CHAPTER 1

Science, Politics, and History

Do They Explain the Variety of Approaches to Covid-19?

With the coronavirus, the world faced a common problem. Yet it responded in many different ways. Why? That is the fundamental question the response to the epidemic has posed thus far. The scientific understanding of the disease might have varied, thus prompting diverse approaches to combating it. With some exceptions, addressed in Chapter 6, that has not been true. Despite a common etiological understanding of the virus and its spread, nations marshaled different preventive strategies. What about politics, then? Likely, democracies and autocracies would have approached it differently, on account of their being more or less able to enforce the painful measures to beat back a pandemic in the absence at first of any medical solution. Pandemics certainly posed a fundamentally political issue, requiring zero-sum trade-offs between potentially infected citizens whose convenience and economic well-being had to be sacrificed to spare others. Here too, obvious answers fail us. Nations' political complexions and the preventive strategies they applied did not line up in any evident correlations.

Carl von Clausewitz, the early-nineteenth-century Prussian general and philosopher, is best known for his aphorism that war is the continuation of politics by other means. War, in other words, is but another implement in the politician's toolbox – extreme, but sometimes necessary. A similar continuum connects politics and disease prevention. How we seek to spare ourselves the ravages of

pandemics reflects the assumptions baked into our political culture and the systems that govern us. Pandemics are first-order political events. They differ from other threats, natural or human, in posing an immediate faceoff between the community's obligation to safeguard itself and individual citizens' claims not to be sacrificed in the process. In pandemics, citizen and community confront each other head-on. As members, each of us gains from measures to protect our community; as individuals, we may well end up being sacrificed for the common good.

This primordially political situation is itself likely to be colored by the structure of governance in question. How do different political systems handle pandemics? Do some cope better? Autocracies can command their subjects, exacting more obedience and sacrifices than liberal democracies. But, conversely, consensus and buy-in enhance a system's ability to act. Citizens of democratically legitimated regimes may agree to modify their daily routines, accepting sacrifices for the public good. They may be willing to submit to acts that would otherwise be hard to require or compel.

Montesquieu, the eighteenth-century political philosopher, thought that only despotic governments required severe punishments. In republics (he included monarchies too), citizens were impelled to behave as much by honor, virtue, and fear of disapproval as by force.[1] Subjects had to be coerced, but citizens motivated themselves to obey. The nature of law in representative systems also encouraged citizens to obey voluntarily. In republics, laws emerged from decisions that, ultimately, citizens themselves took. By following them, they conformed to what they had mandated their representatives to pass. Breaking the law therefore approximated the self-inflicted harm that Kant and Hegel discussed: thieves whose own right to property was undermined by their refusal to respect that of others, for example.[2] Legitimate law was self-imposed and obeying it was self-will.[3]

Yet, ultimately, even the most despotic regime relies on some consensus. Without a policeman standing behind each subject, people cannot be forced to do what they categorically reject.

Even Hitler and Stalin had to consider dissenting opinions. The Nazi euthanasia campaign against the disabled and mentally handicapped was called off after resistance, especially from the Catholic Church.[4] Protests in today's China may not portend the regime's downfall, nor even push it in more democratic directions, but they still require it to abide by informal rules acceptable to its citizens, not merely thrust demands on them.[5]

Authorities can punish people for disobeying – fining, jailing, or even executing them. Fines and prison are indirect techniques of compulsion. Someone willing to put up with them may decide to pay the price of disobedience. Fines can accumulate to the point where they cause bankruptcy, but that is their outer limit – as is a life sentence in jail. Indeed, the spectacle of multiple and concurrent life sentences highlights the inability of mere prison sometimes to render justice.

It is much more difficult to compel specific behaviors. Threatened with execution for his belief about planetary movements, Galileo saved himself by mouthing assent to heliocentrism, but it seems unlikely he changed his mind.[6] Where vaccination is mandatory, as in most developed nations, citizens have been subjected to the needle by force. Today, such direct methods have fallen out of use. Schools can refuse to enroll antivaccinators' children, and governments may perhaps fine or even jail the parents. Beyond that, they rarely go.

Even states willing to use force have only limited means of compelling behavior. They can directly deduct back taxes or unpaid child support and alimony from bank accounts or paychecks. Property can be encumbered with liens or repossessed to meet obligations. Police can confiscate drivers' licenses on the spot, putting those who continue on their way even more directly at odds with the law. Schools can be desegregated by semi-military force, clubs forced to admit women on pain of forfeiting their liquor licenses. The draft is obligatory, but a young man who refused it would be jailed or fined, not forcibly enlisted.[7] In theory, a conscientious objector could be compelled to serve in the

military, but – other than setting an example for others – what would be the point? Deserters are often shot, which undermines the goal of mustering forces to defend the homeland in the first place, except by discouraging emulation. Compulsory labor is notoriously inefficient. No one makes an effort on chain gangs. Slacking and shirking are how subjects resist and undermine compulsion. Working-to-rule is the trade unionist version.

Emergencies and other states of exception raise the degree of intervention citizens will tolerate.[8] Cynics have argued that capitalism waltzes from one disaster to the next, deliberately exploiting crises to firm up its grip.[9] But even then, the state has not been issued a political blank check. The most autocratic regimes also rely on at least tacit cooperation from their subjects.

Democracies suffer from efficiency envy. They may have broad backing and stable support. But having to keep majorities onboard requires compromise, log-rolling, and trade-offs. That leads to short-term thinking and appeals to the lowest common denominator that undermine decisive action. Mussolini's on-time trains spurred admiration and envy in the 1920s.[10] China's ability to make massive infrastructural investments without the pork-barrel negotiations required in democracies and to pursue distant strategic goals without continually jollying public opinion along is today a source of wonderment to Western observers. Wanting to build a huge dam, the Chinese have the resources and the political clout to remove the peasants whose homes stand in the way.[11] Such considerations are amplified in emergencies. The nuts and bolts of democracy are little conducive to swift or incisive decision-making: consensus, checks and balances, due process, and voting. In emergencies, democratic procedures must paradoxically be temporarily sidestepped in order to preserve democracy.[12]

What are the implications as different political regimes face pandemics? Which systems have best been able to get their subjects to toe the preventive line? The Chinese government – seeking to paper over initial stumbles – trumpeted its successes with a global publicity campaign.[13] The nation's leader had decisively indicated

the way. Its medical personnel had made countless sacrifices, building a Great Wall against the virus. And 1.4 billion Chinese themselves, with faith in the party, had – resilient and united – plunged into battle against the epidemic.[14] The Saudis, too, congratulated themselves on decisive, early interventions that contrasted their allegedly flexible, humanitarian approach both with the bumbling of next-door Iran and with the hesitations of European leadership.[15]

Or does consensual buy-in expand the state's repertoire of tactics and the leverage needed to guide its citizens' conduct? Does a free flow of information give more transparent nations a leg up? Standardizing for wealth, one study suggested that democracies have suffered lower mortality rates than non-democracies in pandemics over the past half-century. They also managed to reduce overall mobility, thus cutting transmission, during the coronavirus epidemic.[16] Among democracies, the ones led by women seem to have done exceptionally well.[17]

For the first half of 2020, the West admired the Asian nations that appeared better prepared and able to deal with the coronavirus. The West was simply not ready to tackle the epidemic with the speed and purpose seen in China, the WHO reported back in March.[18] But these effective nations ran a political gamut from autocratic China through technocratic Singapore to democratic South Korea and Taiwan. So factors beyond politics must also have been in play. These countries had also recently suffered epidemics – SARS and avian flu – and therefore sported an infrastructure of prevention poised to be remobilized. And possibly – despite their political differences – they shared cultural commonalities lacking in the West that enhanced their citizens' willingness to subordinate their interests to the social good.

A THOUSAND FLOWERS BLOOMING

How do we explain the gamut of reactions to a comprehensively global problem? Given a common dilemma, one might have

expected a cohesive array of responses. In fact, how the world's nations dealt with Covid-19 spanned the spectrum: from precise testing, tracing, and isolating the ill and their contacts, through broad-gauge lockdowns of most citizens and economic sectors, to a moderate encouraging of social distancing and closing some institutions, and – finally – sometimes nothing much at all.

A politically polymorphous array of nations followed each of these various preventive strategies. Little unites them. The targeted quarantiners included China, Taiwan, South Korea, and Singapore, as well as New Zealand and Australia. Broad shutdowns were the tactic in Italy, France, Spain, eventually the UK, and most US states, and also in India. A hands-off approach was followed in the "ostrich alliance," nations led by strong leaders with their heads in the sand, Nicaragua, Belarus, Turkmenistan, and Brazil.[19] Yet irreproachably democratic countries were among them too – Iceland, the Netherlands, Uruguay, arguably Japan, and – most unexpectedly – Sweden.[20] Within the US, some states resisted lockdown strategies: both Dakotas, Iowa, Nebraska, Arkansas, among others.[21]

What strategy a nation took could not have been predicted by the nature of its political system. Nor did the world's surprisingly diverse preventive tactics seem to be determined in any straightforward sense by epidemiology. The science of the coronavirus was uniform the globe over. Indeed, as one of the epidemic's few silver linings, science's dissection of the virus underscored the noblest aspects of globalization. Scientific cooperation was immediate, prolific, and worldwide. An astounding amount of scientific information on the coronavirus poured forth almost instantly.

Pandemics had sparked an eruption of discovery before. When the cholera first struck Western Europe in 1832, thousands of books and articles appeared within the year. One contemporary diagnosed a "bibliocholera," a disease he considered as acutely contagious as its subject.[22] Today, economists gently mock the ferocious citation densities of the first generation of research, spreading as it traveled with the internet's speed and a transmissibility far surpassing that of the disease itself.[23] But

the results spoke for themselves. Two decades ago, the SARS virus took several months to decode; the coronavirus required just weeks.

In earlier pandemics, information had been hamstered away for eventual publication in prestigious scientific journals, locked behind paywalls from all but well-heeled university and other institutional subscribers. The standard process of peer review delayed publication to ensure quality. For research on Ebola and Zika, even publications that had also been preprinted appeared in their official versions on average only three months later – a painful delay in epidemic times.[24] In the interim, however, preprint dissemination had become common. Like physics, mathematics, and computer science, some academic fields had long been issuing their most significant publications as preprints.[25] Peer review then arrived afterward, as early versions were commented on and revised or withdrawn. Biology and medicine now used the epidemic to take a step towards normalizing preprint publication for their fields. About half of the early work on Covid-19 appeared in this way.[26]

Epidemiological knowledge was now posted on the web, permitting efficient and timely use.[27] Preprint sites hosted data and research results almost immediately.[28] The downside – as for any not-yet-peer-reviewed information – was that wheat mingled with chaff. Several notable studies had to be retracted.[29] Preprint sites therefore began to extend screening beyond rudimentary issues like plagiarism to guard against other problems. Did articles advance misleading and possibly conspiratorial theories (similarities between HIV and SARS-CoV-2) or information that might harm the public health, such as unwarranted claims for cures?[30] And scientists proposed a rapid review system for preprints – in effect a turbocharging of the old system.[31]

Disputes over Covid-19's etiology were not an issue. In previous epidemics, plain ignorance and then differences of understanding had hampered preventive action. For cholera's first half-century, there was no agreed-upon etiology. Many considered it contagious,

much like the plague. Others thought it a filth disease, caused by insalubrious surroundings. Depending on what seemed accurate, to prevent it meant either breaking chains of transmission or cleaning up urban decay. Only when Robert Koch identified the cholera vibrio in 1884 was the precise cause known. Even then, different approaches continued, all equally justified by appeals to the new knowledge – either cleaning up urban filth to hamper the spread of the vibrio or breaking chains of contact for the same purpose. Decades after Koch's discovery, German law courts were still hearing evidence whether diseases like typhoid were spread purely by microorganisms or whether contaminated soil too was a necessary precondition.[32]

Even as late as the 1980s, during the AIDS epidemic, disagreements framed in scientific terms had undermined unified responses to the disease. Science overwhelmingly agreed that the HIV was its cause. Yet disconcertingly many observers remained convinced that AIDS was generated not exclusively by a microorganism, but also by lifestyle or environmental factors. That spoke to the moralization that invariably accompanies diseases that are both sexually transmitted and associated with habits unlike most citizens'. How was it possible – so ran this logic – that an illness that especially afflicted homosexuals, drug users, and the promiscuous did not somehow stem from their conduct? Even prominent scientists signed on to such reasoning, discounting the HIV as the sole cause, as did some political leaders, most notably Thabo Mbeki, then president of South Africa.[33] Even gays succumbed to such reasoning in the years before the HIV emerged as the cause. The accouterments of anal fisting – Crisco, to lubricate, and amyl nitrate, to relax the sphincter – were considered possible causes, as was semen itself.[34]

Covid-19 suffered less epistemological static. Misinformation abounded, of course. Much was patent nonsense – the idea that the virus spread thanks to 5G networks.[35] Folk medicine offered useless treatments, which threatened to be harmful mainly if believers trusted them alone, ignoring the medical authorities.

"Immunity boosting" became a selling point even as experts cautioned that – if even possible – it would lead to inflammations and autoimmune diseases.[36] For the worried-well-off, Central Europe's weird and wondrous spa culture served up high-priced nostrums. Eating slowly, chewing properly and salivating, avoiding raw food in the evenings – all served to strengthen the immune system and prevent Covid-19, the quack Professor Doktors at Vivamayr in the Austrian Alps assured their clients.[37]

Some political leaders, too, decided to throw their weight behind pet cures of little use. Iran's supreme leader touted herbal remedies, as did Andry Rajoelina, president of Madagascar. Alpha Condé, president of Guinea, recommended hot water and inhalation of menthol, Mike Sonko, Nairobi's governor, Hennessy cognac.[38] Notoriously, President Trump extolled the alleged virtues of two anti-malarial drugs, hydroxychloroquine and chloroquine. He had been tipped off to them via a post by Tesla-manufacturer and Mars-enthusiast Elon Musk.[39] Brazil's president, Bolsonaro, jumped on the bandwagon too. French president Macron dignified Didier Raoult, an off-piste French clinician whose research had pointed to the supposed benefits of hydroxychloroquine, with a presidential visit to Marseilles.[40] The Japanese prime minister, Shinzo Abe, was not to be outdone with a campaign for avigan, an anti-viral with potentially severe side effects and an effectiveness for Covid-19 that has yet to be demonstrated.[41] From under every upended rock, cranks swarmed forth, as apparently they must whenever illness is the topic.[42] Most knotty, as we will see later, were the antivaxxers, who broached the threat that, even with a vaccine, they would shirk herd immunity.

But most other advice on the coronavirus at least posed no immediate dangers. The worried were counseled to drink water frequently, for example, thus washing the virus from the throat into the stomach where supposedly it did no harm.[43] Indonesians, who usually prize pale skin, began sunbathing en masse, hoping that sunlight killed the virus.[44] Later, when the virus really started