

# Book Reviews

and a hacker finds my record, there is still a 25% chance that my true answer is “no.” My privacy has been effectively protected. So we can achieve reasonable privacy at the cost of needing a larger dataset.

This short book discusses privacy, fairness, multiplayer games (such as using apps to direct your morning commute), pitfalls in scientific research, accountability, the singularity (a future time where machines might become “smarter” than humans), and more. Sufficient detail is given so that the reader can understand the ideas and the fundamental aspects of the algorithms without requiring a degree in mathematics or computer science.

One of the fundamental issues driving the need for ethical algorithms is the unintended consequences that result from well-intended choices. This is not a new phenomenon—Lot made a choice based on the data he had available: “Lot looked about him, and saw that the plain of the Jordan was well watered everywhere like the garden of the LORD, like the land of Egypt ...” Genesis 13:10 (NRSV). But by choosing that apparently desirable location, Lot brought harm to his family.

I have often pondered the command of Jesus in Matthew 10:16 where he instructs us to “be wise as serpents and innocent as doves.” Perhaps one way to apply this command is to be wise as we are devising algorithms to make sure that they do no harm. We should be willing to give up some efficiency in order to achieve more equitable results.

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

**A WORLD WITHOUT WORK** by Daniel Susskind. New York: Metropolitan Books, 2020. 305 pages. Hardcover; \$28.00. ISBN: 9781250173522.

Will AI systems inevitably displace humans from employment? While computer and AI technology continue to advance at astronomical rates, the popular concern is often of an apocalyptic future where highly intelligent robots have taken over (e.g., *Terminator*, *Matrix*, etc.). In his book, *A World without Work*, Daniel Susskind predicts the current capabilities of technology will lead to a future in which powerful AI systems can do many of the jobs held by humans. Susskind therefore believes that the proliferation of AI systems will lead to a future “world without enough work for everyone to do” (p. 5). With his expertise in economics, Susskind explores how the continued advanced of technology will have profound effects on future employment, growing inequality, and the methods whereby humans find meaning and purpose.

The book is divided into three sections. In the first section, Susskind sets out the historical context of technological advancements and their effects on employment and economics. He highlights how the

early advancements of computer technology were often met with disappointment as creators found it exceedingly difficult to create a machine that could replicate human intelligence. However, this early disappointment led humans to underestimate the efficiency of AI systems in performing tasks that are easy to automate (or what Susskind refers to as “routines”).

In the second section, the discussion shifts to exploring how the increased power and affordability of machines enable them to perform more human roles. The fear of increasing unemployment due to technological advancement is a real fear. Susskind differentiates between two types of technological unemployment: frictional and structural. While frictional unemployment (humans not having the skills to perform a job) is certainly an issue, structural unemployment (there actually being too few jobs for everyone) is the more pressing problem. The threat of rising unemployment leads Susskind to predict that economic inequality will grow since only certain people will be able to acquire well-paying jobs.

In the third and final section, Susskind tries to provide a solution to the growing unemployment problem. He claims the attempted solution of technology education fails as a long-term response since not all people have the disposition to learn about technology, nor will there be enough jobs. A potential solution is to provide a UBI (universal basic income) for all people so that the economic inequality will not be so severe. However, Susskind rejects the UBI solution in favor of his proposed CBI (conditional basic income) which still provides income but with requirements that must be met. Susskind believes his proposed CBI solution has the added benefits of solving the inequality problem and providing meaning and purpose that a job once held.

Computer and AI technology are certainly advancing at a rapid rate. Susskind is not alone in his warnings regarding the potential dangers of technological advancements. However, Susskind helpfully points out that the danger does not come from machines gaining sentience and oppressing humans but, rather, the danger is one of machines gradually replacing us in our employment due to their overwhelming speed and efficiency. While there is relief that such an apocalyptic future is unlikely, the prediction of a future without enough work to go around ought to be a significant concern.

While Susskind’s prediction of a future with significantly reduced employment is well founded, his potential solution of implementing a CBI to provide the meaning and purpose lost from unemployment seems incomplete. With jobs no longer providing the sense of meaning and purpose, it is difficult for Susskind to find a solution to fulfilling these existential longings can be fulfilled. Unfortunately, he is unwilling to seriously consider a religious answer to these existential

questions, which could help provide a more satisfying response.

What applications can Christians consider from this book? There are at least two. First, if Susskind's prediction of machines performing many jobs traditionally done by humans is accurate and unavoidable, then Christians need to reconsider what work means and how our concept of work may need to evolve. Due to a lack of available positions and the difficulties of acquiring the skills needed, not everyone will be able to enter the field of technology work. While the existence of much traditional work may disappear due to automation, we still need to understand what it means to pursue a calling.

Second, Christians should be part of the philosophical and ethical discussions surrounding computer and AI progress. As the technological field continues to progress at a rapid rate, questions regarding the moral status of machines and their ethical implications for humanity will naturally rise to the forefront. The worldview that shapes these important discussions will have a profound impact on how future technology is designed and created.

Overall, Susskind's book is a welcome addition to the growing literature on AI technology concerns. He helpfully points out the potential future consequences of AI technology from an economic standpoint. I would recommend this book as a resource for thinking through the potential future ramifications of an increasingly automated world.

*Reviewed by Eddy Wu, IT Operations Manager and PhD student at Southeastern Baptist Theological Seminary, Wake Forest, NC 27587.*

**DIGITAL LIFE TOGETHER: The Challenge of Technology for Christian Schools** by David I. Smith, Kara Sevensma, Marjorie Terpstra, and Steven McMullen. Grand Rapids, MI: Eerdmans, 2020. 377 pages. Paperback; \$29.99. ISBN: 9780802877031.

All of us who are invested in Christian education, parents, administrators, building committees, boards, and especially teachers, have struggled with the role that digital devices should play in our schools and in the lives of our children. For this reason, *Digital Life Together* is a gift to the Christian education community in North America. This book is a careful, detailed, and comprehensive look at how a couple of Christian schools chose a 1-1 device-to-student strategy and lived with the technology in this intensive way. Regardless of where one falls on the spectrum, from full adoption to complete rejection of digital technology in schools, this book will broaden and deepen your discussions.

The authors chose a Protestant Christian school system with approximately 1,500 students (labeled "Modern Christian Schools" for purposes of anonymity) across several campuses that had a mature 1-1 device-to-

student approach to technology as the primary focus of their study. For comparison, they also looked at another Midwestern Protestant Christian school system from the same tradition and also surveyed graduates of Christian schools at a nearby Christian liberal arts college. Classroom observations, surveys, focus groups, case studies, and document analysis were used to "shed light on lived experience and changing beliefs and practices of members of a Christian school community embracing new technologies" (p. 26). An appendix on the research methods is included for those interested.

In order to get specific, the bulk of the book is divided into five sections: mission, teaching and learning, discernment, formation, and community. More detailed questions are raised to broaden and deepen the observations of how technology affected students at these schools. These questions are the anchors for the relatively short chapters that comprise the book.

As is befitting such an exploration, the authors are appropriately agnostic about both the wisdom and the efficacy of the intense use of technology in education. They highlight where there are successes from the school's perspective. For instance, they relay an example in which the mission-driven rationale for adopting the technology has made its way into the mind of a student (p. 46). Likewise, graduates from the focus schools indicate that the "technology program at Modern Christian Schools may be having some positive impact in terms of helping students manage their screen time" (pp. 166-67). Failures are also observed and noted. Most surveyed students acknowledged that the technology allowed them to find answers without really understanding them and led them to look for easy answers to problems. More than one third of them agreed that the technology encouraged them to skim over material rather than reading deeply (p. 128). The technology was also observed to promote unhealthy practices of task completion. Students were inclined to get work done quickly and then shop online, or use class time to shop in the anticipation that they would complete the work later (p. 132). Many other examples of positive and negative outcomes could be cited.

Perhaps one of the most intriguing lines of questions for administrators was how overtly Christian mission statements that were central in the adoption of technology could be co-opted by non-Christian aspirations as one moves out from the administration to the broader school community. "The way the mission was understood in the wider community was also shaped by broader social aspirations and implied stories about success" (p. 53). In reference to literature sent to the alumni community, the authors note that, "Appealing to existing community desires and values, including those focused on material advantage, was a way to build support for the program ... The focus group data suggest that this strategic communication choice left its mark" (p. 59). In the case of Modern Christian Schools,