

The history of science and medicine in the context of COVID-19

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SPOTLIGHT ISSUE

Histories of epidemics in the time of COVID-19

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Abstract

This spotlight issue encourages reflection on the current COVID-19 pandemic, not simply through comparisons with previous epidemics, but also by illustrating that epidemics deserve study within their broader cultural, political, scientific, and geographic contexts. Epidemics are not solely a function of pathogens; they are also a function of how society is structured, how political power is wielded in the name of public health, how quantitative data is collected, how diseases are categorised and modelled, and how histories of disease are narrated. Each of these activities has its own history. As historians of science and medicine have long pointed out, even the most basic methodologies that underpin scientific research—observation, trust in numbers, the use of models, even the experimental method itself—have a history. They should not be taken as a given, but understood as processes, or even strategies, that were negotiated, argued for and against, and developed within particular historical contexts and explanatory schemes. Knowing the history of something—whether of numbers, narratives, or disease—enables us to see a broader range of trajectories available to us. These varied histories also remind us that we are currently in the midst of a chaotic drama of uncertainty, within our own unstable and unfolding narrative.

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COVID-19, global history, history of epidemics, history of medicine, history of science, uncertainty

What does it mean for something to have a history? In this time of scientific uncertainty, economic anxiety, and political polarisation, and amid a widely cited absence of lived experience to draw upon, many have looked to history and historians for guidance and insights. The shock of a new disease, COVID-19, sweeping across the globe has encouraged a turn to past epidemics in search of instructive patterns and lessons. In the absence of therapeutic “magic bullets,” our reliance on centuries-old methods of disease control—surveillance, quarantine, home-made masks, hand-washing—has highlighted similarities with previous societies that faced pandemics such as influenza in 1918–1920 and the Black Death in the 14th century.¹ Daniel Defoe's *A Journal of the Plague Year* (1722)—a fictional account of London during the 1665 plague—has returned to bestseller status, as has *La peste* (1947), Albert Camus's canonical story of an imagined plague in French Algeria.² The novels' observations on the experience of fear, quarantine, daily deaths, and resulting social dislocations are quoted on Twitter and Facebook, eerily mapping onto our daily practices and concerns.

A foundational text for contemporary historians of epidemics is a 1989 essay by Charles Rosenberg, titled “What is an Epidemic?” Rosenberg, a historian of medicine who was writing while AIDS upended decades of microbial complacency in the United States, explained how epidemics are not simply biological phenomena, but also fundamentally social and cultural events. They follow a narrative, sweeping in a dramatic arc across initial ignorance to revelation, to anxious attempts to control the disease's randomness and urgent demands for collective action. Eventually the epidemic slinks away into obscurity while society slips back to normality, too often forgetting the urgent lessons learned under the duress of disease.³

Rosenberg's essay encourages historians to identify similarities between epidemics: the ways in which societies inquire into the origin of an outbreak, the ways in which they demand urgent state intervention, and the ways in which collective responsibility is a framework for communal support as well as for accusations of irresponsible individualism. His social framework also provides ways to compare and contrast epidemics: while all societies demand a political response, the form that response takes—quarantine contrasted with surveillance, or competition contrasted with cooperation, for example—can vary. In other words, the history of epidemics is fundamentally a history of societies. Complex biological phenomena meld with everyday social activities. SARS-CoV-2, the novel coronavirus giving rise to COVID-19, may need to be analysed in specialised laboratories, but its transmission is intimately tied to familiar human behaviours: the shaking of hands, the kissing of cheeks, the globetrotting of air travellers. In this mix lies great incertitude. As epidemiologists readily acknowledge, disease mortality and transmission rates are difficult to predict precisely because humans are such unpredictable creatures, giving rise to myriad variables.⁴

This spotlight issue provides broad historical insight into COVID-19. Contributors were selected to capture a varied range of approaches to understanding health, disease, science, and medicine in the past. As many of the articles point out, previous narratives of disease often provide the lens and language that shape social responses, giving rise to a self-referential quality that characterises accounts of disease. Rosenberg suggests that histories of epidemics are narratives: accounts with a setting, plot, and actors, told by a narrator with a purpose. Framed to make the past intelligible to audiences in the present, narratives can be quantitative and mathematical as well as literary,

¹Our usage of “pandemic” follows modern convention, referring to an epidemic that is geographically widespread, highly infectious, and encountering populations with little or no immunity; see Green (2014) and Harrison (2016). However, later in this introduction we also outline the historical evolution of this English word.

²On Defoe: Pepinster (2020); on Camus: Georges (2020).

³Rosenberg (1989).

⁴Mansnerus (2015); Trostle (2005); Webb (2015b); Goodreau (2010).

selecting certain forms of evidence and ordering it in particular ways. Narratives provide a frame of reference but also, through new historical analysis, an opportunity for reworking and rethinking.⁵ This spotlight issue encourages reflection on the current pandemic not simply through comparisons with previous epidemics, but also by illustrating that epidemics deserve study within their broader cultural, political, scientific, and geographic contexts. An understanding of 19th-century cholera, for example, also requires comprehending what diseases were not deemed epidemic, how theories of contagion were also political, why the term “pandemic” came into use, and how the particular context of 19th-century European outbreaks shaped the modern discipline of epidemiology and its own methodology of understanding disease.

More fundamentally, although epidemics are captivating moments of drama, they are merely pinpoints in the historical record: the stunning tips of icebergs (to employ a widely used morbidity data metaphor) that too often distract from the powerful mass hidden beneath the surface. Epidemics are not solely a function of pathogens; they are also a function of how society is structured, how political power is wielded in the name of public health, how quantitative data is collected, how diseases are categorised and modelled, and how histories of disease are narrated. Each of these activities has its own history. As historians of science and medicine have long pointed out, even the most basic methodologies that underpin scientific research—observation, trust in numbers, the use of models, even the experimental method itself—have a history. They should not be taken as a given, but understood as processes, or even strategies, that were negotiated, argued for and against, and developed within particular historical contexts and explanatory schemes.

In many ways, epidemics can be defined by their uncertainty. Particularly in the modern world, in which scientists are expected to provide certain guidance, the spectre of a new disease uncontained by national boundaries, pharma-technological ingenuity, or predictive capacity disturbs our equilibrium. “We know nothing; we are at sea, in a whirlpool of conjecture,” reported England's medical journal *The Lancet* in 1853, during the country's third cholera epidemic.⁶ The words ring as true today. And while it is also true that we know an impressive amount about the genomic sequence and phylogenetics of a virus only studied for a matter of months, there is much in late April 2020 (when this issue went to press) that remains fundamentally uncertain about COVID-19: morbidity and mortality rates, precise patterns of transmission, therapeutic interventions, and why some are more vulnerable than others. As in previous epidemics, it is in this whirlpool of conjecture that the drama takes hold.⁷

Uncertainty pervades the history and historiography of epidemics too. Some might be surprised at the extent to which historians disagree with each other over evidence, interpretation, and even larger historical points. As David Jones observes in his spotlight article “COVID-19, History, and Humility,” there has been no historical consensus on which previous epidemics are comparable with today's, or even if comparisons should be made: “Historians, it seemed, could not even agree about what history had to offer.”⁸ Indeed, historians still do not agree about the nature of the Justinian plague, an epidemic that—depending on whom you ask—may or may not have upended Mediterranean society nearly 1,500 years ago.⁹ Likewise, certainties about the Second Plague Pandemic, even its conventional dating from the 14th to 18th centuries, dissolve under closer historical scrutiny. In his spotlight article “The Invisible Enemy: Fighting the Plague in Early Modern Italy,” John Henderson lays out a wealth of statistical data on plague in early modern Italy and England, outlining how contemporaries debated methods of containment and quarantine. National, regional, and local differences in the course and outcome of the disease were apparent then, just as they are in the midst of today's COVID-19 pandemic. Similarly, and strikingly, the effects—and effectiveness—of human measures remain as uncertain to historians as they were to those living during that period.¹⁰

The history of the English village of Eyam amply demonstrates the layers of uncertainty in historical accounts of epidemics. According to traditional accounts, in 1666 Eyam chose to self-quarantine upon discovery of plague.

⁵E.g., Charon (2008); Jurecic (2012).

⁶*Government Cholera Commission* (1853).

⁷Lipsitch, Swerdlow, & Finelli (2020); van Dorp et al. (2020); Peckham (2015).

⁸Jones (2020).

⁹Mordechai & Eisenberg (2019).

¹⁰Henderson (2020).

Shutting itself off to lessen the spread of the disease beyond the village also caused high rates of mortality within: some estimates suggest that nearly half of the villagers died from the plague. Three modern musicals, alongside numerous poems, children's stories, and plays have cemented this British account of the historic village's heroism. In the context of today's calls for self-isolation to combat COVID-19, Eyam has recently resurfaced in newspapers and online accounts that articulate the historic lesson of the villagers' inspirational "act of self-sacrifice."¹¹ Yet historical scholarship demonstrates that little is "stable or definite in the story of Eyam's plague."¹² At the time, in the later 17th century, few commented on this supposedly exceptional event. Instead, it was in later periods—especially 19th-century Britain, when fears of cholera sparked a "wider literary and historical fascination with past epidemics"—that writers and historians shaped a version of what happened in Eyam in 1666.¹³ The story of a heroic village during the plague was retold and reformed within particular historical contexts, with certain details inserted and elaborated upon, and others edited out. The historical account of Eyam thus has its own history, one that reveals more about 18th- and 19th-century British culture and its views of disease, as well as 20th-century tourism, than it does about 17th-century plague. If the role of history really is to teach us lessons, the lesson of Eyam is that humans continually reshape the history of disease in the light of their own concerns. In other words, the history of epidemics itself has a history.

This meta-historical facet becomes evident when considering the evolution of one English word currently much in use: "pandemic."¹⁴ Now broadly understood to mean a "global epidemic," at the time of plague's appearance at Eyam in 1666, the word was broadly synonymous with endemic disease, one "always reigning" in a particular country.¹⁵ Subsequent usage over the course of the 18th century clarified that whereas endemic diseases were "proper to certain places," pandemic diseases like the plague affected a whole population simultaneously, "without regard to sex, age, condition, or temperament."¹⁶ By the late 19th century, with rapid accelerations of transport, trade, and mass communication, our present-day definition of "pandemic" took shape, as when in 1883 a British member of Parliament discussed repeated outbreaks of smallpox. "This epidemic became pandemic," he noted of an eruption which began in 1870, "for it not only devastated Europe, but invaded both North and South America, as well as the South Sea Islands."¹⁷ Visitations of smallpox, plague, and influenza in the late 19th and early 20th centuries gradually gave rise to our current usage of the word, a process cemented by the worldwide devastation brought by influenza in 1918–1920.¹⁸

Returning again to the example of Eyam and the village's lack of immediate historical records, many societies did not record what we would consider horrendous rates of disease. The lack of records was not simply the result of literacy rates: past societies held different assumptions about what was significant and worth recording. Our urge to document mundane details during the current pandemic, to disseminate images of empty streets and personal narratives of the day-to-day experience of illness or lockdown, is part of our modern-day historical sensibility, just as the rise of social history reflects our modern belief that the everyday lives of everyday people are crucial to making sense of the world.¹⁹ For much of humanity's historical record, epidemics were not necessarily commented upon or dissected at length. Like wars, disease was a terrible but regular visitor, akin to bad weather: a scourge that was endured but not necessarily remarked upon.

More fundamentally, the category and definition of an epidemic shapes which diseases qualify for inclusion as well as how they are recorded in historical accounts. After all, the opposite of an epidemic is not lack of disease, but endemic disease: that is, disease distributions considered typical and domestic—and thus acceptable. By contrast, as

¹¹Beaumont (2020).

¹²Wallis (2006, p. 36).

¹³Wallis (2006, p. 42).

¹⁴Pandemic (2020).

¹⁵World Health Organization (2005, p. vi); Harvey (1666).

¹⁶Brookes (1754).

¹⁷"Parliamentary Intelligence" (1883).

¹⁸Harrison (2016). As Harrison points out, "pandemic" and "epidemic" were also often used to describe widespread emotional states such as mass hysteria: e.g., Académie française (1878, Vol. 1, p. 659).

¹⁹Jurecic (2012).

Margaret Pelling observes in her spotlight article “Bosom Vipers’: Endemic Versus Epidemic Disease,” epidemics are “dramatic”: “They seem to be sudden, and often appear as if they came from outside.” There is no set definition or measurement of when endemic disease becomes epidemic; crudely put, an epidemic is a disease that has become a problem. As Pelling’s analysis of the shifting category of epidemic disease reminds us, it hinges on the conceptual category of “excess”—excess disease, or excess mortality—and is thus defined through comparison with what is “moderate.” Unacceptable epidemics can thus only be understood in relation to acceptable endemic disease.²⁰

A useful analogy may be drawn from anthropologist Mary Douglas’s influential work on pollution and taboo. She famously argued that in order to conceive of “dirt,” one needed a classification system organising matter into appropriate and inappropriate elements. If, according to such a scheme, dirt was simply “matter out of place,” we might similarly think of an epidemic as “disease out of place.”²¹ One cannot have an epidemic without an organising system that categorises—sometimes explicitly and often implicitly—what counts as disease and where it belongs: whether in certain countries, bodies, ages, or even historical periods. Throwing up bewildering challenges to widespread and triumphalist views of modern-day exceptionalism, epidemics represent crises of social order, where pathogens are displaced from where they “belong” and states of health are disordered from where they “should be.” They risk upending an often fragile collective acceptance of the dominant classification system, and in doing so they generate uncertainty, fear, and conflict. Attempts to rectify the crisis invariably expose fault-lines within a society—frequently amplifying differences in categories such as able-bodiedness, age, class, ethnicity, gender, race, and sexuality—and offer insights into its explicit and implicit value systems.

Responses to disease highlight precisely these wrangles between communal traditions, individual autonomy, collective responsibility, and state authority. As historians such as Dorothy Porter have demonstrated, it is often during epidemics or in the management of endemic disease that political authority is negotiated, developed, wielded, and revealed.²² Public health—itsself relying on the concept of a healthy, productive population—thus has a history that stretches back as far as collective action against disease can be traced. But this history has no given trajectory. In her spotlight article “Science, Demons, and Gods in the Battle Against the COVID-19 Epidemic,” Florence Bretelle-Establet traces an expansive history of official responses to epidemics in China to show that, alongside a 20th- and 21st-century commitment to promote science-based state medicine, a much older trio of responses persisted. These three mainstays—distributing free medicine, collecting and disseminating information, and encouraging the proper worship of gods—long formed the basis of official responses.²³ Similarly, as several of the articles here observe, some current responses to COVID-19 conform to models of modern state authority, while others defy historical predictions regarding the nature of modern political power in surprising ways, whether through the use of quarantine, disciplinary power, or religious invocations.

What undergirds such political interventions is the concept of “population.” The notion of population is fundamental to the COVID-19 mantra of “flatten the curve,” a product of disease modelling and statistical epidemiology, but it too has a history. Emerging from the bureaucratic ambitions of 18th-century European states, the concept of population transforms individuals into an abstract and equivalent entity—comparable and calculable. According to the logic of population, national strength was measured through total numbers collected centrally: births, deaths, migration, and other demographic phenomena. Such an approach, as Michel Foucault outlined in various ways, allows—and encourages—collective surveillance, analysis, and management. In this context, disease is portrayed as “a distribution of cases in a population circumscribed in time or space”; it is abstracted into statistics, represented by cases, probabilities, risk—above all, by numbers.²⁴ The red numbers of confirmed cases on the Johns Hopkins Center for Systems Science and Engineering’s COVID-19 Dashboard, updated “in real-time,” have become ubiquitous in reporting on the epidemic. These numbers are streamed as part of 24-hour television news and cited to gauge

²⁰Pelling (2020); Slack & Ranger (1996); Green (2020).

²¹Douglas (1966/2002, pp. 44–45).

²²D. Porter (1999).

²³Bretelle-Establet (2020).

²⁴Foucault (2010); Curtis (2002); Blum (2002); Rusnock (2002).

national failure or success, just as 18th-century political theorists used population as a numerical index of governance.²⁵

In times of crisis and uncertainty, we turn to statistics and numbers for guidance; numbers “have an inherent order to them that words often do not.”²⁶ Most usefully, numbers can be compared, tabulated, and made into series, providing patterns and thereby predictions—a seductive succour during the uncertainties of an epidemic. Kristin Heitman explains their use in her spotlight article “Authority, Autonomy and the First London Bills of Mortality,” providing a concise history of early modern Bills of Mortality, one of the earliest quantitative records of disease in Europe published during an epidemic. These tables of plague deaths allowed the numerate to compare mortality both between locations and across time, enabling Londoners to “weigh costs, risks, and benefits in making their own decisions” during the anxious periods of plague. But as Heitman points out, such numbers were also susceptible to falsification, and the insights they provided were only as useful as the method that collected and tabulated them.²⁷

Historians of science and postcolonial theorists have long recognised that, although numbers appear to signify objectivity and impartiality, they too provide their own narrative of events. They reflect subjective judgement as to what is counted, how it is counted (according to what categories and measurements), and to what it should be compared.²⁸ As noted for early responses to AIDS in Europe, growing numbers of sick and dead can exert an irresistible draw for the media and take on a narrative power of their own. These numbers, regardless of their subjective quality, invoke multiple possible futures and often invite bold interventions to avert portended catastrophe.²⁹ Current debates between different national healthcare systems on how to determine COVID-19 as a cause of death, how a “case” is tested and confirmed, and on what basis morbidity and mortality should be calculated are salient reminders that numbers in and of themselves do not make an argument. They too have a history and need to be placed in context.³⁰

Statistics, probabilities, and modelling do not erase risk, but they render it measurable and calculable. Such methodologies have become central to modern public and international health. Indeed, it is the framework of risk and mitigation which has come to shape international planning for pandemics. Yet this should not suggest that such frameworks provide more exact prediction or successful preparedness. As Mark Harrison explains, “Risks are relative truths, which are, in turn, responses to uncertainty. They are products of knowledge and cannot be overcome by greater knowledge. In a public health context, the implication is that we cannot fully control the factors that contribute to disease.”³¹ As outlined by scholars such as Andrew Lakoff, the concept of “preparedness”—rather than prevention—has come to dominate contemporary approaches to health crises. In his spotlight article “Asian Tigers and the Chinese Dragon: Competition and Collaboration Between Sentinels of Pandemics from SARS to COVID-19,” Frederick Keck focuses on one part of this process of preparedness, and thus on attempts to imagine and mitigate new disease outbreaks. Keck outlines how Asian states have worked together in the early stages of potential epidemics, acting both in collaboration and in competition, tracing shared vulnerabilities and cooperation through a sophisticated system of sentinel warnings.³²

Warnings and portents are not always easy to decipher; even within the context of preparedness, decisions have to be made as to which preparations deserve investment. In his spotlight article “It Wasn't Supposed to be a Coronavirus,” Brian Dolan shows that many prepared for a different pandemic, pointing to the limits of technological and scientific knowledge in predicting and controlling the future.³³ Practitioners as well as historians have long observed how mathematical and computational techniques are often applied to unpredictable things (such as

²⁵Center for Systems Science and Engineering (2020); Frangmyr, Heilbron, & Rider (1990).

²⁶Rusnock (2002, p. 13).

²⁷Heitman (2020); Gupta (2001).

²⁸Appadurai (1994); Kapalgam (2000); Hacking (1990); T. M. Porter (1995); Merry (2011).

²⁹Berridge (1996, pp. 98–99); Slagstad (2020).

³⁰Street & Kelly (2020); Tsang et al. (2020).

³¹Harrison (2016, p. 129); Lakoff (2015).

³²Keck (2020); Lakoff (2017).

³³Caduff (2014); Dolan (2020).

epidemics or stock markets), drawing on our trust in numbers alongside the misplaced promise of thereby making them predictable. As Sunetra Gupta cautions, injudicious use of “mathematics—and especially mathematical modelling—can serve to obfuscate rather than clarify, or at best add nothing at all to the situation other than the illusion of control.”³⁴ Likewise, Jerry Ravetz long ago discerned that such methodologies have a profound ability to blind us to our own ignorance.³⁵ As the “flatten the curve” graph—an early icon of COVID-19—demonstrates, a model necessarily selects certain data and assumptions. As a result, it excludes other data and potential alternative frameworks of understanding, thereby becoming a simple—and at times simplistic—diagrammed concept. And yet, or perhaps even because of this simplicity, models command immense authority.³⁶

Models and simulations aim to provide predictions about the future. History likewise bridges a chronological gap—between the present and the past—but, as with epidemiology, it is as much about space as it is about time. The location of an observer, one's geographical perspective, is fundamental to what is observed as well as how it is described and understood. In their spotlight article “Layers of Epidemy: Present Pasts During the First Weeks of COVID-19 in Western Kenya,” P. Wenzel Geissler and Ruth J. Prince point out that COVID-19 in Kenya is more accurately framed as “one long epidemic”: a continuation of previous epidemics of HIV/AIDS and Ebola, and co-interacting with current epidemics of tuberculosis and cancer. In contrast to the narrative of a radical upheaval so common in the so-called Global North, deaths from epidemic disease are seen in Western Kenya not as a rupture, but instead “a continuation of suffering, as the outcome of a century of physical weakening” that is traced back to colonial occupation. Equipment, staff, and ominous tracking practices of public health are recycled from one epidemic to the next, becoming long-term strategies rather than emergency responses.³⁷ Likewise, in her spotlight article “How to Have Narrative-Flipping History in a Pandemic,” Anne-Emanuelle Birn frames COVID-19 within a long history of disease in Latin America. Detailing responses to cholera, yellow fever, and influenza, Birn outlines how the region has been at the leading edge of global responses to disease, challenging narratives representing it as a passive victim of pathogens. What Birn terms “health solidarity”—that is, country-to-country exchanges of medical equipment, personnel, and knowledge—allows Latin American polities to bypass global power arrangements, as exemplified by Cuba. What emerges is a history that positions Latin America as central to understanding disease and medicine, rather than as a peripheral add-on.³⁸

In the spotlight article “Rethinking the History of Plague in the Time of COVID-19,” Nükhet Varlık dissects a longstanding Eurocentric tale of medical triumphalism over plague to likewise demonstrate that geographical perspective can lead to significantly divergent accounts of pandemics' origins and recessions. Varlık builds on recent research which suggests that, following the devastating plague outbreak of Marseille in 1720, the disease's retreat from western Europe was primarily due to changes in epizootic activity rather than human agency. Nevertheless, as the disease became an increasingly distant regional memory, western Europeans gradually formulated and cemented a triumphalist narrative in which their agency over disease explained the plague's disappearance. This was in sharp contrast with their characterisation of an Eastern world that generated, harboured, and was resigned to disease: a cultural, medical, and historical framework that Varlık terms “epidemiological Orientalism.”³⁹ Meanwhile, the traditional origin tale for the plague of Marseille, thought to have been caused when the merchant ship *Grand-Saint-Antoine* arrived from the Levant, reminds us of another widespread epidemic tendency (by both contemporaries and historians): to identify a distinctive external carrier, whether a ship or a plane, a cook or a flight attendant, or chimpanzees, rats, and bats. Stories of a “patient zero”—a misleading phrase of recent vintage that reinvigorates a centuries-old narrative frame—have circulated widely in media accounts of COVID-19's origins, as they have for every global pandemic since the term was coined by accident in a 1980s network analysis.⁴⁰

³⁴Gupta (2001).

³⁵Ravetz (1987); Morgan & Morrison (1999).

³⁶Saltelli & Funtowicz (2014); Sridhar & Majumder (2020); Masnerus (2015); Grüne-Yanoff (2018); Goodreau (2010).

³⁷Geissler & Prince (2020).

³⁸Birn (2020).

³⁹Varlık (2020).

⁴⁰McKay (2020).

Disease, with its patent disregard for national borders, has long encouraged historians to think globally.⁴¹ As a methodology, global history initially focused on tracing networks, identifying connections, and studying mobility in the past, in a bid to challenge static, nation-centred histories. But historical analysis of scientific medicine identifies national imperatives under the cover of concepts such as “international health” and “global medicine.” Outlining 19th-century negotiations over international public health in his spotlight article “Quarantine, Cholera, and International Health Spaces,” Benoit Pouget notes how the current pandemic has exposed the fragility of this creation. Tracing its history reminds us that “international” never meant the erasure of national politics. Instead, “European powers held the reins of an international health system, which was based on a subtle dialectical relationship between the construction of an international public health space and the affirmation of state sovereignty.”⁴² Histories of international health are also histories of Western imperialism and its own geographic logic of where *cordons sanitaires* and quarantine should be applied.

In her spotlight article “Emerging Diseases, Re-emerging Histories,” Monica Green urges historians to broaden our geographical, chronological, and methodological perspectives even further. Calling for a “deeper time-depth” to our histories of disease and drawing on insights from the fields of palaeo- and phylogenetics, Green demonstrates that the emergence of COVID-19 is by no means an exceptional event. Rather, by considering the novel coronavirus alongside eight other “paradigmatic” infectious diseases affecting humans, she argues that the new pandemic fits neatly within a well-established global pattern, one which characterises our ancestors’ experiences with disease stretching back well over five millennia. Green’s approach highlights the long-term persistence of disease, asserting that current historical understandings of epidemics are shaped by our own assumptions of where and how far back to look.⁴³ Likewise, the particular contexts in which viruses have been studied also shape our understanding and approach to these microbes. In their spotlight article “A Historical and Political Epistemology of Microbes,” Flavio D’Abramo and Sybille Neumeyer highlight how microbiology also has its own history, in which a narrative of viruses as problematic and disruptive has shaped research approaches and assumptions. This narrative has long framed viruses as “the invisible enemy,” a deeper reflection of the political, economic, and military contexts of 19th- and 20th-century microbial research, not simply careless political rhetoric.⁴⁴

As Rosenberg pointed out, epidemics are fundamentally tied up with narratives. Crafted with local, national, and international audiences in mind, they depict not only the course of a disease, but also responses to it. Mary Brazelton has traced the creation of narratives and counter-narratives about China from early in the epidemic of COVID-19; these accounts are as much about medical philanthropy and diplomacy—who sends (and is seen to send) what to whom—as they are about the course of the disease.⁴⁵ As Angela Leung demonstrates in her spotlight article “Chinese State and Society in Epidemic Governance: A Historical Perspective,” China’s at-times draconian response to the Wuhan outbreak drew on authoritarian, top-down models of epidemic control developed in response to previous encounters with smallpox, leprosy, and pneumonic plague. Yet there was another tradition available and at times visible too: the kind provisions of a benevolent state. The Song dynasty (960–1279 CE), long seen as epitomising the compassion that a caring state might bestow upon its citizens (for example, by publishing health-promoting recipe books and establishing sick wards and public dispensaries), is but one historical tradition that current Chinese authorities have drawn upon.⁴⁶ Likewise, Birn highlights how the so-called Global South has been seen to circumvent the Global North through intra-South American and Asian provisioning of medical care—enacting the medical diplomacy that Brazelton outlines as crucial to reframing narratives of China. Unsurprisingly, these still-emerging narratives are often contested, with disagreements apparent in this very issue.⁴⁷

⁴¹E.g., Ladurie (1981); Harrison (2013); Green (2017); Webb (2015a).

⁴²Pouget (2020).

⁴³Green (2020).

⁴⁴D’Abramo & Neumeyer (2020).

⁴⁵Brazelton (2020).

⁴⁶Leung (2020).

⁴⁷Brazelton (2019).

Indeed, historians themselves are often divided on the extent to which their work ought to inform present-day attitudes and policies.⁴⁸ Some historians will feel energised by the heightened public interest in our work, while also noting the narrow range of historical comparisons that have interested policymakers to date. No doubt there will be some for whom one outcome of COVID-19 will be to devote more of their energy towards this more applied type of research, pushing for it to encompass a wider range of voices and perspectives. Yet others may turn even more strongly to studying history for its own sake. The breadth and diversity of what falls under the heading of the history of science and medicine is captured in the range of approaches and styles in this issue. Constraints of space and time have meant that many other possible methodologies and approaches have been left out. This “unusual issue in unusual times” is simply a first offering for the current crisis.

More generally, what these many and varied histories reveal is that history does not speak with one voice, and thus does not offer a single, coherent lesson from the past. Indeed, many historians would point out that history itself reminds us that any attempt to squeeze instructions from its record is risky; the past is pockmarked with those who saw lessons in history that later proved to be comical, counterproductive, or even disastrous. The urge to find lessons in the past reflects the same human urge to frame epidemics as narratives—the need to create order out of uncertainty and chaos. History, like an epidemic, may not be a morality tale. But knowing the history of something—whether of numbers, narratives, or disease—enables us to see a broader range of trajectories available to us. These varied histories can also remind us that we are currently in the midst of a chaotic drama of uncertainty, within our own unstable and unfolding narrative. This is a humbling recognition, as it means that the pandemic narrative we are creating right now will most likely be revised in 10 years, challenged in another 50, and entirely undermined a century from now in ways that we cannot predict.

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