

A Report from the Digital Society Conference 2012

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In June 2012, approximately 70 Christians gathered, under the sponsorship of the Center for Integrity in Business at Seattle Pacific University to discuss the role of technology in our society. The group was comprised of Christians but the commonality ended there. Many branches of Christian faith were represented, and significantly different views of technology were held by the people in the group. There were participants from churches, seminaries, high tech companies, non-profits, and business schools; there were technology developers, technology users, and technology resisters. Presentations and panel discussions covered the spectrum. In the end, the group gathered in small groups to look for points of agreement—is there anything this diverse gathering could say about technology? While nothing was unanimous, there was broad agreement around a collection of issues summarized in this paper. Recordings and additional information are available at <http://spu.edu/digitalsociety>.

We live in fast-paced and disorienting times. The rapid adoption of all of the dimensions of digital technology, including the Internet, mobile telephony, and social media, leave many feeling unsettled. Institutions are being quickly transformed by new, disruptive technologies; those that have failed to adapt have perished despite venerable reputations, affecting all their employees regardless of their roles. Many individuals are concerned about the sudden and rather significant social changes happening around them, and wonder just how much these new technologies are to blame. This has led to a renewed interest in how technology and culture influence one another, and many authors have offered their opinions and prescriptions.

This topic is also resurging in Christian circles as new media encourages significant challenges to more traditional forms of community and authority. In response, several Christian authors have attempted to reintroduce and popularize the ideas of those who most influenced the previous generation's thoughts on technology: Jacques Ellul, Marshall McLuhan, Neil Postman, and Albert Borgmann. There were others, of course, but these have formed the foundation for many critics of technology.

Reintroducing these scholars to a new generation is most certainly worthwhile, but if we want to seek a deeper understanding of technology and culture for our current time, we must also acknowledge that they should be seen as a *starting point* and *not a final destination*. Some contemporary Christian authors tend to canonize the works of these thinkers as if they somehow got it all correct and nothing remains to say on the subject except how one might apply it to today. But this is a dangerous practice with any thinker. These scholars' works, like those of others, have been subject to valid criticisms, and much has been learned about the technology and culture relationship since they wrote. Ignoring this ongoing discussion tends to make Christians seem reactionary and out of touch with the broader culture.

Some recent Christian authors have also followed these canonized scholars into an overly pessimistic view of contemporary technology. Of course Christians must always be ready to critique contemporary culture in helpful ways. The need to be heard above the many voices singing social media's (as one example) utopian praises has caused dissonance but produced little constructive insight for those seeking help to navigate the digital waters. This leads to a bifurcated discussion

forcing readers to choose between either the technophile or technophobe camps—instead of recognizing that these are two extreme ends of a wide and diverse spectrum.

One reason for this may be the motivations of each camp. Technology cheerleaders often find themselves as advocates in order to sell their research ideas, promote their product development ideas, or boost the sales of their products. Critics, on the other hand, often compete for recognition among audiences attracted by strident statements such as “reject all technology.” Neither position provides enough useful insight for fellow Christians, or acts as a helpful voice for people who don’t have the option to retreat from technology by stepping out of the fast-paced world.

We need to rethink the Christian commentary on technology in light of our current context. Much has changed since these thinkers wrote their influential works, and many of their underlying assumptions, which were naturally shaped by their own context, may no longer be true. We need to base our commentary not on extreme anecdotes or theoretical musings, but on observations of what real people do with new devices in actual practice. We need to bring more perspectives to the conversation, especially those of technological practitioners—those who design, develop, and direct technical projects—as well as those who use complex technologies to accomplish their work. We must avoid the extremes of technological utopianism and pessimistic Romantic reactions, and instead chart a course that will lead toward a healthy and redemptive relationship with the human-built world.

This was what we set out to do at a conference held on June 22–23, 2012 on the Seattle Pacific University campus. Participants didn’t always see eye-to-eye, but they did strive to listen to one another and engage in some very lively and productive discussions.

In order to start the discussions on a firm foundation, we began the conference by reviewing and critiquing those influential scholars mentioned earlier: Ellul, McLuhan, Postman, and Borgmann. Our panelists—David Gill, Grant Havers, Geraldine Forsberg, and Rosie Perera—deftly summarized the key contributions made by each of these thinkers, offering helpful insights into how we can build upon their work while pushing the conversation forward.

The rest of this report discusses the major themes raised during the conference, and some broad conclusions agreed to by most attendees. We determined this agreement by listening to speakers and panels, and then asking small groups to identify key areas where they found agreement. It is our hope that this will help push Christian commentary on technology forward for a new era, and both inform fellow Christians and offer insight and help to the world in this digital age.

We have organized the discussion into the broad topics where substantial agreement was reached.

Theory should inform practice, but practice should also inform theory

A strong recurring theme during the conference was the need for theory and practice to inform one another. Much Christian commentary on technology thus far has been led by those outside the practicing and developing technology community. This literature is thus focused on historical examples and omits details that undermine their case. Sometimes this is done with the caveat, “Well everyone knows the positive side of the technology.” When contemporary examples are used, too much of the focus is on extreme and shocking news reported as if it is representative of the experiences of all. Rarely has this commentary made a close and careful examination of how everyday consumers choose to adopt and use new technologies *in practice*, considering both its positive and negative dimensions.

But of course there are exceptions. Heidi Campbell, first keynote speaker at the conference, has spent considerable time observing how various people of faith actually use new media. Her observations of particular faith groups are enlightening, but what makes her research so important is what it says about the way technology and human organizations interact *in general*. Some of these dynamics are easier to see in the context of strongly-hierarchical faith groups, but they should apply equally well to other kinds of human organizations, especially economic firms.

Scott Griffin (another speaker at the conference) worked as a practitioner in the very top ranks of corporate America. As The Boeing Company’s chief information officer (retired in 2007), he

observed that using technology effectively in a business requires asking not only what technology is available to solve a known problem, but also examining the capabilities of technology and understanding what might be possible. He raised the caution that one must know what one stands for—what one's core values are—and not allow technology to lead one away from or violate those core values.

Technology shapes us and we shape it in return

Throughout the conference, attendees reaffirmed that modern technologies do shape our culture, and stressed that we have the power to shape them in return. Commentary on technology, especially those authors most influenced by Ellul and McLuhan, tend to leave very little, if any, room for human agency in technological development and adoption. The assumption is that technology enters a culture from the outside (via a ruling 'technocratic' class), wreaks deterministic impacts upon that culture, and then continues to develop according to its own internal, unstoppable logic.

This kind of thinking, commonly referred to as "technological determinism," was popular in the earlier part of the twentieth century, but is considered half-true at best by contemporary historians. This view just doesn't square with what we see in detailed historical case studies and ethnographic research. Instead of being passive recipients of new devices, consumers actually play very *active* roles during the early stages of adoption. As it turns out, most innovations seem to have a certain degree of "interpretive flexibility" ([Pinch & Bijker 1984](#)); in other words, what they *are* and what they are *good for* are not immediately obvious, and different groups develop different answers to these questions.

Heidi Campbell observed this in her work. Her findings uphold some of the theoretical assumptions made by thinkers like Ellul or McLuhan (e.g., media are not neutral conduits through which messages flow undisturbed), but also challenges others, such as the idea that consumers and technological practitioners have little or no ability to alter the course of technological development.

Consumers also play an active role in what has come to be known as "technological domestication" ([Silverstone et al, 1992](#)). This term is purposely intended to evoke the image of training a new animal brought into a home; a home with a puppy will never be the same again, but if its owner properly domesticates it, the puppy will bend more to the owner than the owner bends to the puppy. In the same way, when families or organizations adopt a new technological device, they often go through a similar process of domesticating it, bending it to the needs of the organization more than the organization bends towards it. Sometimes this takes the form of establishing clear rules about where, how, and when the device may be used (e.g., televisions placed in a separate room, available to children only at certain times). Other times, organizations may play a role in functionally or even physically reshaping these new devices to better fit with their social values (e.g., the Kosher mobile phone, described by Campbell in her book [When Religion Meets New Media](#)).

The deeper problem with technological determinism is that it leaves us with stark choices regarding problematic new devices: adopt it and suffer the inevitable consequences, or reject it entirely. This sort of logic, Sherry Turkle reminds us, leaves us thinking about technology same way an addict thinks about drugs, and feeling just as powerless and hopeless ([Turkle 2011](#), 293).

But if we acknowledge the degree to which both practitioners and consumers play an active role in technological adoption, a third possibility comes to light: we can reshape and maybe even "redeem" technologies that we feel are currently undermining our social values. We can domesticate our devices. We can move *beyond* mere critique into creative engagement and participatory redemption. This observation challenges the position often taken by the critics: let's stay away from new technology and wait to see what it might do to us. This position would allow others to determine how new technology may be shaped to serve, and leads us to a closely-related theme from the conference.

Organizational values should drive technology adoption, but new disruptive technologies should also force us to reexamine our practices and how we address our values.

Our final keynote speaker, Scott Griffin, introduced another key theme that seemed to resonate with attendees and reappeared in several conversations. He stressed that our organizational values should drive our technological adoption, but we should also welcome disruptive technologies that force us to reexamine those values. In many organizations, including churches, the influence is often the other way around: new technologies tend to be adopted without reflection, and thus begin to reshape the organizations values according to those values embedded in the technology's design or application.

Griffin emphasized that every organization must grapple with two core questions: Who are we? Why do we exist? Any use of technology by that organization should then flow from the answers to those questions, and it should always be used such that it supports and furthers the organization's identity and mission.

But he also noted that new and disruptive technologies will often appear and require the organization to revisit those core questions. The Internet, mobile computing, and social media are obvious examples. They can easily disrupt business models, or even entire industries, by changing the rules of the game. Organizations that have a clear understanding of who they are and why they exist, however, will be able to take advantage of those new technologies and fulfill their mission in new ways.

After Hewlett Packard was established by David Packard and Bill Hewlett, they made it a value to visit every plant every year. But when Lew Platt became chairman he realized that it was no longer possible to live out this "value," as the company had grown to 600 locations in 120 countries! They had to revisit this core value. Under Platt, they examined the intent established by Packard and Hewlett (caring about people and communicating well) and found new ways to carry this out.

This idea was applied to the church by an astute audience member. He described how he noticed a discrepancy in the way his church was discussing their plans for an online presence. Some assumed that simply posting last week's sermon and the church calendar was sufficient, but this would only make sense if one assumed that the purpose of the church is just to disseminate information. But if the core purpose of the church is really to facilitate and build community, then their online presence would need to be much different. It would need to embrace online social spaces such as Facebook, Twitter, and Second Life. It would need to rethink how the church builds community in these new spaces. And it would need to do so with a clear understanding of who that church actually is, and what it sees as its core mission.

This leads us to our next major theme:

Christians need to be *in* the world of technology, but not *of* it

Throughout the conference there was widespread agreement that Christians need to remain engaged with new technologies, both as practitioners and consumers. This can and should be done so as not to make ourselves beholden to those technologies or become unreflective techno-utopian cheerleaders. In other words, we are to follow the Biblical commandment to be *in* the world but not *of* it ([John 15:19](#) and [17:14](#)).

Scholars like Ellul and Borgmann present a deterministic and dim view of modern technology that often leaves readers feeling that they must abandon modern technology altogether and retreat to a simpler life. McLuhan's deterministic language also leads one to wonder if it's possible to participate in a new medium without necessarily being captured by it. This approach leaves no room for engagement, and thus no room for participatory redemption. Retreating to a simpler life is also not practical or realistic for most Christians in industrialized countries.

If, however, consumers have the ability to shape our thinking about what a new device actually *is*, and what it is *good for*, then it is critical for Christians to remain engaged with new technologies. If

consumers actively “domesticate” new technologies as they adopt them, then it is vitally important for Christians to participate in establishing the new social norms for its use. And if consumers, through their economic choices and social pressure, have the ability to reshape devices so they better fit with their social values, then it is crucial for Christians to take a leadership role in that process.

Of course, these kinds of active, purposeful roles can be played only when Christians enter into their use of technology in a *reflective* and *discerning* manner. We need to be as “shrewd as snakes and as innocent as doves” ([Mat 10:16](#)) when we engage with new media, or adopt new devices. These things can be seductive, even addictive, and we can easily make them into idols. We must ask questions, carefully experiment with them (as, for example, the Amish do—see [Zimmerman Umble 2000](#)), and constantly reflect on how they are reshaping us. Only then can we start to reshape them in return.

Engineering can be a creative and redemptive act

Many of the attendees were, or had been, technological practitioners, and there was broad appeal to the idea that engineering could be a creative and redemptive act, a vocation that sincere Christians can follow as they participate in God’s redemptive work in the world.

This theme reflected the fact that existing Christian commentary on technology has directed blame towards engineers, or the engineering mindset, for the social ills of the modern world. All major threats to human and environmental flourishing—assembly lines, nuclear weapons and power, large-scale dams, strip mining, clear cutting, global climate change, etc.—have been linked to the hubris of engineers and the profit-seeking industrialists who employ them. Engineers are often characterized by these authors as having a monomaniacal obsession with efficiency to the exclusion of all other social values, causing them to view the natural world merely as a set of resources to be exploited, and to value machines above people. These characterizations leave readers wondering whether it is indeed possible to be both a sincere Christian and a practicing engineer.

We have no wish to deny the naïve utopian rhetoric of late 19th and early 20th century engineers, nor the human and environmental catastrophes of the 20th century that laid those utopian claims to waste. We do, however, want to avoid swinging the pendulum to the other side and assume that engineering is somehow antithetical to Gospel values. We want to assert that the practice of engineering can be a legitimate vocation for a Christian, as it is one of many ways that we can participate in God’s ongoing development and redemption of the world.

The basis for this view was articulated by John Dyer, our second keynote speaker and author of [From the Garden to the City: The Redeeming and Corrupting Power of Technology](#). John reminded us that when God first placed Adam in the garden, God instructed Adam to “cultivate it and keep it” ([Gen 2:15](#) NASB). That is, God called Adam to *work* in the pre-fall garden, playing with and transforming its natural elements into other more useful and desirable forms. But God also cautioned Adam to “keep it,” to guard and preserve its essence, to maintain its balance. As God’s image-bearers, we are called not only to participate in God’s creativity, but also to participate in his redemption by restoring that which has been warped, bent, and pushed out of balance.

The practice of engineering is one way in which we can participate in this creativity and redemption. Despite assumptions to the contrary, engineering is often far more like artisanal craft work than a rigorous and straightforward application of scientific principles to the material world. Engineering is actually a highly creative and improvisational activity, demanding theoretical knowledge, techniques learned in practice, *and* a healthy imagination. Like gardeners and artists, engineers participate in God’s creativity, shaping and building the natural world to form useful and beautiful things.

Engineers can also participate in God’s ongoing redemption of the fallen world. Several speakers offered examples of the joy associated with creating software, designing airplanes, and building both technology itself and other products aided by technology.

Even ordinary activities—seemingly far removed from technology—may benefit from a creative application of technology. John made the case that we can “redeem” technologies not only by shaping them during their design and production, but also by creatively repurposing them once they have been adopted. He cited annoying and intrusive beepers as an example. A few years ago, his pastor was diagnosed with severe colon cancer. A congregant gave the pastor an old beeper and told the rest of the congregation to call the associated number every time they prayed for their pastor. As the pastor waited to undergo surgery, and throughout his recovery, the constantly-buzzing beeper became a tangible reminder of his parishioners’ prayers, as well as the care and concern they had for him as a person. This creative repurposing of a device normally associated with intrusion and disruption transformed and redeemed it.

A panel of experienced technological practitioners (Matthew Clarke, Colin Wong, and Charles Kwon) discussed how our faith and our work inform one another in the practice of engineering. . We all have an intuitive sense that our faith should influence our work, but what does this look like in a technical field like engineering?

All of the panelists agreed that we need to bring our faith into our technological practice, but were leery of the “Christian engineer.” There are no Christian engineers, or Christian businesses, but rather there are Christians who engage in these activities with the purpose and practice that seeks to align with the principles of the Kingdom of God. The frequently-used Christian engineer term could imply that there were laws of physics exclusively available to Christians, which is not the case.

Considerable discussion focused on business and human resource decisions: what kind of projects should one entertain? How should one treat employees fairly? The panelists described cases where they declined to work on a project or develop a certain product because it didn’t seem to align with what they thought God wanted them to do in the world.

But some discussion also touched on how one’s faith might actually influence *technical* design decisions. For example, a Christian involved in automation projects can make design choices that underscore the inherent value of people and prioritize them over machines. A Christian might design a system that empowers or augments the skills of people rather than simply replacing them. Compassionate non-Christians may do the same, and Christians who have not connected their faith and their daily work may miss such things altogether.

One panelist described a project in which he was able to influence the way in which customers identified themselves to the system. The typical method is for the customer to enter their unique identification number, but this reduces the customer to a machine-oriented numerical key. Instead, he designed the system so that customers provided their names and some other personalizing information, reinforcing the idea that those customers are real people, and that the machines should serve them as opposed to the other way around. The panel encouraged Christians to actively consider, with the aid of prayer and dialogue with colleagues, how their faith could and should inform these practices.

Real community happens in online spaces, but we need to learn how to be online

Many have argued that real relationship requires face-to-face communications, and that real community cannot take place online. The Apostle Paul appears to disagree. He wrote to churches of his desire to be with them personally while acknowledging that the technology of his day (writing letters) offered him a better way to address some aspects of his relationship with them (see II Corinthians 13:10). In a similar way, modern research shows many areas in which technology-aided communication provides a very significant component in a “real relationship.”

The topic of community in online spaces was taken up by another panel of practitioners who have spent significant time developing community and interpersonal relationships in online educational spaces, Facebook, Twitter, and Second Life (Derek White, Lars Rood, Jesse Rice, and Neal Locke). Much has been written about the dangers and inadequacies of online spaces, but most of it is

written by authors who do not appear to have spent any significant time in them. Our panel helped dispel some of these myths, but were also honest about shortcomings of online spaces they have observed in their work.

For example, much of the critique of online spaces seems to assume that they are somehow completely separate from, and unrelated to, what people do when they are offline. As Nathan Jurgenson has argued, this kind of “[digital dualism](#)” is actually quite misleading, as it misses the fact that our lived experience is more typically a mixture of the two. In fact, empirical research has consistently found that what most people do online is an *extension* of what they also do offline. Most people use online spaces as *supplements* to their offline lives, and not as a *substitute* for them (for a summary of this research, see [Watkins 2009](#)). There are, of course, isolated and extreme cases in which someone uses the online world as a complete substitute, but these are actually quite rare and not typical of the general experience.

Another bias commonly espoused by critics is that “real community” cannot happen in online spaces. This, of course, is built upon an underlying digital dualism, where one assumes that one’s online community is somehow separate from one’s offline community, as opposed to being an extension of it. But it is also based upon another more subtle assumption: that “real community” is defined by the offline experience, and that this form of community is thoroughly good, wholesome, and human. Unfortunately, these critics often fail to reflect upon the frailties of traditional offline communities, and they do not analytically justify why we should privilege face-to-face interactions over virtual ones, especially when those virtual ones can be used to reinforce and extend previous face-to-face encounters.

Both of these biases were challenged by a number of the panelists, all of whom had participated and experienced what they considered to be “real community” in online spaces, many of which were also supported by offline interactions. Neal Locke helped form the First Presbyterian Church of Second Life (1PCSL), a faith community that meets regularly in that virtual reality environment. He stressed that he considers 1PCSL to be a “real church” where real community happens, but he also noted that many of its parishioners attend brick-and-mortar churches in their local communities in addition to the online church. Like offline churches, the community at 1PCSL is hardly perfect, but it does tend to be more ecumenical than a typical Presbyterian church, and is also a safer place for people to raise questions that might not be welcomed in the offline church.

These biases were also challenged by Derek White, who discussed his experiences in online education. He noted that we often compare the very best of face-to-face education with the very worst of online education, characterizing the latter as necessarily a pale substitute for the former. But there are at least two problems with this kind of analysis: it assumes that online education is always used as a complete substitute (and not a supplement) for in-person, residential education; and it assumes that in-person education is somehow immune from the problems of distraction and disengagement often associated with online education. Derek showed a [painting of a 14th century lecture hall](#) to underscore this latter point. As the lecturer drones on, students are engaging in side conversations, reading their notebooks, or simply falling asleep. The categories of “presence” and “engagement” are *emotional* and not necessarily *spatial* ones. Any practicing teacher knows that students who are *physically* present in the same classroom may not necessarily be *mentally* present or engaged. Presence and engagement are something one works to achieve, regardless of the location or medium in which the relationship takes place.

Online churches and education do, of course, have their issues, and we are certainly not trying to suggest that they are unproblematic. Instead, we are critiquing some of the underlying biases and assumptions that we feel are misleading and unhelpful to a fair and critical analysis of online spaces. If our lived experience is already a mixture of online and offline interactions, and if this continues to be the case in the future, then we need to craft a theological perspective of online spaces that escapes a simplistic theoretical digital dualism, and goes beyond a curt denial of their capabilities by people who haven’t spent much time in them. We need to build it upon the practical experiences of those who are already participating in online spaces, as well as careful ethnographies that separate what is really happening from what is only assumed to be happening.

As one of our other panelists, Jesse Rice, put it, “we need not only online education, but also education about how to be online.” Social interaction in online spaces is different from face-to-face interaction, but the norms and expectations governing that interaction are still moldable by those who participate in it. If Christians want to play a role in shaping those norms, they need to remain engaged and act in ways that foster real community.

Implications and next steps

Technology is here, and as it continues to change it will offer a complex combination of new opportunities and new challenges for both individuals and institutions. It can free people from dehumanizing work, or it can offer people new types of dehumanizing work or no opportunity to work. Because of the rapid rate of technological change, and particularly digital technology, the details of the challenges and opportunities of today will be vastly different from those we face a decade from now. We are not very good at dealing with this kind of change.

The dialogue about technology and organizational relationships (business, education, church) is too often characterized by one of two extremes: technology will solve all of our problems, or “just say no to technology.” The simple embrace of technology, or the rejection of technology, are often made more difficult by another factor. The human brain is very good at pattern matching, accepting things that fit our patterns and rejecting those that don’t (Daniel Kahneman, *Thinking Fast, and Slow*). In the Christian community this can be compounded by the confusion between a belief in absolute truth, and a belief that what I understand is absolute truth. A great deal more nuance is required for this discussion.

As Christians, we will need to encourage continued research on a biblical understanding of our interaction both with this technology and with its rate of change. But as people of the Kingdom, we cannot stop there. We must translate this into meaningful insight, policies, and practices for our broader world. And we will need to hold our conclusions lightly, since the next decade of change may again show that practice informs theory and the particulars will suggest new ways of looking at these issues going forward.