baker’s conviction that people fundamentally did not like to see babies die, and that New Yorkers would not stand for their city being known for the infant mortality of its tenements, aligns with Steffens’ statement that “My purpose was no more scientific than the spirit of my investigation and reports; it was, as I said above, to see if the shameful facts, spread out in all their shame, would not burn through our civic shamelessness and set fire to American pride.” Despite corruption, graft, greed, and poverty, Baker and other reform-minded professionals of her time loved their cities and still believed that their fellow citizens would choose civic responsibility once they became informed and involved.

The ability to feel this pull of civic responsibility, or the desire to reform corrupt systems, or simply to make the lives of society’s most vulnerable members a moral, political, and scientific priority, all ultimately depend at any given time on the larger narrative that inspires both

---

678 Steffens, 6.
679 Steffens, 205.
680 Steffens, 12.
individuals and a society toward such impulses. Most broadly, the service that Baker provides as the perspective lens of this study is the examination of one possible narrative to unite all of these impulses and forthrightly acknowledge the challenges of maintaining it over time. Baker used the field and practice of public health as a manifestation of a larger narrative of life that she and many others during her time believed the nation was called toward. Scientific advance, political agitation, women entering the workforce and refusing to keep their interests out of the public sphere, all provided impetus for public health to create a system of preventative care for mothers and infants possible in New York City, and to make it possible for the nation. Baker believed that ultimately Americans were capable of recognizing that the interest of the infant was the interest of them all, and this belief was echoed by Julia Lathrop when she said that “The parents who came in the cabin of the Mayflower and those who sank in the steerage of the Titanic had the same profound impulse.” 681 The idea that life should be better for children in each consecutive generation was the meta-narrative that fueled Lathrop’s work, Baker’s narrative of life for New York, and the work of so many others of the time who believed that there was an obligation for any new knowledge that could protect and benefit life to become part of the narrative of what America was. It was a particularly compelling narrative to many during Baker’s time, especially because so many of the successful strategies to save babies and aid mothers required one-on-one interactions between people at the same time that anonymity, automation, and class conflict made those interactions seem like the exception.

The necessity of a motivating narrative continues to be relevant to public health work for mothers and infants in the United States in the early twenty-first century. When that narrative is absent or goes unrecognized by any or all of the individuals and institutions involved in

coordinating preventative care, the details and the costs threaten to take over the original goal of
the work. Carolyn Moehling and Melissa Thomasson recently reviewed the available data from
the Children’s Bureau between 1924 and 1929 to elucidate whether the strategies funded by
Sheppard-Towner can be said to have lowered the national infant mortality rate, as the Bureau
had claimed. As part of the American Medical Association’s attack on Sheppard-Towner,
Moehling and Thomasson note that its journal claimed that Sheppard-Towner programs had not
contributed to a faster decline in national infant mortality, thus resulting in an enormous waste
of money. Moehling and Thomasson use the available data from the Bureau to tease apart the
different types of strategies used by different local and state agencies with Sheppard-Towner
funds, and their differential impacts on the infant mortality of whites and nonwhites, finding that
“interventions that were less personal and did not provide a means to follow up with women and
children had little impact for both blacks and whites.”

A fresh look at this data nearly 100 years after it was collected thus suggests that Baker’s insistence on public health strategies informed
by medical knowledge and funded by government but designed and implemented through
personal attention to individual mothers was effective not only in New York City but across the
nation as well.

Further significance for twenty-first-century preventative care of mothers and infants
from Moehling and Thomasson’s study lies in their focus on statistics. Baker and Lathrop both
made no secret of the fact that statistics at the municipal and national level had considerable
utility in a multi-faceted strategy for fighting infant mortality. After all, some kind of indicator had

---

682 1924–1929 is the period when the most consistent data is available. States had to report to the Bureau
what strategies they had used the money for, but the amount of money used for each different type of
strategy was not uniformly reported by all states. Carolyn M. Moehling and Melissa A. Thomasson, “Saving
683 Moehling and Thomasson, 384.
to exist in order to measure whether strategies were working over time. However, Baker cautioned that too much reliance on statistics could lead well-intentioned people to forget “the facts they represent”: “In dealing with children we are not facing a scientific problem which can be measured wholly in percentages... We are dealing with little Susan and John and Mary and Thomas. They are our children. Each one carries all the potential possibilities of all humanity. Whatever the statistics say, each has a right to live. And each one can live.”

Baker often quoted statistics herself, but also with the reminder that a mortality rate was just a rate. Even if the mortality rate stayed steady between two years, chances were that the total population had increased during that time, and so more actual infants had been saved, even if the official infant mortality rate had not changed.

Those individual lives saved mattered to Baker, and matter 100 years later, ultimately more than the infant mortality rate continuing to decline. They matter more because the larger narrative that should drive preventative healthcare for infants and mothers, and that drove Baker’s work in New York City, should be its impact on individual lives as much as the statistics. Moehling and Thomasson do note that the long-term success of Sheppard-Towner is actually impossible to measure, since we cannot go back and ask the mothers who participated what knowledge or aid they passed on to other mothers, and to their subsequent children. Since Sheppard-Towner preventative healthcare for mothers and infants has become more prevalent, but its availability and accessibility remain quite disparate among Americans of different economic classes and cultural backgrounds. Poverty is still a major determinant of access to such care. Journalists Nicholas Kristof and Sheryl Wudunn emphasize this point throughout a 2014 book in which they explain which nonprofit organizations for the poor are the most effective, and

---

685 Moehling and Thomasson, 384.
how citizens can become more involved in fighting poverty through political involvement as well. They note that many Americans donate to nonprofit organizations like Save the Children, wishing to help poor mothers get access to medical care in underdeveloped nations, when the reality is that Save the Children also sponsors children in the United States. They note that “If there's one overarching lesson from the past few decades of research about how to break the cycles of poverty in the United States, it's the importance of intervening early, ideally in the first year or two of life or even before the child is born.”

That lesson was learned much earlier, however, through the work of Baker, Lathrop, and others, during another period of extreme economic disparity among classes. Nonprofit organizations still try to compensate for the lack of access of many American mothers to preventative maternal and infant care, but one of the most successful – The Nurse Family Partnership – still only serves an estimated 2-3 percent of the women and babies in need. Research continues to show that in a variety of different communities the personal visits of a nurse or healthcare mentor to women’s homes before and after the baby arrives are the most effective at preventing infant mortality and a host of other potential hardships later in life, such as learning disabilities and physical limitations such as hearing loss. The assertion of Baker and others after WWI that so many American men would have been spared physical and intellectual hardship had they had access to preventative care as small children is echoed by Kristof and Wudunn, who argue that “early childhood neglect can't be solved by private donations, any more than the federal highway system could be built by individual sponsors. We need advocates to push

---

686 Kristof and Wudunn, 68.
687 Kristof and Wudunn, 51.
688 Kristof and Wudunn, 64. They note that many states have implemented preventative programs based on nurse visitation through the Nurse Family Partnership, and that when Oklahoma introduced it, for example, infant mortality among visited families decreased by half.
federal, state, and local governments to invest in the first couple of years of life, to underwrite home visitation programs, and to support parents during pregnancy and a child’s earliest years.”

The personal human attention of nurses and the acknowledgement of each mother’s unique life circumstances and challenges remains key to effective preventative maternal and infant care, but so does a national narrative to drive national political and economic support in each successive generation. Kristof and Wudunn conclude their chapter on preventative infant and maternal care by saying something very similar to Baker’s claim that “each has a right to live. And each one can live”: “With some help they [the infants and unborn] can break this cycle of poverty. Helping them and millions like them do so should be a national priority. They’re too small to fail.” It was not only Baker’s class, education, time period, or her experience in public health that led her to say such a similar thing in 1939: it was a narrative of life that embraced the conviction that each generation fundamentally wants the next to prosper, and that through individual and institutional cooperation, that conviction could characterize the society which embraced it.

---

689 Kristof and Wudunn, 71.
BIBLIOGRAPHY


VITA

Rebecca K. Cecala
Eastern Mennonite University - Lancaster
1846 Charter Ln, Lancaster, PA 17605
becky.cecala@emu.edu
717.397.5190

Education
Pennsylvania State University – Harrisburg Middletown, PA
Ph.D. in American Studies December 2016
Dissertation: Creating a Narrative of Life: Public health through the eyes of Dr. Sara Josephine Baker
Dissertation adviser: Charles Kupfer
Readers: John Haddad, Simon Bronner, and Anne Rose

Colgate Rochester Crozer Divinity School Rochester, NY
M.A. in Theology May 2010
Thesis: An argument for the acknowledgement of American Christian involvement in national attitudes toward the natural world and environmental degradation

Syracuse University Syracuse, NY
M.S. in Biology May 2005
Thesis: A model for changes in benthic community primary production in response to zebra mussel introduction in Oneida Lake, NY

Allegheny College Meadville, PA
B.S. magna cum laude in Biology May 2002
Thesis: Distribution and abundance of submersed macrophytes in Lake Pleasant, PA.

Selected Awards and Honors

(2015) Harold K. Schilling Dean’s Graduate Scholarship for graduate students whose research is relevant to science, religion, and ethics, The Graduate School, Penn State University

(2012) Robert W. Graham Endowed Graduate Fellowship, Penn State Harrisburg

Publications

