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A Comparative Analysis of Media Responses to 1918-1919 Influenza Pandemic in Cleveland OH, and St.Louis, MO

Research

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BIOGRAPHY

Tarun Jella is a senior undergraduate student in History at Case Western Reserve University pursuing a masters in public health next year. Tarun hopes to become a historian physician activist working to reform government policy relating to health disparities and medical school curricula to incorporate training in the humanities.

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Introduction

The Pandemic of Spanish Influenza (i.e. the 1918-1919 flu) was the deadliest disease in recent history and undoubtedly the most widespread epidemic of the 20th century infecting nearly one third of the global population and leading to an estimated 50 million deaths within a single year (Bristow, 2012). It left a lasting legacy in the sheer number of people impacted and profound implications for the future of public health safety. The life expectancy in the United States, which climbed steadily throughout the early 20th century, experienced a dramatic fall by more than 10 years from approximately 51 to 39 in 1918 (Taubenberger, 2006). The unprecedented mortality of the pandemic is often attributed to two distinguishing factors. First, it killed more people than any other disease in a period of similar duration in the history of the world and second, it killed a uniquely large proportion of the young and otherwise healthy (Barry, 2005). For this particular strain of flu, death was the result of the body's immunological reaction to the virus, making those with the strongest immune systems most susceptible. The United States Census Bureau reported from a sample of 272,500 male influenza deaths in 1918, that nearly 49% were between the ages 20 to 39, whereas only 18% were under 5 years of age and 13% were over 50 years of age (Crosby, 2003).

"For this particular strain of flu, death was the result of the body's immunological reaction to the virus, making those with the strongest immune systems most susceptible."

Given the destructive nature and broad sweep of Spanish Influenza around the world, it is essential to consider the variability with which it traveled. Large discrepancies in epidemic intensities were experienced by regions across the country and were often best documented among major urban centers. Most had corresponding public health statistics, daily newspapers, administrative records and civilian testimonies that, taken all together, could provide a clearer picture of the events that unfolded. The 1918-1919 pandemic itself occurred in a series of three waves. The first was a highly infections yet mild form in the spring of 1918; the second was the most virulent and life threatening strain in the autumn of 1918; and the final wave was another weaker strain spread in the spring of 1919 (Barry, 2005). Granting the variation of peak mortalities experienced across the United States, the great majority of deaths occurred in the autumn of 1918. Thus, for the purpose of this discussion, the second wave will be given central focus, specifically the months from September to December.

A combination of health predispositions as well as variance in administrative prudency, public awareness, and civilian compliance allowed some cities to pass through the epidemic with only moderate casualties while others were completely devastated. For instance, Philadelphia, considered the hardest hit along the east coast, lost more than 13,000 people with an excess death rate of 675.5 per every 100,000 civilians in the last 4 months of 1918 (Opdycke, 2014). Conversely, some places endured lower excess death rates, such as Minneapolis with only 267 per every 100,000 civilians ("Minneapolis," n.d.). Generally, cities with the most drastic differences in death rates also tended to vary tremendously in terms of population size, demographics, and geography among a myriad of other factors. The two cities of St. Louis, Missouri and Cleveland, Ohio, however, seem particularly well-suited for a comparison and present unique opportunities to control for such variables around the time period of the pandemic. In the 1920 census, Cleveland had a population of 796,841 and St. Louis had a population of 772,897 (United States Bureau of the

Census, Davis, & Lappin, 1923). The former lost 2,883 citizens as compared to the 3,576 lost by the latter (United States Bureau of the Census et al., 1923). Adjusted for population size and baseline mortality, St. Louis endured an excess death rate of 325 people per every 100,000 civilians throughout the autumn wave while Cleveland suffered an excess death rate of 414 for every 100,000 during the same period (United States Department of Commerce, 1921). This paper will seek to elucidate this discrepancy by evaluating contemporary attitudes towards the flu in the media archives of either city in consort with those of national public health organizations. I will demonstrate how use of key phrases in newspapers established a more serious tone in St. Louis as opposed to one of initial triviality in Cleveland. This analysis will provide insight into why some cities suffered the flu much more intensely than others.

Historiography

A multitude of explanations have been posited to explain the relative success of certain cities in the face of the Spanish Flu. In 2011, a study was conducted in which statistics from 66 U.S. cities were compared in the context of the entire decade, divided in the pre-pandemic (1910-1917) and pandemic (1918-1920) periods. The researchers discovered that mortality patterns through the pandemic correlated with geographical variation in baseline health conditions and, more specifically, pneumonia mortality rates in the decade leading up to 1918. A correlation was also observed for pre-pandemic and pandemic influenza mortality, although it was significantly weaker and more nebulous (Acuna-Soto, Viboud, & Chowell, 2011). This would imply that the fortune of St. Louis and relative misfortune of Cleveland may have been significantly influenced by complex health predispositions as opposed to the actions or public responses of either city.

One school of thought proposes that St. Louis's success was due to its central location within the United States and the resulting additional time it had to prepare for the flu. The city experienced the fall wave later than most of the country and its relative 'health' could be understood in the context of geographic insulation (Coffey, 2013). John Barry echoes this idea in his work, *The Great Influenza*, asserting that the East and South were hit the earliest and hardest, The West Coast hit less hard, and the middle of the country suffering the least through the entire pandemic.

> *"They thought that they had controlled it, that they had stopped it. They were mistaken. The masks were useless. The vaccine was useless. The city had simply been lucky. Two weeks later, the third wave struck and made the final death rates for the city the worst on the West Coast."*

He claims, "Cities struck later in the epidemic also usually had lower mortality rates… the virus was never completely consistent but places hit later tended to be hit more easily" (Barry, 2005, p. 372).

Conversely, Alfred Crosby (2003) advances the idea that no such sense could be made even in relation to the flu's geographic trajectory, stating, "The factors at work in the pandemic were so numerous and the ways in which they canceled or gained power from one another are so obscure that very few generalities can be drawn" (p. 64). The disease moved too quickly to be understood in such a manner and behaved in more of a 'hit-and-run' fashion than the slow, siege-like progression of other epidemics (Crosby, 2003). Additionally, closing orders attempted in large cities did little to limit the spread of influenza and death

tolls in communities; enforcing such strict measures often failed to contain the spread (Crosby, 2003). In reference to San Francisco's success through the second wave of the epidemic, Barry (2005) describes:

> They thought that *they* had controlled it, that *they* had stopped it. They were mistaken. The masks were useless. The vaccine was useless. The city had simply been lucky. Two weeks later, the third wave struck and made the final death rates for the city the worst on the West Coast (p. 372).

Although these theories seem applicable when comparing St. Louis with the overwhelmed coastal cities, a comparison with Cleveland requires an alternative explanation. A recent investigation published in the *Proceedings of the National Academy of Sciences*, presented a comparative analysis of hygiene, sanitation, and general health policies and measures adopted during the 1918-1919 Influenza epidemic. They found that the timing of interventions had a clear and direct impact on death tolls within the autumn wave. Cities that introduced measures very early on in their epidemics (often within days of the first reported case) achieved significant reductions in peak and overall mortality. Cities that were slow to act, or those that relaxed after assuming the success of initial interventions, endured much higher mortality rates (Bootsma, Martin, & Ferguson, 2007). Another similar study involving the comparative analysis of 17 U.S. cities determined those places where non-pharmaceutical interventions (NPIs) were implemented promptly and sustained throughout the duration of the threat, experienced on average 50% lower excess death rate (Hatchett, Mecher, & Lipsitch, 2007). Sandra Opdycke, in a 2014 volume on the pandemic, similarly asserts that public closing orders helped to soften the impact of the epidemic when they were strictly enforced and maintained until mortality rates were on a definitive decline.

Influenza Pre-1918

Up until the fall of 1918, influenza was considered a serious threat to only the very young and the very old. In a 2012 monograph, Nancy K. Bristow evaluates the standing of influenza within the contemporary American psyche. She contextualizes the beginnings of the 1918 epidemic with the influenza epidemic of 1889-1890, which, in the memory of most adults, was little more than a nuisance. The idea of the so-called 'grippe' became domesticated over the years through familiarity, and even entered the realm of humor whenever it was unreasonably exaggerated or feared. Many people accepted it as a normal part of life and held it as a shared reference point of the cultural lexicon (Bristow, 2012). An 1889 *Cleveland Plain Dealer* article on the topic called it an "annoying and amusing disease," affirming that sense of humor:

> Everybody catches it, even the baby, and the few who don't can look on and enjoy the fun… Sneezing becomes involuntary and unavoidable… The disease is seldom if ever fatal and the usual effect produced is one of amusement at a whole population sneezing. ("La grippe," 1889, p. 8)

This was the prevailing opinion of influenza and influenced most discussion of the subject until death counts began rising in the autumn of 1918. Before analyzing the foresight, or lack thereof, in communities nearly 100 years ago, it must be established that 'non-pharmaceutical interventions' mentioned above were enacted at significant cost. The economic and psychological consequences of mandatory closures, quarantines, reduced business activity, and mass panic amidst the public must all be considered, particularly within the context of World War I. All facets of society were mobilized towards the war effort and optimism as well as patriotism were of a primary importance. When influenza appeared in the news, it was often described in relation to

the war, and, more specifically the inability of the enemy to handle the epidemic in Europe ("Has Kaiser got the flu?", 1918; Geasty, 1918; "Influenza aided allied victory," 1918). Extreme circumstances would be required to prompt any widespread acknowledgement of an influenza crisis on the home front at the risk of dampening wartime production or morale. Even greater danger would be required to intentionally direct public awareness and resources towards influenza, or enact stringent non-gathering policies or business closures. Had the second wave of influenza been mild, as was the case with previous waves, officials would not have risked sparking a mass panic or economic slump at such a crucial point in the war.

The National Story

By mid-summer the epidemic was still noticeably absent from the United States. Despite a highly infectious character and success at ravaging the armies in Europe, the disease could not seem to penetrate beyond the North American coastline (Crosby, 2003). The second wave of the epidemic began with ill sailors returning from Europe to Commonwealth Pier in Boston and soon made its way to Fort Devens. The military practice of continuous transfer from one camp to another for extra training facilitated rapid spread of the flu and since the infected showed no symptoms for the first several days, even the healthiest appearing soldiers could have been carriers (Opdycke, 2014). Essentially, some 1.5 million adults who were the most perfectly qualified to cultivate the most dangerously virulent strain of influenza in history were living in a small network of military camps across the nation (Crosby, 2003). News of the sickness among the military was approached in a variety of ways. A September 12th article in the *Cleveland Plain Dealer* stated, "It is a marvel due to the perfection of our medical science that there has been no widespread epidemic this summer of a more serious character than 'flu'" (Gibbs, 1918, p. 5). Some weeks later the government published its first official warning of the disease as a circular from Surgeon General Rupert Blue on September 22nd, entitled 'Surgeon General's Advice to Avoid Influenza'. At this point, however, the tone was still one of familiarity (Barry, 2005).

Towards the end of September, several professional health organizations acknowledged the rise in case incidence but advised people to be calm and attempted to reassure the public. The Journal of the American Medical Association [JAMA] (1918) read, "'Spanish Influenza'...should not cause any greater importance to be attached to it, nor arouse any greater fear than would influenza without the new name" (p. 1063). The Journal of the National Medical Association [JNMA] (1918) echoed,

> With our experience in the malady and from all current literature concerning it, we find no good reason for the great furor concerning the name. As far as we have been able to judge, we are fighting the same old Influenza or Lagrippe of 1890... (p. 126)

As nationwide mortality skyrocketed through the month of October, however, the American Journal of Public Health [AJPH] (1918a) wrote, "Very few health officers, and no communities, appreciate the terrific devastation of the epidemic until it strikes them. It has been utterly unlike any plague, which has yet visited this country" (p. 787). The article (quoting a first responder in Philadelphia) goes on to predict a half million deaths and advises cities not yet experiencing the epidemic to prioritize corpse disposal or burial over any preventative measure. By the November issue of the same journal, the tone had become solemn and reflective, "Now, as never before, the public has been aroused to the necessity of preventative medicine, universally applied... and sees... the disease which in two months killed as many Amer-

icans as the Germans destroyed in a year (AJPH, 1918b, p. 861).

Unfortunately, by the time the epidemic was widely considered a serious emergency, countless lives had already been lost. From the date of the first national warning in late September and as the disease progressed through the remainder of the year, cities be-

> *"It must be acknowledged that contemporary cities, health professionals, and general infrastructure was not equipped with many sophisticated methods to fight infectious disease epidemics."*

gan taking precautionary measures: Cities closed down businesses and schools, banned public gatherings, imposed quarantines on the infected, and advised the public to stay as isolated as possible. However, this all happened with varying rates depending on the level of urgency attributed to the flu. A closer inspection of newspaper pieces from different cities revealed marked differences in tone, which may be understandable considering the difficulty in balancing public preparedness with the necessity for calm and avoidance of a mass panic. However, calculated attempts to strike this balance should not be confused with the perspective adopted by many in response to the epidemic, that influenza was harmless or undeserving of apprehension. Bristow (2012), for instance, references the occasional use of the flu as comic pieces in sayings such as, "When you feel the first grip of the grip humor its grip and the grip will soon quit gripping" before the 1918 epidemic was realized to occupy an entirely unique region of the collective memory (p. 29). A comparison of similarly dismissive tones and playful phrases in the Cleveland and St. Louis media has proved revealing.

Note on Non-Pharmaceutical Interventions

In mid-September, Surgeon General Rupert Blue released a short summary of general measures to be observed in the face of the spreading flu. Although the outbreak was not yet considered unique, the notice stated, "The present outbreak of influenza may be controlled to more or less extend only by intelligent action on the part of the public" ("Ache all over?", 1918, p. 8). It must be acknowledged that contemporary cities, health professionals, and general infrastructure was not equipped with many sophisticated methods to fight infectious disease epidemics. The severity of the 1918 influenza was completely unprecedented. During previous flu epidemics, notices promoting hygiene, bed rest, and fresh air had more than sufficed to contain the spread and promote speedy recoveries. One recent PNAS study attempted to systematically examine the effects of NPIs within 17 cities. NPIs were defined as any effort to reduce infectious contact between persons and overall disease transmission. The interventions used for comparison varied in terms of severity but shared a specificity, enforceability, and significance great enough to disrupt the flow of daily life.

Notices, health announcements, and awareness campaigns were also common, particularly in the early days of the epidemic, but did not come with the same cost to or commitment from the public. Tangible NPIs included making influenza a notifiable disease, declarations of emergency, quarantine of infected households, staggered business hours, mask ordinances, private funerals, bans on public gatherings, and closures of schools, churches, theaters, and businesses. (Hatchett et al., 2007).

Note on Language

As with any qualitative analysis, in this case within media archives, it is admittedly difficult to objectively pin down and define the terms

in use. An attempt to characterize the 'tone' of an entire city towards the influenza epidemic using any newspaper or set of newspapers is likely an exercise in futility. Attitudes often rapidly shift and even during specific historical moments vary immensely within any given setting. Attitudes are nebulous, dynamic, and far too heterogeneous in composition to be relied on or attributed a fixed consistency. Even if satisfactorily defined, an attitude observed in one instance may be vastly qualitatively different from a seemingly similar attitude observed perhaps even in the same set of circumstances. I will argue, however, that, while acknowledging the extent of such limitations and need for excessive specificity, there is great value in qualitative analysis of contemporary media sources in both St. Louis and Cleveland. There is much insight to be gained through rigorous comparison of the 'attitudes' within the newspapers of either city. More specifically, the timelines of a relative shift in tone from 'domesticated familiarity' (as described by Bristow) to one characterized by urgency and grave sobriety can be observed. Given the docile understanding of influenza before 1918, it will be assumed that the newspapers of both St. Louis and Cleveland began at the former tone and ended at the latter.

The former tone considered the epidemic to be nothing out of the ordinary. Just as previous bouts of the "three day fever," time and bedrest would be enough to cure those that had fallen ill and protect the public in general. Although hygiene and nutrition were recommended for personal well-being as well as staying home to control transmission, this was identical to the response of previous mild epidemics. The latter tone considered the epidemic to be a unique event and unprecedented in its danger and devastation on communities. Influenza was granted primary importance and urgency was espoused in directing all possible resources towards the control of its spread. The latter tone often specifically enumerated death tolls and the likelihood of continued and increased mortality. In short, the difference between the two may be summarized as the presence or absence of immediate life-threatening circumstances. Additionally, the prevalence and frequency of articles within newspapers was found to be noticeably different when describing a mere nuisance as opposed to a public health crisis.

Cleveland

Although the first unified national address did not come until late September, the *Cleveland Plain Dealer* made mention of the flu much earlier that summer. On July 6th, 1918 an article entitled "Your Health and its Care" established a recurring column aimed to educate the public on hygiene, sanitation, and community health issues. It referred to influenza sweeping across Europe as well as the death of the Turkish Sultan, but in a somewhat whimsical tone. It acknowledged, months before the autumn epidemic, that no one was immune from the consequences of disobeying community health practice. However, Spanish Influenza was still nothing that could not be effectively controlled by common sense measures (Bishop, 1918). This tone persisted through September 20th when an article mentioned the spread of Spanish Flu on the East Coast while maintaining that the disease was well under control in the Midwest. Many returning soldiers at Fort Devens outside of Ayers, Massachusetts were ill and undergoing treatment, however authorities assured the public that the disease was on the decline ("Influenza toll grows in East ",1918).

Two days later, a news piece was published reiterating the Surgeon General's warning against influenza and described the advice of Cleveland Health Commissioner Dr. H. L. Rockwood. He claimed that the disease was the ordinary seasonal flu in epidemic form and urged citizens to cover coughs or sneezes and avoid personal contact or public gatherings. Rockwood described the Spanish Flu as fatal only under a very specific set of condi-

tions, but otherwise it was considered neither unique nor an existential threat ("Warns to watch for Spanish flu," 1918). On October 4th, two weeks later, Rockwood conducted a thorough survey of the city to assess emergency preparedness and adaptability were the epidemic to advance. However, at this point there is still neither a rhetorical nor demonstrated sense of urgency ("Spanish flu to meet", 1918). A *Plain Dealer* article published shortly after entitled "Nothing New About Spanish Influenza" provided a whimsical take by relating the story of Milt Slemmons, a man who exaggerated his basic cold to be Spanish Influenza based off things he'd heard and what he had "read all about in the papers" (Fetzer, 1918). A great many may have become overly scared of influenza, to the point of hysteria. Despite posing a real threat in other places, it was not yet a significant issue for the Cleveland community and no reason for alarm.

"Soon after, the health commissioner arranged a meeting with the superintendent to discuss school policy, but it appeared as though decisive action was purposefully avoided out of fear for unnecessary disruption."

On October 10th, a treatise by the Surgeon General was published in the *Plain Dealer* with information and precautionary strategies against the new flu. The message, while acknowledging that in some cases complications such as pneumonia or meningitis could lead to death, reported that in most cases symptoms disappeared in three to four days, followed by rapid recovery. It explicitly stated, "Whether this so-called Spanish Influenza is identical with epidemics of influenza of earlier years is not yet known" ("U.S. tells how to avoid influenza," 1918, p. 8). The advice of the Surgeon General at this point may be summarized as the necessity for vigilance, responsible hygiene, and to simply "... breath as much pure air as possible" (Bishop, 1918, p. 8). As late as October 10th (well into the most deadly period of the pandemic on the east coast), articles citing indifference towards the spread of influenza were still common.

One such piece detailed the decision by the National Association of Motion Pictures to discontinue issuance to 17,500 theaters in response to the epidemic on the East coast. Many local managers in Cleveland, however, dismissively insisted, "This story is another wild report of uncertain character... unless local conditions demand the closing of theaters-which, at present, seems most far removed- such a problem is not likely to be met in this city" (Hoyt, 1918, p. 10).

As the infection spread to encompass more of Cleveland, Rockwood advised caution in several public statements, but up until October 14th, he had still taken no decisive action. He is quoted in the *Plain Dealer* on October 14th, saying:

> The epidemic is the most serious menace that has confronted Cleveland in years, and if the people would just realize that, our efforts would be materially aided...Closing the schools would be a drastic step, but it would be a calamity to allow them to remain open if a considerable number of the pupils are affected. ("Confer today on city school ban",1918, p. 1)

Soon after, the health commissioner arranged a meeting with the superintendent to discuss school policy, but it appeared as though decisive action was purposefully avoided out of fear for unnecessary disruption. If the individual acted with enough prudence and care, businesses and congregations would remain open to all. On the 16th, Rockwood finally began a partial shutdown, closing down churches, moving picture houses, dance halls, lodge

rooms, assembly rooms, public halls, bowling alleys, etc., and stated, "if there is an increase in the number of cases of influenza in Cleveland, it will be necessary to restrict all places where persons congregate" ("Health Commissioner gives official list," 1918). The ban remained in place for several weeks until the mortality rate returned to normal and the city was slowly able to recover.

St. Louis

If Cleveland's disease response was slow, St. Louis' was anything but. In discussions today it is often considered a model city with regard to public health interventions, policy enforcement, and citizen compliance (Kalnins, 2006). Not only did discussion of pandemic lack a lighthearted tone, but city officials also began preventative measures well before the first local incidence of Influenza. In a short article published in the *St. Louis Globe Democrat* on September 20th, City Health Commissioner, Dr. Max C. Starkloff formally requested all physicians to report cases of epidemic influenza directly to his office. This was notably two days before the Surgeon General issued the first nation-wide warning. Particularly within the *St. Louis Star and Times*, entire pages were devoted to influenza awareness and following its spread across the nation, even within the early days of the epidemic. Many individual articles updating citizens on preventative steps taken in St. Louis would contain multiple sub-headings for different parts of the country such as "*East St. Louisians Dead at Camp*," "*Disease Increases in New York*," "*25,000 Cases in Ohio*," "*100 Die at Camp Sherman*," "*No Closing Order for Chicago*," "*180,000 Ill in German Army*," "*Plague in Texas Camps*," and "*Don Martin Dies Abroad*" ("Doctors here must report," 1918).

As early as September 17th, the Star and Times was mentioning the rapid spread of disease on the East Coast. On September 21st, the Star and Times included an article on the front page entitled, "*Influenza and Pneumonia Kill 120 in New England in a Day, 55 Deaths Reported in Boston: 3000 Cases at Quincy, 2000 Among Ship Workers*" ("16 deaths in six hours," 1918). Just days later, on the 24th, another front page article acknowledged 200 deaths at the Great Lakes Naval Camp in Chicago, much closer to home, as well as school closures in Boston ("200 die of influenza," 1918). An article released on October 3rd, acknowledged the first Influenza fatality within the city, a 35 year-old navy officer named A.A. Jont. The announcement was notably accompanied by a neighboring article entitled "*Influenza Reported Today in 43 States*," which detailed the circumstances of Fort Bliss, Oklahoma City, Rockford, Boston, Philadelphia, New York, Chicago, and Little Rock. Commissioner Starkloff advised anyone with cold symptoms to stay in bed and avoid going out in public. He predicted that St. Louis would have its fair share of influenza cases and the best way to avoid the epidemic was to avoid crowded areas or anyone coughing or sneezing. By acknowledging that the disease was not completely under control Starkloff allowed St. Louis ample time to brace itself ("Kiel and Starkloff," 1918). The October 8th, 1918 issue of the *St. Louis Star and Times* included a solemn proclamation by Mayor Henry M. Kiel which stated that:

> [I]nfluenza is rapidly spreading over the entire United States causing tremendous loss of life…[it] is coming westward and is computed to reach St. Louis within a few days… it is estimated that thousands of our people will be afflicted with this disease, even under the most favorable circumstances… (p. 16)

Kiel continues by invoking what seems to be the highest degree of seriousness:

> I Henry W. Kiel, Mayor of the City of St. Louis and by virtue of the general powers reposed in me by the laws of the state of Missouri and the City of St. Louis do hereby proclaim to the inhab-

> itants of this City that a malignant infectious and contagious disease known as 'influenza' is prevalent and probably will become more prevalent in the near future. I hereby confer upon the Health Commissioner of the City of St. Louis all the powers reposed by virtue of Section 14. Article XIII of the Charter to take proper steps to avoid, suppress and mitigate such disease, and to do all things necessary to safe-guard the lives and health of the inhabitants of the City against the ravages of this disease until by public proclamation I shalt announce that the epidemic has subsided and all danger is past ("Proclamation," p. 16)

An article within the same issue described the decision to indefinitely close all churches after the initial public opposition to Mayor Kiel's proposal due to the unprecedented nature of such a measure. It was noted that the closure of public and parochial schools had sent home over 100,000 pupils in the city and the closure of St. Louis University earlier sent home an additional nearly 1,800 ("Influenza closing order extended," 1918).

Less than a week later, Starkloff, in contact with Mayor Kiel, the Red Cross, and the local medical community, issued a sweeping closure order for amusement venues, theaters, churches, schools, and banned all public gatherings ("To close schools and theaters," 1918). Throughout the month of October, the St. Louis newspapers were blunt in their reporting, even in the style of headlines they chose. Titles such as "Spanish Influenza Kills Thirteen More Here; Total Now 49", "559 new influenza cases and 32 deaths", "Total Cases in Country Reach 167,000, with 4,910 Deaths" made little attempt to trivialize the toll the epidemic was taking on the community ("Spanish influenza kills thirteen more," 1918; "559 new influenza cases," 1918). However, this was still occasionally offset by an optimistic view of the city's relative success with titles such as "St. Louis Death Rate Lowest of Large Cities."("St. Louis death rate lowest," 1918, p.A3). Around October 31st, while the epidemic was still in full swing, the Globe Democrat reported that Kiel and Starkloff disagreed on the necessity of the continued influenza ban that effectively shut down all public places or gatherings. According to the article, the mayor wanted the closing order rescinded to keep from stifling business and more generally the lives of citizens; however, Starkloff insisted against it since the incidence rate of new cases was still high and doing so prematurely could lead to potential resurgence ("Kiel and Starkloff," 1918).

Starkloff occasionally even received bad press when he remained stubborn towards closure orders. On November 6th, St. Louis University was slated to have a game where the revenue would be donated to the United War Work Fund, however the idea was shot down when the Commissioner refused to make any exceptions to the quarantine regulations in place. He was quoted stating, "We had 88 deaths reported yesterday, and while the number of new cases showed a slight decrease, it does not warrant the belief that we are out of danger..." ("Starkloff refuses to sanction," 1918, p. 20). Just as the epidemic seemed to wane and the public closures were lifted following the November 11th Armistice Day celebrations, just two weeks later the city experienced a strong resurgence amongst school children ("Influenza closing order is renewed," 1918). The rising number of cases led to a reinstatement of previous measures until the end of December, when it was permanently lifted and all operations could return to business as usual ("'Flu' ban is entirely lifted," 1918). In an annual report the following year, Starkloff said in hindsight:

> The fight against Influenza was indeed very strenuous. Everyone suffered to a greater or less extent and every form of business was affected. We regretted the necessity of enforcing regulations that interfered with the interests of the

people but it was our duty to invoke all measures for protecting the health of our citizens (Starkloff, 1919) .

Closing Thoughts

One-hundred years after the pandemic of Spanish Influenza, the worst in recorded history, little is still known about the intricacies of the disease epidemiology or transmission. A great deal of research is still necessary to map out exactly what happened across the U.S. in the autumn of 1918 and how so many cities could have been so unprepared and unresponsive to the threat until it was too late. Tom Dicke, in a recent entry within the Journal of the History of Medicine, cites the phenomenon of 'cognitive inertia,' which he defines as "the tendency of existing beliefs or habits of thought to blind people to changed realities" (Dicke, 2015). This may help explain how the image of the familiar, harmless flu of previous epidemics was still maintained within the minds of many, despite reports of mass fatalities, mass graves overflowing with bodies, and absolute chaos in the coastal cities hit first. Whether ravaging Europe or the American Coasts, the problem may have still seemed distant and somewhat benign to residents of more geographically insulated communities such as Cleveland and St. Louis. The latter, however, through early decisive action, sustained urgency, and perhaps most notably, the consistent coverage of the national spread of the epidemic, was able to largely overcome the effects of cognitive inertia. By remaining vigilant and in touch with the events along the east coast and south, and reporting them in such a way that implied the gravity of circumstances and a high priority of importance, the St. Louis press likely saved many thousands of lives.

"A great deal of research is still necessary to map out exactly what happened across the U.S. in the autumn of 1918 and how so many cities could have been so unprepared and unresponsive to the threat until it was too late. "

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