

Book Reviews

on this topic: the technology, the politics, the people of the early space program. We continue to see something special in the Apollo program, but that could be because of the other many fascinating aspects, not solely religious or spiritual. In some sense, a program like Apollo (and its precursors) is so large and so unique that it looms in history like a spiritual quest. But in many ways the event—and the entire Space Age of the 1960s and early 1970s—was out of context. (This phrase is used to good effect in Al Worden's recent book *Falling to Earth* [Smithsonian Books, 2011], regarding the personal effort to deal with the return to mundane earthly life after a trip to the moon. The best approach is to place it in perspective as something that had no logical predecessor or successor: *sui generis*.) Fundamental and permanent cultural changes resulting from the space program have been—so far—rare, the ecology movement, as noted, being one possible exception. The fundamental point is that we take from space exploration what we bring to it, a religious connection that is fleeting at best, and exploration that has so far caused more of a turn to Earth than to God.

Reviewed by Mark Shelhamer, Associate Professor of Otolaryngology and Biomedical Engineering, Johns Hopkins University School of Medicine, Baltimore, MD 21205.

iDISORDER: Understanding Our Obsession with Technology and Overcoming Its Hold on Us by Larry D. Rosen. New York: Palgrave Macmillan, 2012. 256 pages, notes, index. Paperback; \$16.00. ISBN: 9781137278319.

iDisorder, by Larry D. Rosen, is a short book with an intriguing premise: the extensive use of modern technology causes many people to exhibit symptoms of classical, common, psychiatric disorders. The book systematically goes through these disorders—communication disorders, ADHD, depression, obsessive-compulsive disorder, narcissistic personality disorder, hypochondriasis, schizoaffective and schizotypal disorders, body dysmorphism, voyeurism, and addiction—and cites countless studies demonstrating how technology enhances or draws out the symptoms of the disorders. As a professor of psychology at California State University, Dominguez Hills, Rosen is well acquainted with these disorders.

Note that the author does not argue that technology causes these disorders. He only argues that technology can cause (or enhance) symptoms that match the symptoms of people diagnosed with these classical disorders. Since the Diagnostic and Statistical Manual (DSM) does not cite technology and media as contributing factors to these disorders, the author refers to them as “iDisorders.”

One of the most accessible and convincing chapters is “Obsessively Checking in with Your Technology ...

24/7” in which the author describes how technology (especially the cell phone) often leads to compulsive behaviors. The author describes how people, including himself, compulsively check their cell phones for new messages, new texts, or missed calls. The chapter contains multiple anecdotes on how individuals get anxious when they travel into an area without cell phone reception. Some even refuse to travel when they know they will be “off the grid” for a time. The chapter relates results of multiple polls and surveys on technology usage during vacations, individuals’ “FOMO” (fear of missing out) and “disconnectivity anxiety.” The chapter then compares these symptoms to those of classically defined panic disorder and obsessive-compulsive disorder. It ends by giving useful advice on how to deal with an obsessive-compulsive iDisorder. This advice includes using settings on your devices to reduce the number of notifications the device triggers and doing a four-step process of Rethink, Reboot, Reconnect, and Revitalize (p. 58).

The other chapters follow this same pattern. The author defines the symptoms of the classical disorder, relates some anecdotes of how the symptoms are brought out by extensive use of technology (computers, cell phones, tablets, social media, etc.), cites studies and surveys implying a connection between the technology and the symptoms, and finishes with a refreshing section on how to identify, avoid, and/or treat the iDisorder in oneself or someone one knows. Some chapters also contain surveys to help readers gauge their own tendency to having an iDisorder. Each chapter is rife with citations—the endnotes of the book contain twenty-one pages of bibliographic references to journal articles, conference presentations, books, and websites.

The advice for treating an iDisorder is generally quite predictable. First, measure your dependence on the technology (how much time or money is spent using this technology each day) and determine how you feel when you do not have access to your technology. Then, avoid situations which may trigger symptoms of the iDisorder. Use technological tools (e.g., apps or plug-ins) to limit or change your use of the technology. Set aside time intentionally to meet others face-to-face, put away technology, and nurture real-world relationships. Be accountable to others as you try to change your behavior. In some cases, seek help from a therapist.

Rosen is not antitechnology and, in fact, stresses that he is a thorough and early adopter of many technologies. It is refreshing that he uses his own behaviors in some chapters as examples of symptoms of iDisorders (p. 50).

Rosen does not make any Christian or spiritual commentary on iDisorders. However, the book is relevant to Christians because it exposes and addresses the symp-

toms of these iDisorders, which can be exhibited by Christians and non-Christians alike. A common theme of these iDisorders is a person prioritizing relationships with technology and media over relationships with others (and for Christians this includes God). Knowledge of these iDisorders is useful for Christians to evaluate their own behavior. This knowledge may expose a Christian's dependence on technology instead of complete dependence on God. Christians might also discover that they exhibit behaviors which diminish their ability to minister to, have empathy for, and serve others in this technology-heavy world. For example, they may realize they are becoming less able to carry on long conversations with someone, they increasingly evaluate people by their looks, or they are becoming increasingly unable to meet appointments because of excessive time spent online.

The author makes the claim that the use of technology is irresistible. Thus, he never suggests that people avoid the iDisorders by simply getting rid of their cell phones, data plans, or social networking accounts. Calling technology adoption "irresistible" is controversial from a Christian perspective, because Christians are called to exercise freedom and responsibility. With God's help, a person can resist the negative impacts of technology. On the other hand, we Christians are called to engage, reform, and redeem culture, so avoiding all technology may hamper our ability to be witnesses of Christ in this world. Thus, a thorough investigation of the possible impact of technology on our thoughts and behaviors may be very useful, so that technology use does not become an idol but is instead used in service of God in our walk and work in this world.

I recommend this book. It is short and quite readable, apart from occasions when the author lapses into the use of psychology jargon that would not be understood by the average reader. The large bibliography may be a useful reference for anyone interested in exploring this area further.

Reviewed by Victor T. Norman, Assistant Professor of Computer Science, Calvin College, Grand Rapids, MI 49546.



HISTORY OF SCIENCE

INFINITESIMAL: How a Dangerous Mathematical Theory Shaped the Modern World by Amir Alexander. New York: Scientific American/Farrar, Straus and Giroux, 2014. 368 pages, biographical summary of key historical figures, timeline, endnotes, index. Hardcover; \$27.00. ISBN: 9780374176815.

Five men in flowing black robes convened a meeting in the Collegio Romano to pronounce judgment on a dangerous idea which they feared might plunge their

world into chaos. On August 10, 1632, the Jesuit fathers condemned and prohibited the dangerous and subversive doctrine of infinitesimals, the proposition that a continuous line is composed of distinct and infinitely tiny parts. Their opposition to this mathematical theory was based on the belief that the world was an orderly place, governed by a strict and unchanging set of rules. Infinitesimals threatened to undermine the authority of established religious and political order.

In *Infinitesimal*, the author weaves a historical drama, with all the intrigue of an adventure novel, set in the context of the mathematics of the infinitely small. Its key actors include many well-known philosophers, religious leaders, mathematicians, and scientists of antiquity through the Scientific Revolution, from Plato to Thomas Hobbes, Martin Luther to the Jesuits, Pythagoras to John Wallis, and Archimedes to Galileo Galilei and Isaac Newton. It is a fascinating read, connecting the dots between the religious turmoil of the Protestant Reformation, the consequent political upheavals that swept through Europe, and the birth of the modern scientific movement, including the religious ban on the heliocentric astronomy of Galileo and Nicolaus Copernicus, and leading to the development of modern calculus by Isaac Newton and Gottfried Leibniz. The debate over infinitesimals, while relatively unknown in comparison with the controversy regarding heliocentrism, occupied the same historical and intellectual space and involved many of the same religious and philosophical concerns.

The concept of infinitesimals is that, just as a cloth is composed of many layers of fine threads, an object of two-dimensional shape can be thought of as a collection of an infinite number of infinitely small but discrete lines. A solid surface can be considered an infinite number of two-dimensional planes, while a one-dimensional line can be divided into an infinite number of points. For modern scientists and mathematicians, this concept seems obvious because we have grown up with calculus involving the summations of the infinitely small. But in the sixteenth and seventeenth centuries, this concept was the subject of an intense and vigorous debate, with the outcome affecting no less than the stability of the social order and the authority of the church.

Why was this mathematical theory, which is standard curriculum today, considered so dangerous back then? Martin Luther launched the Protestant Reformation in 1517 by posting his Ninety-Five Theses on the door of Wittenberg's Castle Church and openly defended his stand against Catholic authority in 1521 at the Diet of Worms. The Protestant Revolution that followed plunged Europe into a series of religious and political conflicts that seemed to rock the very foundations of the civilized order. In order to counteract the chaos and uncertainty caused by the schisms and to restore alle-