

Book Review of *Until Proven Safe: The History and Future of Quarantine*, by Geoff Manaugh and Nicola Twilley. Farrar, Straus and Giroux. 2021. ISBN: 978–0-374–12,658-2

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As the world slogs through its third year of the COVID-19 pandemic, many once-unfamiliar public health terms have made their way into the common vernacular. Talk of social distancing, herd immunity, endemicity, R-naught, and variants of concern now roll off our tongues as easily as placing an order for our favorite beverage at the local coffee shop. Despite our newfound familiarity with esoteric concepts of public health, it is quarantine (and its close relatives, isolation and "lockdowns") that is still the most often misunderstood, misused, and mistrusted by the lay public.

In Until Proven Safe: The History and Future of Quarantine, authors Geoff Manaugh and Nicola Twilley provide a concise historical overview of the use of quarantine from the medieval period to the present, along with some musings about what the future of this indispensable yet problematic public health tool might bring. Opening against a backdrop of the growing COVID-19 pandemic and a group of preppers anxious over their fears of impending government overreach and the collapse of society, Manaugh and Twilley take readers from the origins of quarantine in the Western world and its Biblical connections through the establishment of lazarettos, colonial quarantine stations, and early international sanitary conferences on to today's high-tech biosecurity laboratories and isolation units. Along the way, the authors draw not only on standard historical evidence but also on print media, interviews with public health authorities and epidemiologists, former military personnel, and even philatelists. There is even a section on the complex and fragile checks used to keep agricultural pests at bay, the containment systems built around radioactive materials, and even the methods for protecting earth against possible pathogenic hitchhikers returning from space with astronauts. It is, as Manaugh and Twilley write, a book on "how we got from public health restrictions on the shores of the Adriatic Sea to chainsawwielding mobs off the coast of Maine, from magnificent stone fortresses on marshy islands in the Venice lagoon to roadside motels painted black in Washington State" (38).

Quarantine, the authors argue, is ultimately about how societies model, understand, and manage uncertainty. As such, it is a tool both powerful and blunt, useful and dangerous. It can help—and has helped—keep disease outbreaks at bay. Starting in the late-nineteenth

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century, quarantine and public health helped spur international cooperation as European powers began to realize the critical importance of standardizing public health and international commerce. Based on a presumption of risk and the pervasive fear of contagion, however, quarantine has at times led down a dark path of scapegoating ethnic and religious groups. It is also the one public health measure where the administrative state has almost supreme power to subvert the foundations of normal jurisprudence, allowing authorities to track and confine citizens in ways that would be otherwise unethical.

As an ancient and problematic public health measure, it would be far too easy for Manaugh and Twilley simply to condemn quarantine as outdated, useless, and rife with pitfalls. Rather, the authors are even-handed in their treatment of it, including the myriad ways quarantine continues to play a critical role in protecting public health. And, despite major advancements in medical surveillance methods and technology, Manaugh and Twilley make certain to acknowledge that "quarantine will remain indispensable: its circuit-breaker capability reducing rates of infection so that healthcare systems are not overwhelmed and vaccine-resistant viral mutations are less likely to occur" (346–347). As they correctly point out, threats from novel pathogens and zoonotic spillover events will only increase in the future, as human populations expand and as climate change leads to shifting ranges of insects, fauna, and humans. Quarantine, therefore, will continue to play an essential role in safeguarding public health.

The question then becomes one of reimagining quarantine, taking it from its archaic past to a more equitable and useful future. For Manaugh and Twilley, our ability to do so rests in our willingness to think of ourselves not as individuals but rather as part of a collective. The future of quarantine, therefore, is "a question of civility, of a politics and culture of collaboration that allows for awareness of shared responsibility in the face of an unknown disease" (347). As they argue, a communitarian approach will allow us to invent new forms of quarantine where the costs and benefits are both more transparent and more equitably borne.

Manaugh and Twilley conclude their book with five critical points. First, quarantine must be redesigned to make it cheaper, more effective, and less onerous. Second, it must also be reformed at the policy level, with clear guarantees from authorities that due process and a duty to care will be safeguarded. Third, quarantine must be reimagined and reconsidered as more than just a public health tool but rather an event that is experienced by those who are forced to undergo it. Fourth, quarantine must be reframed and explained to the lay public as an iterative process, one that is never truly right but is frequently wrong. Lastly, if future quarantines are to be effective, we must reclaim the entire concept of quarantine as an act of personal responsibility to a greater communal good. One need look no further than our ongoing experience with COVID-19 to demonstrate the wisdom in Manaugh and Twilley's concluding points.

Where *Until Proven Safe* fumbles a bit, however, is when they ask, "What does quarantine look like in the Aristotelian system's other three kingdoms: animal, vegetable, mineral—and beyond" (199)? As the authors write, "Unlocking the rationale behind quarantine, as well as its implications, requires looking not just across disciplines but across species, too" (199). Unfortunately, the authors fail to make a compelling case for the inclusion of this section. If the point is to highlight the technological and creative processes used to manage and contain the potential threats in these areas and to demonstrate how those ideas might be applied to our understanding of human quarantines, then a more concise presentation would have kept their main argument more in focus. As it stands, the chapters in the third section take readers on a rambling side trek before Manaugh and Twilley finally return to the central question of the book: how best to balance the long-standing

and undeniable power of quarantine to safeguard public health with the ethical requirement to treat citizens with equity, humanity, and respect.

Despite these superfluous chapters, *Until Proven Safe* still manages to offer a solid foray into the history as well as the future of quarantine. Specialists will likely wish for a deeper dive into that history. Generalists and lay readers, however, should find Manaugh and Twilley's overview both informative and approachable. Public health officials will find *Until Proven Safe* valuable for linking the problematic history of quarantine with thought-provoking ideas about how we might reimagine its future.

And as COVID-19 has painfully taught us, reimagine quarantine we must. As Manaugh and Twilley conclude, "In the end, [quarantine] demands nothing more of us than that we take the appropriate space and time; that we simply pause, before venturing out again, until proven safe" (351). Here's to hoping we can do so before the next pandemic.

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