

Technology and Theology
Lesson 1: Introduction

Outline

1. “Houston, (Do) We Have Problem?”: What Is Technology Doing To Us?
2. Cultivation, Corruption, Christ, Consummation: A Biblical Theology of Technology
3. Master or Servant?: Making Technology Work for You
4. Broadening Our Bandwidth: Reaching Our Technological World

A Short Bibliography

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Houston, (Do) We Have a Problem?

"Houston, we have a problem."

When Jim Lovell, the commander of *Apollo 13*, spoke those infamous words, he was making a statement about technology. He was stating that the good technology that had taken he and his crew outside of the earth's atmosphere, ready to land them on the moon was compromised. And unless certain measures were taken their mission would could to a fiery end.

Apollo 13 marks a time in recent history when good technology went bad. And even more when broken technology was repaired in order to make a miraculous salvation—one good enough to be enshrined in Tom Hanks' movie by the same name.

As Common as Apple Pie

Technology is as common as apple pie. In fact, you can't even eat apple pie without technology. It takes an oven to heat the pie, a mixer to make the dough (assuming you make it from scratch), a knife to cut the apples, and probably some insecticides to grow apples sans worms. In short, technology is a part of every day life.

And yet, in 2014 when we think of technology, our minds usually don't think of knives, ovens, or farming applications. Our minds race to smart phones, iPads, cars that drive themselves, [drone deliveries](#), and [humanoid robots](#). Since 2000, information and digital technology have outpaced our human ability to keep up. And while the prospects of using these technologies for personal, commercial, and even missiological purposes is exciting, we must take time to consider: What is all this technology doing to us?

An Overview of Technology

Think with me for a moment about where we are in technological history. And when I say technological history, I want to keep three things in mind:

- (1) urbanization—the technology of mass population and medical advance,
- (2) globalization—the technology of mass transit and mass communication, and
- (3) digital technology—the technology of mass information.

While it is reductionistic to say that we can figure out our modern *Sitz im Leben* by looking at these 3 factors alone, they do make up the widest streams of influence in our world, and they are 3 realities that set us light years away from our ancestors—be it 150 years ago or 2500 years.

Urbanization

As to urbanization: For Americans living in the mid-nineteenth century, the agrarian world of the Bible would have been very normal.

- In 1800, 6% of the country lived in urban contexts.
- This percentage moved to fifteen percent in 1850;
- thirty-nine percent in 1900; sixty-four percent in 1950;
- and in 2010, more than eighty-percent of people live in urban areas.

Consequently, Americans would be far more comfortable in Ephesus or Egypt than they would be in the bucolic pastures of David or the carpenter's workshop of Joseph and Jesus.

- The pace of life, the priorities of life, and the products of life that are normal are so radically different than what we find in the Bible.
- It takes work to understand the metaphors. It also takes work to appreciate things like family relations, local economies, and long-held traditions. It takes constant vigilance to fight the temptation of resourcing yourself with what you find in the City (cf. Genesis 4)
- Spiritually speaking, dependence on the city of man easily replaces dependence on God.
- How many things in your daily life do lead you to gadgets, tools, internet?
 - o If you needed rain . . . you prayed to God (now the weather report)
 - o If you needed help in a relationship . . . you talked to a pastor (now the Internet)
 - o If you struggled with your identity, you looked to father (now superstars)
 - o If you need joy . . . you prayed (now you watch a movie)
- The City offers all kinds of goods that replace God.

Globalization

In our modern world, the challenges are not just local either. The cities of the world have now been united by intercontinental travel, international news, intergalactic communication.

The freedom to go anywhere, be anything, and do anything is an incredible blessing, but it comes with many unforeseen challenges.

- **Vocations:** Sons growing up in a farmer's field or a tailor's shop would have thought little about traveling far, trying a new profession, or turning down the values of their parents. Yet, today every child is ushered into a global world where individual choice is expected and applauded.
- **International Contact:** Such global possibilities bring the nations in contact. This is good, but it also erodes any sense of place. What does it mean to be from a place?
 - o In the Bible, place meant something. In Judges, it was good to be from Bethlehem, a place of hospitality; it was bad to be from Gibeah, a place where the people refused to serve their guests. Nazareth was despised (John 1). Zion is a place of blessing. Babylon
 - o Today, place means very little.
- **Values.** When public education was first created, authority was invested in local school boards. Why? So that local parents could reinforce local values. But now there is move to standardize schools and remove locality.
 - o No longer are values local; they are mass produced in Hollywood or New York and imported by satellite into every home in America (and beyond).
 - o What unifies culture today is rarely family values, national identity, regional conviction, or religious beliefs; popular culture is strung together by sound bytes, movie quotes, musical anthems, and television sit-coms.
 - o Entertainment has become the purveyor of values and it is mass distributed by the latest digital technology. Television is what unifies our culture.
 - o What effect does that have on us?

How do Christians learn to live and move and have their being disconnected from place?

- Adam was created from the Adamah.
- Jeremiah 29 stresses living in the city for the city.
- Matthew 5:13–16, be a city on a hill.
- The local church is the place we need to cultivate a new community. Without that community, the solo Christian will embody the values of the world.

Technology

As to technology, we've been adding one layer of technology to another since the beginning of twentieth century. Consider just a few of the key inventions and their related sociological impact.

- In 1903, **human flight** was invented. This has changed warfare, business, and missions. Local affairs have become global affairs, and it is now possible to live and work in cities hundreds of miles apart. If humanity is tied to the ground (*Adam* is from *adamah*), then what effect does such transiency have on our souls?
- In the 1920s, **air conditioning** was invented. This has made work indoors more enjoyable, but also more common. Labor has shifted from manual to stationary, from outside to inside, from pack mules to pixels, from dirty finger nails to tired eyes.
- **Microwaves** were created in 1947. Though not affecting work, the speed with which they cook food enabled faster meals (to go along with fast food), which continued to speed up life. Though not determining the way we live; the way we approach food both reflects our values and shapes them.
- **Sony's Walkman** was marketed in 1979. For the first time, individuals could shut themselves off from the world. Whereas music was a public experience before, now it was private. No longer did individuals have to gather with others or put up with music they didn't like. Now, music was an individual choice.
- **iTunes** only furthered this phenomenon. Beginning around 2000, CD's were replaced by digital downloads and now individuals could not only choose their own music, they could create their own playlists. Instead of buying albums, with B-side fillers, they could select individual songs. Rather than submitting to the DJ's selection, individuals now became the lord of what they had ringing in their ears.
- Finally, the **smart phone**, takes this principle of lordship to a whole new level. Now, with the flick of the thumb, individuals can leave one world and enter another. They can design a computer with all the personal apps they want. When bored they can play a game. When ignorant they can google information. When alone, they can connect with friends. On and on and on . . . until the phone in our pocket becomes our lifeline.

Questions

How have these technologies affected your life? Do you take time to think about the affect?

If life have become more transient, what should be done to help 'rooted-ness'? Does it matter?

Can you think of other technologies that have changed the way we think, live, worship?

Does technologies only affect our state of mind? Or do they impact our relationship with God?

What is Technology Doing to Us?

While globalization and urbanization (two forms of technology in their own right) have deeply impacted culture and Christianity, I want to consider in more specific ways technology. And we must ask the question: What is technology doing to us?

- John Dyer has noticed that “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 last 150 years.”¹
- But who considers these things to be technology? Technology, as we typically think about it is “anything that was invented *after* you were born.”²
 - o Therefore, the old car you drive is hardly “technologically advanced.”
 - o Microwaves are standard equipment at home and at the office.
 - o And television, well that is a human right, right?
 - o By contrast, smart phones are the most pressing technology right now. Along with all sorts of data storage, drone deliveries, and other medical applications on your phone.
 - o In fact, so regular is technology’s advancement that most people who carry a 2010 flip-phone in their pocket feel a little bit out-of-date.

Yet, how do we know that what we are consuming is good for us? How do we know that we are using it rightly?

- Could it be that like the Marlboro Men of the 1950s, we might be consuming something that destroys us. Before medical research linked tobacco usage to cancer, people smoked without fear but with the same dangerous results.
- Could it be that the overuse of digital technology may lead to a cancer of the soul? Or what about the ‘[data smog](#)’ that plagues high-volume data users?

Neil Postman, who wrote the important book *Amusing Ourselves to Death*, also gave a lecture called “[Informing Ourselves to Death](#),” where he reported:

“In America, there are 260,000 billboards; 11,520 newspapers; 11,556 periodicals; 27,000 video outlets for renting tapes; 362 million tv sets; and over 400 million radios. There are 40,000 new book titles published every year (300,000 world-wide) and every day in America 41 million photographs are taken, and just for the record, over 60 billion pieces of advertising junk mail come into our mail boxes every year. Everything from telegraphy and photography in the 19th century to the silicon chip in the twentieth has amplified the din of information, until matters have reached such proportions today that for the average person, information no longer has any relation to the solution of problems.”

That was in 1990. I can only imagine the statistics now, factoring in the barrage of information on the Internet, Twitter, Facebook, and texting.

¹Dyer, *From the Garden to the City*, 21.

²Alan Kay, cited by Dyer (ibid.).

Or consider these comments from Francis Heylighen, research professor at the Free University of Brussels. In his 1999 article ("[Change and Information Overload: negative effects](#)"), at a time when cell phones were as big as burritos, he observes,

The acceleration of change is accompanied by an increase in the information needed to keep up with all these developments. This too leads to psychological, physical and social problems. A world-wide survey (Reuters, 1996) found that two thirds of managers suffer from increased tension and one third from ill-health because of information overload. The psychologist David Lewis, who analysed the findings of this survey, proposed the term "Information Fatigue Syndrome" to describe the resulting symptoms. Other effects of too much information include anxiety, poor decision-making, difficulties in memorizing and remembering, and reduced attention span (Reuters, 1996; Shenk, 1997). These effects merely add to the stress caused by the need to constantly adapt to a changing situation.

Part of the problem is caused by the fact that technological advances have made the retrieval, production and distribution of information so much easier than in earlier periods. This has reduced the natural selection processes which would otherwise have kept all but the most important information from being published. The result is an explosion in often irrelevant, unclear and inaccurate data fragments, making it ever more difficult to see the forest through the trees. This overabundance of low quality information, which Shenk (1997) has called "data smog", is comparable in its emergence and effects to the pollution of rivers and seas caused by an excess of fertilizers, or to the health problems caused by a diet too rich in calories. The underlying mechanism may be called "overshooting": because progress has inertia, the movement in a given direction tends to continue even after the need has been satisfied. Whereas information used to be scarce, and having more of it was considered a good thing, it seems that we now have reached the point of saturation, and need to limit our use of it.

Do you feel that? I do. The rapid pace of life, the advancement of technology, the numbing effect of data smog. And that's only in the last few years. Consider the speed of technology.

- Before 1650. When something was invented it was a local phenomenon. News of such breakthrough could only travel as fast as the fastest horse. The world was divided by space, time, and language.
- 1650–1850. That changed with publication and distribution of books (post-1450), commercial ferries, locomotives, machinery like the cotton gin (1794), and the telegraph (1840s). This era made machines that replaced the bodies of men and sought to give men more free time.
- 1850–1950. The [transcontinental railroad](#) (1869) increased the speed of commerce and enabled the industrial revolution. Henry Ford's assembly line mechanized, automated, and amplified production. This era produced mechanical arms and legs and empowered Americans to get more stuff.³
- 1950–today. Telephones, television, data processors, and the microchip are the inventions that came during this era. They replaced man's eyes, ears, and mind. They moved us out of the industrial era to the information age. And they now glut our minds with endless bits of useless information—even the things that seem so important (like middle east tensions and the production of oil) are "useless" because they are things that we cannot really change!⁴

³Henry Ford who opened his assembly line in 1913 is often said to say that "history is bunk"; however, in fact, he had a very different feeling. He created Greenfield Village to capture history and to make sure that future generations remembered the past. It's ironic that one of the men most responsible for moving us into modernity established a museum and village to remember the past!

⁴Neil Postman, *Amusing Ourselves to Death*, ch. 5.

It is impossible to state which invention is most important, or which has had the most effect on changing society. But consider this fact, in each period (1650-1850; 1850-1950; 1950-today), the population on earth also doubled. The exponential growth of people comes with the exponential possibilities of medicine and the exponential effects of technology. Do you feel dizzy yet? What effect does that have on us—emotionally, physically, spiritually?

What are we to do?

1. We need to define our terms
2. We need to learn what the Bible says about technology
3. With the Biblical Grid in place, we need to consider the best practices
4. We need to be aware of the idolatry of technology, exposing its false promises, and fighting back with the promises of the gospel
5. We need to engage culture with a right view of God.

Definitions

- *Techne* = craft, skill, art; “the Greek term *techne* referred to a person’s skill [technique] in making things, not the tools they used to do so” (as we think of it).⁵
- *Logia* = the systematic study of (biology, theology, scatology)
- *Techne* + *Logia* = the study of craftsmanship—both the artisans and the arts/tools; but Aristotle could even the systematic study of grammar, speech, and writing.
- Technology entered the English language around 1600. At that point it was used as it was in Greek, but with the rise of the sciences, the Enlightenment, and the industrial revolution, it soon changed.
- Practicing the arts changed to the study of the arts in the nineteenth century.
 - o In 1829, Jacob Bigelow wrote *Elements of Technology*
 - o IN 1861, M.I.T. was opened with educating its students in the knowledge of technology
- It wasn’t until the 20th century that technology took on the meaning we are most accustomed to: as acquisitiveness and consumerism rose, technology began to speak of things

Four Ways to Speak of Technology

1. the skill of making things
2. the study of the skill of making things
3. the tools used to make things
4. the things made with these tools⁶

It is the fourth definition that best describes the technology we have . . .

- "We can say that we are talking about technology when we use tools to shape nature in the service of human ends."⁷
- Technology is the "constellation of tools, machinery, systems, and techniques that manipulate the natural world for human ends."⁸
- "Technology . . . is the means by which we transform the world as it is into the world that we desire."⁹

⁵Dyer, *From the Garden to the City*, 56.

⁶Dyer, *From the Garden to the City*, 56–58.

⁷Egbert Schuurman, *Faith and Hope in Technology* (Toronto: Clements Publishing, 2003), 64-65.

⁸David Mindell, "Cultural Impacts of Technology," *Wiley Encyclopedia of Electrical and Electronics Engineering*, ed. John G. Webster (Hoboken, NJ: John Wiley & Sons, 1999), 1. Cited in Dyer, 35.

⁹John Dyer, *From the Garden to the City*, 35.