keep growing revenue. Once HubSpot has an IPO, the founders and venture capitalist investors will make a lot of money. Even before the IPO, these people at the top are making millions (their personal profits are greater than the hundreds of millions that the company is losing). The company may never make a profit. If there is another tech bubble burst, the mom-and-pop investors in the company and the young employees will lose. Many of those at the top will have already cashed in (pp. 115–17).

> This is the New Work, but really it is just a new twist on an old story, the one about labor being exploited by capital. The difference is that this time the exploitation is done with a smiley face. Everything about this new workplace, from the crazy décor to the change-the-world rhetoric to the hero's journey mythology and the perks that are not really perks—all of these things exist for one reason, which is to drive down the cost of labor so that investors can maximize the return. (p. 121)

HubSpot: Lyons makes several pointed criticisms specifically about HubSpot (pp. 42, 97, 103, 113). The founders responded to some of these criticisms in a statement made after the book was published.

After Lyons left ("graduated" in HubSpot speak) and he was close to completing this book, there were news reports about the HubSpot board firing Cranium and Trotsky, and censuring one of the founders. The FBI opened an investigation, but Lyons was unable at that time to find out any clear details, except that the firings related to illegal activities relating to "a book" about the company. One of the company's self-proclaimed core values is transparency. The firing incident highlighted the selective implementation of that value. Lyons eventually obtained a redacted copy of the FBI report. It appears that some bosses resorted to hacking and extortion in a failed attempt to obtain a pre-release copy of the book.

After publication of this book, the two founders of HubSpot held a press conference to discuss the issues raised by Lyons in the book, mostly skirting the issues. One can find transcripts on the Internet.

The epilogue raises one other issue. Many companies, such as HubSpot, have our data even if we have never given it to them. In the case of HubSpot, they store the data generated by the companies who are HubSpot's customers. What is to stop them from mining that second-hand data? (p. 255).

> There's an adage in Silicon Valley that people who use online services are not the customers. We're the product. As far as companies in Silicon Valley are concerned, we exist solely to be packaged up and sold to advertisers. (p. 257)

One motivation for the behaviors Lyons finds objectionable has been a part of the human psyche since the Fall in the Garden of Eden. The Apostle Paul has this to say:

> But those who want to be rich fall into temptation and are trapped by many senseless and harmful desires that plunge people into ruin and destruction. For the love of money is a root of all kinds of evil, and in their eagerness to be rich some have wandered away from the faith and pierced themselves with many pains. (1 Tim. 6:9–10, NRSV)

The majority of readers of this review are neither venture capitalists nor tech start-up founders. We may appear to be exempt from all the problems described in the book. A deeper look shows there may be more overlap than we wish to admit. Early in the book Lyons writes:

> *Drinking the Kool-Aid* is a phrase everyone in Silicon Valley uses to describe the process by which ordinary people get sucked into an organization and converted into true believers … Believing that your company is not just about making money, that there is a meaning and a purpose to what you do, that your company has a mission, and that you want to be part of that mission—that is a big prerequisite for working at one of these places. (p. 51)

Those of us who work in academia also tend to think that we are engaged in work that is life- and world-changing (presumably we are). It is important that we periodically measure how well we are accomplishing those goals. Does our work really change lives and make the world a better place, or are we just earning a paycheck? Do we treat our students disrespectfully? Do we look down our noses at staff and other non-academics? Are we in perpetual war with administration? Or, do we truly seek to love and serve all whom we encounter?

Reviewed by Eric Gossett, Department of Mathematics and Computer Science, Bethel University, St. Paul, MN 55112.

IRRESISTIBLE: The Rise of Addictive Technology and the Business of Keeping Us Hooked by Adam Alter. New York: Penguin Press, 2017. 354 pages. Hardcover; $27.00. ISBN: 9781594206641.

For over twenty years, I have been exploring rat models of excessive behaviors—animal parallels to what in humans are now called behavioral addictions. At the same time, I have acquired a number of technological devices—computers (desktop and laptop), iPods, iPads, and smartphones (both BlackBerry and iPhone)—but I have not developed much of a technological presence. I use my computers for work and my mobile devices for email, texting family, and keeping my schedule (I do have one app—a local

bus scheduler that tells me when my next bus will arrive). I do not tweet, have no access to Netflix, am not on Facebook, do not have a Fitbit, and am not familiar with many of the programs and games that Adam Alter describes in this easy-to-read book.

The topic of this book is timely. Our local paper recently re-ran an editorial (from the *Dallas Morning News*) entitled "Stopping smartphone zombie children," suggesting that smartphone sales should be banned for children under thirteen. Concern about distracted students in the classroom is leading some instructors to suggest a tech-free zone for their classes. Alter makes the argument that these devices and their daily usage lead to a behavioral addiction that parallels drug addiction. Canada and some American states are in the process of legalizing cannabis and, like alcohol and cigarettes, sales to minors will be prohibited. In the prologue to his book, Alter points out that many tech giant founders restrict or prevent their own children from using these mobile devices. Alter recommends in his last section that early access to this technology should also be limited.

This book explores the addictive nature of the new digital technology broadly defined. After a prologue laying out the main argument, the book divides into three sections. The first section explains what the author means by behavioral addictions: for example, excessive gambling is one of the first recognized behavioral addictions. Alter describes how the new mobile, web-connected presence of smart phones, tablets, and the apps available are leading to harmful and excessive usage of these devices to the exclusion of other activities. In a chapter on the biology of addiction (chapter 3), I came across a reasonably accurate list of researchers working with human and rat models whose work I have followed for most of my professional career.

Part Two of the book follows the introduction, reviewing a set of techniques that increase the addictive nature of behavioral experience. These interrelated ingredients include the need for goals and the nature of the feedback provided by software as one progresses through escalating levels of difficulty. Also included are older techniques such as cliffhangers, used in Dickens's time to sell newspapers. The section ends with a chapter on the importance of social interaction as a reward.

In the final section, Alter suggests some possible solutions for these behavioral addictions. One suggestion is restricting and structuring access for children, as they seem to be more vulnerable to the negative effects of this technology. He suggests that environmental factors, such as where to put one's smartphone (especially at night), might help reinforce good habits. Finally, Alter argues that some of these addicting techniques might be put to good use by increasing learning, for example, in a process of gamification (making learning more of a game).

This is a book written by a secular author for a secular community. Sin is not mentioned in the book, and there are no references to the Book of Proverbs and its concerns about excessive alcohol consumption and sloth. Christians have long had a complex understanding of addiction and this complexity is expanded as the definition of addiction broadens. Is the medical model of addiction sufficient? Is it a failure of willpower? Does addiction emerge out of the structure of our lives, and how does it relate to the notion of sin or the brokenness of creation? What this book highlights well is how the design of the apps and the technology itself make it easy for people to fall into bad habits.

In the Prologue the author writes, "Tech isn't morally good or bad until it's wielded by the corporations that fashion it for mass consumption." An exploration of this awareness, that large corporate interests push these irresistible objects for their own benefit rather than for their consumers' good, would have been helpful. We talk about government regulation of the financial industry to protect individuals in areas with huge power imbalances, but what is happening in the tech area to reduce the potential harm that can occur? Should there be regulations about email usage by companies, similar to labor laws concerning work hours?

This leads to one suggestion that I was surprised not to see mentioned in the book: the idea of a digital Sabbath, an idea that both Jewish and Christian communities have raised. While people can use digital devices for good, often their use imposes a work burden on the user: unrelenting job-related emails and messages that demand response. Thus, a day-long break without any technology (as part of one's lifestyle) seems like a good suggestion for Christians to make, in light of the notion of a Sabbath rest as mandated (for our good) in the fourth commandment.

The rapid advance of technology in our society is having profound effects on many aspects of our lives, and it appears that the rate is only increasing. It is not clear to me that all aspects of this advance of technology can be subsumed under an addiction model. As the technology advances, we are engaging in a one-way social experiment with both good and bad outcomes. The advances in technology make it possible for remote doctors to see our medical information and make recommendations for treatment.

We can plan and confirm a complex vacation from the comfort of our home. The job market is changing—many retail jobs are disappearing in favor of online merchants (with driverless delivery coming). I can probably order all the books reviewed in the last year of *PSCF* with only a few clicks of my mouse. Wikipedia and Google searches give me instant access to all the information I need immediately. I can download academic articles from thousands of journals through our library.

Thus, the strength and weakness of this book is that it focuses on one aspect of technology to the exclusion of other important interlinked issues. The ability to use phones and video chats to keep contact with family and friends from far away is generally a positive. The use of a Fitbit device by an obese couch potato may not be harmful, so we must see situations in context. Can these tools be abused by individuals (the topic of this book) and by corporations (not covered in this book)? Certainly, but the real question is, how can we use them wisely? For this, the command of love for God, our neighbor, and ourselves becomes the critical issue: how can we live and love better with the technology?

Reviewed by Roelof Eikelboom, Department of Psychology, Wilfrid Laurier University, Waterloo, ON N2L 3C5. ❖

Letter

Supporting Emergent Transitions

The conceptual framework of using emergent transitions to deal with order from chaos was well done in Scott Bonham's article entitled "Order from Chaos" (*PSCF* 69, no. 3 [2017]: 149–58). I enjoyed reading it and was reminded of Gerald Schroeder's book *The Science of God* (Free Press, 1997). There, Schroeder, who is a physicist and a Hebrew scholar, has an interesting interpretation of the terms used in Genesis 1, evening and morning. Schroeder claims that evening (*erev* in Hebrew) and morning (*boker* in Hebrew) have a secondary meaning as well. According to him, *erev* can stand for chaos and *boker* for order. If so, that dovetails nicely with Bonham's interpretation of the disorder-order transition framework.

Ken Touryan
ASA Fellow ❖

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