

The College of Wooster

Fighting the “Dread Paralysis”:

The Press and Public Health in the 1916 Polio Epidemic in New York City

by

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ABSTRACT

Occurring in a transitional moment both in the history of polio as a disease and in the development of public health, the polio epidemic of 1916 was the largest polio epidemic to its date and it baffled scientists and public health officials alike. In this project, I explore the relationship between the New York City Health Department and the press during the 1916 epidemic by examining newspaper articles from major daily newspapers. Although the New York City press was the Health Department's primary means of communicating information to the public, the press had an ambiguous relationship with the Health Department, at times supporting the department, while at other times criticizing it. The press reflected and expanded the terminologies of culpability and warfare initiated by the Health Department and based on the department's insistence on clean streets preventing polio, newspapers initiated crusades against filth in the city. However, as the Health Department became increasingly invasive in both the prosecutions for Sanitary Code violations and quarantine measures, the newspapers published articles criticizing the Health Department response.

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While my interest in the history of disease arose out of coursework at the College of Wooster, my interest in polio is much more personal. This research is dedicated to the memory of Elizabeth Wetherell, better known fondly to many as Aunt Betty, a polio survivor who was very dear to my family and who has inspired me in so many ways.

INTRODUCTION

Press, Public Health, and the “Dread Paralysis” Puzzle

INFANTILE PARALYSIS SCARE IN BROOKLYN

Health Officials Puzzled by 24 Cases— Children Quarantined

New York Tribune, June 18th, 1916¹

The plague affects some of the youngsters in curious ways. One little boy had no sign of his affliction except that it had left him cross-eyed. Another’s palate was paralyzed, so he had difficulty in swallowing. These were only minor cases. The children who will never walk again are the real tragedy of the scourge.

New York Tribune, August 20th, 1916²

From beginning to end, the polio epidemic of 1916 was a mystery. In a time when science emerged victorious time and again against disease, a malady that had only recently begun occurring in epidemic form suddenly appeared in its largest epidemic to date in the largest city in the United States. This epidemic was the first polio epidemic to require the direct intervention of the United States federal government, but after 1916 there were epidemics of polio every summer until the Salk vaccine was created in 1953. In many ways, the epidemic of 1916 was the epidemic that heralded a time during which polio was a constant threat to the people of the United States and the bane of public

¹ “Infantile Paralysis Scare in Brooklyn,” *New York Tribune*, June 18, 1916, *Chronicling America*.

² “Sees Inspectors Fight Paralysis,” *New York Tribune*, August 20, 1916, *Chronicling America*.

health departments across the country. But regardless of how familiar polio became, in 1916 “infantile paralysis” was a puzzle to public health and public alike, emphasizing the importance of communication with the public during such a time of confusion. In light of this, I take this opportunity to investigate the relationship between the press of New York City and the Public Health Department during the 1916 epidemic.

In researching the history of polio, there are several books that address the broad history of polio in the west, from the first epidemics to polio’s eradication. In the preface to his history of polio, John R. Paul writes that the events “which led up to the eventual conquest of poliomyelitis... have the makings of a dramatic story with a triumphant ending—a story that has been, and will be, written several more times” and continues by adding that this triumphal narrative is not the whole story.³ Acting on this sentiment, Paul covers the larger history of polio, with chapters devoted to topics beginning with “Ancient Records” and going all the way through “The Attenuated Poliovirus Vaccine, Salk-Type.” Another resource for the survey of the history of polio is *Poliomyelitis: Emergence to Eradication* by Smallman-Raynor et al., a helpful scientific history focusing on epidemics for which geographical data is available.⁴ The book contains analyses of many epidemics, but for the 1916 epidemic Smallman-Raynor et al. argue that the structure and development of the epidemic were fundamentally the same as the 1907 epidemic in New York, but on a much larger scale due to increasing sanitation practices eliminating natural immunities, especially among children.

³ John R. Paul, *A History of Poliomyelitis*, Yale Studies in the History of Science and Medicine 6 (New Haven: Yale University Press, 1971), xiv.

⁴ Matthew Smallman-Raynor et al., *Poliomyelitis: Emergence to Eradication*, Oxford Geographical and Environmental Studies (Oxford; New York: Oxford University Press, 2006).

In many ways, the historiography of polio has been overshadowed by the later history, from famous polio survivor President Franklin Delano Roosevelt to the Salk and Sabin vaccines that eradicated polio in the west. However, Naomi Rogers's *Dirt and Disease: Polio Before FDR* and "Dirt, Flies, and Immigrants" present thorough research into the understudied time period.⁵ Rogers argues that traditional associations of dirt with disease and prejudices against immigrants greatly influenced the public health response to early polio epidemics, and 1916 in particular, in a way that was not true after 1920. In this paper, I draw upon this argument and expand it to the press dialogue in 1916.

Another important historiographical framework for the epidemic of 1916 is the investigation of public health in America. An up-to-date history published by Johns Hopkins can be found in John C. Burnham's *Health Care in America: A History*. In this history, Burnham describes the process of the "modernization" of public health in America, through a framework of eras defined by a given development or technique in public health. The framework that Burnham applies to the time period addressed in this paper is defined as "Surgery and Germ Theory, 1880s to 1910s."⁶ For this time period, Burnham argues that germ theory was generally adopted, although unevenly, that hospitals became more professional, and that medical professionals became increasingly specialized. I argue that this framework of the professionalization of public health and increasing emphasis on hospitals and germ theory underpins the public health response to the polio epidemic in 1916.

⁵ Naomi Rogers, "Dirt, Flies, and Immigrants: Explaining the Epidemiology of Poliomyelitis, 1900–1916," *Journal of the History of Medicine and Allied Sciences* 44, no. 4 (1989): 486–505, *JSTOR*; Naomi Rogers, *Dirt and Disease: Polio Before FDR*, Health and Medicine in American Society (New Brunswick, N.J.: Rutgers University Press, 1992).

⁶ John C. Burnham, *Health Care in America: A History* (Baltimore: Johns Hopkins University Press, 2015), 141.

Another book that is relevant to the historiography of public health when considering polio is Alan M. Kraut's *Silent Travelers: Germs, Genes, and the "Immigrant Menace."*⁷ In a chapter titled "That Is the American Way," Kraut argues that associations of filth with Italian communities in New York led to the public health authorities being biased against the immigrant communities in Brooklyn, despite the statistical fact that polio was less prevalent among the Italian community than among native-born Americans.⁸ This aligns with Rogers' assessment of the 1916 epidemic, and I argue that it underpins the language of culpability that targeted the Italian communities of Brooklyn.

In addition to the historiographical sources given above, a number of historical news theories shed light on the newspaper reporting during the epidemic. One such theory is Jürgen Habermas's concept of the public sphere. The press during the epidemic performed both the government administrative function that Habermas identifies as well as the realm for public voices to come together in a "forum in which the private people, come together to form a public, readied themselves to compel public authority to legitimate itself before public opinion."⁹ Although the degree to which the press was rational and critical is debatable, newspapers certainly offered the (bourgeois) public an opportunity to debate the actions of the city government (and especially the Health Department) as a unit. Another theory that is useful in examining press reporting during the epidemic is the propaganda model put forward by Edward Herman and Noam

⁷ Alan M. Kraut, *Silent Travelers: Germs, Genes, and the "Immigrant Menace"* (New York, NY: BasicBooks, 1994).

⁸ Kraut, 108–10.

⁹ Jürgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger (Cambridge, Mass: MIT Press, 1991), 25–26, *EBSCOHost*.

Chomsky in *Manufacturing Consent*.¹⁰ Although of course the Cold War era political background does not necessarily apply, the filters of size, dependence on advertising revenue and government information sources, and flak proposed by Herman and Chomsky shed light on how and when the press decided to report the epidemic.

In this project, I explore the relationship between the New York City Health Department and the New York City press during the 1916 epidemic by examining newspaper articles from major daily newspapers. The newspapers that I examine are the *Sun*, the *Evening World*, and the *New York Tribune*, from the period of mid-June to late-October 1916.¹¹ I also make extensive reference to *A Monograph on the Epidemic of Poliomyelitis (Infantile Paralysis) in New York City in 1916*, which was compiled by the New York City Public Health Department after the epidemic and published in 1917. In examining these sources, I investigate what the relationship was between the New York City press and the Public Health Department during the 1916 polio epidemic. Primarily I use a thematic analysis of these newspapers to identify trends in how the press reports Health Department initiatives and other news of the epidemic, with reference to the Health Department monograph to clarify how Emerson and the Department defined and explained their actions.

Although the New York City press was the Health Department's primary means of communicating information to the public, the press had an ambiguous relationship with the Health Department, at times supporting the department as a medium of

¹⁰ Edward S. Herman and Noam Chomsky, "Manufacturing Consent," in *News*, ed. Howard Turner (Oxford University Press, 1999), 166–79.

¹¹ For a short period in July 1916, the *Sun* was combined with the *New York Press* under the mantle of the *Sun and New York Press*. These articles are included in my research, and are not treated as a newspaper distinct from the *Sun*.

government communication, while at other times criticizing it as a medium of public dissent. The press reflected and expanded the terminologies of culpability and warfare initiated by the Health Department, and following the Department's insistence on clean streets preventing polio newspapers initiated crusades against filth in the city. However, as the Health Department became increasingly invasive in both the prosecutions for Sanitary Code violations and quarantine measures, the newspapers published articles criticizing the Health Department response.

In Chapter One, I present an overview of the science of the "dread paralysis" and examine the historical frameworks of the 1916 epidemic. Chapter Two investigates the use of the language of culpability within the Public Health Department and the Press during the epidemic, while Chapter Three analyzes the use of warfare terminology. Chapter Four investigates cleanliness crusades in the press and Public Health Department, and Chapter Five examines the press representation of the Health Department's quarantine measures. The conclusion investigates the legacy of the 1916 epidemic, and how the complex relationship of continuous feedback from the press to the Public Health Department helped to establish how future epidemics would be handled.

CHAPTER ONE

The Framework of the 1916 Epidemic

Modern science has improved much on the information available to the scientists of the early twentieth century. Indeed, many of the newspaper accounts of the epidemic of 1916 emphasize the degree to which the polio epidemic puzzled contemporary scientists. While modern science has fitted together many of the pieces of the polio puzzle, since the revolution of the Salk vaccine removed polio from the collective consciousness of the west, modern scientists have focused their efforts on diseases that have more immediate consequences, leaving some of the details about polio hazy. Scientists in 1909 determined that polio is caused by a virus, but were unable to determine much more because they lacked technology able to image viruses.¹ Since then, with advances in technology, scientists have been able to image and identify three strains of the poliovirus. With this improved insight, polio is now classified by the Center for Disease Control as a Viral Infection of the Central Nervous System, primarily operating on the fecal-oral transmission route (as do cholera and typhoid), especially through the media of contaminated fingers, utensils, and sometimes food. Less commonly, polio can also be transmitted through droplets from the respiratory tract, exposed through coughing or sneezing (as with influenza).² The incubation rate of polio has been especially difficult to determine, as indicated by a mid-twentieth century study whose results concluded that the incubation rate for polio is between three and thirty-five days.³

¹ Rogers, *Dirt and Disease*, 14.

² Smallman-Raynor et al., *Poliomyelitis*, 39.

³ Smallman-Raynor et al., 40.

Much of the difficulty in determining the incubation period, and in studying polio in general, arises from the wide variance in how polio presents itself clinically. The three clinical presentations of polio (regardless of which strain of poliovirus causes them) are categorized as abortive, non-paralytic, and paralytic.⁴ However, these three categories do not include the ninety to ninety-five percent of cases that present no apparent disease.⁵ Abortive polio cases, which make up between four and eight percent of polio infections, result in only minor illness, typically occurring three days after infection, with symptoms potentially including a sore throat, headache, nausea, vomiting, abdominal pain, and redness of the throat. Non-paralytic and paralytic cases resulting in major illness make up one to two percent of polio infections. These cases generally follow initial minor illnesses, often with a period of between one and twelve days of apparent wellness in between, further confusing the determination of polio's incubation rate. Non-paralytic major illnesses generally occur nine days after infection and produce high fevers, sometimes accompanied by pain and stiffness in the legs, back, or neck. If it occurs, the paralytic stage for which polio is known lasts two to three days, and the resulting paralysis varies greatly in intensity and location depending upon the individual case. In general, large muscle groups (as in the legs) are more affected in the paralytic stage than smaller muscle groups (as in the hands). The most dangerous cases are when the spine itself or the muscles that control breathing are affected. Paralysis resulting from polio is not always permanent, but typically if recovery of muscle function will occur it is limited to the twelve to thirty-six months after the infection.⁶

⁴ Smallman-Raynor et al., 30–32.

⁵ Smallman-Raynor et al., 32.

⁶ Smallman-Raynor et al., 33.

This wide variety of symptoms also makes it difficult to study the history of polio epidemics before the late nineteenth century. Even in cases in which paralysis or deformities that could be a result of polio are described or found, it is often difficult to eliminate other diseases as possible causes. In one case, a skeleton from approximately 3700 BCE, having one leg 8.2 cm shorter than the other with no evidence of fracture or other injury, has been identified as a polio case, but two other skeletons from the second millennium BCE with deformities possibly attributable to polio have been determined to have congenital abnormalities instead.⁷ There are also references within the Hippocratic corpus to clubfoot and other conditions that may indicate the presence of polio.⁸ More modern evidence of polio can be found in the description of an epidemic of “lameness” in Ireland in 707-8 CE, as well as other isolated instances.⁹ Individual cases and minor outbreaks have also been recorded or in evidence in Europe since the eighteenth century, as evidenced by Michael Underwood’s description of the condition “Debility of the Lower Extremities” in 1789.¹⁰

It is clear, then, that the 1916 polio epidemic was not the first epidemic of polio, but it is important to note that it was not even the first in the United States, only the most virulent to that time. One of the earliest recorded epidemics of polio in the United States occurred in Louisiana in 1841, recording ten cases with no resulting deaths. The first significant outbreak took place in Vermont in 1894, with a mortality rate of eight percent

⁷ Smallman-Raynor et al., 67.

⁸ Smallman-Raynor et al., 67.

⁹ Smallman-Raynor et al., 68.

¹⁰ Tony Gould, *A Summer Plague: Polio and Its Survivors* (New Haven: Yale University Press, 1995), 10.

and resulting in a total of 132 cases.¹¹ A much more widescale epidemic took place in 1910, when an epidemic culminated in 14,590 cases across almost thirty states, with an estimated countrywide mortality rate of twenty percent. Another epidemic in Vermont in 1914 resulted in 304 cases with a mortality rate of seventeen percent and sparked an investigation. In June 1916, the *Bennington Evening Banner* reported that “the disease seems to be a rural disease” and “while apparently following the arteries of human intercourse, makes long jumps between towns in isolated and inaccessible regions.”¹² This article, published just after the initial cases in New York, demonstrates well how the qualities of polio baffled the scientists and doctors of the time. An apparently rural disease had just taken up residence in New York City, and it would spread invisibly through tenements and town houses alike, defying all attempts to identify patterns of transmission.

The 1916 epidemic took place over a short period of time in the summer, with cases increasing rapidly in late June and dying off slowly from August to October. The epidemic began in early June 1916 with fewer than ten cases reported by June 8th, but the announcement of the epidemic was not issued until June 17th, and newspapers began reporting consistently beginning on the 18th.¹³ During the week from June 18th to June 25th, the cases of paralysis were limited to Brooklyn, and were only given the space of a couple of sentences detailing how many cases there were and that they were limited to

¹¹ *A Monograph on the Epidemic of Poliomyelitis (Infantile Paralysis) in New York City in 1916, Based on the Official Reports of the Bureaus of the Department of Health* (New York: M.B. Brown Printing and Binding Co., 1917), 356, *Hathi Trust*; Gould, *A Summer Plague*, 9.

¹² “Infantile Paralysis,” *Bennington Evening Banner* (Vt), June 27, 1916, *Chronicling America*.

¹³ *A Monograph on the Epidemic*, 13–15.

the Italian population of Brooklyn.¹⁴ By June 25th, cases had appeared in Manhattan, and press coverage had become much more substantial, including very basic instructions from the Health Department. The Health Department declared a Great and Imminent Peril to the city of New York on July 5th, and this was not rescinded until October 31st.¹⁵ Over the course of the next two months, the polio epidemic would be in the newspapers in prominent positions and long articles.¹⁶ The epidemic peaked in early August, but the reporting continued to be prominently placed well into later August, only receiving less prominent positions in September. By early October when the travel bans had been lifted, press articles were typically limited to new developments (for instance, schools reopening).

Modern scientists have given much thought to the question of why polio developed into an epidemic disease from its early stage as an endemic one. One theory explaining this change claims that nutritional changes, specifically an increase in the amount of vitamin B-1 and B-2 consumed and to a lesser degree an increase in calorie intake, led to an increased susceptibility to polio infections, as shown in studies with mice.¹⁷ The dominant theory in the medical field, however, is actually that improved hygiene interfered with a natural process of immunity acquired in childhood through

¹⁴ “Paralysis Sweeps Brooklyn Infants,” *The Sun*, June 18, 1916, *Chronicling America*; “Infantile Paralysis Scare in Brooklyn.” The first of these articles is six sentences long; the second is longer, but only because the article recounts part of New York City’s history with polio. Only seven sentences refer to the epidemic.

¹⁵ *A Monograph on the Epidemic*, 49–50.

¹⁶ E.g., “32 Paralysis Cases in Day,” *New York Tribune*, June 29, 1916, *Chronicling America*. The article is in the second-left column on the front page for about a third of the length of the newspaper, and is continued onto another page besides. This is fairly typical of the length and positioning of articles about the epidemic during late June through late August.

¹⁷ Smallman-Raynor et al., *Poliomyelitis*, 15.

exposure to the virus.¹⁸ Thus, as hygienic practices became more thorough, more children grew up without this immunity and became potential hosts for epidemic transmission. The epidemic in 1916, thus, was one of the epidemics which indicated the transition of polio from an endemic phase to an epidemic phase.

The 1916 epidemic also occurred in a moment of transition within the fields of medical research and public health. Among the general public ideas connecting dirt and disease were still prevalent, but medical research had advanced to the point of identifying and even imaging the bacteria behind many diseases. And although the technology for seeing viruses had not been created yet, medical research had proven the effectiveness of vaccines and sera in preventing and treating viral disease.¹⁹ It is important to consider the state of health departments in the United States in this time period. After the Civil War, before germ theory had become prominent, public health departments had taken control of duties such as garbage disposal, the regulation of food, and street cleaning.²⁰ In this time period, of course, these functions were considered inextricably linked to public health. This process of updating public health departments to reflect the current theory of disease transmission was continued, and by 1916, health departments had been professionalized and municipally funded, and many had laboratory facilities.²¹ However, the connection between dirt and disease, and the relationships between the public health department and the street cleaning and garbage disposal departments, remained firmly embedded in the consciousness of the city bureaucracy. Hence, during the epidemic, New

¹⁸ Smallman-Raynor et al., 16.

¹⁹ Rogers, *Dirt and Disease*, 14.

²⁰ Rogers, 16.

²¹ Rogers, 17.

York City Health Commissioner Haven Emerson and the mayor insisted on giving New York City “the most dramatic house cleaning in its history” despite acknowledging that “all scientific experience points to the fact that it is communicated by direct personal contact, and that the germs do not live apart from the human body.”²² Another common instance of this mingling of filth theory and germ theory is the war against flies that takes place in the early twentieth century. By blaming an insect frequently associated with garbage and filth for transmitting germs, health departments and scientists were able to appease both theories of disease.²³

It is essential to consider the polio epidemic in its context of these transitory stages of history. It was the transitory understanding of disease that led to the public health department responses which shaped the reporting of the epidemic in the press. Due to the unfulfilled expectation of modern means of preventing the spread of polio, the public health department felt the need to justify the lack of progress against the epidemic by finding anything or anyone possible to blame. In the following chapter, I explore how the press adopted the Health Department’s language of culpability throughout the epidemic, including turning it against the Health Department itself.

²² “To Wash All N.Y. in Paralysis Fight,” *Sun and New York Press*, July 10, 1916, *Chronicling America*.

²³ Rogers, *Dirt and Disease*, 18.

CHAPTER TWO

Concerns of Culpability

Commissioner Emerson said yesterday the situation in Manhattan had at all times been under better control than it was in Brooklyn at the start of the epidemic. “We were handicapped there,” he declared, “by the failure of physicians and parents to report cases. Before we knew it existed the epidemic in Brooklyn had grown serious.”¹

This was reported in the *New York Tribune* on August 15th, and this rather late example was only the continuation of the apparent Health Department policy of seeking out groups of people to blame for the epidemic and its continuation throughout the summer.

In the context of this apparently inexplicable epidemic caused by a mystery virus that could not be explained by contemporary science, newspapers published innumerable theories about who or what was to blame for the origin and spread of the polio epidemic, most originating with the Public Health Department. The press’s response was an instance of the dual-role nature of the press during the epidemic. Initially, the press adopted the culpability language against the groups that the Health Department had identified and continued it, but the press also served as the medium for displaying public dissatisfaction with the Health Department and published articles that denounced the Health Department as one of the culprits of the epidemic.

¹ “Plague Is Waning Physicians Hope; Cases Show Drop,” *New York Tribune*, August 15, 1916, *Chronicling America*.

The first instance of culpability resulted from the patient zero mentality and was directed at the Italian population of Brooklyn who suffered the first cases of the disease. Although the phrasing changes, newspapers in late June and early July consistently emphasized that the Italian population were responsible for the epidemic. For instance, a rather mild statement of cause appeared in the *Sun* on July 1st: “As the first cases came from the neighborhood of the docks in South Brooklyn, in an Italian quarter, it was reported yesterday that the disease may have been brought from Italy.”² Many newspapers outside of New York also latched onto this form of reporting, often being even harsher in condemnation of the Italian population. One of the most vehement statements of culpability came from Vermont’s *Barre Daily Times* in the form of the headline “Italian War Refugees Bring Paralysis Germ; They Are Held to Be Responsible for the Present Epidemic.”³

An almost more popular form of culpability was found in blaming flies (as we now know, falsely) as carriers of the disease. This was most clearly enunciated in articles such as the one in the *Sun and New York Press* that proclaimed “the fly is constantly drawing his feet through all manner of decomposing organic matter in which the germ of infantile paralysis has its origin. He pervades the house; he walks over the family food; he is on table and chair and wall. He is a winged carrier of evil in full career until he dies.”⁴ Less emotionally and more indirectly, newspapers also relayed the public health department’s war on flies to readers by printing quotes from pamphlets or the slideshows

² “Infantile Paralysis Cases Now 327, Increase of 47,” *Sun*, July 1, 1916, *Chronicling America*.

³ “Italian War Refugees Bring Paralysis Germ,” *Barre Daily Times (Vt)*, July 1, 1916, *Chronicling America*.

⁴ “Paralysis War Pressed; Rate of Death Cut,” *Sun and New York Press*, July 9, 1916, 4, *Chronicling America*.

used in movie theaters. One such printing in the *Sun* included “Swat the fly” as the final instruction in a series of steps for parents to take in protecting their children, while the other instructions were “Don't let your child go to parties, picnics or outings” and “Don't let your child play with any children who have sickness at home.”⁵ Obviously this inclusion of the necessity of killing flies with these extremely common and important instructions for the prevention of disease spread indicates that the health department considered flies almost as instrumental to the transmission of polio as contact between an infected person and others, and this assertion transferred directly to the newspapers.

Like flies, domestic animals were targets of blame due to traditional associations of animals with uncleanness. These associations were reiterated and specialized to the epidemic in statements such as this one from the *Sun*: “The dog that rolls on his back in the vacant lot, the cat that prowls in the cellar, the horse that stands in the gutter may all spread this scourge of the race [polio].”⁶ It is clear that these animals are being targeted not because of any specific evidence that they are carriers of polio (or any disease for that matter), but because of their close proximity to spaces traditionally considered unclean. Thus, the war on dirt that took place during the epidemic extended to a process that the *Evening World* dubbed “Waging War on Cats and Dogs.”⁷ The statistics of this war were reported much as the cases of polio and the gains and losses in trenches were each day. For instance, on July 8th, the *Evening World* reported that “In five days of collection work the Brooklyn police and the Society for the Prevention of Cruelty to Animals have

⁵ “Infant Paralysis in Epidemic Stage,” *Sun and New York Press*, July 6, 1916, *Chronicling America*.

⁶ “Paralysis War Pressed; Rate of Death Cut,” 6.

⁷ “18 More Die From Infantile Paralysis,” *Evening World*, July 8, 1916, *Chronicling America*.

gathered and destroyed 3,539 cats. In the same time they have destroyed 356 dogs."⁸ By pushing blame onto these traditionally “unclean” animals and publishing the statistics of their extermination, the public health department was able to deflect its own potential culpability and to show apparent progress in fighting the disease.

In addition to these groups, the public health department also tried to blame parents of children for not obeying their instructions and restrictions, and the press also used this frame of parental responsibility in reporting the disease. Very early in the epidemic, on June 28th, the *Sun* reported of the epidemic that “failure to diagnose the early cases is responsible for the rapid spread of the disease, and parents rather than physicians are to blame.”⁹ In a similar vein, the *New York Tribune* reported the following on July 9th under the headline “Call the Doctor!”: “We have received from a number of valued friends letters describing alleged remedies for infant paralysis and proposing various home treatments to combat the disease. These we have not published, for in our judgement the principal thing to impress on parents in the present emergency is the necessity of reporting immediately on its discovery every suspicious case to a competent medical practitioner or to the proper municipal authorities.”¹⁰ This section seems to reiterate the theme of reporting disease without much overt blame being placed, but later in the article the newspaper printed that “home doctoring means not only danger to the patient, but exposure of the entire neighborhood to infection. As long as it is persisted in, the city, State, and nation will be unsuccessful in their efforts to combat the sickness and

⁸ “18 More Die From Infantile Paralysis.”

⁹ “Infantile Paralysis Cases Now Reach 183,” *Sun*, June 28, 1916, *Chronicling America*.

¹⁰ “10,000 Citizen Police Begin Plague Fight,” *New York Tribune*, July 9, 1916, 8, *Chronicling America*.

shorten the period of the infection.”¹¹ Clearly this statement was directed at parents, and was, again, pushing the culpability for the continued presence of the polio epidemic onto a specific group of parents who were refusing to comply with the instructions of the health department in reporting cases of polio and following the established protocols.

Street vendors, especially pushcart vendors, who sold food were also targets of statements of blame. In most instances, it seems that pushcart vendors were, like horses, flies, and domestic animals, blamed because they were associated with uncleanness, in this case the uncleanness of New York Streets. This is quite clear in the *Evening World* on July 8th in an article with the headlines “Sunday Clean-Up Ordered to Curb Paralysis Peril: Whole City Will Be Flushed To-Morrow: Pushcarts Blamed.” The article quotes the Street Cleaning Commissioner John T. Fetherston as having said “It was noted to-day that conditions appear to have improved. That was largely because the push carts were off the streets, as they are on all Saturdays. These push carts, with their droppings of rotten fruit, are one of the worst filth creators of the city and they should be abolished.”¹² Because in this case the conditions of the street have been directly connected by the health department to the continuing epidemic, the fact that the pushcarts are guilty of causing the filthy conditions of the streets also means that they are guilty of providing the means for the continuance of the epidemic.

Interestingly, this focus on blaming groups other than the public health department for the polio epidemic did face some backlash, although it certainly did not get the same priority of position as the articles containing the health department

¹¹ “10,000 Citizen Police Begin Plague Fight.”

¹² “18 More Die From Infantile Paralysis,” 2.

indications of blame. On July 11th, the *Sun* published an article crammed into its back pages that addressed the mayor's announcement that "If it is possible to check the spread of infantile paralysis by makings so clean that the disease will have no place to breed, then New York City is going to do it." The writer acknowledged the potential value of this approach but also directed pointed questions at the authorities, asking "If conditions of uncleanness exist which are responsible for the present epidemic, who is to blame for them? By whom were they tolerated? What factor of legislative enactment or administrative weakness permitted their creation and perpetuation?" The writer concludes by stating that "The well taxed citizens of New York are entitled to explicit answers to these simple interrogatories."¹³ It seems that perhaps the health department's focus on presenting potential groups to blame for the epidemic has backfired somewhat. In this case, the emphasis on dirt being the cause (or at the least breeding ground) of disease led to an article questioning the "legislative enactment" and "administrative weakness" that permitted conditions inviting an epidemic to exist in New York City. Indeed, since the example of the *New York Tribune* redacting home remedies for polio indicates that at least some newspapers felt that they had the right, even the responsibility, to restrict material that would potentially be hazardous to the general welfare and the mission of the public health department, it is interesting to consider how many articles such as this one could have been written but never published. Regardless, despite the great number of groups whom the public health department and the press attempted to blame for the origin or continuation of the epidemic, at least in some places the government of New York City, and thus the public health department itself, was blamed for the epidemic.

¹³ "Cleaning Up New York," *Sun and New York Press*, July 11, 1916, 14, *Chronicling America*.

All of these examples have indicated how the public health department's emphasis on culpability affected press reporting of the epidemic. In most cases, newspapers picked up the scent of a guilty party to be tracked down and pinioned on the front pages from the health department, but in a small minority of cases, newspapers published articles questioning or criticizing the Health Department that the Department was surely trying to avoid. This is a prime example of the press serving both as a government information distribution medium but also as a medium for public discourse against government initiatives. However, in the case of the martial actions and terminology used to describe the epidemic, it seems that the newspapers latched onto the extant but not extensive usage by the public health department and exaggerated it in their own reporting in support of the Health Department's assertiveness, as I will explore in the following chapter.

CHAPTER THREE

Waging War on an Epidemic

The war against the epidemic became more general yesterday when Dr. Simon Flexner and Health Commissioner Haven Emerson addressed a gathering of 100 physicians from the infected Brooklyn district at the Polhemus Memorial Clinic, to enlist them in a systematic, concentrated fight.

Washington Times, July 2nd, 1916 ¹

Although not a newspaper from New York, this quote reflects the solidity of the military terminology that pervaded much of the press coverage of the epidemic.

The Health Department handled the epidemic as if it truly were a military conflict, from the allocation of resources like the Red Cross and the federal government and the institution of “martial” law (in this case, the Sanitary Code initially and eventually the quarantine measures) to the terminology used to describe the Department’s actions. But as much as the Department had declared war on polio, it did not know its enemy, and it did not know how the enemy was moving or how to stop it. In this scenario, the war terminology that the press used expansively was a way to bolster confidence in the Health Department’s actions and to make the epidemic less frightening for readers, an example of the supportive role the press performed at times during the epidemic.

The emphasis on martial terminology began in reporting with the way that polio itself was personified and made warlike. For instance, the *Sun* reported on July 8th that

¹ “Infant Paralysis Kills 58 in Week,” *Sun*, July 2, 1916, 58, *Chronicling America*.

“the germs of infantile paralysis did more deadly work than ever yesterday among babies,” further stating that “they attacked not only eighty-seven more children in this city and killed twenty-two... but they affected babies in ten other States outside New York.”² While still reflecting the progress of germ theory by specifying that it was polio germs that caused the damage, this article clearly personifies polio as an active worker, and emphasized a military context by referring to the cases of disease as instances of children being attacked. This is even more clearly militarized than the common reference to “attacks” of other diseases because of the distinction between the statement that “most grown persons have suffered in their childhood a mild attack of infantile paralysis” in the *New York Tribune* and the statement that polio germs attacked almost ninety children in a day here.³ Another instance of the term “attack” being hyper-militarized can be found in the *Sun* on July 5th. While reporting about the lack of awareness that children affected by infantile paralysis needed to be hospitalized, the *Sun* reported that “in one case two children, brothers, attacked two weeks ago, and attended only by the mother, were sent out in the streets to run about so soon as the fever abated.”⁴ This example is rather the opposite of the other, in that it is the passive voice used that indicates the agency of polio, again emphasized by the use of the word attack in a more military sense than a medical sense.

Unusually militarized terms are also used for the actions taken against the epidemic of polio and the people who work against the epidemic. Some of the more

² “Fight to Stop Paralysis Now Is Nationwide,” *Sun and New York Press*, July 8, 1916, *Chronicling America*.

³ “Plague Spreads to Middle West and Canada; 22 More Die Here,” *New York Tribune*, July 8, 1916, *Chronicling America*.

⁴ “60,000 Children Fleeing Epidemic,” *Sun and New York Press*, July 5, 1916, 0, *Chronicling America*.

prominent examples of this phenomenon include the *New York Tribune* having reported on July 10th that “there is to be no let-up in the warfare until the disease is driven out” and the many instances in the July 1st *Sun*.⁵ In this article, it was reported that Health Commissioner Emerson “arranged for his permanent advisory committee of physicians in private practice to act as a general staff in carrying on the war” and that “an important council of war held yesterday afternoon” in which Dr. S.A. Blatteis was “field chief of the fighting corps.”⁶ These examples all used blatant war terminology that had been adapted to use in the context of public health in this period.

Another group of people who indicate the militarization that abounded in the reporting of the epidemic was the Home Defence League. When reporting that the Home Defence League had been called into service, the *Tribune* stated that “One more resource of the city was marshalled yesterday to contend with the outbreak of infantile paralysis” and described the group as “a force of citizens organized to help the police meet exceptional emergencies.”⁷ Both of these descriptions framed the group as a military unit, using terms like “force of citizens” and “marshalled” rather than potentially less martial terms like “group” and “gathered.” This was highly militarized lingo for a group of individuals who were “reporting violations of the Sanitary Code and assisting thereby in a general clean-up campaign.”⁸

Even the way that the newspapers reported the involvement of the United States government reflected the language of warfare. When reporting that health authorities

⁵ “‘Clean City!’ Mayor Orders in Plague War,” *New York Tribune*, July 10, 1916, *Chronicling America*.

⁶ “Infantile Paralysis Cases Now 327, Increase of 47.”

⁷ “10,000 Citizen Police Begin Plague Fight.”

⁸ “10,000 Citizen Police Begin Plague Fight.”

were becoming concerned about a larger-scale epidemic, the *Tribune* wrote that the United State Health Service “does not yet view the spread of the disease outside of New York with alarm” but was concerned about New York itself because “ordinary weapons for use against the disease, such as isolation and quarantine, are helpless in a city of its size.”⁹ As a result of this lack of “ordinary weapons,” the *Tribune* reported that “it was decided that the United States service should have ‘carriers’ of the disease as its particular problem.”¹⁰

Even in the allocation of resources and involvement of government agencies, the epidemic was given priority like that of a military conflict. This included the O’Gorman Resolution, legislation passed through Congress that allowed the use of the federal immigration center at Ellis Island as a quarantine hospital facility. The O’Gorman Resolution was passed unanimously by the Senate on July 10th, well before the number of cases per day reached its peak, which occurred on August 5th.¹¹ That this epidemic garnered the attention of the United States Senate this early in the epidemic indicates that the government considered this epidemic just as much of a threat as the militarized newspaper descriptions displayed. In fact, July 10th was an important day for the involvement of the government in the battle against polio, as on that same day the public health leaders of New York City also “decided to ask Congress for a \$100,000 appropriation and permission to draft physicians from civil life” to fight the epidemic. Clearly, this epidemic is being treated in the same manner as a military threat; extra

⁹ “10,000 Citizen Police Begin Plague Fight,” 14.

¹⁰ “10,000 Citizen Police Begin Plague Fight,” 14.

¹¹ “Deaths From Infantile Paralysis Now 238,” *Evening World*, July 10, 1916, *Chronicling America*; Smallman-Raynor et al., *Poliomyelitis*, 156.

funding is appropriated for fighting a serious threat, and military needs override the freedom of individuals. At a time when the United States was not (yet) at war, the New York Public Health Department was requesting permission that would have only been granted under the direst situations of wartime. Not only were public health officials restricting individual freedom through quarantines and enforced hospital stays, they also wanted the ability to draft medical professionals. It seems that the public health department ruled under their own brand of martial law, and as Mayor Mitchel declared “there is to be no let-up in the warfare until the disease is driven out.”¹²

When the Health Department declared war on polio in June and July of 1916, the press followed suit, expanding upon the language of warfare used in describing both the progression of the epidemic and the people involved in working against it. In these early months of the epidemic, this dramatic expansion of warfare terminology indicated press approval of and support for the Health Department. When an epidemic is in progress that no one understands, the press has the option to report that the authorities are puzzled, or the option to report that the authorities are mustering a “fighting corps” against the attacks of the “dread paralysis.”¹³ These articles have shown that at the beginning of the epidemic, the New York press opted to cooperate with and support the Health Department by presenting them as a force that the epidemic had to reckon with. The next chapter will explore how this initially cooperative relationship between the Health Department and the press became more complex in the Health Department and press crusades against dirt in the streets and papers of New York City.

¹² “‘Clean City!’ Mayor Orders in Plague War.”

¹³ “Infantile Paralysis Cases Now 327, Increase of 47,” 3; “Dread Paralysis Crosses River,” *New York Tribune*, June 25, 1916, *Chronicling America*.

CHAPTER FOUR

Cleaning as Combatting Disease

On July 10th, the *Sun and New York Press* reported that Mayor Mitchel, “encouraged by the apparent success of sanitary arrangements in cutting short the rapid multiplication of [polio] cases,” had met with a council of aids to discuss “the best means of giving New York City the most drastic house cleaning in its history.”¹⁴ Health and municipal officials were in agreement on the value of cleaning New York streets, to the point that it was reported that the Street Cleaning Department was expecting “4,000,000 Gallons of Water to Be Used in Flushing the Streets Daily.”¹⁵ In the book that Emerson and the Health Department released after the epidemic, Emerson explains that the legal actions taken by the Health Department and the mayor in terms of the Sanitary Code represented a “clean up crusade,” and this certainly is an indication of the extreme lengths to which the Health Department would go in pursuit of clean streets in Brooklyn.

This chapter explores how the press responded to the Public Health Department’s “clean up crusade.”¹⁶ In the beginning of the epidemic, the press simply supported the Health Department initiative, but as the epidemic continue the crusading journalists of the newspapers, especially the *Evening World*, pursued their own leads in revealing the filth in the city. However, even having established their general support for the mission of cleaning up New York (and especially Brooklyn, due to the focus on immigrants and

¹⁴ “To Wash All N.Y. in Paralysis Fight,” 1.

¹⁵ “To Wash All N.Y. in Paralysis Fight,” 1.

¹⁶ *A Monograph on the Epidemic*, 59.

tenement residents), eventually the public and the press became displeased with the extreme measures that the Health Department pursued, and the press published articles condemning the ongoing measures.

Early in the epidemic, Mayor John Mitchel and the Public Health Department pushed for prosecution of violations of the Sanitary Code, despite acknowledging that there was not significant scientific support for this tactic. In announcing the beginning of the clean up project, Mayor Mitchel is quoted as saying “I am advised by the health authorities that all scientific experience points to the fact that it is communicated by direct personal contact, and that the germs do not live apart from the human body,” and that “whatever the method of transmission may be, I have determined that every precautionary measure in the nature of clearing out house refuse from halls, areas, yards, and cellars...shall be taken.”¹⁷ The success of Health Department’s vigor in pushing for prosecution of the Sanitary Code was reported in the newspapers, as in the *Sun and New York Press* of July 8th, in which it was reported that “the police have been making arrests, specially [sic] in Brooklyn, for violations of the sanitary ordinances.” The article went on to cite the actions of a few magistrates, reporting that “Magistrate Dodd, in the Butler street court, said he would go the limit in upholding the laws regarding cleanliness” and that he had “fifty stablemen before him on the charge of having filthy premises.”¹⁸ Another magistrate was reported to have “fined a fish dealer \$10 for exposing his wares” and to have “fine a clerk in the same shop \$2, announcing that if necessary he would

¹⁷ “To Wash All N.Y. in Paralysis Fight.”

¹⁸ “Fight to Stop Paralysis Now Is Nationwide,” 4.

impose jail sentences.”¹⁹ On another memorable day, the *Evening World* reported that “violators of the sanitary code to the number of four hundred were fined this morning in police courts throughout the city, as part of the clean-up campaign inaugurated because of the infantile paralysis epidemic.”²⁰

The press took these examples of the increasing criminalization of filth and adapted the principles to the printing of newspapers, including reporting instances of filth themselves as crusading journalists. On July 7th, the *Evening World* printed an article stating that “the Evening World today investigated a portion of the thickly populated district of the lower east side” and that investigators found “garbage cans filled with refuse, piles of dirt in the streets, cats dining on the refuse, babies by the hundreds with and without guardians, sitting in the middle of the sidewalks or playing around the garbage cans on stairways.”²¹ The third page of the newspaper was completely devoted to articles about the epidemic (and a few advertisements), and was headed with three pictures, titled “Scenes On Monroe Street Block in Which Babies Have Been Stricken with Paralysis.” The pictures were captioned “city rubbish wagon uncovered in Monroe Street,” “children playing near garbage cans at No. 26 Monroe Street,” and “uncovered garbage cans around doorsteps at No. 32 Monroe Street.” The crusading *Evening World* journalist apparently took the mayor’s announcement the previous day to heart and decided that it was also the place of journalists to arraign people guilty of unclean habits before the court of the press.

¹⁹ “Fight to Stop Paralysis Now Is Nationwide.”

²⁰ “Deaths From Infantile Paralysis Now 238,” 2.

²¹ “Garbage Cans in Streets, Babies Playing About Them, Breed Infantile Paralysis,” *Evening World*, July 7, 1916, 1, 3, *Chronicling America*.

The *Evening World* took this crusade and cooperation even further in August with its “Help-Your-Neighbor-Clean-Up’ Campaign.” On August 4th, the *Evening World* blazoned the headline “Evening World Launches Health Campaign to Check Infant Paralysis Epidemic” with an article detailing a plan for individuals in affected communities to educate their neighbors in proper precautions.²² The campaign was “Intended to Cure Filthy and Disease Breeding Conditions on Reeking East Side.” The newspaper instructed its readers in “How to Abate Infantile Paralysis by ‘Help-Your-Neighbor’ Plan,” with the first instruction being “If you live in a district where a case of infantile paralysis has developed, constitute yourself a committee of one to see that your block is kept thoroughly clean.”²³ One of the main goals of the campaign was to get food vendors to cover their carts with nets per Health Department instructions, and in this goal the campaign was endorsed by the License Commissioner George Bell and the Health Department. This campaign was the height of cooperation between the press and the Public Health Department, with the press adopting a campaign begun by the Health Department and taking it into their own hands with a call to solidarity and neighborliness.

However, there were also instances in which the press criticized the cleanliness crusade that the Health Department pursued. The most outstanding example of this was on July 13th, when the *Sun* printed an article in which the staff of the newspaper itself was criticizing the “panic” that the Health Department had created “in the name of sanitation.”²⁴ The article begins with the author stating that up to this point “The Sun has

²² “Evening World Launches Health Campaign to Check Infant Paralysis Epidemic,” *Evening World*, August 4, 1916, *Chronicling America*.

²³ “Evening World Launches Health Campaign to Check Infant Paralysis Epidemic.”

²⁴ “A Panic in the Name of Sanitation,” *Sun and New York Press*, July 13, 1916, *Chronicling America*.

urged its friends to obey cheerfully the regulations promulgated by the authorities in their effort to eradicate infantile paralysis from New York” and that they “emphasize those urgings now” and go on to state that “we believe the authorities, and particularly the Department of Health, have contributed unnecessary hardships to the situation that exists.” Further, the author argues, if the Health Department “does not make a radical change in its methods, it will create in the name of sanitation a panic whose effects will be more terrible than anything the city has to fear from the mysterious disease to which attention is now given.” One particular grievance addressed in the article is that “the Department, if it has not made a deliberate effort to inspire fright, certainly has exerted no sustained influence to induce rational calm” with the result that “several states have already formally declared quarantine against the city, and many communities have put the ban on it.”²⁵ That a newspaper that had previously been supporting the Health Department published such a stringently critical article gives an indication of the degree to which the Public Health Department pursued its crusade. A degree that apparently became unsupportable even by the Health Department’s allies in the press.

The press response to the Health Department’s clean-up crusade embodies the complexity of the relationship between the press and the Department during the epidemic. At first, the press supported the Health Department cleanliness measures, and even took the initiative to go on their own crusades, indicating that the press was playing a supportive role. But at times the press also served as the medium for public dissent, not only from the public but from the press itself. This complexity is also shown in the next

²⁵ It should, perhaps, be noted that the *Sun and New York Press* had an audience in the countryside (see page 6 of this edition, “To the Press Readers of the Sunday Sun”) and these quarantines against children would be especially troublesome to a newspaper with a large readership outside New York often delivered by newsboys.

chapter, which investigates the press response to the Health Department's isolation and quarantine measures.

CHAPTER FIVE

A City Full of Typhoid Marys

“Justice Serves as Acolyte”; “Supreme Court Justice William J Caw, who has a summer home at Good Ground, recently performed the duties of an altar boy at the Catholic church here, as children are not permitted on the account of the epidemic to enter churches.”¹ Since the polio epidemic of 1916 primarily affected children and was known widely as “infantile paralysis,” of course most of the Health Department policies and responses were focused on children, resulting in the bizarre situation of a city banning its children from most public places, from interacting with each other, and because of the surrounding health departments, leaving the city.

According to John Paul in his history of polio, the public health response to the 1916 epidemic represented “the high-water mark in attempts at enforcement of isolation and quarantine measures.”² Indeed, the quarantine and isolation measures taken by public health departments in 1916 were stringent, and increasingly public and press responses displayed thorough displeasure with the restrictive policies and the autocratic control of public health. As the New York City Public Health Department (and the public health departments of the surrounding areas) prevention methods became increasingly restrictive to movement and personal liberties, newspapers published increasingly vehement and critical articles where once they had published in support of the Health Department policies.

¹ “Further Decline in Paralysis Cases,” *Sun*, August 27, 1916, *Chronicling America*.

² Paul, *A History of Poliomyelitis*, 148.

In fact, a (negative) cultural icon had recently resurfaced in the minds of New York City public health officials in the recapture of Mary Mallon, known better to history as “Typhoid Mary.” Where 1916 was the “high-water mark” of isolation in the history of polio, Mary Mallon was the high-water mark of isolation and quarantine in the history of typhoid fever. Mallon was the first verified healthy carrier of typhoid fever, and as a result of the danger she posed to public health, the health department of New York City kept Mallon in enforced quarantine on islands off the coast for a total of twenty-six years. Identified in 1907, Mallon was finally allowed to return to the mainland and live under observation in 1910. Shortly thereafter, Mallon escaped the health department’s watch. She was rediscovered in 1915 after a typhoid outbreak in the Sloane Maternity Hospital in New York City, and was isolated once again on North Brother Island for the rest of her life.³ “Typhoid Mary” was an extremely important figure in the legal realm of public health, as she raised the ethical questions of whether one person’s personal rights could be violated (indefinitely) for the sake of public health. Clearly, the New York City Public Health Department’s decision in Mallon’s case set the precedent for the extreme restriction of personal freedoms in the name of public health. The precedent of “Typhoid Mary” allowed for the extreme ways in which public health departments responded to the polio epidemic only one year after Mallon was recaptured.⁴

At the beginning of the epidemic, in late June and the first two weeks of July, the health department’s isolation attempts were an instance of cooperation between the press

³ Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public’s Health*, c1996., 64–67. Further research on Mary Mallon can also be benefitted by L.N. Gibbins, “Mary Mallon: Disease, Denial and Detention,” *Journal of Biological Education (Society of Biology)* 32, no. 2 (Summer 1998): 127, *EBSCOHost*.

⁴ Leavitt presents a thorough exploration of this ethical dilemma in public health in “Extraordinary and Even Arbitrary Powers,” in *Typhoid Mary*, 39-69.

and the health department. One of the first ways in which the New York Public Health Department initiated quarantine measures was by publishing the addresses where polio cases were reported. After the epidemic, Haven Emerson himself described this practice as an “unusual step,” but emphasized that the decision to publish the addresses “was made after conference with the Corporations Counsel’s office and with the managing editors of some of the prominent newspapers.”⁵ These lists were published each day in the newspaper, initially accompanied by explicit warnings to avoid those streets. For instance, on June 29th, the first day the full address lists were published in the daily newspapers, the *New York Tribune* headlined the list “Paralysis Cases Public is Warned to Avoid” and also reported that “the advice printed on the lists” was “Study this list daily and keep your children away from the infected homes.”⁶ This first list included the addresses for ten days’ worth of cases, but due the increasing incidence of the disease each list soon contained only the past twenty-four hours’ worth of cases. The publication of these addresses was combined with the more common practice of placarding these “infected houses.” Newspapers also cooperated in presenting this process to the public, as on July 1st when in discussing the health department responses to the epidemic, reported that “placards printed in English, Italian, and Yiddish will help the authorities in warning children from approaching an infected place.”⁷ The emphasis on the helpfulness of these placards indicates a level of press approval of this measure. Overall, even in the “unusual step” of publishing length lists that took up increasing amounts of page space, the press

⁵ *A Monograph on the Epidemic*, 16.

⁶ “32 Paralysis Cases in Day,” 9, 1.

⁷ “Infantile Paralysis Cases Now 327, Increase of 47.”

cooperated with and supported the public health department's initial isolation and publication measures.

The press also initially supported the Health Department's attempts to exclude children from large public gatherings. As reported in the *Evening World* on July 3rd, the Health Department advised that "to prevent a spread of the disease children should be isolated as much as possible during the epidemic," and the Health Department certainly attempted to enforce this to a high degree.⁸ In fact, the very next day the *New York Tribune* reported that "all motion picture theatres in the five boroughs are to be closed to children under sixteen years of age until danger of further spread of the infantile paralysis outbreak is past."⁹ The headline under which this news was printed, "Paralysis Bars Children at All Movies," presents the subtle distinction that the personified paralysis is closing movie theaters, not the Health Department, an indication of the press's support of this measure. Likewise, the *Sun* reported the movie ban under the headline "Paralysis Bars Movies to Children," and reports more the more general closure of some Fourth of July celebrations with the headline "Epidemic Also Prevents Some Celebrations for the Fourth."¹⁰ A week later, the *Tribune* reported that "from many pulpits warnings of the Health Department against infantile paralysis were read with the letter from Commissioner Emerson asking that children and adults from infected houses be barred from houses of worship."¹¹ This indicated an increase in the restriction of movement, as it applied to adults as well as children, but again the reporting framed the restriction

⁸ "Paralysis Plague Fatal to 4 More; 67 New Victims," *Evening World*, July 3, 1916, 1, *Chronicling America*.

⁹ "Paralysis Bars Children At All Movies," *New York Tribune*, July 4, 1916, *Chronicling America*.

¹⁰ "Paralysis Bars Movies to Children," *Sun and New York Press*, July 4, 1916, *Chronicling America*.

¹¹ "'Clean City!' Mayor Orders in Plague War."

positively. The passage following this quote reports that “for the Health Department yesterday was the busiest Sunday in years,” linking this request for restrictions as an extension of the work that the Health Department was doing in the city as a whole.

However, the press also presented significant criticism of the extensive quarantine measures pursued by the Health Department, including the quarantines active in surrounding areas based on warnings issued by the New York City Health Department. Several stories of groups of people being forced to leave an area simply because they were from New York City were published. One such article focused on a group of young men who were on a hike and were forced to continue past many cities because of quarantines. The troop’s travails were recounted as “At Oakland the scouts were permitted to camp on the outskirts of the town. At Pompton they were allowed time enough for just one meal. They had to dodge Butler.”¹² The scoutmaster was quoted sympathetically as having said that “If quarantines aren’t raised...we may never get back.” Another article detailed the struggles of a group of New Yorkers ejected from a Jersey resort, with the subheading “Women and Children Forced to Sleep in Station.”¹³ The article explained that “125 men, women, and children whose only crime was that they had recently come from Brooklyn and New York, were routed from a bungalow colony and sent back to their summer homes” where they were then ejected “by the Mountainview health authorities, who were determined to take even unlimited precautions against infection from the paralysis plague.”¹⁴

¹² “Scouts on Hike Dodge Paralysis Quarantine,” *New York Tribune*, July 22, 1916, *Chronicling America*.

¹³ “Jersey Resort Ejects 125 New Yorkers,” *New York Tribune*, July 22, 1916, *Chronicling America*.

¹⁴ “Jersey Resort Ejects 125 New Yorkers.”

Although initially the press supported the Health Department's policies in response to the epidemic and pursued its role as public informant, as the burden of these restrictions became greater the press pursued a role as the voice of the public's displeasure. In some ways this reflects Herman and Chomsky's propaganda model, that until an issue is either an "approved" issue by a government elite or an oligarchic elite it will not be published.¹⁵ Here, the restrictions of personal liberties were accepted as long as it was immigrants and tenement residents (and their children) whose rights were being infringed. Once the restrictions became chafing for the elite populations, like the New Yorkers who were forced out of their summer homes, the issue became an issue that was published in newspapers. However, this can also be interpreted as an instance of a (semi) public sphere, in which the elites of the city (represented by and sometimes including the editorial staff of the press) are able to pursue rational critical debate with the information that the Health Department has given them. And while the Health Department's status as "rational and critical" is shaky, the pushback articles seem to embody these ideals of the bourgeois public sphere as found in the press of New York City in 1916.

¹⁵ Herman and Chomsky, "Manufacturing Consent," 166.

CONCLUSION

1916's Legacy from Infantile Paralysis to Polio

Although the New York City Public Health Department issued a daily press release with information for newspapers to publish, as I have examined in this paper, the relationship between the press and the Health Department was more complex than the Department dictating to the press exactly what would be published. In some scenarios, including the expansion of warfare terminology and cleanliness crusades, the press expanded upon what the Public Health Department was doing in support of the Department. But in other scenarios, the press presented critiques of the Health Department, including turning the Department's language of blame against them, and in response to the increasingly extreme pursuits of cleanliness and restrictions of personal liberties in quarantine measures. So although the press did function as a medium for health administration communication, a role upon which it often expanded rather than simply taking dictation from the Health Department, it also served as a medium for sounding public discontent with the increasingly restrictive responses to the epidemic.

This epidemic has resonances with the history of public health in terms of the groups being targeted as culpable for the epidemic, although for polio this targeting changed over time. As Rogers and Kraut both argue, the Italian immigrant communities in New York were targeted as responsible for the epidemic out of biased assumptions that immigrants were essentially unclean, even though statistical evidence available to health officials in 1916 clearly indicated that even though the epidemic began in an Italian community, Italian communities were less affected by the disease overall. However, the history of polio after 1920 did have a different cultural underpinning than the polio

epidemics after 1920, as Rogers indicates in “Dirt, Flies, and Immigrants.” These early epidemics were much more focused on the associations of disease with immigrants or people who lived in tenements, and were thus considered “dirty,” whereas in later epidemics the disease lost much of this initial stigma. In part this was due to the efforts of non-profits like March of Dimes to contribute to assisting polio survivors, but it was also due to the publicity which Franklin Delano Roosevelt brought to the disease, both by his public diagnose and his founding of the National Institute for Infantile Paralysis.¹ It took a public figure of significant authority being open about his disease and his resulting paralysis to help to destigmatize the disease and those affected by it.

The debate of public health versus personal and privacy rights that revolved around “Typhoid Mary” and continued throughout the polio epidemic in 1916 continues to be an issue to this day, and has been shaped significantly by the reactions to the way that the polio epidemic in 1916 was handled and the critical public response transmitted by the press. This debate came to the forefront again recently during the Ebola epidemic in 2014. Columnist Charles Krauthammer argued passionately for the imperative of protecting public health even at the cost of privacy and personal rights was published in the *Chicago Tribune* on October 17th. The article was titled “Ebola vs. Civil Liberties,” and claimed that “in times of a uniquely dangerous threat, we Americans have trouble recalibrating our traditional (and laudable) devotion to individual rights and civil liberties,” and addresses issues of privacy, quarantine, evacuation, and travel bans, the four categories of response to the polio epidemic in 1916.² So although Krauthammer

¹ David M. Oshinsky, *Polio: An American Story* (Oxford ; New York: Oxford University Press, 2005), 53.

² Charles Krauthammer, “Ebola Vs. Civil Liberties,” *Chicago Tribune*, October 17, 2014, sec. News, ProQuest.

claims that the devotion to individual rights is “traditional,” implying that they have withstood the test of time, in fact a crucial moment in the history of this debate came only one hundred years before this article. During the polio epidemic of 1916, the scales definitely tipped to public health, and the critical response and lack of solid results (along with many other factors, of course) discouraged public health organizations from attempting this widescale restriction of personal rights again. Krauthammer’s article shows that the debate of public health versus personal rights, in which the polio epidemic participated and played a large role, remains a topic of considerable import and ongoing discourse.

As noted by Paul, historians tend to prefer to study the victorious narrative of the eradication of polio (in the west, let it be remembered) from the time of Franklin Delano Roosevelt until the Salk trials in 1953 rather than the more complicated early history. But in many ways the 1916 epidemic determined how the future epidemics of polio and other diseases would be handled in the United States for the future. It was evident not only from the data collected by the health service departments involved but also from the backlashes from the public through the press that the level of quarantine attempted in 1916 was both impractical and ineffective (in handling polio at the very least). This determination continued to push health departments to find preventative measures for polio when they understood that quarantine, even on an extreme level, would likely not be enough to stop the spread of the epidemic. Ultimately, the great push for vaccines and the better balance in the weighing of personal rights versus public health are the legacy of the ravages of the dread paralysis that wreaked havoc in the eastern United States and especially the city of New York in 1916.

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A. Primary Sources

A.1: Primary Source Monographs

A Monograph on the Epidemic of Poliomyelitis (Infantile Paralysis) in New York City in 1916, Based on the Official Reports of the Bureaus of the Department of Health. New York: M.B. Brown Printing and Binding Co., 1917. *Hathi Trust.*

This monograph was published by Haven Emerson and the Public Health Department, who of course had access to the large amounts of data collected during the epidemic. The monograph presents all the actions taken by the Health Department in response to the epidemic, including a chapter devoted to the laws and legal precedent that permitted their actions in especially controversial situations, such as the forcible removal of children from parents' homes. Of course, the monograph is written in support of the actions the Department took. Other health departments had written up reports about epidemics that took place in their locales, but most were only published in newspapers or perhaps journals, so this monograph is exceptionally thorough (in part due to the unusually high amount of resources available to the New York City Health Department). This monograph is useful in my resource as a detailed account of the Health Department's knowledge of and response to the epidemic's situation as it developed.

A.2: Newspaper Articles

(Organized by newspaper, then date)

A.2.i : *New York Evening World*

The *New York Evening World* was a daily penny newspaper printed from 1887 to 1931. Originally owned by Joseph Pulitzer, in 1916 the paper had as its editor Charles Chapin, who pursued a sensationalistic agenda.

"Paralysis Plague Fatal to 4 More; 67 New Victims." *Evening World*. July 3, 1916. *Chronicling America*.

This article emphasizes the restriction of Fourth of July activities due to the paralysis epidemic, and also gives instructions on keeping children isolated during the epidemic.

"Garbage Cans in Streets, Babies Playing About Them, Breed Infantile Paralysis." *Evening World*, July 7, 1916. *Chronicling America*.

This crusading article identified filthy conditions in Brooklyn, especially around Monroe Street and Gowanus Creek (areas primarily inhabited by Italian immigrants), including trash on the streets and stray cats.

“18 More Die From Infantile Paralysis.” *Evening World*, July 8, 1916. *Chronicling America*.

This paper tells of the increasing strictness of the municipal response, from parents summoned to court to reveal where they have hidden their children to police giving summonses for Sanitary Code violations. It also reports the involvement of the Home Defense League.

“Deaths From Infantile Paralysis Now 238.” *Evening World*, July 10, 1916. *Chronicling America*.

This article reports the Senate approval of the O’Gorman resolution (which allowed for the Ellis Island facilities for quarantine, and also includes statistics of over 400 people fined for Sanitary Code violations, with uncovered garbage cans and dirty living spaces listed as common infractions.

“*Evening World* Launches Health Campaign to Check Infant Paralysis Epidemic.” *Evening World*, August 4, 1916. *Chronicling America*.

This article depicts the beginning of the *Evening World’s* neighbor-help-neighbor campaign to clean up the city, a prime example of the press expanding upon Health Department initiatives.

A.2.ii: *New York Tribune*

Founded by Horace Greeley in 1841, the *New York Tribune* was a penny paper as well. Although it was in competition with the *Sun* and the *Herald* and its circulation did not match theirs, it was still a major daily in New York City. After Greeley, the paper was led by Whitelaw Reid until 1912, then by Reid’s son, Ogden. Under Reid, the newspaper became a major Republican newspaper, and it tended to have moralistic overtones.

“Infantile Paralysis Scare in Brooklyn.” *New York Tribune*, June 18, 1916. *Chronicling America*.

This is the first announcement of the epidemic in the *New York Tribune*, and it depicts the Health Department’s surprise and confusion; it also reports the first quarantines of children.

“Dread Paralysis Crosses River.” *New York Tribune*. June 25, 1916. *Chronicling America*.

This article represents a change in the level of reporting of the epidemic, as the press reports more on the epidemic after it began affecting Manhattan.

“32 Paralysis Cases in Day.” *New York Tribune*. June 29, 1916. *Chronicling America*.

This article from when the epidemic was first affecting Manhattan reports Emerson’s new policy that janitors be held responsible for the conditions of the building they work in and for reporting cases in that building, representing the increasing strictness of the Sanitary Code.

“Paralysis Bars Children At All Movies.” *New York Tribune*. July 4, 1916. *Chronicling America*.

This article details Emerson’s decision to ban children from movie theaters, one of the first such measures since schools were closed for the summer.

“Plague Spreads to Middle West and Canada; 22 More Die Here.” *New York Tribune*, July 8, 1916. *Chronicling America*.

This article detailing the progress of the epidemic strongly emphasizes a language of warfare against the incursions of the disease, and it also reports the discussion of an intensified quarantine.

“10,000 Citizen Police Begin Plague Fight.” *New York Tribune*, July 9, 1916. *Chronicling America*.

This article reports the involvement of the Home Defense League and the increased crusade against dirt. It also includes the explanation of the *New York Tribune*’s decision not to print several home remedies along with the insistence that readers go to a real doctor.

“‘Clean City!’ Mayor Orders in Plague War.” *New York Tribune*, July 10, 1916. *Chronicling America*.

As indicated by the headline, this article reports Mayor Mitchel’s directive that the Sanitary Code be enforced strictly, and it also reports that Emerson had asked that children not be permitted in churches.

“Jersey Resort Ejects 125 New Yorkers.” *New York Tribune*, July 22, 1916. *Chronicling America*.

This article reports the strictness of quarantines in New Jersey against not just children from New York but also adults. It also shows that when adults are targeted, the press presents the measures negatively.

“Scouts on Hike Dodge Paralysis Quarantine.” *New York Tribune*, July 22, 1916. *Chronicling America*.

This short article tells the story of a group of scouts on a hike extended by the fact that all the cities they come to refuse to let them stay, displaying the widespread quarantines around New York City.

“Sees Inspectors Fight Paralysis.” *New York Tribune*, August 20, 1916. *Chronicling America*.

This article served as a positive expose on the condition of the Health Department approach and the hospitals, describing the pitiful children in the wards and the heroic nurses and doctors helping them.

A.2.iii: *Sun, Sun and New York Press*

Several articles in this paper were published under the mantle of the combined *Sun and New York Press*, which only existed for part of July in 1916. This was one of several mergers that Benjamin Munsey initiated in the years after he purchased the newspaper in 1916. The *Sun* was one of the original penny papers, begun under Benjamin Day.

“Paralysis Sweeps Brooklyn Infants.” *Sun*, June 18, 1916. *Chronicling America*.

This article shows the initial responses to the epidemic and the initial evaluation of the danger and identifying characteristics of the epidemic.

“Infantile Paralysis Cases Now Reach 183.” *Sun*. June 28, 1916. *Chronicling America*.

Dr. Haven Emerson is highly quoted in this article, both in his initial estimate that the epidemic will last the whole summer and his statement that the rapid spread of the disease was parents’ fault for not identifying cases in their children.

“Infantile Paralysis Cases Now 327, Increase of 47.” *Sun*. July 1, 1916. *Chronicling America*.

In this article, the *Sun* reports the gathering of Emerson’s council of advisors in highly militarized terminology, and also reports the claim that the epidemic came from Italy.

“Infant Paralysis Kills 58 in Week.” *Sun*. July 2, 1916. *Chronicling America*.

This article continued the language of warfare used to describe the epidemic and the health department fighting it.

“Paralysis Bars Movies to Children.” *Sun and New York Press*. July 4, 1916. *Chronicling America*.

This first edition of the combined *Sun and New York Press* reports the increased restriction on children’s movements and large public gatherings, including the

wholesale ban of children from theaters and the revocation of permits for Fourth of July activities.

“60,000 Children Fleeing Epidemic.” *Sun and New York Press*, July 5, 1916. *Chronicling America*.

This article enumerates the panic caused by the epidemic in the extremely high number of children and families that left New York early in the epidemic. It also shows the Health Department’s emphasis on unclean conditions in the tenements, especially in Brooklyn.

“Infant Paralysis in Epidemic Stage.” *Sun and New York Press*, July 6, 1916. *Chronicling America*.

This article presents the beginning of the strict quarantines against children from New York (especially in New Jersey) as well as the warnings issued by the Health Department.

“Fight to Stop Paralysis Now Is Nationwide.” *Sun and New York Press*, July 8, 1916. *Chronicling America*.

As the epidemic affected more states, this article reports Emerson’s insistence that fighting dirt in the city through the increased punishments for Sanitary Code violations would end the epidemic.

“Paralysis War Pressed; Rate of Death Cut.” *Sun and New York Press*, July 9, 1916. *Chronicling America*.

This article reported the Senate approval of the bill to allow Ellis Island to be used as a quarantine facility, as well as another passage on the importance of maintaining cleanliness on city streets and the use of police forces for this end.

“To Wash All N.Y. in Paralysis Fight.” *Sun and New York Press*, July 10, 1916. *Chronicling America*.

This article reports Mayor Mitchel’s instructions to clean the city in order to combat the disease, although the mayor also acknowledges that this process has only a possible chance of stopping the epidemic. It also reports Cuba’s decision to restrict children coming from the US because of the epidemic.

“Cleaning Up New York.” *Sun and New York Press*, July 11, 1916. *Chronicling America*.

This article presents a critique of the previous day’s announcement by the mayor that cleaning the city would help stop the epidemic, and questions which government agency allowed these filthy conditions to develop, and is therefore responsible for the epidemic.

“A Panic in the Name of Sanitation.” *Sun and New York Press*, July 13, 1916. *Chronicling America*.

This editorial by the *Sun* staff presents a stringent critique of the Health Department's policies of the cleanliness crusade and the autocratic decisions made by the Health Department.

"Further Decline in Paralysis Cases." *Sun*, August 27, 1916. *Chronicling America*.

Once again published under the mantle of the *Sun* alone, this article contains the story of a justice who did the altar boy's job at mass because children were banned from churches.

A.2.iv: Other Newspapers

"Infantile Paralysis." *Bennington Evening Banner* (Vt). June 27, 1916. *Chronicling America*.

This article actually does not report on the epidemic in New York City, but reports the results of an investigation of an earlier epidemic. It reports that polio is rural and while typically follows human transit it also makes bizarre jumps into isolated regions.

"Italian War Refugees Bring Paralysis Germ." *Barre Daily Times* (Vt). July 1, 1916. *Chronicling America*.

This article from an outside newspaper reports the viewpoint that Italian immigrants were responsible for the epidemic in New York City in very strong language.

B: Secondary Sources

B.1: Polio

Gould, Tony. *A Summer Plague: Polio and Its Survivors*. New Haven: Yale University Press, 1995.

A work which emphasizes the personal experiences of polio survivors with the history of the epidemic from New York 1916 through the eradication in the west in the 1970s. Tony Gould is an accomplished author, with an interest but not a formal education in history, who began this project because of his own experience with contracting polio. Gould uses both scholarly sources and personal accounts in his history of polio, and his citations and selected bibliography are evidence of extremely thorough research. Although not a historian, Gould presents a thoroughly researched and highly respectable account of this disease's history in America and Britain, with emphasis on connecting scholarly research with personal accounts. For my research, this book presents a chapter focusing on the

1916 epidemic that provides an excellent summary of the most important events and people involved in the epidemic.

Oshinsky, David M. *Polio: An American Story*. Oxford; New York: Oxford University Press, 2005.

David Oshinsky is the director of Medical Humanities at New York University and a professor of history. Oshinsky's book is a thorough history of polio from the time of Franklin Roosevelt's creation of the Warm Springs facility through the eradication of polio in the west. His book contains a chapter devoted to the "early epidemics," with a few references to the 1916 epidemic, but by and large Oshinsky focuses on the later history of polio in America, including a chapter on the experience of polio survivors into current times. This is an approachable text with an extensive bibliographical background and footnotes. Oshinsky's history is an excellent resource for the story of the journey from Franklin Roosevelt to the eradication of polio in the west.

Paul, John R. *A History of Poliomyelitis*. Yale Studies in the History of Science and Medicine 6. New Haven: Yale University Press, 1971.

John Paul was the leader of Yale's Poliomyelitis Study Unit and a professor of preventative medicine and epidemiology, and this book was the culmination of Paul's knowledge of polio gained through this experience and through other research. This book covers the history of polio from ancient times through the Salk vaccine trials in 1951, with special focus on biographical sketches of major historical figures (such as Simon Flexner and Haven Emerson). Paul's writing is scholarly but easily approachable. Especially during the biographical sketches, Paul writes very favorably of the institutions and health departments discussed. This history is a very useful and thorough overview of polio, from a useful if perhaps overly positive perspective of a preventative health expert.

Rogers, Naomi. *Dirt and Disease: Polio Before FDR*. Health and Medicine in American Society. New Brunswick, N.J.: Rutgers University Press, 1992.

Naomi Rogers is a professor of the history of medicine at Yale University since 1990. In this book, an extension of a previous journal article, Rogers argues that the traditional associations of dirt with disease defined how scientists and public health officials dealt with early polio epidemics, especially the epidemic of 1916. Rogers refers to both primary and secondary sources, although here again the lack of secondary sources about polio before 1920 becomes problematic, so primary sources are especially important. The book is scholarly but easily readable. This book is important as a secondary source focusing on public health responses and their underlying assumptions in the beginning of polio's epidemic era.

———. “Dirt, Flies, and Immigrants: Explaining the Epidemiology of Poliomyelitis, 1900–1916.” *Journal of the History of Medicine and Allied Sciences* 44, no. 4 (1989): 486–505.

This article, the precursor to the above book, is a more condensed argument of the connections between traditional assumptions about dirt and disease and the public health habit of blaming immigrants for epidemics, especially in the 1916 polio epidemic. This article presents a thorough, compact argument about the public health relationship with immigrants during the epidemic, whereas in comparison Rogers’ book contains much more historical exploration and examination of the more general history of the epidemic. Thus, this article is excellent for a scholarly opinion of the public health department’s actions and motivations during the epidemic, which aligns with Kraut’s points in *Silent Travelers*.

Smallman-Raynor, Matthew, A.D. Cliff, B. Trevelyan, C. Nettleton, and S. Sneddon. *Poliomyelitis: Emergence to Eradication*. Oxford Geographical and Environmental Studies. Oxford; New York: Oxford University Press, 2006.

A scientifically and geographically focused text which divides the history of polio into three categories (ancient to early modern times as an endemic disease, the late eighteenth to mid-twentieth centuries as an increasingly epidemic disease, and the 1950s onward as a receding disease). The primary author specializes in the spatial study of disease, and has also published research on epidemics during war and HIV infection. As noted by the authors in the preface, this book focuses on epidemics that have more detailed demographic and cartographic information available, due to the geographical focus of their research. While engaging with scholarly writings on polio, this book focuses on the analysis of primary source information of epidemics in a scientific way. This book is an excellent resource for the history of not only polio as a historical disease and its progression, but for specific and detailed analysis of the progression of the 1916 epidemic.

B.2: Public Health

Burnham, John C. *Health Care in America: A History*. Baltimore: Johns Hopkins University Press, 2015.

John Burnham was a professor of history focusing on the history of medicine at the Ohio State University. This book covers the history of public health in America from the time of the Civil War onward, and depicts the development of America’s public health as a process of modernization. The book is an approachable overview with all relevant footnotes and citations for further and more detailed research. This book is helpful in understanding how the epidemic of 1916 fits into the larger framework of the history of public health.

Gibbins, L.N. "Mary Mallon: Disease, Denial and Detention." *Journal of Biological Education* (Society of Biology) 32, no. 2 (Summer 1998): 127.

L.N. Gibbins is a microbiologist. This article covers the history of "Typhoid Mary" (Mary Mallon) and the consequences of her being discovered as the first verified healthy typhoid carrier, beginning with the scientific background of healthy typhoid carriers and expanding into the historical and cultural repercussions of the New York City Health Department's handling of the situation. This is helpful in establishing the background of the Health Department and precedents of putting public health above personal rights.

Kraut, Alan M. *Silent Travelers: Germs, Genes, and the "Immigrant Menace."* New York, NY: BasicBooks, 1994.

Alan Kraut is a professor of history at American University, with specialties in the history of medicine and immigration. In this book, Kraut examines the history of prejudice in public health against immigrants due to conceptions of bad genes or associations with uncleanness.

Leavitt, Judith Walzer. *Typhoid Mary: Captive to the Public's Health.* 1996.

Judith Leavitt was a professor of the history of medicine, history of science, and women's studies at the University of Wisconsin. In this book, Leavitt examines the history of the cultural icon of "Typhoid Mary" from a variety of lenses, including the public health response, the ethical dilemma of how to handle an uncooperative healthy carrier, and the press narratives. Whereas Gibbins' article focused on the scientific aspects, Leavitt's book presents a variety of useful lenses into the history of this infamous historical figure. In my research, this book provides helpful background on how the Health Department handled healthy carriers, like the ones they suspected to be at work in the polio epidemic in 1916.

B.3: News Theory

Habermas, Jürgen. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society.* Translated by Thomas Burger. Cambridge, Mass: MIT Press, 1991. *EBSCOHost*.

Jürgen Habermas was a professor of philosophy and sociology, and his theories have been highly influential. In this work, Habermas details his theory of the public sphere, a rational and critical forum for public debate. In his explanation of the origin of this sphere, Habermas indicates that the press was an essential means to the establishment of the bourgeois public sphere. The press in New York City during the epidemic participates in the tradition that Habermas identifies as the public sphere.

Herman, Edward S., and Noam Chomsky. "Manufacturing Consent." In *News*, edited by Howard Turner, 166–79. Oxford University Press, 1999.

Edward Herman was a professor of finance and a media analyst, and Noam Chomsky was a linguist, among many other fields. In this work, Herman and Chomsky identify five filters that restrict the press from publishing dissenting materials, including the profit-orientation, size, advertising dependency, "flak," and anti-communism. While anti-communism does not necessarily apply to this study, the other four filters help to explain the press coverage during the epidemic.

Stevens, John D. *Sensationalism and the New York Press*. Columbia History of Urban Life. New York: Columbia University Press, 1991.

John Stevens was a professor of communication at the University of Michigan at Ann Arbor. In this book, he articulates the phenomenon of sensationalism in the New York press through three eras, the 1830s, the 1890s, and the 1920s, with an introduction that defines sensationalism and argues that it has been a global and timeless phenomenon. Of course, Stevens makes extensive reference to the newspapers and most important historical actors in the New York press. Stevens's work is easily readable but is extremely well documented, with footnotes on almost every sentence. This book provides insight into the press trends of New York leading up to and after the epidemic.