

Book Notes: Reading in the Time of Coronavirus

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Pandemic Prose

While sheltering in place for almost three months, not quite quarantining myself but most assuredly restricting my movements to the occasional commando raid on a grocery store or an aimless auto ride around the peninsula, I have been asked during more than one Zoom gathering: “How many pandemics have there been in American history?” Or “Are there any good books about them?”

There have been numerous pandemics in American history documented in a small library of books about them. In this week’s **Book Notes**, rather than rummaging around in a particular book gleaning such insights as we might gather, we’ll briefly survey the record of American pandemics seeking lessons applicable to our own COVID-19 ordeal. As we do, we’ll take a snapshot look at three books in the pandemic literature: Elizabeth Fenn’s ***Pox Americana: The Great Smallpox Epidemic of 1775-82***; John Barry’s ***The Great Influenza: The Story of the Deadliest Pandemic in History***; and Laura Spinney’s ***Pale Rider: The Spanish Flu of 1918 and How It Changed the World***.

Smallpox caused America’s earliest pandemics. A very contagious disease, smallpox is caused by one of two variants of the *variola* virus. As Fenn documents in ***Pox Americana***, Colonial America was plagued by frequent outbreaks of smallpox, but the most devastating were those that decimated the Native American population in 1633-34 when more than 70 percent of the population died [1] and the outbreak between



1775-82 that threatened the Continental Army and the success of the American Revolution. [2]

Although as early as the 10th century, the Chinese had developed a technique for inoculating against smallpox using the *variola* virus, smallpox was finally contained by Edward Jenner's development in 1796 of a vaccine from cow pox. Unlike the Chinese inoculation, which risked infecting the inoculated with smallpox, Jenner's use of cowpox avoided that risk, helping the body become immune to smallpox without causing the disease. [3]

You can win a ***Jeopardy!*** quiz with this bit of trivia – Jenner called the material he used a *vaccine* from the Latin *vacca* for cow. Hence, vaccines are named after cows! [4]

Three lessons pop from Fenn's extensive study of smallpox in early America: 1) progress always seems to come bundled in a "good news-bad news" package; 2) the moral threat of "germ warfare" is not some post-modern nightmare, but predates the founding of the Republic and is as old as humanity itself; and 3) leadership counts.

Regarding progress, smallpox, one of humanity's oldest scourges, traversed the North American continent because of the, comparatively speaking, ease of travel. Europeans, in their trans-oceanic sailing vessels, brought smallpox to the New World, which, as they explored the continent's intricate lacework of interconnected waterways, allowed the spread to Native Americans. Native Americans, in particular the Plains Indians riding horses first brought by the Spanish, easily and unwittingly spread the disease throughout the West across the Rockies to the Pacific Northwest.

Obviously, the reality of how this happened is far more complicated than that three-sentence summary, but it resonates down to the present. The incredible spread of a virus from Wuhan, China, which I wager 75+ percent of Americans had never heard of prior to February 2020, facilitated the disease not by wooden ships, canoes, and riders on horseback, but rather the modern banality of transcontinental jet travel. Larry Flatley, J.D., recently released a piece for the Jefferson Educational Society titled [**COVID-19 Pandemic is a Teachable Moment on Native American History**](#) which touches on this issue.

"Good news-bad news" – things move fast from distant ports: Walmart trinkets, electronic gadgets, and pathogens.

Published in 2001, Fenn's ***Pox Americana*** arrived in the shadow of **9/11** and the threat of germ warfare. I can recall that era's fear, having personally lived through an anthrax scare: short-term quarantine, gang showers, nylon-woven hazmat suits, and

massive antibiotic doses (Cipro) until several days later it was determined to be not a genuine terrorist attack but a vicious prank.

Germ warfare – it's not new.

As, among several other reviewers, James Kirby Martin points out in a *Journal of Social History* review of *Pox Americana*, Fenn missed the opportunity to revisit British attempts to weaponize smallpox-infected blankets as early 1763 during the French and Indian War and as late as 1775 during the siege of Boston when Gen. Thomas Gage allegedly forced infected Boston citizens to leave the city for the colonial lines.[5]

Always the defining characteristic in any enterprise, leadership is never more critical than during times of crisis when decisions must be made with incomplete, rapidly changing information. Following Washington's use of quarantine in 1775 during the Siege of Boston and his own insistence that Martha Washington be inoculated before she joined him, [6] Fenn's account [7] of Washington's inoculation of Continental Army troops at Valley Forge not only details, as Janet Maslin noted in *The New York Times*, "the first large-scale, state-sponsored immunization in American history," [8] it also demonstrates the absolute importance of leadership.

Washington, faced with a crisis, rather than whine about how it might affect his legacy (about which doubts he was entirely capable), assessed the situation, determined the risk, and did what needed to be done.

In the summer of 1793, Philadelphia, at that time America's largest city and the nation's capital, suffered an epidemic of yellow fever. An estimated 5,000 Philadelphians died. Yellow fever is spread by the bite of a female mosquito. At the time, the cause was not understood. [9]

To protect themselves from the disease, citizens of Philadelphia almost instinctively adopted social distancing, quarantining, and fleeing from the city in order to protect themselves. Alexander Hamilton sent his family to live with his in-laws in Albany, New York. While they were away, he trysted with Maria Reynolds, which later led to America's first sex-tinged political scandal. It's not clear what that says about leadership; maybe it only affirms what Dylan Thomas meant about the "force that through the fuse drives the green."

Nineteenth century America suffered from three waves of cholera between 1832 and 1866 and repeated waves of scarlet fever. Cholera, an infection of the intestine, killed as many as six Americans per day during the outbreak. Quarantining the sick was the only effective preventative. Today, cholera is controlled by a vaccine invented in 1896 by Wilhelm Kolle. A bacterial infection, scarlet fever primarily impacted children. There is

no vaccine for scarlet fever; it is treated with antibiotics. Scarlet fever is spread by close contact with an infected person. Hence, the best preventative is social distancing and isolating the already sick. [10] [11]

Typhoid Mary, Spanish Flu, diphtheria, polio, and measles all were scourges that at different times ravaged 20th century America. Polio, a viral disease, spread through the country from 1916 to its peak in 1952 with 57,879 cases and 3,145 deaths. [12] It also left an estimated additional 20,000 with a permanent disability, including, on a personal note, the withered left arm of my best friend in high school. Since there is no cure for polio, its prevention, before the Salk vaccine, was almost entirely a result of quarantine and social distancing since polio spreads from direct contact with an infected person.

“Typhoid Mary” is only of relevance to us today because she was an asymptomatic carrier of the typhoid fever virus. Her real name was Mary Mallon; a cook for wealthy families, she unwittingly passed on the disease to the family and guests, which then resulted in its spread throughout New York City due to what epidemiologists call community-spread. She exhibited no symptoms and almost certainly did not know she was infected. [13] Regarding COVID-19, Mary Mallon’s case underscores the importance of widespread testing to determine who is carrying a disease.

As both John Barry and Laura Spinney document, the 20th century’s deadliest American pandemic was the Spanish Flu of 1918. The name is a misnomer resulting from the fact that the flu erupted in the waning months of World War I and combatant nations suppressed reporting it. Spain, which was not involved in World War I, more openly reported its comparatively mild experience. For their transparency, the Spanish earned the dubious honor of having the flu erroneously labeled the “Spanish Flu.”

Its origin is a matter of some debate. Some, like Barry in *The Great Influenza*, suspect an American origin in Army bases in Kansas, but others note its earlier appearance in Europe. Regardless, it lasted from January 1918 until December 1920, with its deadliest wave being the second wave in the autumn and early winter of 1918-19. Globally, the Spanish Flu infected an estimated 500 million people; it killed at least 50 million. [14] At the time, the total global population was estimated to have been only 1.8 billion.

In the United States, the impact was devastating – the deadliest pandemic in American history with an estimated 675,000 dead. [15] For a simple arithmetic comparison of the Spanish Flu’s lethality, the total American population in 1918 was 103.3 million; thus, the Spanish Flu’s mortality rate was 0.006, or 6/10ths of a percent. A similar pandemic in 2020 would kill 1.98 million Americans, or the rough equivalent of every man, woman, and child in 20 Erie, Pennsylvanias!

Its impact in Erie was equally devastating. The flu came late to Erie in fall 1918, but its impact was quick and deadly. More than 500 Erieites died. Erie leaders, however, learning from Philadelphia's experience, quickly adopted cutting-edge best practices of social isolation, social distancing, and quarantining. They closed the public schools, theaters, bowling alleys, taverns, and canceled all large public gatherings. Local officials also established a triage hospital at the Elks Club building. [16]

This was in stark contrast to Philadelphia. Although Barry's *The Great Influenza* details the Woodrow Wilson administration's attempts to downplay the flu's severity in order to focus national attention on the war effort, Barry focuses on Philadelphia. Philadelphia suffered the most.

Why? Incompetent leadership.

Aware of the re-emerging pandemic, Philadelphia's Health Commissioner, a political appointee with no previous public health experience, refused to cancel the Sept. 28 Liberty Loan Parade. Liberty Loans were government bonds sold to support World War I's war effort. In contrast, in St. Louis, City Health Commissioner Dr. Max C. Starkloff made a different decision. Using emerging knowledge of how a viral pandemic can spread, he canceled the St. Louis parade. [17]

The opposite results between St. Louis and Philadelphia couldn't be more dramatic. After Philadelphia held its parade with 200,000 in attendance, as Karen Brudney noted in a **New England Journal of Medicine** review of *The Great Influenza*, "within 72 hours of the parade, every bed in Philadelphia's 31 hospitals was filled ... the epidemic exploded ... the horror is most vivid in the dilemma surrounding the disposal of bodies ... the morgue had bodies stacked up ... undertakers ran out of coffins." [18]

In St. Louis, which had canceled its parade, the death rate was one-eighth or 12 percent of Philadelphia's. [19]

Laura Spinney's *Pale Rider: The Spanish Flu of 1918 and How It Changed the World* takes a more global approach. Beginning in 412 BCE with Hippocrates and the "Cough of Perinthus," believed to be history's first influenza epidemic, Spinney traces the flu's impact on human history using commerce and war to travel the world. [20]

Second *Jeopardy!* tip – the word influenza comes from the Italian meaning "influence" and refers to the disease's cause. It was at first linked to astrological *influences*. Other terms for it are *epidemic catarrh* and *la grippe*, from the French. [21] As for "catarrh," once on a trip to England when I went into an apothecary shop looking for cough syrup, the chemist (pharmacist) told me I had a "catarrh."

The title ***Pale Rider*** comes from the book of Revelation and the apocalyptic “Pale Horse, Pale Rider,” an African-American spiritual in which the rider’s name is Death. [22] Spinney, who is also a novelist, weaves a tale of flu’s baleful influence (couldn’t help the pun) on history, but nowhere so great as in 1918-20 and the great Spanish flu epidemic.

Spinney’s subtitle is “*How the Spanish Flu Changed the World.*” In a science.mag.org review, Suzanne Shablovsky itemizes them: “Orphanages were overwhelmed. Religious leaders struggled to explain a calamity that struck believers and unbelievers alike ... the science community was humbled. The U.S. life insurance industry paid out ... the equivalent today of \$20 billion. The idea of universal health care took off ... So did smoking, which was even promoted to soldiers as a flu prophylactic.” [23]

What lessons does this brief survey of American pandemics offer 21st century Americans coping with COVID-19? There are two. First, just as in Erie’s Spanish flu experience, St. Louis’s experience canceling its parade, or with George Washington and the Continental Army coping with smallpox, leadership counts. Erie had it, St. Louis had it, the Continental Army had it; Philadelphia didn’t and paid with lives.

Secondly, in the absence of a vaccine, the only effective tools are quarantining, sheltering at home, closing down public spaces, and social distancing. This is not new news. “Quarantine” comes from the Italian and means to isolate or set aside for 40 days. Its origin is from 14th century Venice when “ships arriving from infected ports were required to sit at anchor for 40 days before landing.” [24]

So, as we begin to re-open our country, we need to be mindful not only of the economic consequences of our decisions, but also the moral and ethical implications of placing citizens’ lives in harm’s way. As Fenn, Barry, and Spinney document, it’s the job of leadership to frame issues so that their followers understand the consequences of their choices. The Continental Army under George Washington had such leadership. Philadelphia in 1918 lacked it and paid with lives.

In both 1918 and today, Erie’s leadership understood the choices and made the difficult decisions to protect citizens lives.

Leadership – you don’t know how valuable it is until you don’t have it!

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A C-SPAN video of Elizabeth Fenn lecturing about **Pox Americana** at Washington College on February 7, 2002 can be found [here](#)

End Notes

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