# FROM THE GARDEN TO THE CITY

## THE REDEEMING AND CORRUPTING POWER OF TECHNOLOGY

## JOHN DYER Foreword by Dr. T. David Gordon



From the Garden to the City: The Redeeming and Corrupting Power of Technology

Copyright © 2011 by John Dyer

Published by Kregel Publications, a division of Kregel, Inc., P.O. Box 2607, Grand Rapids, MI 49501.

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopy, recording, or otherwise—without written permission of the publisher, except for brief quotations in printed reviews.

All Scripture quotations, unless otherwise indicated, are from The Holy Bible, English Standard Version<sup>®</sup> (ESV<sup>®</sup>), copyright © 2001 by Crossway, a publishing ministry of Good News Publishers. Used by permission. All rights reserved.

Scripture quotations marked NASB are from the New American Standard Bible<sup>®</sup>. Copyright © 1960, 1962, 1963, 1968, 1971, 1972, 1973, 1975, 1977, 1995 by The Lockman Foundation. Used by permission. (www.Lockman.org)

Library of Congress Cataloging-in-Publication Data Dyer, John.

From the garden to the city : the redeeming and corrupting power of technology / John Dyer.

p. cm.

Includes bibliographical references and index.

1. Technology—Religious aspects—Christianity. I. Title. BR115.T42D94 2011 261.5'6—dc22 2011013589

ISBN 978-0-8254-2668-1

Printed in the United States of America

11 12 13 14 15/5 4 3 2 1

"Technology is almost omnipresent whether we like it or not. So what do we do with this thing that is impacting people everywhere? Very few Christians think a lot about this, but John Dyer has. In a balanced journey through the digital world, he shows us what to like and be aware of about our technological world. *From the Garden to the City* is more than a trip through the digital world; it is a tour of discovery about a growing part of our lives. Read and discover what technology is and can be."

#### -Darrell Bock, author of Jesus According to Scripture

"We all have a great deal of experience with technology, but few of us have sought to think about technology in a distinctly Christian way. This is one reason I commend John Dyer's *From the Garden to the City*. As comfortable with theology as he is with technology, Dyer is a steady guide to the digital world we find ourselves in."

-Tim Challies, author of The Next Story: Life and Faith After the Digital Explosion

"Slow down for a minute; be still and ponder what John Dyer is addressing in this helpful book. Technology is undeniably reshaping how we communicate with, relate to, and ultimately love one another. If you've ever texted, tweeted, or sent an email to someone who was sitting right next to you at the time, you're affected. It's time for you to read *From the Garden to the City.*"

-Bob Lepine, cohost of FamilyLife Today

"It's odd that most of us spend our days immersed in and preoccupied with technology, yet also take its most important features entirely for granted. This book is full of jewels of observation that will help you see technology, the Bible, and your own life afresh. It's frequently funny, surprisingly moving, and consistently smart—a great guide for those who want to begin thinking about how technology shapes us and how we can live faithfully with it."

-Andy Crouch, author of Culture Making: Recovering Our Creative Calling

"John is the unusual person who is as expert in information technology as he is familiar with the Bible, and he is even more unusual in being able to move to and fro with ease and come up with striking and helpful insights. His voice, though gentle, speaks with authority."

-Albert Borgmann, author of Real American Ethics

"John Dyer has essentially written the book I've always wanted to write except he's executed it with far more excellence and comprehension than I am capable of! John has created a superbly crafted theological framework for both the layperson and technology enthusiast, so they both can engage wisely, rejoicing in technology's redeeming properties while being cautious with the corruptive. John balances the contemporary challenges that newer devices create with timeless historical models from the Scriptures that give answers that more than satisfy. Thanks, John, for giving this fast-paced generation something worthy enough to cause us to pause, realign, and reprogram our thinking for not only ourselves but all those that we impact in our relationships, businesses, and ministries. I will never look at my iPhone the same way again, and I'm a better person for it—and you will be too." —John Saddington, Professional Blogger, TentBlogger.com

"John Dyer does a magnificent job—the best that I have seen—of explaining to the Christian community how and why technology *cannot* be morally neutral. He crafts his arguments carefully, using examples from his field of information and computer technology (insiders use the term *computer-mediated communications*). But the principles he extracts are quite general and include fresh insights into the role of technology in culture and matters of the spirit. Perhaps his greatest contribution is that he shows contemporary Western culture to be determined by technology as much or more than by any other force. That insight may come as something of a shock to the musicians, poets, philosophers, and media producers to whom the Church has attributed the role of culture-formers. Especially, however, it creates a new challenge for pastors and church leaders who now must add discernment of technology to their teaching about popular culture. . . .

From the Garden to the City contains several fresh and fascinating new insights."

—Jack Clayton Swearengen, Emeritus Professor of Engineering at Washington State University, nuclear weapon scientist, and author of *Beyond Paradise: Technology and the Kingdom of God* 

"It's a unique perspective that combines the heart of a theologian with the brain of a high-tech expert, but that's what you get with John Dyer. And speaking as a pastor, I believe that's what *you* need as well if you share in any sort of spiritual leadership. Our cause is to live and communicate the good news as deeply and as broadly as we can, using all the tools at our disposal, especially and including high-tech tools. But as John shows, we must be wise in the use of technology lest we and our cause change to serve it and not the other way around. *From the Garden to the City* offers biblical, profound, and practical insights as to how we can do just that."

-Dr. Andy McQuitty, pastor of Irving Bible Church, Irving, Texas

"There are few guides through the sometimes uneasy relationship between technology and Christianity that I would more highly commend than John Dyer. In this book, he walks us through difficult concepts in ways that are eminently accessible. Never hysterical but appropriately critical, *From the Garden to the City* provides an important and timely framework for churches and leaders to think through how they can use technology without technology using them."

-Matthew Lee Anderson, author of Earthen Vessels

To Amber, who taught me Heidegger, laughter, and unmediated love

## CONTENTS

Foreword by T. David Gordon | 9 Acknowledgments | 11 Introduction | 13

- 1. Perspective | 19
- 2. Imagination | 32
- 3. Reflection | 43
- 4. Definition | 55
- 5. Rebellion | 69
- 6. Approach | 81
- 7. Redemption | 98
- 8. Mediums | 115
- 9. Restoration | 132
- 10. Technicism | 144

Virtualization | 159
Recommendations | 175
Appendix: Technology Tetrad | 180
Notes | 183
Index | 190

## FOREWORD

John Dyer has written a book that few could write. Trained both in information technology and in theology, and well-versed in media ecology, he is unusually qualified to raise questions about how we make tools and how tools make us, focusing especially on the more recent developments in electronic and image-based technologies. With his distinctive background, Dyer is able to ask and answer two questions of our tools and technologies: What do they do *for* us? And, What do they do *to* us?

Dyer's viewpoint is self-consciously Christian without being reactionary, tech-savvy without being naive, and well-considered without being pedantic. At a moment in history when our tools are being developed at a rate faster than our capacity to evaluate their impact, we need reliable guides to help us to understand them well, so that we can use them thoughtfully and intentionally. John Dyer is such a guide; and this insightful volume dodges none of the difficult questions, while retaining a balanced and judicious consideration of those areas that do not yet enjoy universal consensus. From the Garden to the City traces the history of technology and toolmaking from a distinctively Christian point of view; and candidly acknowledges that both human wisdom and folly, both piety and impiety, both humility and pride, have contributed chapters to this complicated history. Neither technophobes nor technophiles will be entirely satisfied with either Dyer's judicious reasoning or his cautionary encouragements. Each will prefer total, apocalyptic warfare, and each will be uncomfortable with his sniperlike precision.

I have looked for a volume like this since I began teaching an introduction to media ecology class almost a decade ago; and I commend it to all who are interested in electronic and image-based technologies, and to all whose thinking (like mine) has been influenced by people such as Walter Lippmann, Jacques Ellul, Marshall McLuhan, Daniel Boorstin, Walter Ong, Neil Postman, Winifred Gallagher, Maggie Jackson, Maryanne Wolf, Mark Bauerlein, William Powers, and Nicholas Carr.

For all those who desire to be wise and faithful followers of Christ without returning to his moment in technological history, this will prove to be a valuable, if not cherished, guide.

> Dr. T. DAVID GORDON Professor of Religion and Greek Grove City College Grove City, PA

## ACKNOWLEDGMENTS

For getting this book off the ground, I'd like to thank Frank Barnett, who encouraged me to start a blog after I emailed a few rants about technology several years ago. I'd also like to thank the BibleTech Conference that let me do a talk in 2009, Justin Taylor who posted that talk on his blog, and Ed Komoszewski from Kregel, who saw the talk and then badgered me into submitting a proposal for this book.

While writing, numerous friends offered their encouragement, including my longtime friend Dave Furman, who somehow manages to be rather immediate even half a world away. Thanks also to the men in my small group, each of whom contributed something to this work: Barry Jones (culture), Jeff Taylor (music), Trey Hill (images), Josh Weise (typography), Brady Black (faith), Christian Hemberger (presence), and Dale Dunns (advocacy). Also, thanks to my writing and blogging friends both near and far, Matthew Lee Anderson, Rhett Smith, Scott McClellan, John Saddington, Tim Challies, and the rest. Thanks also to Dallas Theological Seminary, which gave me a wonderful biblical education, and to my boss, Mark Yarbrough, who gave me time to write this book.

A special word of thanks is also due to Dr. Albert Borgmann and Dr. T. David Gordon, both of whom allowed me to ask them questions as I wrote and whose work has been enormously helpful to me and others.

I am indebted to those who took the time to read early versions of this book and offered helpful feedback, especially Adam Keiper of the *New Atlantis*.

I am also grateful for a wonderful family, including my mother, who raised me to be a person hopefully capable of writing a book someone (other than her) would read, and my father, who bought that first Apple IIe. To my dear sister, Ruthie, and my trusted brothers, David and Stephen, I hope our children are blessed with siblings as wonderful as you.

And to my lovely, brilliant wife, Amber, thank you for waiting. Are you free Friday night?

## INTRODUCTION

One day, a guest speaker brought an interesting contraption to our church. As our pastor introduced him, he pulled an old reel-to-reel movie projector out of its case and began to set it up. Some of the audience seemed to wonder why he'd bring something so technologically backward, but I was mesmerized as he attached the reels and weaved the celluloid film through a half dozen channels and pulleys. After working with it for some time, he finally connected the film to the second reel, plugged it in, and flipped the switch, but then . . . click, click, click, click . . .

Nothing happened. Something was obviously wrong.

As the clicking sound continued, the room started to grow a little tense. People shifted awkwardly in their seats, letting our guest know he was wasting their time.

But not me. I wasn't bored at all, because I could see exactly what had gone wrong.

So I got up from my chair and marched straight down the aisle of the church, past the guest speaker, and up to the ancient, malfunctioning

Introduction

device. Without saying a word, I began to dismantle what he had done and started to carefully rethread the film back through the correct channels.

The audience watched with some surprise, apparently aware that I had never used this device before. Some shook their heads in disbelief, while others shot knowing grins at each other. I continued to work, slowly threading the film, then reattaching it to the second reel. I checked the plug, flipped a few switches, and then pressed the power button . . . whiiiirrrr . . . it worked!

Now, this story probably seems fairly ordinary. Tech people like me are always fixing things in churches. However, you might be interested to know that I have absolutely no memory of the events I've just described. The only reason I know it happened is that while I was growing up, whenever my mom met someone new, she liked to tell the story of how her three-year-old son had fixed a film projector he had never seen before.

And so began my love and fascination with all things technological, from mechanical projectors to radio control cars and planes to computers and mobile devices. I was the kind of kid who asked for a chemistry set for Christmas so I could do experiments in the garage, and who saved up money for an electronics kit from Radio Shack so I could wire up an alarm for my bedroom. Of course, like most children of the '80s, I played countless hours of video games, but when I finally bought an Xbox, it was not so much because I wanted to play Xbox games but because I wanted to solder in a modchip and play around with home-brew software.

Fast-forward a few decades. As a young adult, I found that I loved doing two things. The first was teaching the Bible, which led me to attend seminary. The second was computer programming, which led me to work in the web development world. God graciously provided me a web design job at the seminary I was attending, allowing me to combine my love for God and his church with my love for technology.

As exciting as it was to do technology work for a ministry, I soon found that working for a ministry does not always pay all the bills. So I took on a few side projects that allowed me to build tools for companies like Apple, Microsoft, Harley Davidson, Anheuser-Busch, the Department of Defense, and Dallas's NPR affiliate. Throughout my years in seminary, I continued to study and work hard in both theological studies and programming. I spent as much time learning Greek and Hebrew as I did learning languages like PHP, C#, Python, HTML, and JavaScript.

But in my final semester of seminary, a professor, who was known both for his brilliance and shocking, out-of-nowhere statements, said something that changed everything for me. In the middle of addressing a variety of current issues in society and culture, he looked straight at all of us and said, "One of the most dangerous things you can believe in this world is that technology is neutral."

Wait, what? I thought. Surely, he must have misspoken.

After all, nothing could be more obvious than the fact that technology is neutral. What matters is that we *use* technology for good, right?

As he kept talking, I started arguing with the professor in my head. I could not think of a single tool, device, or technology that was morally good or evil in and of itself. Yes, a tool like the nuclear bomb has been used to kill hundreds of thousands of people; but it is based on technology that can also be used to generate inexpensive electricity for millions of people.

Sure, people can choose to abuse computers and the Internet, using them for all kinds of illicit purposes, from identity theft to the distribution of pornography. But the reason I chose web development for an occupation was that I also know the Internet can be used for incredible good. Outside work hours, I built websites to help church leaders find good biblical resources. My entire goal was to use the latest and greatest technology for the good of Christ and his Church.

What could be so dangerous about that?

I returned to class the next day prepared to ask the professor about his statement, armed with the best arguments I could muster about why technology is, in fact, neutral. However, when I arrived that day, the professor was not there. He had fallen ill and would not be able to return to class that semester.

What was I to do? How could I be sure if I was right? And what if the professor was right after all? What if there was some problem with technology

Introduction

that I had never considered? Does the Bible actually say anything about technology? Can we say anything more profound or helpful about our technological world than simply, "Don't be evil" (Google's informal corporate motto)?

So I headed straight for my computer and started scouring the Internet for resources. Strangely though, when I attempted to find specifically Christian reflection on technology, I found very little. A quick search on the Internet for "theology and technology" turned up dozens of results on how to *use* technology. But beyond calls to "redeem technology," I found very little on a biblical position for technology or anything about how technology fits into the redemptive story told in the Scriptures.

Just as I was about to give up in frustration, a dear friend who works two floors up from my office gave me a book on Marshall McLuhan's thought, and another friend who lives halfway around the world gave me a book by Neil Postman, a student of McLuhan. I later found out that McLuhan and Postman founded an academic discipline called media ecology, which studies how technology operates within cultures and how it changes them over time. Media ecologists look at what happens when a technology enters a culture the same way that a biologist examines what happens when a new animal species enters an ecological environment.

Digging a bit more, I found a subdiscipline of philosophy called—obviously enough—"philosophy of technology," which asks questions about how technology relates to what it means to be human. These questions include "Does technology have an independent nature?" and "Should humans be classified as 'tool-making animals'?"

As I continued reading anything I could find on the nature of technology and communication media, I began to find some troubling ideas that made me wonder if technology was not all that it seemed. Very little of what I found considered these issues from a biblical or theological viewpoint, so I began to filter what I was reading through a biblical lens, documenting it in a blog entitled, "Don't Eat the Fruit."<sup>1</sup> This blog became the impetus for the book you hold in your hand today.

The blog's title is a reference to the Garden of Eden and the Jim Jones

cult of the 1970s. In both cases, people consumed something they didn't fully understand, resulting in terrible consequences. In our modern world, we—like Adam, Eve, and Jim Jones's followers—often consume technology without being fully aware of the changes it can bring. This book is my attempt to grapple with those changes and understand how we can fulfill our role as God's image-bearers in a world very far removed from the garden.

As I did with the film projector so many years ago, I will use the following pages to dismantle the concept of technology, examine it carefully, and then put it back together again. I hope you enjoy this retelling of the story of technology in a way that honors God and the reason he put us here on earth.

## 1 PERSPECTIVE

Just down the street from my house, there is a little Indian market my family and I like to visit when we need to pick up a few items for dinner. On the short walk there we'll pass the neighbors from Korea who own a liquor store, the retired Germans with the meticulously kept lawn, a Chinese realtor who named both his dog and his daughter after himself, a tall Bolivian man who developed many of the algorithms for the 4G LTE networks that started coming online in 2010, the chief ice-cream scientist for an Italian gelato company, and an elderly black woman still displaced from Hurricane Katrina.

Some of these neighbors live in homes worth upwards of half a million dollars. They send their kids to expensive private schools, drive new luxury vehicles, and dress immaculately for every occasion. Just a few blocks away, however, another set of neighbors can barely afford their low-income government-subsidized housing. People from this group send their kids to public schools, travel by public transportation, and wear clothing from Goodwill. Dotting the surrounding area are dozens of churches, mosques, temples, and synagogues, each serving the unique religious needs of our community. Scattered among these places of worship are dozens of restaurants serving every kind of cultural and ethnic food one can imagine. At the center of it all is Walmart, where you will find people wearing an equal number of burkas, Birkenstocks, and baggy jeans.

On the surface, then, my neighborhood would seem to be fairly diverse. We have different religions, genders, ages, occupations, food preferences, cultures, income levels, and native languages. And yet, this apparent diversity is actually a carefully crafted illusion.

If you look closely—brushing aside skin color, favorite religious texts, and socioeconomic status—you'll see that my neighbors and I have something in common that transcends all of our differences and orders nearly every part of our lives. It's obviously not our cultural heritage nor our common upbringing. It's not the place we live nor our hatred of the August heat in Texas.

The one thing that transcends all cultural, religious, and age boundaries, the one thing that is common among rich and poor and young and old, is the fact that we all share a lifestyle thoroughly saturated with technology.

#### A Completely Different World

At first glance it might seem that technology divides more than it unifies, for individuals and communities easily separate into high- and lowtech groups. I can tell the difference between the twelve-year-olds down the street who send hundreds of text messages a day and the little old ladies at the nearby nursing home who only use landlines. I know that the gigantic church a few miles away with HD video is far more technologically advanced than any of the smaller churches in the neighborhood. The houses in the new subdivision with solar panels, geothermal cooling, and computerized lighting are clearly much more advanced than the nearby HUD housing with incandescent lightbulbs and window A/C units.

However, only a narrow view of technology and culture leads to such a strict division between techie and technophobe.

If we broaden our perspective to consider the last several decades, our distinctions of techie versus non-techie vanish. Just a century ago, the idea of communicating electronically to anyone at any time would have seemed like magic. By the standards of 1900, the difference between communicating via landline or Skype would be meaningless, because a person from that era would not yet be accustomed to hearing disembodied voices from across the globe. Even the most educated and advanced individual of the 1840s could not see a distinction between the big-screen TVs of the 1980s (that took up an entire living room) and a modern 3D movie theater, because they lived in the time before photography was commonplace.

Almost all of the tools we use on a daily basis—cars, telephones, televisions, ballpoint pens, washing machines, lightbulbs, air-conditioning, and so on—were invented in the past 150 years, but these tools are so normal to us that it seems strange to call them *technology*. Computer scientist Alan Kay, inventor of the concept of computer windows, famously picked up on the way we understand technology by saying we tend to define it as "anything that was invented after you were born."<sup>1</sup>

Because of all this technology, our world has changed so drastically over the last fifty years that the biblical character Abraham of 2000 B.C. would probably have more in common with Abraham Lincoln of the early 1800s than Lincoln would have with us in the twenty-first century. Though Abraham and Abe are separated by some 3,800 years and several important technological advances, our sixteenth president would likely find our world more incomprehensible than that of ancient Ur.

Abraham's father raised cattle, and Mr. Lincoln planted pumpkins. By contrast, most of us spend the majority of our time indoors, working at desks with little knowledge of the natural world. Both men attended small religious gatherings with people they knew well from the surrounding area. We drive several miles to sit in huge auditoriums and watch screens with thousands of people, many of whom are strangers. Their water supply and bathrooms were outside; ours are inside. They lived in small, one-bedroom dwellings lit by candles; we live in comparatively enormous homes equipped with electricity, phone, cable, and Internet lines. They wrote letters and spoke in person; we write electronically and speak through devices. They weathered the seasons; we control the weather with air-conditioning.

We could go on making various comparisons, but the point is that our world is so uniformly technological that even in an ethnically and religiously diverse community like my neighborhood, the day-to-day activities of my neighbors probably have more in common with one another than with the founders of our country. Technology has become a kind of supracultural phenomenon that finds its way into every aspect of our diverse lives.

All but the poorest among us dwell in climate controlled buildings, wake up to digital alarm clocks, prepare meals with devices powered by a vast interconnected electrical grid, transport ourselves with vehicles fueled by internationally shipped petroleum, and ingest several thousand advertisements on billboards and screens scattered throughout our cities and homes. Not a single one of these devices or behaviors existed just over a century ago, and yet all of us treat them as if they were as normal as the water we drink or the air we breathe.

So why does any of this matter? If more advanced technology leads to things like increased quality of life and faster ways to spread the gospel, what could be the harm in any of it? Why do we need to pay close attention to the influence of technology? The story of a certain young pastor and yet another projector shows what can happen when we ignore technology.

#### The Youth Pastor and the Projector

After I graduated from college, I took a job as a youth pastor. One of my first requests was a video projector for our youth room. As a youth pastor at a *Bible* church, my job was to make sure the kids were firmly planted in the Scriptures. That meant that they needed to regularly encounter the words of the Bible with their own eyes. The only problem was that many of the kids didn't bring Bibles. I figured a projector would allow me to put the words of God on-screen so everyone could read together whether they brought a Bible or not. (And as a bonus, we could play video games on a gigantic screen and call it "ministry.") Eventually, a generous church member donated a projector, and I immediately began using it during all my teaching. I made fantastic sermon outlines and highlighted important words in the text. I peppered my teaching with captivating stories and concluded them with hilarious punch lines. I taught verse-by-verse, but I also made the Scriptures relevant and applicable to the kids' lives. They seemed to eat it up, and at the risk of sounding haughty, I think I was a pretty good youth leader.

But then things started to go terribly wrong.

I started to notice that fewer and fewer kids were bringing their Bibles to church. And those who did bring them didn't open them when I was teaching. Perhaps I was not the model youth pastor I thought myself to be.

I tried saying, "Open your Bibles to . . ." more often, but that didn't seem to help—they just ignored me when I said it. I tried toning down my wit and charm and focusing more on the text of Scripture, but no matter how much I emphasized the Bible, the kids still wouldn't bring or open them. I even preached a few sermons on "Bibliology"—a pretty big term for thirteen-year-olds—but there was no change.

Finally, I pulled aside one of my students and said, "I talk to you guys all the time about how important the Bible is, but I notice you don't bring your Bible to church anymore. Why don't you think the Bible is important?"

She answered, "But I *do* think the Bible is important! I just like reading it on the screen with everybody else. Why would I bring a Bible if you project it on-screen?"

Of course, the conversation didn't happen exactly like that—it just sounds better that way for a book. But this situation opened my eyes to how the technologies that surround us can have an impact on something as intimate as how we encounter the Scriptures. I imagined that the projector would level the playing field and give everyone equal access to the Word of God. In my mind, a projector was a perfectly normal thing to bring into a church. All I was doing was taking the unchanging, eternal, inerrant Word of God and transferring it to a newer, better medium that had the power to reach more students. I never considered that the projector would completely transform the way my students encountered God's Word. Years later, when I began to study the effects technology can have on people, I began to regret my ignorant perspective regarding technology. How could I have done so much damage to my kids without even knowing it? I shared what had happened with some friends, and many of them were horrified to learn that, as a result of my technological choices, suburban American kids—*gasp!*—weren't bringing their Bibles into church buildings. After all, what's a Bible church without Bibles?

However, as I contemplated this, I realized that my perspective was even more limited and myopic than I had first thought. Whereas I initially considered not bringing a Bible to church a tragedy, I soon realized that believers have only been doing this for the last few centuries. Until the printing press made Bibles inexpensive and available to everyone, individuals rarely owned their own copy of the Bible. Every single believer from Moses to Martin Luther-from 1500 B.C. to A.D. 1500encountered God's Word by going to church and *listening* to it alongside others. They almost never had the chance to *read* the Bible for themselves. This meant that for nearly three thousand years, there was not a single believer in the one true God who ever had a "quiet time" as we know it today. Only rabbis and priests had access to handwritten copies of the Bible, but common people simply could not afford them. Gutenberg's printing press allowed families to purchase a copy of the Scriptures, but it was not until the twentieth century that it became common for individuals to own a personal copy of the Bible.

Looking back on what happened in my youth pastor days, the projector had actually allowed my kids to experience God's Word in a way much more similar to the pre-printing press era. My students had given up their individualized Bible with custom covers and specialized study notes and had begun reading the same words on the same screen together, as a group. By transitioning from print to projector, we had moved forward technologically and yet backward culturally.

It turns out that these kinds of cultural shifts have been well documented by historians of technology. Some even argue that the last five hundred years—from the time of the printing press to the time of projectors and the Internet—will be seen as an aberration in human history.<sup>2</sup> These five centuries will have been the only time in human history when printed text was the dominant form of communication. Today, with cell phones and online video chat, we are returning to a culture of spoken words rather than printed text, and yet those spoken words are not shared in person.

Our point here is not to argue that it is better to hear the Bible orally than it is to read it in print, or that reading on a screen with a group is better than either of those. Instead it is important to recognize how little attention we pay to the technologies we use to encounter the Word of God. While God's words are eternal and unchanging, the tools we use to access those words do change, and those changes in technology also bring subtle changes to the practice of worship. When we fail to recognize the impact of such technological change, we run the risk of allowing our tools to dictate our methods. Technology should not dictate our values or our methods. Rather, we must use technology *out of* our convictions and values.

### The Myth of Technology

So why is it that we tend not to recognize the changes that technology brings? Why did I have so little awareness of how the printed Bible had shaped my expectation of church and how the projected Bible would reshape it?

Neil Postman attempted to explain this by saying that over time, "technology tends to become mythic." By "myth" Postman wasn't referring to a legend or fantasy story. Instead, he used the word "myth" to describe the way of life that people think of as normal. In this sense, a myth is the story that develops over time about how the world works and what makes sense to a group of people. For example, most people know that leaders of the United States are chosen by voting. Before July 4, 1776, the idea of voting for leaders was new and radical, but over time voting has become a part of our shared "myth" about the way government is supposed to work.

When a new technology comes along, it too seems strange, out of place, and even magical at first. As sci-fi writer Arthur C. Clarke once quipped, "Any sufficiently advanced technology is indistinguishable from magic."<sup>3</sup> Sitting in a coffee shop, the person with the brand-new laptop—a little slimmer and lighter than last year's model—stands out. However, as futurist Jamais Cascio writes, "as [technologies] move from the pages of a science fiction story to the pages of a catalog, something interesting happens: they lose their power to disturb. They're no longer the advance forces of the techpocalypse, they're the latest manifestation of the fashionable, the ubiquitous, and the banal. They're normal."<sup>4</sup>

Today nearly every adult has a mobile phone. Yet in the late 1990s, a mobile phone was considered a bit of an extravagance, only for very important businesspeople. Going back in time, the same could be said of portable music players (the first Sony Walkman was released in 1979), microwaves (1947), air-conditioning (1920s), and human flight (1903). Each technology was a revolution when it first arrived, but now they are all such a part of everyday life that it's difficult to imagine life without them.

The longer a particular practice or device has been around, the more solidly mythic it becomes in our culture. Eventually we stop thinking about why it was there in the first place, and over time we lose the ability—or desire—to question its presence. Those who might question a common technology—like email or mobile phones—might as well be crazy, or from another planet! It's like doubting that hot dogs should be eaten at sporting events or that Texans should have air-conditioning.

But when it comes to technology, each generation sees the issue from a slightly different perspective. Douglas Adams, author of *Hitchhiker's Guide to the Galaxy*, once grouped technology into three categories. First, "everything that's already in the world when you're born is just normal." Then, "anything that gets invented between then and before you turn thirty is incredibly exciting and creative and with any luck you can make a career out of it." Finally, "anything that gets invented after you're thirty is against the natural order of things and the beginning of the end of civilisation as we know it until it's been around for about ten years when it gradually turns out to be alright really."<sup>5</sup> In other words, each generation is equipped with a different myth concerning technology. The faster technology develops and the less perspective we have, the more stratified our myths become.

#### Shortsighted Critiques of Technology

These generational gaps mean that younger people often uncritically embrace any and all technology while older generations sometimes make shortsighted critiques of technology. Consider, for example, a recent *New York Times* article discussing how preteen children interact online and via text messaging. The author begins by describing how teens chat on Facebook late into the night, and her tone suggests that she disapproves of this new way of interacting through technology. She then laments, "Children used to actually talk to their friends. Those hours spent on the family princess phone or hanging out with pals in the neighborhood after school vanished long ago."<sup>6</sup>

The author obviously wants to contrast the technological communication her children engage in with the embodied, face-to-face encounters she remembers from her youth. But did you notice how she paired "hanging out with pals in the neighborhood after school" with "hours spent on the phone" as if both were equally nontechnological?

Chances are, the author was born after the telephone was invented and turned thirty sometime before texting and Facebook caught on. She goes on to wonder if texting is healthy and questions whether her children will be able to relate properly as they grow older. Yet, at the same time, spending "hours on the phone" seems like a perfectly normal—even *good*—way for kids to relate and communicate with one another. In fact, it appears that she sees no real difference between spending time together in person and talking on the phone. As long as she can hear a voice, it feels "real" to the author.

But I imagine that if we were to dig deeply into the *New York Times* archives, we might find a similar article written in the 1950s that would criticize "talking for hours on the phone." Just a generation ago, talking on the phone for hours would have seemed as foreign and unhealthy as the texting habits of today's children. If we were to dig even further back in the

archives, a pattern would quickly emerge in which the older generation is worried about the technology of the new generation, while they are largely unaware of their own technological heritage. How can we question the next generation's technology if we don't even understand our own?

It turns out that the phenomenon of questioning new technology while clinging to older technology is not limited to *New York Times* authors and youth pastors like myself. It happens at all levels of society and in churches around the world.

#### Uncovering the Myth

What this tells us is that the way we talk about and understand technology is in some ways dictated by where we sit along the timeline of technological progress. Rather than taking our cues about technology from the Scriptures and the outline of God's plan for humanity, we seem to be locked in a cycle of questioning the really, really new but accepting the just barely old. We question the young for the blind acceptance of the latest gadgets, but we do so driving our computerized cars to and from church sipping on coffee grown on another continent.

Today's technology has the power to "heal the sick and make the blind see," and yet it also has the power to overwhelm us and distract us from what is truly important. When technology has distracted us to the point that we no longer examine it, it gains the greatest opportunity to enslave us.

To avoid this cycle, we'll need to start from the beginning and explore how the Scriptures treat technology. In the coming chapters, we will follow the outline of the biblical story beginning with creation and continuing to the fall to redemption and finally to restoration. Like a good seminary graduate, I've relabeled the first two chapters of the story so that all four start with the letter "R": Reflection, Rebellion, Redemption, and Restoration.

As we discover the role of technology in each section of the biblical story, it will lead us to a follow-up question that will help us better understand technology. In chapter 3, we will delve into the creation where God gives humanity the role of reflecting his image and charges them with cultivating and keeping the garden. In the following chapter, we will explore the unique role of technology among the things humans create. Then in chapter 5, we will look at Adam and Eve's rebellion (the fall) and the subsequent evil uses of technology that find their origin in Cain and his family. This will lead us to explore a more fully developed philosophical approach to technology in chapter 6. In chapter 7, we will begin exploring the various mediums<sup>7</sup> through which God accomplishes his plan of redemption, and in chapter 8 we will see how those mediums operate within a culture and how they shape individuals. In chapter 9, we will complete the biblical story by looking at what God will do when he restores the earth. Chapter 10 will pick up where the biblical story left off, examining how the world of technology has continued to develop into a kind of religion unto itself. Finally, in chapter 11 we will look at the digital revolution and use what we've learned to help us understand, and live faithfully in, our current age.

At one end of this story is a pristine garden prepared by God for humankind to develop and transform. At the other end is a glorious, heavenly city full of human creations, art, and technology. At the center is our Savior Jesus Christ crucified on a cross, the most horrific of all technological distortions, built by transforming a tree from the natural world into a tool of death. Yet in his resurrection, Christ redeemed even that tool, transforming it into the symbol of our faith that eternally portrays his power over death and sin.

In the time between the garden and the city, between Christ's first and second coming (when he will complete his work of redemption and restoration), we must work diligently to understand how to live faithfully in this technology-saturated world. To help us better understand our world, we will combine what we find in the Scriptures with insights from some of the best thinkers on technology, theology, and culture. We can't give adequate attention to heavyweights like Heidegger,<sup>8</sup> but his work will inform us as we retell the biblical story. We will also limit our discussion to "everyday" kinds of technology, meaning that we won't attempt to address important societal issues like health care, nuclear weapons, or biotechnology.<sup>9</sup>

#### **Discerning Technology**

It would be exceedingly convenient if we could simply label every technology as either "good" (use it as much as you want) or "bad" (never, ever use it). But Arthur Boers posits that technology is more like the yellow light on a traffic signal.<sup>10</sup> Unlike green, which always means "go," or red, which always means "stop," the yellow light is a call for a discerning look at the entire situation.

A surprisingly helpful example of this kind of technological discernment can be found in an obscure passage in one of John's letters. In 2 John 12, the apostle wrote:

> Though I have much to write to you, I would rather not use paper and ink. Instead I hope to come to you and talk face to face, so that our joy may be complete.

In 3 John 12–13, he repeated the same idea:

I had much to write to you, but I would rather not write with pen and ink. I hope to see you soon, and we will talk face to face.

In John's day, "pen and ink" was the communication tool he was tasked with evaluating, and though it might seem low tech to us today, it too had its detractors.

A few hundred years before John wrote his letters, the Greek philosopher Socrates expressed concern about the technology of writing. He believed that learning in dialogue was the key to helping people grow in wisdom, and he worried that writing would make people knowledgeable, but it would fail to make them wise. Socrates was so worried about the damage that writing could cause that he never wrote any of his own ideas down.<sup>11</sup>

In his letters, John seems to be aware of the drawbacks that writing, as a technology, brings. In fact, he says that he would prefer not to use it for communication because he valued embodied, face-to-face reality more than the disembodied words of a letter. He goes so far as to say that it is only in face-to-face conversation that he finds fullness of joy.

While upholding the value of embodied reality over technology, John still saw the value in communicating through the medium of writing. In this case, it was impossible for him to be present with his audience. And in the wisdom and leading of the Holy Spirit, John's writings need to be preserved for the rest of the church. So fully aware of the strengths and weaknesses of the new technology of writing, John makes a calculated choice to use a disembodied form of communication in service of the embodied life of the church, and in doing so he honors our Lord and builds up his Body.

My hope is that in the coming chapters we can learn to do the same with our technology.