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With Covid-19, Tech Is Making History Repeat Itself

As the coronavirus spreads, globalization and tech are amplifying every major theme of pandemics past: secrecy, scapegoating, sell-offs, and much more.



When comparing Covid-19 to pandemics past, it's déjà vu all over again, albeit a nightmarish blend of several déjàs vu into one. Photograph: Chung Sung-Jun/Getty Images

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I have been a professional epidemic watcher for nearly 30 years. I've researched seven centuries of pandemics. Yet ever since late January, I have been gobsmacked by the Covid-19 crisis. This surreal disbelief began with the news of China imposing a draconian quarantine on its people—first in Wuhan, where the epidemic began, and then 14 neighboring cities, and then throughout the nation. It is, without doubt, the largest quarantine ever erected, and one that would be barely recognizable to the people who first created quarantine policies in the Middle Ages.

WIRED OPINION ABOUT

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Nonetheless, when comparing the ever-changing story of Covid-19 to pandemics past, I feel like quoting Yogi Berra: It's "déjà vu all over again," albeit a nightmarish blend of several déjars vu into one. In every epidemic, certain ideological, political, sociological, and economic chords are always struck, others only on occasion. With the coronavirus, technology and globalization are ensuring that nearly all epidemic chords are struck at once. Among them:

Epidemics are framed and shaped—sometimes advanced and sometimes hindered—by how a given society understands a particular microbe to infect and spread to others.

People have always tried to avoid those deemed sick and contagious to others, long before we had a good understanding of the microbes that cause infectious diseases. The Old Testament as well as treatises by Thucydides, Hippocrates, and Galen all contain suggestions to avoid those afflicted with runny noses, coughs and sneezes, weird rashes, and many other symptoms. But because their understanding of the cause and spread of these diseases were so different (and scientifically untenable), their responses were feeble and ineffective.

Read all of our coronavirus coverage [here](#).

We forget that the scientific appreciation of microbial infections and their spread is a new phenomenon in the history of humankind. Not only was there swift identification of the causative coronavirus in question but, within hours of receiving its genome, scientists at the NIH were able to figure out which protein would make for the best vaccine product. Modern surveillance, public health measures, testing, and laboratory work all made for quick analysis and action.

The economic losses associated with epidemics can have a strong influence on public response.

The recent collapse of the Dow Jones Industrial Averages and virtually every other financial market last week is but one example of the losses nations, companies, and individuals incur during an epidemic or pandemic. The closure of seaports, airports, and other means of travel

costs a fortune, as do closures of schools, factories, and other places of work. The 2003 SARS epidemic cost the world economy somewhere in the tens of billions, and we can expect a much larger loss this time with Covid-19. Moreover, today's global market and the connectivity of various stock markets and bond issues, in which massive sell-offs can be accomplished in seconds, amplify financial panics into losses that were unimaginable only a few decades ago.

From the political to the purely mercenary, secrecy and concealment has almost always contributed to the further spread of a pandemic and hindered public health management.

In 1892, Hamburg was the largest seaport in the world and sent off dozens of ships filled stem to stern with travelers, goods, cargo, and steerage immigrants. Struggling to contain a cholera pandemic that came Germany's way via Asia, India, and Eastern Europe, the politicians in control decided to conceal their problem and send off ships, business as usual—only to spread the disease further.

In 2003, China suppressed information regarding its SARS-coronavirus problem for nearly six months and only admitted to it after cases sprouted up in Hong Kong, Toronto, and elsewhere—all to devastating effect.

With Covid-19, information and case reports were suppressed by President Xi Jinping and his autocratic government for over a month, thus giving the virus a running head start to global dominance. In today's global village, an outbreak anywhere has the potential to travel everywhere. In the 21st century, borders mean very little to microbes, and we need an international pandemic preparedness and containment collaborative with real powers, budgets, and action.

Widespread media coverage has been an essential aspect of any epidemic.

Even before the dawn of modern printing presses, journalists, scientists, scholars, and others have been writing about epidemics. What's different today is that Twitter, Instagram, Facebook, and a wide spectrum of sources has the ability to amplify and misdirect the flow of information, for better and for worse. The uninformed mass opinion that “everybody is entitled to their own facts” is a dangerous, if not deadly, way to interpret a pandemic.

Humans have always scapegoated individuals or social groups for the importation of infection.

Throughout history, and in many different nations, the short equation has been: Contagious Disease + “Undesirable” Social Group= Poor Outcomes. Epidemics have always been blamed on so-called “undesirable groups.” During the Black Death of the 14th century, Jews across Europe were accused of poisoning wells with bubonic plague. Across the 19th and 20th century, cholera, typhus, and yellow fever epidemics in the United States were blamed on “dirty” immigrants, Jews, Irish Catholics, Italians, and Mexican day workers. In the early 1980s, gay men, intravenous drug users and Haitians all inspired calls for quarantine when they became associated or were perceived to be associated with a specific contagion.

Contagious crises often inspire laws governing migration, individual liberties, and movement to contain the real or perceived threat.

The word quarantine was not coined until the mid-1300s, during the Black Plague, which killed more than a third of Europe's population. It comes from the Italian *quarantena* or *quaranta giorno*, 40 days. When the first quarantine laws were developed in Venice, a quarantine meant a strictly enforced, 40-day ban on all ships and goods coming into the city from foreign ports as a means of preventing the entry of bubonic plague. Forty days represented the time most plague epidemics began to burn themselves out. It also reflected the Hippocratic treatise dividing acute or infectious diseases as lasting fewer than 40 days and chronic ones lasting far longer.

A few decades later, the span was reduced to 30 days. During the Industrial Age, many European nations developed the cordon sanitaire, where a ring of armed guards prevented the entry or exit of anyone deemed ill or suspected of becoming ill with a particular epidemic disease. By the 19th century, most major cities had a lazaretto—a remote island or containment facility to put the ill and those suspected of being ill far away from the healthy. Before the advent of effective vaccines, intravenous fluids, and vaccines, these people were not cared for medically and often left to contract the infectious disease in question and even die.

In response to Covid-19, China has taken quarantine and isolation measures on a level not seen since the deadly influenza pandemic of 1918. These include 1) isolation of those infected with influenza in hospitals and the home quarantine of people with direct contact with the ill, and in some cases closing public transportation; 2) banning social gatherings; and 3) closing schools, to check the spread of Covid-19 among youngsters who were especially vulnerable to flu that year and traditionally have poor respiratory hygiene. Of course, the Chinese are implementing these measures on a mammoth scale never before seen, let alone studied.

Various other governments, such as Italy and Iran, are taking similar measures. In Washington there appears to be chaos: A vice president with no public health or medical experience has taken the helm of the US Covid-19 containment effort, and the president may be muzzling his best experts on these issues. They not only know what they are doing but are also incredibly bright and competent. These public health officials need to be put to work as soon as possible. Alas, history is littered with public health officials who made the call to contain a virus either too early or too late, only to be criticized, reviled and fired. You'd have to be Babe Ruth to hit the sweet spot between acting too early or harshly or too late.

Interagency rivalries and disputes form between local, state, and the federal government.

Battles between these levels of government almost always cause more problems and risk of disease spread. The most successful public health efforts in history have always included trusting, cooperative relationships between health authorities, government leaders, and the citizenry. When it comes to epidemic control, constant and open communication, psychological counseling, adequate food, water, entertainment and comfortable, socially connected facilities for the isolated and the quarantined are also essential. These measures have been shown to work and work well. That said, accomplishing all these tasks in the fog of an epidemic is a tall and expensive order.

So far, Covid-19 has demonstrated all these features of a contagious crisis in spades, as well as one more, the most dire: the failed promise to revolutionize our response to pandemics. Since at least the advent of germ theory in the 19th century, epidemiologists and lawmakers alike have heralded the coming of a global preparedness and action plan, and yet response methods have largely stagnated for centuries. As much as modern technology and globalization have helped repeat history during the Covid-19 outbreak, they are also our greatest tools with which to rewrite history. We have the resources to revolutionize responses now. There should be no illusions, the risk of failure is great and the social, economic, and political costs even greater.

Until then, as a historian quite uncomfortable predicting the future, I can only hope for some much needed help from Mother Nature and for the Covid-19 viral spread to burn itself out as the weather gets warmer.

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