

THE GHOST MAP

STEVEN JOHNSON

“This is a story with four protagonists: a deadly bacterium, a vast city, and two gifted but very different men.”

So begins Steven Johnson’s multi-layered account of the 1854 London cholera epidemic. London was just emerging as one of the first modern cities in the world, but it lacked the public health infrastructure to support its exploding population. As a result, the city became the perfect breeding ground for a deadly disease. Rising up against the dogma of the scientific community, two men, Dr. John Snow and Reverend Henry Whitehead, attempted to put a stop to the epidemic, and in doing so revolutionized the way we think of the spread of disease, the nature of scientific inquiry, and the rise of the modern city.

PRAISE FOR *THE GHOST MAP*

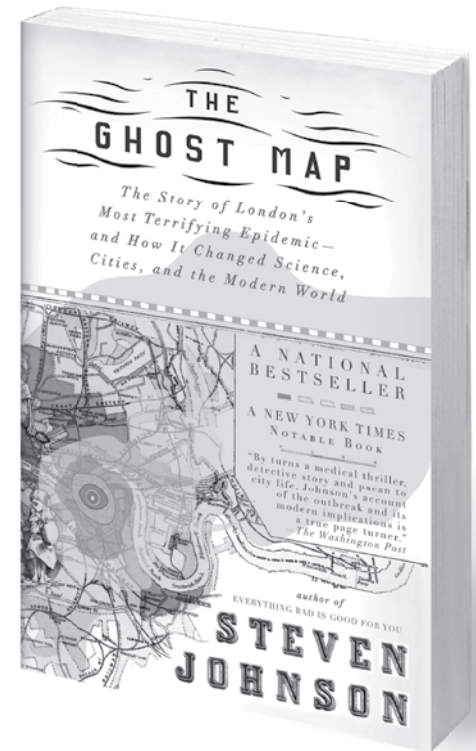
“By turns a medical thriller, detective story and paean to city life, Johnson’s account of the outbreak and its modern implications is a true page turner.”
—*The Washington Post*

“This is more than a great medical detective story. It’s the triumph of reason and evidence over superstition and theory, and Johnson tells it in loving detail.”
—*Chicago Tribune*

“Steven Johnson gives us history at its best: colorful, connected, and compelling. At the core is a medical mystery, or what today would be called an epidemiological detective story...A masterpiece of historical writing.”
—*Seattle Times*

“[An] unputdownable tale...This is a marvelous little book, based to a large extent on the essays delivered to an academic colloquium, just as was Dava Sobel’s *Longitude*. Yet *The Ghost Map* is a far more ambitious and compelling work...Wonderful.”
—*The Wall Street Journal*

“Steven Johnson tells the tale with verve, spicing his narrative with scenes of Dickensian squalor and the vibrant street life surrounding that squalor. But in Johnson’s hands, *The Ghost Map* morphs into something more than mere history.”
—*San Diego Union-Tribune*



STEVEN JOHNSON
is the bestselling author of *Everything Bad Is*

Good For You, *Mind Wide Open*, *Emergence*, and *Interface Culture*. He is a Distinguished Writer in Residence at New York University’s Department of Journalism, and the founder of several influential websites, including FEED, Plastic, and, currently, outside.in. He lives in Brooklyn with his wife and their three sons.

Discussion Questions

1. Johnson describes the book as having four protagonists: Doctor John Snow, Reverend Henry Whitehead, the *Vibrio cholerae* bacteria, and the city of London. What does he mean by including London as a “character” in the book? How does he achieve that? And is it effective?
2. During the outbreak, the *London Times* and *Morning Chronicle* were filled with a plethora of dubious remedies from a variety of unqualified sources. Compare the Internet of today with the *London Times* of 1854. Has information literacy improved such that the average citizen can distinguish trustworthy advice from chicanery on the Web?
3. *The Ghost Map* reads like a thriller at times. How does Johnson create suspense despite the known facts of cholera’s trigger and remedy?
4. *The Ghost Map* is filled with historical and scientific tangents—for instance, about the biological role of fermentation and alcohol in the development of Western Civilization. How do these enrich the storytelling and reading experience without being distracting? Or do they?
5. Whitehead was effective as an independent researcher in part because he had intimate knowledge of Soho and its residents and was not timid about asserting and building on his knowledge. He stood his ground on the issue of an “index case,” for example, which led to the reexamination of the Broad Street well. How did his neighborhood knowledge help solve the case? How might his social status have added weight to his influence over events? What if a similarly independent, civic-minded midwife or journalist had been in his role?
6. The profession of a physician was clearly a very different one in 1854 than it is now, particularly as John Snow practiced it. What do you see as the major differences? Given both Snow’s practical and theoretical work, what professions and fields in today’s world, if any, might be more similar to what John Snow did? The role of the church in people’s lives is also different. Do you think the role of the Reverend, as Henry Whitehead fulfilled it, has changed as much as the role of the doctor has changed since 1854?
7. We are used to seeing the medical community clash with religious leaders on issues from genetic research to euthanasia. Is partnership on some level between the medical and religious communities sometimes necessary for progress today, as it was in Snow’s and Whitehead’s time?
8. Johnson writes about the pervasiveness of the miasma theory, emphasizing that even some of the most brilliant medical minds rejected the notion of waterborne contagions despite evidence to the contrary. What were some of the factors that contributed to this massive mental block?
9. Johnson draws our attention to the fact that Whitehead was relegated to the role of Snow’s apprentice by popular Victorian literature. Johnson’s own opinion is that Whitehead’s “engaged amateurism” was so important as to make his role virtually equal to that of Snow’s in solving the mystery of cholera. What is your assessment?
10. How was the Board of Health both a positive and negative force as London evolved into a modern city?
11. Johnson debunks several popular misconceptions about Snow’s actual map, principally that the map itself led to the end of the outbreak. Yet he still names his book after the map. Why? Given Johnson’s take on the map’s limited practical role vis-à-vis this particular cholera outbreak, do you accept his contention for its continued significance?
12. Snow had to work harder to disprove the miasmatisms with his analysis of the Lambeth and S&V water supply case because the data showed that the subdistricts that relied on the polluted water source also happened to be in less desirable industrial zones. Discuss modern examples of how socio-geo-economic issues can influence scientific and medical assessments.
13. Given the relative living conditions, the cultural life, the economic opportunities, and any other costs and benefits, would you have chosen to live in London during the Victorian Era? Why do you think John Snow and others who could presumably afford to live elsewhere chose to live in a city that apparently seemed to always be on the brink of collapse into pure squalor?
14. In the latter part of the book, Johnson makes a case for urbanization as the most significant trend of the modern era—highlighting the fact that as of 2007, over 50% of the world’s population lives in cities. Johnson views this as a positive trend, an irreversible trend, and ultimately a necessary trend for the future of the planet because of the ecological implications of urban living. Do you agree with his positive assessment? Does reading a story like that of *The Ghost Map* make you feel more or less positive about cities and urbanization?
15. In his epilogue, Johnson posits that our survival as a “city-planet” relies on our willingness to embrace science and improve public health systems in the developing world. What do you see as the role of developed societies in this scenario? How do high profile philanthropists such as Bill and Melinda Gates fit into the picture?
16. Johnson cites the continued unavailability of clean water in many parts of the world as the single-most serious—and perhaps the most reprehensible—issue facing the world today. Do you share that assessment? Do you think the world will need to relive crises equivalent to the cholera outbreak of 1854 to achieve solutions that are equivalent to the construction of London’s modern sewer system? Or will technology and the highly-connected state of the world accelerate solutions?

For more information and video on *The Ghost Map* and Steven Johnson, please visit stevenberlinjohnson.com.



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