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this volume. This review addresses just a few slices relevant for Christian readers.

The Übermensch, the future superman (also translated "Superior Man" and "Higher Man") Nietzsche made famous, was denigrated following World War II due to its association with the Nazis. Fuller travels back to Nietzsche's early reception when the superior man was not a racially tinged idea. This makes it possible for Fuller to "remain interested in the early twentieth-century image of Nietzsche as someone who took literally the prospect of transcending the human condition—a futurist who was unafraid to confront the puzzlement and even suffering that it would entail" (p. 10).

As with the transhumanist agenda, a happy outcome for Nietzsche's superman project was not guaranteed. Nietzsche's tightrope walker, which may be understood as a metaphor for the human condition, falls to his death. For Fuller, this does not mean that Christians, committed to transformation, should not make use of these technologies or see them as a means of God's grace. "As Nietzsche might put it-and transhumanists would recognize - we are not superior animals but failed gods" (p. 17). However, Fuller says we cannot regain our standing on our own; it is a grace-gift from God. Along the way, Fuller adeptly maps varieties of transhumanism onto theological (but not necessarily orthodox) positions, for example, Aubrey de Grey's Pelagian-like biological superlongevity program and Ray Kurzweil's Arian-like vision of "divine" consciousness escaping the confines of the body. For Fuller, the Arian "supposes that humans 'always already' possess divine capacities which may have yet to be discovered" (p. 47). And, importantly, short of making choices for transformation, "humans may freely fall into a further degraded state, which may include regarding their degradation as satisfactory if not superior to the time when they were close to God" (p. 18).

Christians can find Nietzsche a thoughtful guide for a proactionary (as opposed to a precautionary) approach to technological possibilities for human enhancement. Being proactive does not mean underestimating the risks these programs entail. While the tightrope walker can reach the other side, humility asks us to recognize that it is a "risky project of self-improvement" (p. 20). But we can face the danger and push through the fear. "However much day-to-day empirical realities remind us of our earthbound nature, we are nevertheless more than just that" (p. 34). And then, rhetorically, Fuller asks: "The question then becomes how to give that 'transcendental' aspect of our being its proper due: Is it just something that we release on special occasions, such as a church service, or is it integral to our ordinary being in the world, propelling us to realize our godlike potential?" (p. 34). In this context, Fuller asserts that faith can be understood as a "creative response to radical uncertainty" and a belief in providence, that is,

"that God will always provide what we need to know to improve our position – but the trick is for us to figure what that is" (p. 34).

This book, then, is not so much about Nietzsche as it is a meditation inspired by Nietzsche that provides a sober critique of transhumanism and its possibilities. The Christian religion will do well to provide a theological response to radical human enhancement, and Nietzsche, via Fuller, can provide guidance, albeit from an unlikely source.

Reviewed by Calvin Mercer, Professor of Religion, East Carolina University, Greenville, NC 27858.

THE CHARISMA MACHINE: The Life, Death, and Legacy of One Laptop per Child by Morgan G. Ames. Cambridge, MA: The MIT Press, 2019. 309 pages including appendices, notes, bibliography, and index. Paperback; \$35.00. ISBN: 9780262537445.

As with many who lead development projects, Negroponte and OLPC's other leaders and contributors wanted to transform the world—not only for what they believed would be for the better but, as we will see, in their own image. (p. 4)

Morgan G. Ames's book, *The Charisma Machine*, is a deeply incisive analysis of the One Laptop per Child (OLPC) project. The OLPC project, led primarily by Nicholas Negroponte, sought to provide millions of simple, robust, inexpensive laptops to children in developing countries, to allow the children to rise above societal and educational limitations. The author analyzes not only the hardware and software of the OLPC XO laptop, but also delves into the leaders' experiences as "technically precocious boys" and "hackers" at MIT's Media Lab, their educational philosophy of constructionism, and both their personal charisma and that of the XO laptop.

The book appears to be a reworking of the author's PhD dissertation from Stanford University in 2013, and as such, is not an easy read. Understanding the book requires understanding a few oft-used terms, defined in the introduction. Ames repeatedly uses the term "social imaginary" defined as

a set of coherent visions by a group of people to collectively "imagine their social existence," as philosopher Charles Taylor puts it—the ways that people imagine themselves as part of a group and the identities that this group takes on in their minds. (p. 6)

The book also emphasizes the leaders' common life experiences as technically precocious boys—boys who grew up taking apart devices to understand them and then rebuilding them to make them better. Their experiences continued in the group at MIT's Media Lab, where members would play with computers to learn how they worked and then would challenge each other to reprogram them and extend their capabilities. These

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individuals generally had been unhappy being educated at "factory schools," and thus they believed that all children could better educate themselves by being given unsupervised access to laptops. They believed in extreme educational constructionism: children learned best by unrestricted and unguided play, and if given the opportunity by being given a laptop, they would learn to program, would learn English, and would learn how to diagnose and fix hardware problems, all without supervision.

Finally, the term "charisma" is crucial. "Charisma is not legitimized through bureaucratic or rational means but by followers' belief that a leader has extraordinary, even divine, powers that are not available to ordinary people" (p. 8). Negroponte and others were charismatic individuals, making claims about OLPC (and education and society) that others, then, simply accepted as true.

The XO laptop itself, Ames claims, was a charismatic machine. It was a small, inexpensive, colorful laptop, running open-source software, and touted as tough and reliable. In reality, the hardware suffered from many problems: poor battery performance, insufficient memory, fragile wireless antennae, a flaky keyboard and trackpad, and a screen that cracked easily. The software provided by the operating system was supposedly easy to learn and use, and included educational tools (Scratch, Tux Paint, etc.) and an internet browser. Most programs used English in their instructions; the assumption was that children in non-English-speaking regions needed to and would learn English by using the programs, and thus they would become fluent in the "universal language" of technology and industry.

Chapter 1, "OLPC's Charismatic Roots," seeks to answer the question, "Why did so many so enthusiastically accept OLPC's charismatic promises?" The chapter provides a foundation for the rest of the book, going over the histories of Negroponte, and more importantly, Seymour Papert, who first conceived of the XO laptop. Papert was a technological utopian, believing that technology had the power to lift people out of poverty, fix education (by disrupting the status quo), overthrow corrupt governments, and so on. Papert's life experiences and writings (*Mindstorms: Children, Computers, and Powerful Ideas*) provided the foundation for OLPC.

Chapter 2, "Making the Charisma Machine," describes the OLPC hardware and software, and the five principles of OLPC: child ownership, low ages (targeted toward children ages 6–12), saturation ("where every child will own a laptop"), connection (to the Internet), and free and open software. Of these five, saturation and connection ended up proving to be the most difficult. Saturation was never achieved because the laptop hardware was so fragile that many children who were given a laptop, broke it, and they were then never able to use it again. Connection proved to be difficult. Initially the laptop was going to implement a new networking

technology which would allow laptops to seamlessly find and connect to one another, forming an ad hoc network across a town. This technology was never fully realized, and so connectivity was possible only if the government or a nongovernmental organization (NGO) installed wireless hotspots at schools.

In chapters 3 and 4, Ames recounts what she observed in Paraguay over a seven-month period. OLPC deployed the XO laptop in Paraguay, especially in one city, Caacupé, with the help of an NGO called Paraguay Educa. Ames recalls seeing hundreds of broken laptops stacked in a backroom at Paraguay Educa, notes how children used the still-working laptops (primarily to download games and music), and how already overworked teachers had little time to incorporate this new disruptive technology into their lesson plans. Success was achieved only in a few schools where Paraguay Educa hired technology formadores, or trainers, to be placed to help maintain and promote the laptops. Money for paying these formadores quickly ran out, however. She found and interviewed a few children who had taught themselves to program using Scratch or Turtle Art. In all cases, these children had guardians who closely monitored the children's use of the laptops, and encouraged them to create content instead of just consuming it. In other words, these children did not, without supervision and outside encouragement, learn programming, learn English, and learn how to repair their own laptops.

Chapter 6 is a fascinating chapter that examines the role of performance in the success of NGOs and nonprofits. Most organizations sponsored by outside funding sources must periodically demonstrate the effectiveness of their work to their sponsors. Paraguay Educa was no exception, having to demonstrate to visiting leaders of OLPC how well their vision was being realized. These dog-and-pony shows made the OLPC leadership believe that everything in Paraguay was going well. These demonstrations were necessary for the employees of Paraguay Educa to keep their jobs. The OLPC leadership were also not interested in digging too deeply to discover any problems, as they also had to report back to their donors. Ames analyzes this system of accountability based on performances, noting its advantages and disadvantages.

The final concluding chapter summarizes the five main takeaways of the book:

- 1. Big cookie-cutter solutions to problems without thorough research and sustained honest analysis "in the field" are probably doomed to fail.
- 2. When developing a project, don't underestimate the hard realities of the culture where the project is to be deployed.
- 3. Be cognizant of the privilege of those proposing a solution, and how others may not have this privilege.

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- 4. Don't be fooled by performances.
- 5. Inspect the undergirdings of your philosophies. Are they legitimate?

OLPC failed on all of these points. Millions of dollars were spent, and there is little evidence of any lasting impact.

Although it is not an easy read, this book is recommended for those who are interested in thinking about how computing can be effectively used to make a difference in this world. If you are a Christian, and desire to be an active agent of change for good, you also should spend time considering your privilege, the culture of where your project will be deployed, and why you are optimistic about the success and impact of your project. Will you be making the same mistakes that OLPC made?

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MY TECH-WISE LIFE: Growing Up and Making Choices in a World of Devices by Amy Crouch and Andy Crouch. Grand Rapids, MI: Baker Books, 2020. 208 pages. Hardcover; \$15.99. ISBN: 9780801018671.

My Tech-Wise Life is a book about life before it is a book about technology. Through a discussion of her own experience growing up in a "tech-wise family," Amy Crouch shares her struggles and successes as a young adult navigating a world that is obsessed with technology. She honestly shares how she doesn't have it all figured out, while describing the ways that she keeps technology in its place as a tool in her life, rather than as a controlling force.

Technology causes us problems that aren't rooted in technology. It changes the problems that we face, but it doesn't create fundamentally new problems. Sometimes it exacerbates problems that we have always faced, such as distraction. Other times, it covers up problems—this sounds good, until you realize that it also covers up the solutions. We experienced distraction and loneliness long before the distractions from phone notifications, and the loneliness from seeing Instagram posts of parties we weren't invited to. This book is about how to live—with and without technology.

In each chapter, Amy tackles a different facet of technology, exploring how we can be free of the demands of technology in a way that helps us to be more engaged in our own lives. Some chapters address specific technologies: for example, social media, and how "we don't have to compare ourselves" (chapter 1). Other chapters cover how we can use all of our technology better so that "we don't have to be exhausted" (chapter 7).

Each chapter is paired with a letter from her dad, Andy Crouch, the popular Christian author of *The Tech-Wise* 

Family. Each chapter also ends with "What to Do Next," beginning with questions of reflection, then moving toward the challenges of how to start conversations with your family and friends about how you want to be using technology, and ending with suggestions for how to change your habits surrounding technology.

My Tech-Wise Life reads more as an invitation than as a lecture. It is encouraging to hear this from Amy's perspective, as someone who grew up with smartphones and Instagram as a central part of high school. Amy is honest about how she struggles with what she's writing about—including issues of secrecy, loneliness, and exhaustion. These negative effects aren't invented by tech companies, but they are reframed and coded into the devices we carry around. She doesn't pretend that our problems can be fixed by purging our life of technology. Yet our situation isn't hopeless; Amy offers stories of her successes too. We are not inevitably going to lose to technology. There are ways to live a more meaningful life and to not succumb to the exhaustion of the endless scroll.

The book would be a valuable read for any young adult, but it is written to be most relevant for teens. This is apparent in some of her prompts to discuss technology use with parents, as well as in the emphasis placed on the teen demographic in the Barna research statistics scattered throughout the book. These statistics are based on surveys of young adults, so they primarily add confirmation that everyone else is struggling with the same technology problems. Aside from the statistics and a few of the prompts, the book is applicable to anyone who grew up with digital technology and is needing to reassess their relationship with it.

With its easy-to-read style, *My Tech-Wise Life* is a quick read, and would fit well for a small group wanting to read a book together. It is a hopeful, yet realistic book. It is honest about the problems that we face in using technology wisely, but it also offers concrete suggestions to be more mindful of technology use. Amy invites us into a life that is shaped around relationships and wonder rather than around technology.

Reviewed by Elizabeth Koning, graduate student in the Department of Computer Science, University of Illinois at Urbana-Champaign, Urbana, IL 61801.

**RIGHT/WRONG: How Technology Transforms Our Ethics** by Juan Enríquez. Cambridge, MA: The MIT Press, 2020. 304 pages. Hardcover; \$24.95. ISBN: 9780262044424.

Right/Wrong: How Technology Transforms Our Ethics made me angry, made me think, made me research, made me discuss, made me agree, made me disagree ... and it turns out that is what the author was hoping for. His goal was to get people interested in ethics again.