

and signing a “do not resuscitate” order, Austin is also able to write movingly about finding joy in the midst of caring for a now-incontinent spouse. The relational journey which began as a type of Song of Songs existence now moves into the territory of the book of Job. While Austin refers to Job as “the best book in the Bible” (p. 135), it is ultimately the crucified Christ screaming out in prayer to God who is given the last word. *Losing Susan* then concludes with a hauntingly beautiful midrash on the crucifixion and resurrection of Christ written by Susan Austin entitled, “To Plumb the Depths of God’s Love.”

In some ways, *Losing Susan* could be seen as an indictment of a medical system that now treats conditions, rather than patients. While Austin is thankful for the medical treatment that Susan has received, his first-person account of the bewilderment that he often experienced as a medical layperson attempting to navigate the labyrinthine realities of the medical bureaucracy in his efforts to secure the best care of his wife should be required reading for all healthcare professionals. The darkness of this largely inhumane, and often inept, healthcare system was punctuated by glimmers of light in the form of particular nurses, therapists, and doctors, who took the time to genuinely care for Susan, advocate for her needs, and listen to her family.

In keeping with Austin’s conviction that there are three major *dramatis personae* in this story, theological reflections are skillfully woven throughout the book. As one might expect, there are significant discussions of the gift of love, faithfulness, and the problem of evil. However, Austin’s telling of the story also allows him to reflect upon other less obvious theological themes, including how we come to know God, the relation of free will and providence, the doctrine of the Trinity, and prevenient grace, to name just a few. The centrality of the embodied character of human existence is a recurring theme throughout the book. Also present are important practical reflections upon the comfort found in the liturgy, the importance of pastoral visitors for the sick and their families, and the experience of being sustained by the prayers of the community of faith.

This short but poignant book will find an obvious audience among caregivers, health professionals, ethicists, and theologians. Beyond that, it commends itself to all people of faith who are ultimately pressed with the painful question of the seeming absence of the God who has drawn so uncomfortably near to us in the flesh of the crucified Jesus.

*Reviewed by Robert J. Dean, Providence Theological Seminary, Otterburne, MB R0A 1G0.*



## HISTORY OF SCIENCE

**REVOLUTIONARY SCIENCE: Transformation and Turmoil in the Age of the Guillotine** by Steve Jones. New York: Pegasus, 2017. 353 pages. Hardcover; \$27.95. ISBN: 9781681773094.

Have you ever wondered why so many Paris Metro stations carry the names of French scientists and intellectuals? *Revolutionary Science* is a book that may give a partial explanation. The book surveys the rich scientific landscape of the French capital and details the contributions of many late eighteenth-century scientists, aristocrats, and radicals who lived during the French Revolution. The book is written by John Stephen Jones, former Head of the Department of Genetics, Evolution and Environment at University College, London. He has also been a BBC television presenter and has won the 1996 Royal Society Michael Faraday prize “for his numerous wide-ranging contributions to the public understanding of science,” or to use the French term that I am confident Jones would prefer, “*vulgarisation scientifique*.” Jones is in love with France, particularly Paris.

Paris was the world capital of science at the time of the French Revolution. Jones creates an elegant and stimulating narrative recounting the many scientific discoveries made by Enlightenment-era French scientists, radicals, and intellectuals. At the same time, Jones wants the reader to become aware that these same persons were also deeply involved in civic and business affairs. We think, naturally, of their efforts to develop a system of weights and measures, of Antoine Lavoisier’s chemical and physiological investigations, of the development of modern cartography, of the many discoveries in electricity—such as the unit for electrical current by Andre-Marie Ampere, of the study of metabolism by Lavoisier and Laplace, of the investigation of venereal disease or the introduction of new food-stuffs—such as the potato by Parmentier—into the French cuisine. But, Jones reminds us, Lavoisier was also a munitions expert and tax-collector; Lagrange, founder of the decimal system of measurement, was President of the Senate later in life; and E. I. du Pont de Nemours was both a chemist (expert in explosives) and founder of the world’s largest chemical company after he fled to the United States.

In many ways this is an unusual history of science book. Ostensibly a book about science in revolutionary France, it wanders in ways that cleverly illuminate later developments. During any specific wandering, we are offered fascinating historical tidbits of information. One word of warning: it would

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help to have a French dictionary at hand. For example, in chapter 1, “The Wall of the Farmers-General”: the wall, which was a tax-collection site for farmers bringing their produce into Paris, was derided by French citizens in the extremely clever epigram, “*Le mur murant Paris rend Paris murmurant*” [The wall surrounding Paris renders Paris murmuring or, stronger yet, growling] (p. 34).

The third chapter is representative of the format of the book and the structural flow of each chapter: Begin with an arresting title (“Let Them Eat Chips”), provide a journalist’s eye for detail, and then weave the details about the person’s life, cultural, civic, and scientific efforts and influence into a compelling story. Marie Antoinette may have uttered the famous phrase “Let them eat cake” to hungry and revolutionary French citizens. Jones, however, introduces us to Antoine Parmentier, trained as a medical chemist and later the chief apothecary to the Napoleonic armies. Parmentier first planted potatoes in the King’s royal garden and then promoted them so avidly that the potato came to play an important role in the French diet.

This narrative strategy is faithfully followed in other chapters. For example, chapter 2, “From Ash to Ash,” is devoted to the role of the element nitrogen in development of explosives from saltpetre to TNT, with attention paid to such luminaries as Lavoisier, DuPont, and Alfred Nobel. Chapter 7, “A Degree of Latitude,” introduces us to the world of measurement (metrology) alive in Paris. It details the shaky foundations of the metric system as well as efforts to establish the Paris meridian. The last two chapters (8 and 9), “President Jefferson’s Moose,” and “Handing It On,” introduce us to such biological luminaries as Buffon, Saint-Hilaire, Cuvier, and Lamarck. However, one looks in vain for a discussion of religion/science themes. These themes are rather muted, even when Lamarck or Darwin are on offer.

This is the American edition of *Revolutionary Science* and it carries a different title than the original British title: *No Need for Geniuses: Revolutionary Science in the Age of the Guillotine*. Jones’s original title comes from an apocryphal comment made by one of the judges at the execution of Lavoisier (the tax-collector) by the guillotine. In fact, in the prelude (p. 32) and conclusion (p. 343), Jones claims that you are reading a book with that title. More rigorous editing was in order. The book would also benefit from more explanatory notes and a bibliography, though one should keep in mind that Jones did not aim to write an academic historical treatise. There is also another factual error on p. 68, where Jones states that the arrangement of the chemical periodic table is based on the

atomic weights of the elements, rather than on their atomic number (that is, the number of protons in the nucleus).

All in all, this is a pleasurable book to read, giving an English-speaking reader a much better insight into the lives of many of these French administrative scientists (see p. 338). Many of them ended up as martyrs to the Terror. Those who survived, after pragmatically testing the winds of change, would later occupy many influential civic roles.

*Reviewed by Arie Leegwater, Calvin College, Grand Rapids, MI 49546.*

**ESSENTIAL READINGS IN MEDICINE AND RELIGION** by Gary B. Ferngren and Ekaterina N. Lomperis. Baltimore, MD: Johns Hopkins University Press, 2017. 278 pages. Paperback; \$32.95. ISBN: 9781421422909.

*Essential Readings in Medicine and Religion* is a companion piece to Ferngren’s 2014 book, *Medicine and Religion* (see my review in *PSCF* 66, no. 4 [2014]: 256–258), and “supplies a collection of texts and places them in their respective contexts in order to specifically address the historical relationships between medicine and religion.” The authors are knowledgeable about this subject: Ferngren is both a professor of history at Oregon State University and a professor of the history of medicine at First Moscow State Medical University; Lomperis is a PhD candidate in theology at the University of Chicago and holds a junior fellow position at the Martin Marty Center for the Advanced Study of Religion. In a manner similar to *Medicine and Religion*, this book provides a historical overview of human history at the intersection of medicine and faith over several millennia. The book has a straightforward format over its eight chapters. The authors provide an overview of a historical period; this is then followed by a series of writings from that geographic region and time. The authors provide histories of each period that are easy to read, and I believe the chosen writings are pertinent and illuminating.

The book begins in the Ancient Near East, composed of ancient Egypt and Mesopotamia (including Israel) in which disease was attributed to actions of the gods (as retributive), to demons and sorcerers, or to a consequence of natural mechanisms (such as fractures). Early human writings in this region of the world described disease processes related to sin, which required forgiveness from a deity. It is fascinating to realize that such thoughts are still present in many aspects of human culture 3,000–4,000 years later. An introduction to Greek literature follows in which the professionalism of medicine is first codi-