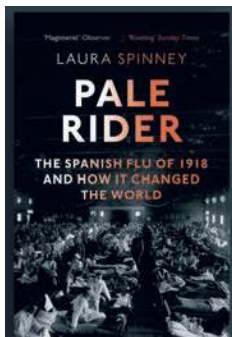


# Book reviews

David A. Bennahum, MD, and Jack Coulehan, MD, Book Review Editors



## **Pale Rider: The Spanish Flu of 1918 and How It Changed the World**

Laura Spinney  
Public Affairs; September 2017;  
352 pages

Reviewed by Elaine Thomas, MD

One hundred years ago, the 1918 influenza pandemic magnified the horrors of World War I, and changed the practice of epidemiology, public health, and human history. It struck the world at a time of mass population movement, changing cultures, and almost no understanding of virology. The bacterium *Hemophilus influenzae*, whose name still confuses students, was originally thought to be the cause, since scientists could culture bacteria but not viruses.

Historians, epidemiologists and virologists are still researching the epidemic's causes and effects. Even the total number of dead—more than 50 million—is still under debate.

Spinney, a British science journalist, looks beyond the predominant focus on Europe and North America, surveying the 1918 Spanish flu's impact on Brazil, Persia, China, India, and elsewhere. She explores how the response to epidemics depends not only on the state of scientific knowledge, but on geography, politics, medical fads, popular understanding of contagion, level of trust in government, money, tradition, and prejudice.

Although *Pale Rider* is intended more as multinational cultural history than as a medical text, it includes updates to previous medically focused summaries. Flu researchers are melding information from epidemiology, molecular virology, and immunology to understand 1918's perfect storm. Spinney briefly but clearly explains some of Dr. Jeffrey Taubenberger's (AQA, Virginia Commonwealth University, 2000), and others' research on the now-sequenced virus and its unique effects.

Spinney describes the standard of living and state of medical capacity in various countries, drawing a picture of life in 1918 around the world. The pandemic spurred many nations to begin creating modern health care and public health systems. The writing turns more speculative on the flu's effect on political events (Woodrow Wilson's

peace negotiations, and the independence movement in India), on culture (loss of traditions in decimated Alaskan villages and Pacific islands), and on art and literature.

The author abstracts lessons for future pandemics, illustrating the need for transparent public health infrastructure:

“[T]rust is not something that can be build up quickly. If it is not in place when a pandemic declares itself, then however good the information being circulated, it probably won't be heeded.” p283

Media has changed in form, but an informed populace will be critical to epidemic management:

“Newspapers were the main means of communicating with the public in 1918, and they played a critical role in shaping compliance [with public health measures]—or the failure of it...and different newspapers expressed different opinions, sowing confusion.” p102

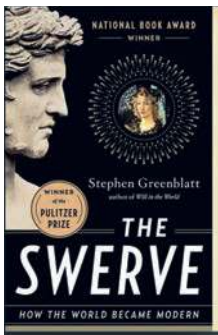
Spinney's narrative skips around and is sometimes superficial—perhaps unavoidable in surveying disparate parts of the globe. References could have been more complete, for readers to explore in greater depth, and to clarify which conjectures are her own or others' and how well they are substantiated. She often conflates attack rate and fatality rate, making comparisons between populations difficult. At the time, numerical documentation was sparse outside Europe and the U.S., so her regional vignettes are most valuable as cultural histories of public health rather than improvements to the tally of global fatalities.

For medical personnel, more detailed descriptions of the clinical carnage and unfolding virology are found in books such as Gina Kolata's *Flu: The Story Of The Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It* (2001); Alfred Crosby's *America's Forgotten Pandemic: The Influenza of 1918* (2003); John Barry's *The Great Influenza: The Story of the Deadliest Pandemic in History* (2005).

For historians, epidemiologists, and anyone with an interest in the effects of disease on populations, Spinney's emphasis on the pandemic outside the U.S. and Europe will spark curiosity for more in-depth investigations. As

Spinney cites, the National Academy of Medicine estimates a 20 percent chance of four or more pandemics in the next 100 years; we will need everything we can learn from the past.

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**The Swerve: How the World Became Modern**

Stephen Greenblatt  
W. W. Norton & Company;  
September 26, 2011; 356 pages

Reviewed by David A. Bennahum, MD (AQA, University of New Mexico, 1984)

Physicians with an interest in science and history will find the Pulitzer Prize winning book, *Swerve*, by Stephen Greenblatt, who previously published, among other books, *Will in the World: How Shakespeare Became Shakespeare*. In *Swerve*, Greenblatt tells the story of the discovery, in the winter of 1417, by the Vatican Scribe, Poggio Bracciolini, of the lost Latin manuscript of *De rerum natura* or *On The Nature of Things* by the first century BCE Roman poet Lucretius.<sup>1</sup> The hunt, encouraged by the 14th century humanist, Petrarch, for the lost books of the classical world of Greece and Rome, had an extraordinary influence on European thought, stimulating the coming of the Renaissance, the scientific revolution, and the making of our modern world.

The first part of the book retells the difficulty of searching through obscure monastic libraries for lost texts. “Petrarch in the 1330s had pieced together Livy’s monumental *History of Rome* and [had found] copies of forgotten masterpieces by Cicero,” and others in monastery libraries.<sup>2</sup> The hunt for the lost classics of the past was on.

As manuscripts became available, the new invention of movable type by Gutenberg in the mid-15th century would ensure widespread dissemination of both the rediscovered classics, new texts, and radical ideas of reformation.

The author tells the story of 15th and 16th century Italy and the Catholic church as it came under siege from reformist and Protestant movements. At the time there

were three Popes who were called before the Council of Constance in 1416 where the cruel execution at the stake of the Czech reformer Jan Hus, and his acolyte Jerome, took place. Poggio’s master, Pope John XXIII, was imprisoned, another Pope died, and the third was installed as the sole leader of the church.

Without a job, Poggio was free to hunt for lost manuscripts in monastery libraries in northern Europe where he found Lucretius. Precisely in which monastery is not known. But once copied and eventually printed, the poem would have an extraordinary influence.

In trying to explain the influence of Lucretius on the Renaissance, Greenblatt writes extensively on the contrast between Christian theology and its emphasis on sin, suffering, faith, and an afterlife. As a contrast to the ideas of the poet and the Epicureans he writes:

*On the Nature of Things* is not an easy read. Totalling 7,400 lines, it is written in hexameters, the standard unrhymed six-beat in which Latin poets like Virgil and Ovid, imitating Homer’s Greek, cast their epic poetry.<sup>182</sup>

As a follower of the Greek philosopher Epicurus, Lucretius did not believe in life after death and that suffering takes priority over pleasure in order to ensure faith. The author discusses this contrast with Christian theology and shows how Epicurean beliefs became an anathema to early Christianity, which accused Epicureans of hedonism. In the poem one can listen to Lucretius’s distress at how belief in the gods led to the sacrifice of Iphigenia by her father Agamemnon in order to bring the winds that freed the Achaean fleet to sail for Troy.

Here is an example from a recent translation by A.E. Stallings of the first stanzas. You can hear and almost see the famous painting by Botticelli of Venus rising from the waves, a Renaissance painting influenced by Lucretius:

Life-stirring Venus, Mother of Aeneas and of Rome  
Pleasure of men and gods, you make all things beneath  
the dome  
Of sliding constellations teem, you through the fruited  
earth  
And the ship-freighted sea—for every species comes to  
birth  
Conceived through you, and rises forth and gazes on the  
light.  
The winds flee from you, Goddess, your arrival puts to  
flight  
The clouds of heaven. For you the crafty earth contrives

sweet flowers,  
For you, the oceans laugh, the skies grow peaceful after  
showers,  
Awash with light.<sup>1</sup>

In another example he writes of atomic theory, for the Epicureans believed that all substance was composed of indivisible atoms that were continuously constituted and reconstituted.

Nor can external blows slamming from every side maintain  
The integrity of a world composed of atoms.

Greenblatt writes that while “it is possible to argue that despite his profession of religious belief, Lucretius was some sort of atheist, a particularly sly one, since to almost all believers of almost all religious faiths in almost all times it has seemed pointless to worship a god without the hope of appeasing divine wrath or acquiring divine protection and favor. Imagining that the gods actually care about the fate of humans or their ritual practices is, he observed, a particularly vulgar insult—as if divine beings depended for their happiness on our mumbled words or good behavior. The serious issue is that false beliefs and observances inevitably lead to human mischief.”<sup>1</sup>

Greenblatt lucidly offers a brief list of what he calls the Lucretian challenge, “Everything is made of invisible particles that cannot be divided,” what he called seeds, we call atoms.

The elementary particles of matter—“the seeds of things”—are eternal. Time is infinite. “The Spanish-born Harvard philosopher George Santayana called this idea—the ceaseless mutation of forms composed of indestructible substances—the greatest thought that mankind has ever hit upon.”<sup>1</sup>

The elementary particles are infinite in number but limited in shape and size, and like the letters of an alphabet, an idea that presages our understanding of the genetic code.

All particles are in motion in an infinite void. Space, like time, is unbounded. The universe has no creator or designer.

Everything comes into being as the result of a *Swerve*, “which Lucretius called variously *declination*, *inclination*—or *clinamen*—is only the most minimal of motions, *ne plus quam minimum*. But it is enough to set off a ceaseless chain of collisions. Whatever exists in the universe exists because of these random collisions of minute particles.”<sup>1</sup>

There are so many ideas of this sort, including that the *Swerve* is the cause of free will. Nature ceaselessly experiments. The universe was not created for or about humans. Humans are not unique. Human society began not in a Golden Age of tranquility and plenty, but in a primitive battle for survival.<sup>1</sup>

*Swerve* in describing the thoughts of Lucretius is filled with challenging ideas for the reader.

The rediscovery of Lucretius stimulated many artists, scholars, and scientists such as Leonardo da Vinci, Copernicus, Vesalius, Montaigne, Cervantes, Galileo, Harvey, Shakespeare, and Botticelli. Embracing Lucretius probably caused the death of Giordano Bruno, and perhaps the physician theologian Michael Servetus who described pulmonary circulation, but whose religious ideas seemed too radical for both the Catholic church and Calvin.

For Lucretius and the Epicureans:

...the highest goal of human life is the enhancement of pleasure and the reduction of pain. Life should be organized to serve the pursuit of happiness. There is no ethical purpose higher than facilitating this pursuit for oneself and one's fellow creatures. All the other claims—the service of the state, the glorification of the gods or the ruler, the arduous pursuit of virtue through self-sacrifice—are secondary, misguided, or fraudulent. The militarism and the taste for violent sports that characterized his own culture seemed to Lucretius in the deepest sense perverse and unnatural. Man's natural needs are simple. A failure to recognize the boundaries of these needs leads human beings to a vain and fruitless struggle for more and more.<sup>1</sup>

Greenblatt has written a most interesting and stimulating book finding in this two millennia old text, much that describes our world today.

## References

1. Carus TL and Stallings AE. *The Nature of Things*. London: Penguin Classics. 2007.
2. Slavitt DR. trans. *De Rerum Atura: The Nature of Things*. Oakland, CA: University of California Press. 2008.

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