AN INTRODUCTION TO SPIRITUAL FORMATION AMONG DIGITAL NATIVES

by

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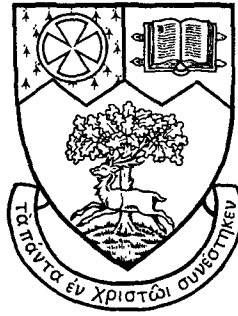2012

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ABSTRACT

"An Introduction to Spiritual Formation Among Digital Natives"

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A curious demographic shift is underway in North American evangelical churches. While the percentage of teens and young adults who regularly attend worship services has remained basically the same for the past thirty years the number of casual attenders is plummeting. In 2008, forty-seven percent of teens reported never attending a worship service, up from twenty-eight percent in 1980. What is causing such a radical shift in worship attendance? This thesis will investigate an increasingly distinct cultural group, called Digital Natives, who were born since 1990 and have never known a world without the Internet and constant connection to digital media.

Through the development of a biblical theology of technology, and the investigation of recent research into the psychological and social effects of social media and other computer mediated communication, this thesis will develop a clearer picture of the cultural gap that many Mainline and Evangelical churches are facing. Through theological reflection this thesis will identify new boundaries and new behaviours that will assist in the discipling and spiritual formation of Digital Natives in today's churches.

TABLE OF CONTENTS

INTRODUCTION

Reginald Bibby is a Canadian sociologist who has spent the last thirty years researching trends in youth culture and religion. He reports in his book, *The Emerging Millennials,* that despite the fact that in 2008 sixty-seven percent of Canadian teens (ages thirteen to nineteen) believe that God or a higher power exists, only thirty percent report praying at least once a week.[1] Sixty-two percent of Canadian teens affirm that a higher power cares for them, but only twenty-one percent attend a religious service weekly.[2] Only thirteen percent say that religious involvement is "very important" to them.[3]

In Bibby's most recent work, *Beyond the Gods and Back: Religion's Demise and Rise and Why it Matters* he writes, "Today's teens are reporting the highest level of 'non-affiliation' in Canadian history. Thirty-two percent say that they have 'no religion,' up dramatically from twelve percent in 1984."[4] This leads some pundits like Michael Valpy of *The Globe and Mail* to say, "if the future for institutional religion lies in the hearts and minds of the young, a dark night is sweeping down on the country's churches, synagogues, and temples."[5]

Despite this depressing analysis, a religious debate in 2010 between former British Prime Minister Tony Blair and Atheist Christopher Hitchens was the fastest sell-out in the history of Toronto's Roy Thomson Hall.[6] Journalist Lorna Dueck observed after the event that young

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[1] For the purpose of this thesis, the demographic data cited will address a Canadian, Western religious perspective unless otherwise noted. American data on teens and young adults is remarkably different on the issue of teen's attendance at religious services. The National Survey of Youth and Religion 2002-3, reports that 40% of American teens ages 13-17 attended religious services at least weekly (compared with 21% in Canada). 18% of American teens reported never attending religions services (compared with 47% in Canada). See Smith and Denton, *Soul Searching,* 37. For more on the differences between American and Canadian social studies see Adams, *Fire and Ice,* 103-26.

[2] Bibby, *The Emerging Millennials,* 178.

[3] Bibby *The Emerging Millennials,* 179.

[4] Bibby, *Beyond the Gods, 32.*

[5] Valpy, "Young Canadians," n.p.

[6] This event was part of the Munk debate series in Toronto in December 2010. The resolution of the debate was, "Be it resolved religion is a force for good in the world." Transcripts of the debate can be downloaded from http://www.munkdebates.com/debates/Religion .

adults made up a significant proportion of the audience suggesting that, "religion is far from dead in the public imagination."[7] Bibby goes further and explains that the percentage of regular church attenders among teens in Canada has surprisingly remained relatively static over the past twenty-five years.[8] What has grown considerably in the last twenty-five years, however, is the proportion of Canadian teens that never attend a religious service: from twenty-eight percent in 1984 to forty-seven percent in 2008.[9]

These paradoxes raise the question, why are some teens and young adults so reluctant to participate in existing traditional churches? Even those who profess a faith in God are less and less inclined to engage in the life of an established church. There is a growing polarization in Canada between teens who participate in religious services and those who do not.[10] More than two-thirds of Canadian teens still identify with a religious group, but it seems that teens who report never attending a worship service are on the rise, and teens who are occasional attenders are becoming extinct.[11]

What is driving this change? Why are regular attendees among teens and young adults remaining a small but steady portion of the population while occasional attendees are vanishing? Dr. Edward Diener is a pioneer in the field of positive psychology and in 2002, he and another colleague at the University of Illinois did a study of undergraduate college students and found

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[7] Dueck, "Blair v. Hitchens: What you believe to be true matters," *Globe and Mail*, Nov 25, 2010.

[8] 23% in 1984, 18% in 1992, and 21% in both 2000 and 2008 reported attending a religious service weekly. Monthly attendance was reported as 21% in 1984, 14% in 1992, and 12% in 2000 and 2008. See Bibby, *The Emerging Millennials*, 178.

[9] Bibby, *The Emerging Millennials*, 178.

[10] Rather than a bell curve (a normal distribution centred around a single value) statisticians call this kind of polarized distribution a "well curve," - Increasingly large extremes with a disappearing middle. See Pink, "The Shape of Things to Come," 19. As a result, one should expect in the future that evangelistic efforts that appeal to past biblical instruction and previous positive experiences in church will have less and less traction with teens and young adults in Canada. See also chapter 3 of *Beyond the Gods and Back*, by Reginald Bibby.

[11] In 1984, Bibby reports that 88% of Canadians identified with a religious group, 79% in 1992, 75% in 2000, and 68% in 2008. See Bibby, *The Emerging Millennials*, 178. See also Bibby, *Beyond the Gods*, 34-61.

that "authentic connection" is key to health and mental well being.[12] "Authentic connection is

described as the core of psychological well being and is the essential quality of growth fostering,

and healing relationships. In moments of deep connection in relationship, we break out of

isolation and contraction into a more whole and spacious state of mind and heart."[13] Teens and

adults of all generations have desired connection in their formative years; that is not new. What

is changing is the way in which teens and young adults are finding that connection today. They

are seeking connections using new tools and new devices that depend on Computer Mediated

Communication (CMC) and researchers in every field from Education to Marketing to

Psychology are all unclear as to the effects of these new technologies.[14] Do these new ways of

connecting foster "authentic connection" or do they fain deep ties only to fail later in life?

John Palfrey and Urs Gasser begin their book, *Born Digital: Understanding the First

Generation of Digital Natives* speaking to middle–aged readers saying: "…one thing [is] for sure:

These kids are different. They study, work, write and interact with each other in ways that are

very different from the ways that you did growing up."[15] Seventy-two percent of teens ages

twelve to seventeen text friends on a daily basis.[16] This barely differs from the proportion of

adults eighteen years old and older who use text messaging services (seventy-one percent) but

the difference lies in how they use the service. One third of text-sending teens send over one

hundred messages a day (3 000 a month) while only eight percent of adult text message senders

do the same. Teens, on average send fifty text messages a day compared with an adult average

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[12] Diener, "Very Happy People," 84.

[13] Surrey, "Relational Psychotherapy, Relational Mindfulness," 92.

[14] CMC is usually used to discuss computer communicative transactions that occur between two or more networked computers. See McQuail, *McQuail's Communication*. This thesis will use the term in the social-psychological tradition to discuss how humans use computers or digital media to manage interpersonal interaction, identity formation, and construction of religious meaning This includes social media, text messaging and instant messenger services. See also Walther, "Computer-Mediated Communication" 3-43, and Walther and Burgoon, "Relational Communication," 50-88.

[15] Palfrey and Gasser, *Born Digital*, 2.

[16] Lenhart, "Teens and Mobile Phones," 30.

of ten text messages a day.[17] Teens and young adults use these new tools very differently than older generations.

A critic might say that every generation is described as different when they are in their formative years. For the past one hundred years teens of every generation have always been first and fastest to adopt whatever new technology is out there. The real question is, are the technological innovations of every generation the same? Is the CMC of the Digital Generation the same kind of different or is it something new altogether? Teens in the 1960s and 1970s used telephones far more than their parents or adult peers did.[18] Since then, however, phone communication has become common, across all generational lines. Young or old, everyone uses a telephone today. By contrast, email communication exploded onto the communication market in the late 1990s and young adults, who were teens at the time, continue to use it today. Teens today, however, almost never use email, except when corresponding with adults.[19] Today's digital generation has not adopted the communication technologies of the previous generation. Their communication innovation of choice is SMS (Short Message Service) text messaging. We will see that a move to this form of communication is radically different from the move to email correspondence of the 1990s or the expansion of telephone service in the twentieth century. SMS favours instantaneous communication of brief bursts of factual information which changes the nature of what it means to communicate. But there is more to this generational difference than just the tools they choose to use to communicate. Christian Smith, a researcher in the United States has done longitudinal studies comparing responses of teens and young adults over the past

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[17] From the Pew Research Center's Internet and American life Project. See Lenhart, "Adults, Cell Phones and Texting," n.p. Retrieved from http://pewresearch.org/pubs/1716/adults-cell-phones-text-messages .

[18] I grew up with two brothers and our phone was tied up often in the evenings but not as much as some homes. One girl I went to school with was only allowed one twenty minute phone conversation each night. Her parents used an egg timer to enforce this rule because she had three sisters and without limits the phone would never be available to anyone!

[19] Lenhart, "Teens and Mobile Phones," 54.

thirty years. He finds that the responses of teens today are a different kind of different from any generation in the past.[20] Teens experience the world differently today because their contact with people, and with places and institutions, is different; it is mediated by the devices they use. Their world is fluid and scattered with very few stationary landmarks.

A change in the technological landscape may be what is driving the change in the way people see and interact with the church. How should the church respond? We will need to theologically reflect on what the Bible has to say about technology. How should churches respond to social media and new approaches to community and communication? Are our tools affecting us? If so, what new barriers and what new behaviours should the community of faith develop to facilitate an authentic engagement with the twenty-first century Western world?

This thesis will explore current literature and research into the impact of social media and CMC on discipling practices and spiritual formation of teens and young adults within Canadian churches. The social implications of the radical connectivity of some are creating a unique generational divide.[21] Those who use CMC consider faith, and ultimately consider coming to faith, in radically different ways than their less connected peers as well as those who came before CMC. In chapter one we will explore the advent of a mediated culture. The communication tools of the twenty-first century have created a new order of complexity in how we perceive ourselves. Community and a sense of belonging are still important to teens, but words like community, authenticity, and membership are acquiring a whole new meaning for today's digital generation. In chapter two we will develop a theology of technology. How does the Bible inform our use of technology? Should churches lead the way in technological innovation or should they reject

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[20] Smith, *Souls in Transition*, 279-80.

[21] It is important to note that not all teens embrace CMC and not all adults reject it. As time goes on this divide will become less about your age and more about how you use communication tools. In the epilogue this thesis will expand on how the church needs to avoid age specific responses to this challenge and focus more on how people communicate and what tools they choose to use.

technology as a product of a fallen world? In order to faithfully respond to the commission Jesus has left for the church to go into the world and make disciples (Matt 28:19-20), the church must have a clear understanding of the place technology has in the created order. In chapter three we will investigate the findings of psychological and social research and summarize how our tools affect us. How do they impede and how do they advance discipleship and spiritual formation? Do twenty-first century teens and young adults have specific social and spiritual deficits as a result of being raised in the first Internet generation? Finally, chapter four will outline the practical application of this study. Social media has erased some of the social boundaries in Western culture and made others obsolete. We will outline some new boundaries and new behaviours for spiritual formation in the twenty-first century.

Methodology

This thesis will adapt a methodology that combines a secondary literature review with theological reflection on my ministry experience as senior pastor at the Tintern Church of Christ and my recent experience as a volunteer youth worker at the Youth For Christ Drop-in centre in Vineland ON. Specifically we will practice theological reflection through the three operations of a method used in Stone and Duke's work, *How To Think Theologically,* namely, Interpretation, Correlation, and Assessment.[22]

We are all natural interpreters, finders and givers of meaning right from birth. While most of the interpretations or views that we hold are so natural and unreflected that we take them for granted, as we mature, we become more aware of our own interpretations by comparing and contrasting them with others. Considered together, our interpretations or views form a collective viewpoint often called a worldview. This worldview becomes more than just the collection of

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[22] Stone and Duke, *How to Think Theologically,* 28-39.

interpretations we have gathered. It is itself a tool in making meaning of the world around us. This is why theological reflection is so important. A person transformed by Jesus Christ does not just speak of Christ or imitate His behaviours. They see the world in light of His incarnation and the message He brings. Stone and Duke say, "Christian theological reflection interprets the meanings of things from the perspective of faith in the Christian message."[23] In this sense, interpretation puts words to our thoughts and experiences and brings them into conversation with Christian theology.

In this thesis we will seek to interpret the cultural changes of the past five-hundred years in light of the Christian faith. We seek to answer the question: do technological innovations such as the printing press, the telegraph, television, personal computers and the Internet have an impact on our understanding of faith? To quote Stone and Duke, the church's, "substance is transmitted from generation to generation by means of the language of faith, a loose-knit collection of stories and symbols."[24] This thesis will show that the advent of the digital age has had a huge impact on that transfer of faith, from one generation to the next. Stone and Duke add that "learning how to use the language of faith is of critical importance in forming the set of interpretations that makeup a theological perspective."[25] Therefore, understanding the impact of technology is key to understanding the theological perspective today's digital generation.

Theological thinking has to do with interpreting the meaning of things from the distinct perspective of faith in the Christian message. Therefore similarities and differences between theological and other viewpoints come to light through the process of correlation. Correlation compares our thoughts and experiences within a broad range of contemporary issues. Correlation between a Christian theological worldview and another worldview is done in such a

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[23] Stone and Duke, *How to Think Theologically*, 29.
[24] Stone and Duke, *How to Think Theologically*, 29.
[25] Stone and Duke, *How to Think Theologically*, 30.

way as to be mutually beneficial to both partners. Each partner in the conversation should be

informed, and potentially transformed, by the exchange of thoughts and experiences. It is not a

colonial process where the theologically enlightened partner "delivers the goods" to a less

informed world. It does not pay to see theological reflection in those terms. Rather, it is possible

to practice correlation without denying the lordship of Jesus Christ and the revelation of Himself

in the word of God, with a spirit of mutual respect.

For example, Paul Tillich was a German theologian from the early twentieth century who

believed it was the responsibility of the church to engage the contemporary *zeitgeist* of its day.

He saw World War I as a crisis of confidence in theology and he believed that,

> the existential and moral questions of each generation – the very symptoms of this
> crisis of confidence – constituted the real subject matter to which Christian
> theology must address itself. The task of articulating a body of understanding by
> which people can live meaningfully in today's world is fundamental to the
> theological enterprise.[26]

Perhaps the technological revolution of the twenty-first century is our opportunity to re-

evaluate our theological understanding of community and what it means to be part of the

body of Christ.

In chapter two we will briefly summarize a biblical theology of technology and bring that

into conversation with contemporary issues related to the changing relationship between the

digital generation and the church. The theological task at hand is one of correlation: articulating

what faith means in light of the changes in our culture. A robust practical understanding of both

theology and culture comes as the result of effective correlation. A misguided quest for

relevance here will only result in trendiness at best and burnout at worst if we fail to correlate our

faith and culture clearly. Stone and Duke remind us that "using traditional language is not itself

a guarantee that the meaning of faith is rightly understood. The meaning ... of faith needs to be

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[26] Graham et. al., *Theological Reflection: Methods*, 154.

unlocked by acts of interpretation and correlation that disclose the significance of things in relationship to the message of God."[27]

For example, the human desire for connection is best understood when viewed in light of the fact we are image bearers of our Creator, who is Himself a relational being. In general, "the point of correlating theological and non-theological views is to identify what things mean in relation to [God's] message so that Christians may carry out their life of service keenly aware of its distinctiveness."[28] Until we understand the theological foundations for our most deeply held desires, we will never find their resolution.

Lastly, this thesis will perform the theological task of assessment, which offers some rationale as to the trustworthiness of the thinking in question. Stone and Duke list four considerations that should be made in the process of assessment as theological reflection: Is it consistent with the gospel? Is it plausibly coherent? Is it consistent with the moral integrity of God, and finally, is it valid when compared with other worldviews?

For a theological view to be consistent with the gospel it needs to commend a view of Jesus Christ as core and central. Christian community is only consistent with the gospel if it is centred on the incarnation of Jesus Christ through His body, the church. As we will discuss in chapter four, a disembodied church will have difficulty in being truly consistent with the gospel. Physical presence within community is vital to the Christian faith.

Twenty-first century culture presents the church with a set of brand new questions: What does it mean to be a member of a church? What forms of on-line community are valid forms of Christian fellowship? For the Christian practice of faith to be considered plausible and coherent it needs to have well articulated answers to these questions, which this thesis will deal with in

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[27] Stone and Duke, *How to Think Theologically*, 34.
[28] Stone and Duke, *How to Think Theologically*, 34-5.

chapters three and four. The church needs to assess its theological understandings in light of new

technological advances rather than retreating from technological innovation. The moral integrity

of God is of significant concern when we are dealing with dehumanizing or destructive habits

that are associated with anonymous chat rooms, cyber-bullying and other obsessive uses of

technology. Rather than abandon the use of technology, we need to practice a theological

understanding of technology within Christian community and, as a result, propose a

comprehensive and effective philosophy for discipleship and spiritual formation for youth and

young adults in a computer mediated age.

In addition to theological reflection and reflection on the Scriptures, this thesis will

review contemporary writing in fields like Education, Sociology, Media and Cultural Studies,

Technology Trends, as well as Theology.[29] Educational researchers who specialize in elementary

age children (ages four to thirteen) have known for years that children born in the 1990s have a

different perspective on the world. Every generation is different, but this new generation is

different in a whole new way.[30] An awareness of this distinction has only just reached the post-

secondary educational context. The research of communication professors like Heidi Campbell,

Stuart Hoover, and others will be combined with the work of media studies pioneer Marshall

McLuhan, and those who follow in his footsteps: Neil Postman, Robert Putnam, and others.

Combined with a review of contemporary literature, this thesis will also look at the church's

traditional interaction with technology in the past, and will construct a theological understanding

of these issues through the concurrent practices of interpretation, correlation and assessment.

Our Changing Context

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[29] Many scholars describe this field of study (religion and electronic media studies) as an interdisciplinary area of
study (Campbell, "Religion," 3 – 44., Hoover, *Religion*, 17, Lehikoinen, *Religious*, 20). For this reason, a great
deal of primary research exists in each of these fields, but very little cross disciplinary synthesis has been done
up to this point.

[30] See Oblinger and Oblinger, "Educating the Net Generation," 13-20.

We are living in the middle of rapid cultural change and it seems that teens and young adults are making interpersonal connections differently than generations past. Unless they grew up attending church, teens and young adults are now failing to find 'sense-making' points of contact within the existing structures of traditional church practices. Teens and young adults have a radically different grip on reality and a different practice of spiritual life than those who came before them. This rapid cultural shift has created a large cultural void between young people and the leadership of the traditional churches they might attend. The gap between these generations presents a great challenge for the ministry staff and leaders of today's churches. An analogy may be useful in illustrating this unique challenge.

Imagine a church plant in an urban Canadian context that seeks to serve the Jamaican/Canadian community in that city. This new church is filled with people who have emigrated from the Caribbean and share the struggles and concerns of a group adapting to a northern climate and Western culture while responding in a uniquely Caribbean way. Rather than being rigidly scheduled, this church would likely operate on "Caribbean Time" – a more fluid, more flexible approach to scheduling events. The music, the style of speech, and everything about family life in this church would have a Caribbean feel to it. Now imagine that the staff and leadership of this church plant were made up entirely of Caucasian Canadian nationals. How difficult would it be for this leadership to authentically lead and serve this community? It would be very difficult!

This Caucasian Canadian leadership would come to the table with radically different cultural values and would initially have difficulty identifying with the struggles of their predominantly Jamaican congregation. In order to be successful in shepherding this church, the leadership would need to work exceedingly hard to bridge the cultural gap between themselves

and the congregation. They would need to acquire a keen understanding of Jamaican culture and the unique perspectives of people who have a Caribbean heritage. Rather than wait for the Caribbean members to adapt to Canadian culture, the leaders in this congregation would need to learn to see themselves as "immigrant" to the Caribbean culture they seek to serve. Once they began to learn Jamaican cultural practices and values they would, no doubt, be more and more successful in representing the unique interests of the Jamaican culture – a culture very different from their own. Without this understanding of Jamaican cultural practices, this church has no hope of growth within the Jamaican community in the city. An effective witness for Christ requires enough cultural sensitivity to incarnate the gospel in this immigrant culture.

In the future, Jamaican Canadians themselves would need to be given the opportunity to be not just members of this church, but leaders in this church plant as well. In this way the church plant would be able to occupy both cultures authentically: Jamaican and Canadian. What was once foreign to the Canadian nationals in leadership would now become familiar. What was once foreign to the Jamaican Canadian community would now be authentically theirs.

Regardless of ethnic or cultural background, this is the very same challenge that is faced by churches new and old, traditional and contemporary. Our culture has changed so quickly that the existing leadership in churches all across Canada have become foreign to the world that is native to teens and young adults. Church leaders and ministry staff have become "immigrant" to the digital world around them and in order to lead well they will need to become bilingual – thinking and speaking as both Digital Natives and Digital Immigrants.

For the purpose of this thesis, Digital Natives are defined as those born since 1990 who have never known a world without the Internet.[31] For the most part they are completely fluent in

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[31] The term, "Digital Native" is used in educational circles to refer to students who have grown up in the Internet Age (born since 1990). Digital Immigrants are those born before 1990. Marc Prensky first used the phrase in his

the use of digital technology. They make use of computers, and cell phones almost constantly and have very little interaction with their world that is not mediated by their digital tools.[32] On the other hand, Digital Immigrants are those born before 1990 who can remember a world before the Internet and the world of constant communication. Many Digital Immigrants have learned to adapt to the digital world of the twenty-first century but they will never fully function as natives. They speak, as it were, with an accent.

Perhaps this is why the number of teens and young adults who are regular attendees of churches has remained static over the past twenty-five years and the number of teens and young adult casual attenders is collapsing. Digital Natives who grew up as regular church attenders are trained early in how to speak, act and think within the existing church culture. They are bilingual, able to cope in both their digital world and in the increasingly foreign world of the church. The language and behavioural barriers caused by this cultural shift do not challenge them but teens and young adults who only casually attend church may not be able to cope any longer. Is the cultural gap becoming too large for them to cross? Perhaps when casual attenders come in contact with typical traditional church practices, without an advocate or a cultural translator available, they are unable to make sense of the community of faith and its values and, as a result, drop out of the picture.

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work, "Digital Natives," in October of 2001. The metaphor, though useful, does have some limitations. Dr. Ofer Zur and Azzia Zur observe rightly that not all digital immigrants are technologically inept (Zur and Zur, *Digital Immigrants*). Early adopters are very similar to Digital Natives and similarly not all Digital Natives are comfortable with technology. Jones and Shao, "The Net Generation" counter that there is no clinical evidence that being born after 1990 determines that your learning style or worldview will be different than those born before you. They prefer the term "Net Generation," because it is less determinist. Bennett, "Beyond the Digital Natives Debate," observes most saliently of all that what is important is not when a person is born but what communication technologies do they use? As we will discuss in chapter 2, technologies are not neutral. Marshall MacLuhan warned that, "the medium is the message," and in this he is correct. Our tools shape us whether we realize it or not. In this thesis we will use Digital Native and Digital Immigrant because, despite the weakness of the term, it does address the reality that the church faces a true generational culture gap, perhaps more than the education system does.

[32] Common Sense Media reports that 42% of teens polled by Neilsen say they can text message blindfolded. They also report that texting is the second most common use of a cell phone, second only to checking the time! Retrieved from http://www.frankwbaker.com/mediause.htm on Nov. 30, 2011

Even a healthy church today is bound to have a leadership and staff that are almost exclusively made up of Digital Immigrants. When the leadership of a church speaks a different language than everyone who is twenty-two years old or younger, it is no wonder that there is a cultural disconnect. In the same way that a leadership of a Jamaican congregation made entirely of Canadian nationals would need to work very hard to bridge the cultural gap between themselves and the congregation, Digital Immigrant leaderships of congregations today need to work hard on two fronts: developing and implementing spiritual practices that speak the language of the youth in their congregations, and a greater capacity to understand the language and the cultural reality of Digital Natives in their community. They need the equivalent of cultural sensitivity training.

A vivid example of this communication struggle comes from a church I visited in Michigan. This young, vibrant church is next door to a growing Christian college and on the outside door of their auditorium is a sign asking that no cell phones be brought into the sanctuary. The Digital Immigrant leadership of this congregation no doubt means well – they are likely trying to eliminate the distraction of a mobile phone ringing during a worship service. Never-the-less, the statement shows a lack of awareness of the fact that many Digital Natives do not carry physical Bibles; they download them onto their phones.[33]

Digital Immigrants and Digital Natives have radically different expectations for communication. While many Digital Immigrants, regardless of age have developed a facility with email communication and consider it cutting edge, Digital Natives on the other hand

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[33]   Dr. Rob Patterson of Tyndale University reports in an unpublished study in 2011 that 33% of respondents said they read the Bible off their cell phone during worship. PEW Internet and American Life Project report that 84% of teens (ages 15-19) carry a cell phone and it is my experience that very few of them are willing to part with it. Most have a Bible app downloaded on it. Brittany Smith reports in the *Christian Post* that Logos Bible software is the #4 most downloaded app for mobile devices. Lifechurch.tv's "YouVersion" Bible app has had more than 30 million downloads as of October 2011. See Smith, "Angry Birds" n.p.

consider email passé and are much more likely to use SMS for their day to day communications. Many Digital Immigrants use a mobile phone as a voice communication device only and might very well leave it at home without thinking about it. Most Digital Natives on the other hand consider their mobile device essential and would not think of intentionally going somewhere without it. As we will see in chapter 3 their mobile device is central to their personal identity. In order for churches to respond to the unique needs of Digital Natives there needs to be a greater understanding between the two groups.

At the outset it is important to say that this thesis is not an apologetic for one way of seeing the world. This is not a call to privilege a Digital Immigrant narrative over a Digital Native one or vice-versa. This thesis is a call for sober reflection on the way we use our technological tools. We are currently developing tools faster than we can evaluate them, and sadly we spend precious little time evaluating the tools that we do use. New media tools and new media habits are helping to create a generation of young people with a radically different worldview. The key to understanding this new worldview is in understanding how these new tools are affecting believers of all ages. Can these two worldviews work together? Is there a careful way forward where the old and the new can grow up together, side by side, supporting and affirming each other? Another analogy might help.

The Northern Rata Tree Vine grows in the coastal forests of New Zealand and was originally thought to be parasitic. It was a strangler, always found wrapped around, and growing with the New Zealand Red Pine, otherwise known as the Rimu Tree. Researchers have found that the two have an interesting symbiotic relationship. The New Zealand Red Pine grows first; it can live for hundreds of years and it can grow to be upwards of 45 meters tall. The seed of the Rata Tree vine, however, is wind-blown. Once it lands in the upper reaches of a Rimu tree, it is

nurtured in the water and mulch that is trapped in the upper canopy. As the Rata Vine matures, it grows down the trunk and follows the roots of the Rimu deep into the ground. In the early stages, the Rimu Tree provides the structure and nourishment of the Rata Vine, but eventually, once the Rata vine has matured and has found its way to the ground, it reinforces the Rimu tree through its final stages of development.

Only a healthy Rimu Tree can play host to a Rata Vine and the Rata Vine seems to grow best when the Rimu Tree it occupies remains healthy. The oldest and largest Rimu Trees nearly always have the support and reinforcement of a mature Rata vine during the last few decades of their life. The Rimu Tree will eventually die, but not until the Rata Vine is fully established.

The Rimu Tree and the Rata Vine are two different trees with different DNA but they live together. They ultimately acquire the same nourishment from the same sun and same soil. The Rimu tree comes first, growing from the ground having survived for hundreds of years. New life, however, comes from above: the seed of the Rata Tree arrives on the wind. The Rimu nurtures the Rata Vine through its early development. The latter will outlive the former but each sustains the other through the transition.

These two different worldviews, that of the Digital Immigrant and that of the Digital Native, are fundamentally different. They have different DNA but both have so much to offer the other. Just like the Rimu tree, the Digital Immigrant worldview, raised in a Modern, post-industrial world, has been around for hundreds of years. The Digital Native arrives at the beginning of a new era and just like the Rata vine, without the structure and the resources of the Rimu, it will have great difficulty sustaining life, but together they grow alongside one another. The new thrives but not at the expense of the old. The old intubates and generates the new.

Together both are nourished from the same source. Someday one will pass away, but not until

the other is firmly established.[34]

Can the old and the new grow together? Yes. The faith of the Digital Native community

needs the spiritual strength and the resources of the Digital Immigrant world but a greater

understanding is needed for both to work together. We will first consider the beginnings of a

mediated culture and how the Digital Native worldview came to be.

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[34] This analogy was first shared by Alan Jamison at "Mountain Advance" at Canaan Valley West Virginia on 2008. Len Sweet shares Alan's story in a podcast, *Napkin Scribbles*, called, "Gutenberg to Google" posted on March 3, 2009.

CHAPTER 1: THE ADVENT OF A MEDIATED CULTURE

Introduction

As mentioned in the introduction, many of those who study contemporary church culture have already noticed the widening gap between Digital Natives and Digital Immigrants within a church context. Researchers have been warning for decades that dropping attendance in church among young people is causing a spiritual tsunami that is going to wipe out entire denominations.[1] Reginald Bibby and others, however, are not without hope. They find that teens and young adults today see themselves as highly spiritual, but not religious. They are very involved in international missions and domestic service projects but less likely to affiliate themselves with a particular religious group.[2] Despite lower levels of religious affiliation, Bibby reports that belief in God for Canadians remains fairly stable. Digital Natives are not less spiritual but they are more polarized in their beliefs. Bibby reports that the percentage of regular worship attenders has been relatively stable for the past thirty years while the number of teens and young adults who "never attend worship services" has doubled.[3] Why is this new generation so distinct and what is making the difference?

The disparity between a Digital Native's use of social media and that of a Digital Immigrant is immediately apparent. Research shows that teens send on average more than three

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[1] Jim Coggins of *Canadian Christianity* cites research from Ipsos Reid polls, Statcan's General Social Survey, and Reginald Bibby to come to the conclusion that "Church attendance in Canada is declining rapidly. Atheism is rising, Christian moral values are being replaced by secular ones. Canada is no longer a Christian nation and Canadian Christians will soon be a persecuted minority." See Coggins, "The State of the Canadian Church," n.p.

[2] In Robert Putnam's insightful analysis of the collapse of American Social culture he argues that the American public, and by extension it could be argued the Canadian public, is less committed to institutional religion. He writes, "More people are surfing from congregation to congregation more frequently, so that while they may still be 'religious,' they are less committed to a particular community of believers... 'Believers' perhaps, but 'belongers,' not.". See Putnam, *Bowling Alone*, 74.

[3] 23% of teens and young adults reported regular attendance in worship in 1984 and in 2008 the number was still 21%; down slightly. 25% of teens and young adults reported never attending worship services in 1984 and that percentage jumped to 50% in 2008. See Bibby, *Beyond the Gods and Back*, 45.

thousand text messages a month while most adults do not even crack five hundred.[4] Teens send five times as many text messages as adults and are far more likely to use Internet resources and smart phone applications on their phone.[5] For many teens, a cell phone is absolutely vital to their identity.[6] It is used almost exclusively for text messaging and Internet access; the only people they talk to on their phones are their parents.

Much has been written in the past ten years about the advent of social media and what church leaders should do about it, but the most common question is, "how should we use social media in our churches?" This thinking assumes that in order to bridge the gap between Digital Natives and Digital Immigrants we ought to adopt similar media habits. "How can we incorporate social media into church life in order to appeal to the teens and young adults who are abandoning church life?" This may seem like a feasible growth strategy that will stem the retreating tide, but in these questions there are some unchallenged assumptions that need to be examined. One problem is that these are the wrong questions to be asking. Rather than considering which new communication tools we need to adopt, we first must understand what media represents to Digital Natives as well as Digital Immigrants. How is our use of media and our understanding of media changing? We need to consider these questions before we can talk about how this change is affecting us and our institutions and what we can do to bridge the gap between Digital Natives and Digital Immigrants.

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[4] Retrieved from Neilson's analysis of mobile usage data among teens in the United States for the second quarter of 2010. http://blog.nielsen.com/nielsenwire/online_mobile/u-s-teen-mobile-report-calling-yesterday-texting-today-using-apps-tomorrow/

[5] Lenhart, "Adults, Cell Phones, and Texting" from research published by the Pew Internet & American Life Project. Retrieved from http://pewresearch.org/pubs/1716/adults-cell-phones-text-messages.

[6] Sherry Turkle in *Alone Together* describes how teens use mobile devices in constructing a new sense of self. It used to be that a person would bring a cell phone with them, now they are "on their cell phone." With it they create a "tethered self," (p. 154) one that is not intact without a mobile device close at hand. We will explore this idea further in chapter 3.

Is it possible that constant connection and continuous communication through mobile

devices has an unintended effect on the sender as well as the receiver? Perhaps church leaders

should be encouraging their members to use their mobile devices less and not more! Is there such

a thing as too much involvement with technology and interactivity? How can a faith community

support the spiritual needs of all ages: Digital Natives and Digital Immigrants?

This chapter will explore the function of media within the faith community by answering

three questions: What is media and how has it changed in Western culture in the past few

hundred years? Is the advent of mobile digital media devices related to the apparent generational

divide between Digital Natives and Digital Immigrants in Western Christian churches? Finally,

how has the media revolution of the past fifty years impacted the context of congregational

ministry? In order to address the unique perspectives of Digital Natives we first need to explore

what is meant by the term "media."[7]

What is Media?

In order for us to understand the impact of media on human interaction it will be helpful

for us to step back and consider what we mean by the term "media" in its broadest sense. In

general, media are tools which extend the capacities of humanity.[8] "All forms of media extend

or amplify some part of ourselves. They either extend a part of our body, one or more of the

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[7] For this thesis we will adopt a convention suggested by John Dyer on page 183 of his book, *From the Garden to the City*, regarding the use of the word "media" as a singular noun. A single form of expression that leverages one of the human senses (a photo for the eyes, audio recording for the ears, etc.) will be referred to as a medium. Multiple forms of expression that each leverage a single human sense will be referred to as "mediums" because the proper plural form for medium (media) is commonly associated, instead, with convergent forms of expression like the news media, digital media, etc. Convergence between television, radio, computers, and mobile communication devices has created compound expressions that are each single forms of expression that have combined many separate expression forms into a new whole. Digital convergence will continue to integrate distinct forms of expression into a single multivariate whole. For more on the discussion of "media" as a singular noun see Jarvis, "Media is Singular," n.p.

[8] As discussed in McLuhan, *Understanding Media*, 43.

senses, some function of our mental processes, or some social process."[9] In this sense, something

as commonplace as a set of wheels is a media that serves as an extension of a foot. A bicycle

applies this media to give a pedestrian a greater range of travel. Rather than walking to town, the

wheel (applied through the use of a bicycle) allows a pedestrian to travel further and faster. In a

similar way, eyeglasses are media that serve to extend the function of the eye. Even speech itself

and handwriting are both media which serve as an extension of the mind.

What we normally consider as media − newspapers, television, radio − are more like

metaphors of media. They permit a higher order conversation between the mind and world

around it − they are extensions of an extension. For example, spoken language is a media (an

extension of the mind). The radio extends the capacities of spoken language; it allows the voice

to be heard instantly across great distances, but it is not the actual voice media of the disk jockey

you are listening to when you tune in with your radio. It is something that stands in the place of

a media − a media metaphor − that you are listening to. Or consider the media of written

language (also an extension of the mind). A newspaper, or a book or even a website extends the

capacities of the written word; it records a thought for posterity and makes it possible for people

to transmit their thoughts over great distances and time periods. The media-metaphor of the

newspaper stands in between the receiver (the reader) and the media of the sender (the author).

A contemporary of McLuhan, Neil Postman, reminds us that these kind of media-metaphors

work subtly in the background,

> to enforce their special definitions of reality. Whether we are experiencing the
> world through the lens of speech or the printed word or the television camera,
> our media-metaphors classify the world for us, sequence it, frame it, enlarge it,
> reduce it, colour it, argue a case for what the world is like.[10]

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[9]   Hipps, *The Hidden Power*, 34.

[10]   Postman, *Amusing Ourselves*, 10.

Media-metaphors like newspaper, television, and social media interfaces deceive us, for they do not objectively carry raw information to our senses. Although we should know better, information received from media metaphors has often been carefully crafted and filtered. We will see in chapter three how Google and Facebook carefully target their users to receive specially selected information, and more importantly, specially selected advertising. They participate in the ongoing process of meaning making. Ernst Cassier makes this clear when he says that,

> physical reality seems to recede in proportion as man's symbolic activity advances. Instead of dealing with the things themselves, man is in a sense constantly conversing with himself. He has so enveloped himself in linguistic forms, in artistic images, in mythical symbols or religious rites that he cannot see or know anything except by the interposition of an artificial medium.[11]

The twenty-first century has already witnessed an explosion of highly sophisticated multimedia devices such as mobile phones that are media-metaphors. They serve as cameras, phones, game consoles, and even small computers. As we will see, Cassier's prophecy is coming true: technologically sophisticated social media devices are making the real-world more and more remote – and it seems that nobody is noticing.[12]

The Digital Generation is the first generation that prefers simulation over reality.[13] Taken at its word, the Internet and Social Media offer virtual community – a simulated embodied experience. Researcher Sherry Turkle reminds us that simulation subtly demands immersion. "Immersed in simulation, it can be hard to remember all that lies beyond it or even to acknowledge that everything is not captured by it. For simulation not only demands immersion but creates a self that prefers simulation. Simulation offers relationships simpler than real life

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[11] Cassier, *An Essay on Man*, 43.
[12] McLuhan prophetically warns, "the electric technology is within the gates and we are numb, deaf, blind and mute about its encounter with the Gutenberg technology, on and through which the American way of life was formed." McLuhan, *Understanding Media*, 30.
[13] Boddy, "Underground and Overhead," 125.

can provide."[14] Using tools and digital devices to interact with the world makes us familiar with a reality that is less than real.

Media users mistakenly imagine the media they use as a pipe that channels information to them, the end user. This naïve notion assumes, therefore, that the experience of hearing about your aunt's funeral arrangements is the same whether you learned about it through a phone call, through a text message, or through a personal visit from someone in your family. This is, of course, not the case. Each of these media provide a vastly different experience when learning personal information. Each different media has a different set of values and these values influence both the sender and the receiver.[15]

In order to understand media, it is vital to see them in these broad terms, for the effect media has on us cannot be studied otherwise. Shane Hipps writes that "when we fail to see media this way we become overly enamoured, giving them the power to make us slaves of our own creations."[16] Put simply, the medium can have more of an effect on the media user than the information it contains. Media studies pioneer, Marshall McLuhan – who famously said, "the medium is the message" – hyperbolically put it, "the content or message of any particular medium has about as much importance as the stencilling on the casing of an atomic bomb."[17] While perhaps overstating the point, McLuhan's warning is clear: new devices are blindly received and embraced at the user's peril! Western culture has a great appetite for technological adaptation and change, and as a result we are now developing tools faster than we can understand them or their effect on us. What are our tools telling us and how are they affecting us?

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[14] Turkle, *Alone Together*, 456-7.
[15] We will explore this fact in greater detail in chapter 2.
[16] Hipps, *The Hidden Power*, 35.
[17] McLuhan, McLuhan, and Zingrone, *Essential McLuhan*, 238.

For many of us, particularly Digital Natives, we have no understanding of what our tools are doing to us. Again, McLuhan writes that "when we fail to perceive media as extensions of ourselves, they take on godlike characteristics, and we become their servants."[18] It is a great mistake to assume that the media we use are entirely neutral and have no effect on the user. Media devices invariably have both a positive and negative effect on the user. On the one hand, advocates of any new media device tend to see the advantages of this new device in sparkling clarity while having limited view of any shortcomings.[19] Critics, on the other hand, tend to see things in opposite terms. Neil Postman, in his book *Technopoly,* describes media proponents as "one-eyed prophets who see only what new technologies can do and are incapable of imagining what they will undo."[20] The truth lies somewhere in between. He writes, "every technology is both a burden and a blessing; not either-or, but this *and* that."[21] All new technologies give and take away, at the same time. Social media users need to reflectively consider, whatever it is that we gain by being constantly connected, and what is it that we are losing?

In general, revolutions in media technology should not be thought of as additive or subtractive but rather as ecological with all the associated inter-dependencies. For example, if you were to add a particular caterpillar to a forest, you would not simply have the forest plus a caterpillar. You would have a whole new forest! This one caterpillar could eradicate a species of plant life essential for another animal's survival. On the other hand, this new caterpillar could multiply greatly, providing a source of food for another animal on the verge of starvation, leading to a population explosion. In this same way, adding a new media technology is

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[18] McLuhan, *Understanding Media*, 41.
[19] Plato famously observed in his work, *Phaedrus,* "the discoverer of an art is not the best judge of the good or harm which it will accrue to those who practice it." As quoted in Postman, *Technopoly,* 4.
[20] Postman, *Technopoly,* 5.
[21] Postman, *Technopoly,* 4.

ecological. Adding a new media tool changes the way we use all of our other tools. Postman

observes that,

> Fifty years after the printing press you don't have old Europe plus the printing
> press, [you] have a different Europe. After the television, the United States was
> not America plus television; television gave a new colouration to every political
> campaign, to every home, to every school, to every church, to every industry.
> And that is why the competition among media is so fierce. Surrounding every
> technology are institutions whose organization – not to mention reason for being
> – reflects the world-view promoted by the technology. Therefore when an old
> technology is assaulted by a new one, institutions are threatened. When
> institutions are threatened, a culture finds itself in crisis. This is serious business,
> which is why we learn nothing when educators ask, "Will students learn
> mathematics better by computers than by textbooks?"[22]

The present media revolution is no different. Internet-ready personal computers have not

simply been added to the average family household. They have radically altered the media

ecosystem of the home and office.[23] Likewise, cell phones have not simply replaced regular

land lines (though some suggest that they will). Cell phones enter the user's world and alter the

way they use phones in general. Thirty years ago calling a person meant calling their home, or

their place of work. You were calling a location and the person you wished to speak with needed

to be there. Cell phones have changed all that. Now you call a person, or more accurately, you

call their cell phone. Phone calls are no longer geographically oriented. Mobile phones mean

that the person has become the portal.[24] And cell phones themselves are evolving: from phones,

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[22] Postman, *Technopoly*, 18.

[23] The high school that I used to teach at began to incorporate computers into the academic office in 1990, making typewriters almost instantly obsolete. Never-the-less, official legal documents called Ontario Student Records were printed on archival paper and could not be fed into a printer. Only a typewriter could be used to modify these records. As the typewriters went extinct the secretarial staff was forced to scavenge for replacement parts for the remaining typewriters. While the office computers were becoming less and less expensive, the last working typewriter in the school eventually became the most expensive piece of equipment in the office.

[24] Rainie, *Networked*, 55.

to text message devices, to cameras, to computers. It is becoming unclear precisely what a cell

phone is after all.[25]

Changes in Language

Media revolutions can be considered ecological because they end up changing the culture

they are in by changing the language. Whether the media-metaphor being added is the written

alphabet, the printing press, the telegraph, or the Internet, the new media changes its environment

by first changing the language. Over the past 50 years, cultural scientists have observed how

different cultures have defined themselves in light of governing metaphors. Following the

advent of the printing press, a person who was without guile might think of themselves as "an

open book." After the industrial revolution, people might think of themselves as machines:

consuming food as fuel in order to stay operational.[26] In the late twentieth century, the computer

was added as another governing metaphor for people as they imagined themselves as information

processors, receiving data input and producing information output.[27] Now terms like "multi-

tasking," "bandwidth," and "upgrading" have moved from computer world into everyday usage.

The twenty-first century has added a new metaphor: that of a network, and Digital Natives are

just as likely to think of themselves as nodes in a scale-free network.[28]

What is therefore significant is how social media technology has changed the nature of

communication for its users. For example, text messaging was first conceived as a substitute for

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[25] The cell phone has been distributed faster than any technology in history. By comparison, the printing press changed the idea of knowledge and information and was widely dispersed throughout Europe in about 150 years. In contrast, already, more than four billion cell phones are in use as of 2010, 37 years after the cell phone was invented. Chapter three will explore how smart phones radically change a culture's understanding of time, space, community, and self.

[26] Challies, *The Next Story*, 40.

[27] Lakoff, *Metaphors*, 27.

[28] Friesen, *Kingdom*, 51. Scale-free networks typically have clusters of connections around a small number of nodes (supernodes) and some other nodes with very few connections. Just like in a person's peer group, the social connections are not uniformly distributed: some people have more connections than others.

phone conversation when the latter was for some reason thought to be impractical.[29] Turkle writes, "don't have time to make a phone call? Shoot off a text message. But very quickly, the text message became the connection of choice. We discovered the network – the world of connectivity – to be uniquely suited to the overworked and over-scheduled life it makes possible."[30] Being able to address another mobile user instantaneously is highly convenient for the sender, but it puts a brand new set of expectations on the receiver. In face-to-face conversations and phone conversations, it is the sender that must confirm the connection. I cannot claim to have told you something until I have seen you, or gotten a hold of you on the phone. With email and text communication, however, the sender is off the hook. Once I have sent a text or email I can now divulge myself of any responsibility. It is now up to the receiver to do his or her part. They must receive, interpret, and act on the information. The responsibility now falls entirely on the receiver. This is a radically different way of communicating.

Text communication fixes the distance between the two parties who are communicating and it is fast becoming the preferred method of communication for Digital Natives. When people are communicating face to face, questions cannot be left unanswered, and when the conversation is complete, you must work to negotiate an exit. Voice communication constrains the speaker and the listener; they both must relinquish some control. Texting, on the other hand, "offers just the right amount of access, just the right amount of control... texting puts people not too close, not too far, but at just the right distance."[31]

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[29] That is the reason for the 140 character limit. SMS engineers were originally limited to the packet broadcast capacity of networks of the 1980s. Packets were limited to 128 bytes. The limit was later increased but engineers at the time thought more than 140 was unneeded. They figured that if you had more than that to say you would call rather than text. See http://http://en.wikipedia.org/wiki/SMS.

[30] Turkle, *Alone Together*, 13.

[31] Turkle, *Alone Together*, 15.

As a result, text communication is a good example of how mediated communication is strongly influenced by the tools that are being used and Digital Natives and Immigrants alike are often unaware of the effect their tools have on their relationships. Tools that offer intimacy and access like cell phones must be considered carefully. What is the cost of being available twenty-four hours a day? How do these tools affect how I interact with my friends and family? Turkle suggests that "when technology engineers intimacy, relationships can be reduced to mere connections. And then eas[e of] connection becomes redefined as intimacy."[32]

Another concept that has been redefined in the digital age is knowledge. It has become redefined for Digital Natives as, "access to information." With a smart phone in hand, information is always at our fingertips and Digital Natives access it constantly. Before the advent of the Internet, information was sometimes scarce and difficult to access. It used to be that by the time you had done your research and acquired information on a particular topic you had often constructed an understanding of it as well. For example, a friend of mine has watched countless hours of classic movies from every Hollywood era. He has a nearly encyclopedic knowledge of movies, actors, and directors from the past hundred years. With a Google app on my phone, however, I can answer any trivia question he can, but my understanding of the topic is obviously far less than his. When allowed to depend on my digital device we both have the same amount of information, but he has more knowledge. In this way, my reach far exceeds my grasp.[33] My access to information is a mile wide but my knowledge is an inch deep. Author Tim Challies says that "this digital world has given us an obsession with accessing; indeed, it has

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[32] Turkle, *Alone Together,* 16.

[33] I am unsettled with how many Bible verses I habitually look up by searching some portion of them on Google. I generally know what book to look in and perhaps what chapter but a specific chapter and verse is outside my grasp. A minister friend who grew up decades ago has, through a career of ministry and Bible study, acquired an encyclopedic knowledge of where verses can be found. I wonder if I will never develop this ability because of my present dependence on Google.

raised accessing information to the level of a virtue. And it has done so at the expense of

knowledge. It has given us plenty of knowledge *about* but little knowledge *of.*"[34]

Wikipedia has become one of the best examples of the radical change in the twenty-first

century media world. Since 2001, Wikipedia has grown to contain more than 15 million

articles, 3.8 million of them in English, and the site draws 75 million visitors every month.[35]

Wikipedia is a very different kind of encyclopedia, and in order to use it well, you need to

understand this difference. Wikipedia is free and it can be edited by anyone. This allows it to be

fluid and responsive. Articles on current events are often updated within minutes of the events

taking place. It is also convenient. The entire volume can be accessed anywhere an Internet

connection is available. These advantages are remarkable but it is not without its drawbacks,

and some of them are quite serious.

Wikipedia allows any person to write or edit any entry so, as a result, all perspectives are

considered equally valid. A Ph.D. chemist and a high school student are considered by

Wikipedia to be equally qualified to write an entry for the site. Likewise, all contributors are

assumed to be unbiased. This is unfortunately not true. Virgil Griffiths released a report in 2007

that revealed that the Church of Scientology constantly manages critiques of the church on

Wikipedia. The Vatican has also, allegedly, changed an article on Sinn Fein president Gerry

Adams multiple times to suit its purposes.[36] There are, on average, 8 000 new English articles

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[34] Challies, *The Next Story*, 147. Plato wrote in *Phadreus* (p. 96) how the word knowledge came to mean so much less than it did after the technology of writing came along. Proponents of the technology of writing claimed that this advance would improve the quality of a scribe's memory, and yet those who kept a written account found they practiced their memories less and less and as a result became forgetful. Through the use of writing, scribes had a better recollection of facts and figures, but a poorer memory and as a result Plato observed that his students continued to acquire knowledge through reading, but at the expense of wisdom.

[35] Challies, *The Next Story*, 162. Challies reports that if the *Encyclopedia Britannica* had as many articles as Wikipedia, it would fill approximately 10 000 volumes and cost nearly a half million dollars for a single set. There would have to be more than 300 volumes just to cover the letter 'A.'

[36] Challies, *The Next Story*, 163.

every day and 11 million English edits each month.[37] With no way to validate such a volume of information, it becomes clear that Wikipedia delivers information a lot better than it delivers knowledge.

The nature of the site dictates certain values to its users, almost without their knowledge. McLuhan warned that "the medium is the message" and Wikipedia demonstrates this axiom. Without realizing it, a person who uses Wikipedia on a regular basis redefines for themselves what truth is.[38] Challies says, "the wiki model tells us that truth is what the majority determines it to be."[39] For the Digital Native, truth becomes consensus. The assumptions and values that Wikipedia holds have massive implications on its users. If you are going to use the Wikipedia site you must therefore embrace the values of the site.

Media revolutions change the language but they also change the nature of discourse in the cultures they inhabit. The propagation of the television in the United States during the middle of the 20th century radically altered American culture and as a result, changed the practice of political dialogue. By 1960, televisions were widely used in the United States, and the presidential debates of 1962 between Richard Nixon and John F. Kennedy became the showcase of a radically different form of political dialogue. Unlike election campaigns of the past, where logical discourse was the way to prevail, the television had altered the nature of the discourse altogether.[40] Kennedy's trouncing of Nixon in 1962 had far more to do with a more convincing

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[37] Up to the minute statistics on Wikipedia are available at http://stats.wikimedia.org/reportcard/. These stats were retrieved on January 29th, 2012.

[38] Stephen Colbert coined the word wikiality stating, "Together we can create a reality that we all agree on – the reality we just agreed on." See http://www.colbertnation.com/the-colbert-report-videos/72347/july-31-2006/the-word--wikiality.

[39] Challies, *The Next Story*, 166.

[40] In 1858 Abraham Lincoln and Stephen Douglas hosted a series of debates to packed houses that lasted for 7 hours or more! See Postman, *Amusing Ourselves*, 44ff.

visual appearance than it had to do with anything else.[41] Even then, political debate had already

collapsed into a form of verbal sparring. The winner is now the one whose verbal jousting

produces the most media-friendly sound bite, all because of the inherent values and biases of the

television media-metaphor.

What makes things complicated is that our awareness of our own culture is mediated by

the tools (the media-metaphors) we use to make sense of the world and these same tools can

sometimes radically change our culture and even the language we use to describe our world. It is

not a simple thing to describe this process. As a preface to his book, *Mediation,* De Zengotita

warns that, "mediation is elaborate beyond imagining. It works differently for different people,

in different places, at different times. ... No generalization I make applies perfectly."[42] Never-

the-less, whether you are a Digital Native or an Immigrant, we all live in a mediated world. This

can be seen more clearly if we take a step back in time and trace the arrival of the Mediated Age.

A Brief History of Media Development

A person born in the medieval era had very little knowledge that was not personal and

first hand. For the most part, all the people that they knew were people they had met personally

and saw on a daily basis. News from far-off places held very little interest because it was very

unlikely to ever affect them in any personal or direct way. People in a medieval culture lived

with their immediate families and worked in subsistence farming or in the family trade. The

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[41] Nixon blamed his disastrous showing in the televised debate on the make-up artist who worked on him prior to the debate. The next day the Chicago Daily News led with the headline, "Was Nixon Sabotaged By TV Make-up Artist?" "We all say a Democratic make-up artist made him up," charged John Hall, business agent of the Make-Up and Hair Stylist Union. "They loused him up so badly that a Republican couldn't have done that job." From *The Great Debate., by Robert Sanders.* Downloaded from (http://www.museum.tv/debateweb/html/greatdebate/r_sanders4.htm) on September 27, 2011.

[42] De Zengotita, *Mediated,* ix.

three worlds of Work, Family and Leisure were completely integrated.[43] They worked and played with members of their own family in an unmediated way, until a revolution came that began to radically alter that.

The most influential media revolution since the invention of the alphabet was Gutenburg's printing press.[44] Before the printing press, a scribe in Florence, Italy, would charge one florin for one new copy of Plato's *Dialogues,* but by 1483, a printing shop using a press charged three florins for over a thousand new copies.[45] It is estimated that the number of books printed in the first fifty years following Gutenberg's invention equalled the number produced by European scribes during the previous thousand years.[46] Fifty years after the invention of the printing press, there were presses in 110 cities in six different countries. By then over 8 million books had been printed, almost all of them filled with information that had previously been unavailable to the average person.[47]

Like all new forms of media, the printing press brought many benefits to Western culture but it also had its costs. The printing press introduced the notion of individuality: individual thought, opinion, and action. It also destroyed the medieval sense of community and integration. The printing press prepared the way for the scientific method but it also reduced religious sensibility into mere superstition.[48] Postman says, "typography assisted in the growth of the nation-state but thereby made patriotism into a sordid if not lethal emotion."[49] With the arrival of

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[43] Pernoud, *The Glory of the Medieval World,* 242-5.

[44] Postman, *Amusing Ourselves,* 29. Postman discusses in "Five Things You Need to Know," how the alphabet is often overlooked as a technology. As odd as it might seem, just like the printing press, the alphabet, was invented.

[45] Carr, *The Shallows,* 69.

[46] Clapham, "Printing," 37.

[47] Postman, *Technopoly,* 61.

[48] Postman, *Amusing Ourselves,* 29.

[49] Postman, *Amusing Ourselves,* 29.

the printing press, the medieval world began to fall apart. The media development of the

printing press had created some new boundaries, but had made some others obsolete.

As European culture moved from an Agrarian society to an Industrial society, the three

spheres of the medieval world, Work, Family and Leisure, began to differentiate. A person now

had a "work-place" that had its own cultural norms and expectations. It was often in a different

geographical space than their home and, for the first time, a person had to negotiate how to get to

and from "work." The notion of a "work day," came about as the result of

> the desire for the merchants to have more control over their workers. When the
> work was done at home, the merchants could not force the home-workers to
> work hard enough to meet the increased demand for cotton. As the workers
> were paid a piece-work rate, they tended to produce as much work as was
> needed by them to maintain their lifestyle. ... Even when the piece rates were
> lowered to stimulate output, workers simply shifted to another merchant or took
> another job. Therefore, consolidating the workers into centralized mills gave the
> merchants more control over their production. It also allowed the merchants to
> change the working time from an individualized, self-paced day to a standard,
> fourteen hours a day for six days a week.[50]

Family and Leisure had no place and no traction within the industrial work world. Work

happened at work – a separation was now in place.

Similarly, the Gutenberg revolution created a way in which ideas could be shared without

being physically present. Raw information without a context and without a sense-making

framework could be distilled in written form and widely distributed. Information without

personal experience went from becoming virtually useless to being valuable, and interesting,

almost entertaining. Information could now be considered apart from its context. The printing

press created an economy, even an ecosystem, for knowledge and information.[51] After the

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[50] Backer, "The Cause of the Industrial Revolution," n.p.

[51] The field of Media ecology was proposed by McLuhan in 1964 in his work, *Understanding Media: The Extensions of Man*, but not formally defined until a speech given in 1968 by Neil Postman to the National Council of Teachers of English. It continues to be a field of study which focuses on how media and

printing press, ideas took on a life of their own: they could be bought and sold in the form of

books and documents. Ideas now survived through their own propagation in the marketplace.

Ideas thought to be good were adopted by a culture and expanded upon. Ideas thought to be

poor were abandoned and ignored.

At the same time, leisure pursuits, "in a certain restricted sense ... w[ere] invented in the

early modern period," and began to have their own unique context.[52] By the sixteenth century,

"people were clearly becoming aware that the kinds of activities we now call leisure constituted

a separate sphere from that of the duties incumbent upon a man of a certain station, from his

'business.' "[53] Through the printing press, literature was made available to those who had the

means and the time for leisure activities. As a result, distinct activities that did not relate to

family functions, nor to work, nor wealth acquisition were, born.

Family activities became further specialized as the Industrial Revolution laid claim to

"work-time."[54] Many people no longer worked with their families in a family trade but worked

for employers and would only see their families outside the working day. These three shifts

started to make the three worlds of the Post-Medieval world – now known as the Modern world

– more distinct. Work, Leisure and Family had less and less to do with each other.

In today's culture, however, information technology in the Post-Industrial era appears to

be causing a re-convergence to take place. McLuhan declared, perhaps sardonically, that the

media-metaphors of the twentieth century – telephone, radio, movies, television – were

"breaking the tyranny of text over our thoughts and senses. Our isolated, fragmented selves,

locked for centuries in the private reading of printed pages, were becoming whole again,

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communication processes affect human perception and understanding. See Gencarelli, "Neil Postman and the Rise of Media Ecology," 201-25.

[52] Marfany, "The Invention of Leisure," 1.

[53] Marfany, "The Invention of Leisure," 1.

[54] Backer, "The Cause of the Industrial Revolution," n.p.

merging into the global equivalent of a tribal village."[55] Later he wrote that we were

approaching, "the technological simulation of consciousness, when the creative process of

knowing will be collectively and corporately extended to the whole of human society."[56]

After hundreds of years of being isolated, Work space, Family space and Leisure space

seem to be coming together. With the use of information technology, work no longer has to be

done from one location. Telecommuting means we can spend more time at home with family.[57]

Leisure activities are often done on-line, through information technology. Even for those who

still leave home to go to work, our loved ones are only a text message away. It would appear

that the information age is bringing the three spheres of the Medieval world back together again.

The difference, however, is that people are interacting in each of these three worlds at the same

time but in a mediated way.[58]

People work while home with their families, but they work by telecommuting using

digital technology. The computer interface is used to connect the worlds of work and family.

People can engage in leisure pursuits with their friends and family through electronic means but

the connection is not "im-mediate" (without mediation).[59] Our devices stand between us. One

can communicate with their family while at work but it is a mediated communication. As a

result, the reunion of the Family, Work and Leisure worlds is not through restoring personal, first

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[55] Carr, *The Shallows*, 1.

[56] McLuhan, *Understanding Media*, 5. Computer scientists call this consciousness the, "Noosphere." See Lanier, *You Are Not a Gadget,* 16ff. A simple example of how this already exists can be observed by typing almost any question into Google as a search query. An answer to most questions can be found on the first page of search results. This is obviously not the purpose of Google's search engine, but is an interesting, though unintended example of distributive intelligence.

[57] Despite the advances in communication technology, Statcan reports that people are not flocking to work at home. The percentage of workers who work from home has remained largely unchanged from 2000 – 2008. Turcotte, Martin, "Working from Home," 4.

[58] For a thorough discussion of this change in culture see Challies, *Next Story*.

[59] For example, I love to play Scrabble and Chess but I discovered recently that since I got my most recent smart phone I have played hundreds of games against a computer or on-line stranger, but have not played a single game face-to-face. In chapter four we will talk about strategies we can use to get our tools to lead us to embodied experiences rather than virtual experiences.

person connection but rather through mediated means. Our devices are what bring us together. In the twenty-first century, we live in a mediated world where some kind of media constantly stands between us and the rest of our world and the question we ought to be asking is, "how do our media tools affect us?"[60] In order to answer that question, we need to look at another historical context.

Digital Natives in a Mediated Age

Thomas de Zengotita begins his book, *Mediated* by asking the question, "Did the members of the Greatest Generation spend a lot of time talking about where they were and what they did and how they felt when they first heard the news from Pearl Harbour?"[61] People certainly remembered the attack on Pearl Harbour, but the folk genre of creating an "oft repeated, inevitably embellished story-for-the-ages reporting on my personal experience of the event" did not exist at that time.[62] When you read a contemporary media reporting of December 1941, it is spoken with the foregone conclusion that the event and its consequences were what mattered. Instead of talking about "where I was when it happened," people just talked about what happened. When media coverage of the attack on Pearl Harbour is considered, a public, reflexive level of introspection simply did not exist then.[63] Why is today so different?

One of the reasons why those who were alive in 1941 did not create stories about "where they were on December 7th" is because they were not there. Only those who were living on the

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[60] Challies, *Next Story,* 17.
[61] De Zengotita, *Mediated,* 1. "The Greatest Generation" is a term coined by journalist Tom Brokaw to describe the generation who grew up in the United States during the Great Depression, and then went on to fight in World War II. Later it became the title of a 1998 book written by Brokaw where he says, "it is, I believe, the greatest generation any society has ever produced."
[62] De Zengotita, *Mediated,* 1.
[63] In a similar way, the Hindenburg disaster on May 6th, 1937, more than four years before was the subject of intense media coverage – newsreel motion pictures, photos, and a radio broadcast – and yet there were no witness reaction statements. Media consumers of that time did not consider themselves part of the story. The event was the only story to tell.

Hawaiian Islands would have a first-hand account of the attack. Everyone else received a

second-hand report of the event through the radio, or newspaper. That report was delayed by

days and weeks and it was limited in scope. For people living in North American, the attack on

Pearl Harbour was an event that happened, it was not an event that happened to them.

De Zengotita suggests in his book, *Mediated: How the Media Shapes Your World and the*

Way You Live in it, that one of the first "remember where you were," events of the twentieth

century was the Kennedy assassination in November of 1963.[64] The greatest difference in these

two tragedies was the media experience of the general public. In 1963, through media coverage

on television, you were there. You saw and heard the event unfold. There were hundreds

present outside the book depository in Dallas when the shooting took place but the viewer being

addressed by the television was present for the event as well. They had multiple vantage points

and the benefit of expert analysis.[65] In other words, the viewer had an omniscient, God's eye

view. The mediated, reflexive experience of the world is a presentation specifically for the

benefit of the viewer and described by De Zengotita,

> this is a form of flattery so pervasive, so fundamental to the very nature of
> representation, that it has escaped notice, though it ultimately accounts for the
> much remarked narcissism of our age. The flattered self is a mediated self, and
> the alchemy of mediation, the osmotic process through which reality and
> representation fuse, gets carried into our psyches by the irresistible flattery that
> goes with being incessantly addressed.[66]

A vivid contemporary example of this phenomenon is the terrorist attacks on September

11, 2001. The protagonists of these attacks had deliberately chosen the date and time of the

attack to ensure wide media coverage. Since television cameras from all major media sources

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[64] De Zengotita, *Mediated*, 7.
[65] There was no live television coverage of the motorcade, however, three amateur films were taken of the assassination. This represents another generational divide. For those born well before 1963, their experience of the Kennedy assassination is likely that of Walter Kronkite announcing the president's death, in black and white, live on television. Those born later likely associate the event with the Zapruder film; silent and in colour.
[66] De Zengotita, *Mediated*, 7.

were already pointed at the World Trade Centre, there were dozens of media outlets covering the impact of the second plane, live. Each one presented and analyzed the images for the benefit of the viewer – again, a God's eye view. Despite being perhaps thousands of kilometres away, viewers around the world experienced the events as though they had happened to them.

Mediation like this works on two levels. First, it takes events from the distant corners of the world and presents them near and present to the viewer. In 1941, it was days before the reality of the Pearl Harbour attacks became apparent to media consumers in the continental United States, but sixty years later, an event like that would have been broadcast instantly, in vivid colour. The second effect of mediation is one of dimensional reduction. Since the vast majority of the public were all viewing a mediated experience of these events, we all receive the same experience. We saw the same media coverage, with the same analysis, with the same camera angles. We receive this event, not with the infinitely varied perspectives of eye witnesses, but rather as media consumers, served the same experience. This is why we talk about where we were when we found out, it is the only identifiable marker on the event. Everything else was the same. This universal experience that we all shared flattened the perspectives and diminished the experience dimensionally. We all acquired the same illusion of immediacy and likewise the same lack of depth. Consider the typical response from someone who saw the destruction first hand. De Zengotita observed from his own personal experience that people kept saying, "It was like something you see in a movie."[67] The most disturbing thing for a first-hand witness was to see the destruction, unmediated. It was deeply unsettling to see the news without a frame around it.

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[67] De Zengotita, *Mediated*, 280. It is of course ironic that the most real experience we can compare it to is that of a virtual recreation like a movie.

An unmediated experience is almost accidental anymore. Unless you are stranded on the side of the road with a dead cell phone, or lost on a walk in the woods, we are never without our distractions, without our mediated tools. In order to be in an unmediated environment, one that is not deliberately designed to amuse us, we must choose to separate ourselves from our tools and take an electronic media fast.[68]

Almost everything we see today is mediated through some technological device. This is how a teenager today can be nostalgic about the 1970s, a decade he or she was not alive to see. Through mediated experience, they feel like they have been there. They have seen the images, songs and stories of the 1970s, and in the dimensionally reduced reality they have become accustomed to, that is enough. For most Digital Natives, seeing the 1970s is the same as being there. That is why Digital Natives and Digital Immigrants have been affected so differently. They use different media tools, but even when they use the same tools, they use them in radically different ways.

The Effects of a Mediated Culture on Ministry

The use of social media tools is the single most significant difference between Digital Natives and Digital Immigrants. The twenty-first century world is different for everyone, but Digital Immigrants and Natives face the same changing landscape with what would amount to different intellectual handles. Even the way they use their tools is different. Two women in my congregation illustrate this difference perfectly: one woman who embraces the typical media habits of a Digital Native posted on Facebook at four am that her son was wide awake. Her post included pictures with humorous commentary. Another woman who is a Digital Immigrant said

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[68] Recovery of this spiritual discipline is one of the recommendations we will discuss in chapter 4.

to me, "When my boys were that age I don't think I could have even operated a camera at four am. It would literally be the last thing in the world I would want to do."

Digital Natives would not think twice about posting a status update in the middle of the night while Digital Immigrants, on the other hand, would not even think of it. In this particular example I could see on the Digital Native's Facebook profile that she had been up once that night already with her newborn son and in general she makes a daily habit of posting comments about the most routine details of her day. A typical Digital Immigrant finds a Digital Native's use of social media, confusing at best, and absolutely incomprehensible at worst. What does constant connectivity and inane status updates accomplish for a Digital Native? Research into the behaviour suggests that for Digital Natives, it is identity play and the experimentation of self.[69]

Something significant is going on when a Digital Native is broadcasting to the world seemingly insignificant details about his or her life. Researcher Sherry Turkle says they are often "performing themselves" through their media selections. In her book, *Alone Together,* she writes that "our new devices provide space for the emergence of a new state of the self, itself split between the screen and the physical real, wired into existence through technology."[70] Facebook, for example, offers the opportunity to test out different personae. The behaviour is particularly powerful among adolescents, who are just getting in touch with their own identities. Teens begin with saying "I like this," until it becomes, "I *am* like this." Personal preferences and daily observations become identity claims. Turkle calls these on-line worlds "identity

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[69] Turkle, *Alone Together,* 12.
[70] Turkle, *Alone Together.* 16.

workshops," where Digital Natives are exploring new identities and new aspects of their character.[71] She says that Digital Natives are the first generation

> to grow up with an expectation of continuous connection: always on and always on them. They are among the first to grow up not necessarily thinking of simulation as second best. All of this makes them fluent with technology but brings a set of new insecurities. They nurture friendships on social-networking sites and then wonder if they are among friends. They are connected all day but are not sure if they have communicated. They become confused about companionship. Can they find it in their lives on the screen?[72]

They are in danger of not being themselves when they do not have their devices. One teen at my church related a story to me about having a full scale melt-down when her cell phone was confiscated overnight. She recalled later that she felt like she had "lost her mind." For the mediated self, cell phones become remote controls for life. Everything is instigated or initiated with the use of a cell phone. It has become irreplaceable for most Digital Natives and is radically impacting how a Digital Native forms their sense of self.

For Digital Natives, Facebook is a representational space where young people play at being themselves and eventually the performance of identity starts to become identity itself.[73] They make statements through text messages to friends or they make status updates and then use the feedback to decide whether this appropriately reflects their character. Perhaps this is another way in which Cassier's prophecy is coming true: as our use of cell phones and other mediated devices increases, our real selves become less real.[74] Digital Natives are thinking aloud using

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[71] Turkle, *Alone Together*, 12.

[72] Turkle, *Alone Together*, 19.

[73] Turkle interviewed teens who spent hours each day in virtual worlds like Second Life, World of Warcraft, and others. Of their experiences she writes, "On-line life is practice to make the rest of life better, but it is also a pleasure in itself. Teenagers spend hours depleting allowances, shopping for clothes and shoes for their on-line selves. These virtual goods have real utility; they are required for avatars with full social lives." Turkle, *Alone Together*, 193.

[74] Philippe Aries in *Centuries of Childhood* (1962) argued that what we think of as childhood is an invention that emerged in the early modern era to reflect changing social conditions. Children no longer went to work once they were physically capable but instead they learned to read and write. De Zengotita in *Mediated* (79) argues that the notion of "teenager" is a product of 20th century pop culture. Nothing like it existed in 1823 much less

social media devices in an effort to consolidate their sense of self. This is part of the reason why

Digital Immigrants have difficulty understanding what motivates Digital Native behaviours. We

may use the same tools but we use them for completely different reasons.

The most significant impact social media and mobile communication technologies have

had on a church ministry context has been how the term "community" has been redefined. The

word "community" is increasingly becoming defined for the Digital Native as simply those with

whom we have communication. Consider the changes in communication of the past 20 years and

how communication has changed from being location based to people based. If you wanted to

send a person a written message before 1993, you would have sent it to a fixed location, likely to

their house. They would have to be at that location a number of days later in order to receive

that message. Likewise if you were to contact a person by telephone or by fax, you would have

called a fixed land line. As a result of mobile communication people are no longer grounded.

With email, mobile phones, and computer mediated communication, we are now communicating

with a person, not a place. Computer mediated communication "is everywhere but it is situated

nowhere. It is I alone that is reachable wherever I am; at a home, hotel, office, highway, or

shopping centre. The person has become the portal."[75] The question becomes, then, how does

this affect the nature of community for Digital Natives? Digital Natives are now primarily

individuals and not part of a traditional group. Location no longer provides any sense of

community and, as a result, community itself is becoming disembodied. It is now defined more

by common interests, and by communication ties rather than shared space.[76]

1923. Adolescence is taking longer and longer today, all consistent with Cassier's assertion that as technological mediation increases, the real world recedes.
[75] Challies, *The Next Story,* 103.
[76] Putnam, *Bowling Alone,* 74.

So where does this leave the church? Shared interests are not rich enough to constitute the foundation of biblical Christian community. Jesus Christ needs to be more than a common interest in order to form a lasting fellowship, one in which we can be spiritually formed and challenged. Shared interests are barely any deeper than shared opinions and in most church fellowships, there is not a uniformity of opinion on very many issues at all. If all that holds a community together is common interests, shared opinions, and a church building, then the church is in big trouble indeed.

Location is not seen as a valid definition of community for Digital Natives but, in contrast, location is a huge part of the definition of community for Digital Immigrants. Many who came to faith before the Internet conceptually see their faith community as defined by the place in which they meet. On Sunday, many would say that they are "going to church." For a Digital Native, however, what defines community is simply the group of people they communicate with. Their "mediated communities, the ones that exist only in the form of communication ... are the ones [they] love the most and the ones for which [they] feel the most."[77] What happens then when the church does not fill this void?

The problem with making shared interests and convenient communication channels the basis of community is that it makes community imperceptibly but inherently shallow. A number of years ago I was part of an on-line community of sailboat owners who participated in an email discussion group. After being vetted by the administrator, you were added to the email loop and could participate in discussions related to the model of sailboat each member of the group owned. During the next two and a half years the group got to know each other; some visited one another and we shared tricks and tips about owning a Catalina 22' sailboat. After a couple of years, the Administrator spent a few months trying to find someone to take over the group and

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[77] Challies, *The Next Story*, 105.

after failing to do so, announced to the group that he would be suspending the email service. With that, the group instantly disappeared.

It was amazing to me how quickly the community of sailboat owners disappeared. What felt to me like a vibrant community of people suddenly evaporated into nothing. It was a community that existed only in the form of communication. When the medium for communication disappeared, the community disappeared. In the same way, consider what would have happened if I had sold my sailboat. Once I was no longer the owner of a Catalina 22, even if I was the owner of another kind of sailboat, my connection with the group would be greatly weakened. The vast majority of the chatter would have been uninteresting to me. I would have quit the group shortly after.

The danger of using social media to supplement the communal needs of a Christian community and to attract teens and young adults is that, without meaning to, you change what is meant by the word "community." In a sense, if you embrace the use of Twitter and Facebook in maintaining your faith community, you train the Digital Natives in your group to define community much more shallowly than they should. They will define it in terms of shared interests or in terms of the means of communication (membership in a Facebook group, inclusion in an email distribution) rather than in terms of what the Bible teaches Christian community is all about.

Transforming Christian community is formed by Jesus Christ. Author Charles Drew provides a warning about the involuntary nature of the community that God calls us to. He cautions us against elevating our individual tastes in the churches we attend, writing that

> "Church" is not an event. It is a people – people whom God calls us to love. What is more, it is in a very important sense, an involuntary community of people. We don't choose our brothers and sisters – God does. And sometimes those people are not terribly compatible with us – not the people we would

choose to hang out with. But it is this very incompatibility that is so important, for at least two reasons. First learning to love the people I don't like is by far the best way to learn how to love. It's easy to love people I happen to like. Second, the church is supposed to be a sociological miracle – a demonstration that Jesus has died and risen to create a new humanity composed of all sorts of people.[78]

Computer mediated communication and social media often presents itself as a one way street that is ultimately inevitable. "Of course you are going to use Facebook! Everyone is using it!" This is the mistake of a culture that has accepted some recent technological innovation as mythical; something that has always been.[79] Rather than categorically resisting technology or embracing it holistically without any reflection, we need to prepare to shape it in ways that honour what we hold dear. Winston Churchill once said of architecture, "we shape our buildings and then they shape us."[80] Equivalently, "we make our technologies and they in turn shape us."[81] Technology is not to be blindly embraced as inherently good, but it is also not to be rejected as being inherently bad. Technology needs to be reflected on as part of creation, subject to curse of Genesis chapter three. Like the rest of the world, it is part of our rebellion to the rule of the Creator, and is in need of redemption and restoration.

Conclusion

Digital Natives present a new challenge to the church of the twenty-first century. They are an increasingly distinct social group that have vastly different media habits than the generation that precedes them. Digital Natives use social media and computer mediated

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[78] Drew, *A Journey Worth Taking*, 94.
[79] See Postman, "Five Things You Need to Know," for more on the impact of mythical technologies.
[80] From Winston Churchill's remarks to the English Architectural Association in 1924, available at the International centre for Facilities website at www.icf-cebe.com/quotes/quotes.html. Churchill's comment is similar to many made by Marshall McLuhan in *Understanding Media*.
[81] Turkle, *Alone Together*, 19.

communication more regularly than Digital Immigrants and the question is, are their distinctive media habits a cause of the difference or a symptom of some other cultural shift?

Should churches use more social media applications in an effort to attract Digital Natives back to church? This is the wrong question to be asking. Church leaders need a more robust understanding of how our world is mediated by technology and how that impacts our spiritual development. Perhaps we should be encouraging people to use social media less and not more!

In general, media are tools which extend or amplify the capacities of humanity. At the same time as extending our reach, they also make the real-world more remote. Our tools affect us and transform the world around us. Our tools change our language and the nature of communication in a way that is ecological, and not additive. A new tool not only presents new options to the user but also changes the way we use all the other tools that came before it.

Social media tools are changing the way their users communicate, which is why there is such a big disconnect between the two groups. Digital Natives are different from Digital Immigrants, not just because they were born at different times but because, on the whole, they use different media tools and those tools are changing them. When text communication becomes your primary way of communicating with your peers, your interactions are short, factual, instantaneous, reactive and subsequently shallow. This, in turn, causes your relationships to become less reflective and have less depth. Intimacy becomes redefined as ease of connection, knowledge becomes equivalent to information, truth is redefined as consensus and community is reduced to those with whom I have communication. All of these changes have huge implications for ministry.

The most obvious challenge is the way Digital Native and Digital Immigrants perceive community. Spiritual formation happens when people come together and do life together with

Jesus as the central organizing principle for their community. Social media tools can be invaluable in keeping a community of faith connected but some of the inherent values of social media need to be resisted. Social media can be effectively used to make a community closer but we need to theologically reflect on technology in order to see how that can be done successfully. What we need is a biblical theology of technology, the subject of my next chapter. With this we can understand more clearly what our tools can accomplish for our churches and what new behaviours and boundaries will be needed to use them effectively.

CHAPTER 2: A THEOLOGY OF TECHNOLOGY

Introduction

Prior to working in full-time ministry, I taught high school in a private Christian school and had many opportunities to discuss teens' use of technology with their parents. A person's comments or complaints about technology would often reveal the operational assumptions they were using. One parent once said to me, "Facebook is making my kid narcissistic," and this struck me as missing the point. Does a specific use of technology have such a deterministic effect on its user? Are Facebook users hopelessly destined to become narcissistic, or is Facebook use completely unrelated to many teens' tendency toward self adoration? Or is there a third option?

In order for us to have a fuller understanding of the effects of technology and the responsibilities of its users, we need a robust theology of technology. Author John Dyer reminds us that "we must continually attempt to view technology through the lens of the story of God and His people with the resurrected Christ at the beginning, middle, and end of that story."[1] A biblical theology of technology will help us see that on the one hand, technology is amoral; it is neither good nor bad. On the other hand technology is not neutral either. Like everything on Earth, it is subject to the curse of Genesis chapter three and as a result has the capacity to enslave and lead its users into rebellion against the sovereign Creator. This chapter will demonstrate that technology is best conceived as a human activity, performed in community, using tools to transform God's creation. Before we use any technology to glorify God or further the gospel we need to acquire a biblical framework for understanding it and acquire a biblical imagination for discerning its inherent values and its effects.

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[1]   Dyer, *From the Garden to the City*, 179.

Is Technology Good or Bad?

The parent who said, "Facebook is making my kid narcissistic," holds a view of

technology called *Technological Determinism,* which says that technology is an unstoppable

power that has become the driving force in society.[2] Determinists will go as far as to say that

technology is the primary basis of, and reason for, all societal and cultural change. Determinism

shows up frequently in statements like "Technology makes us...," and finishes with blaming

technology for some cultural ill. Embedded in this kind of thinking is the notion that the problem

is not what technology is doing to us, the problem is technology itself. If we remove the

technology, the problem will go away, because technology *is* the problem.[3]

Not all determinists, however, view technology negatively. One of the most famous

technological determinists was Karl Marx, who wrote that technology would be the great force

of good that would equalize humanity. Marx said, "the windmill was responsible for eliminating

the feudal system," and he believed that future technological advances might eliminate poverty

and power altogether.[4] Determinists that view technology positively are in danger of becoming

the one-eyed prophets from chapter one − seeing only the good in a technology and ignoring the

bad that comes with it.[5] No technology is all good or all bad. Each technology has the capacity

to lead us into rebellion and brings with it a mixture of benefits and drawbacks.

Because of the Christian belief that God is the ultimate sovereign driving force in history,

Technological Determinism cannot function comprehensively for Christians as an approach to

constructing an appropriate theological view of technology. Another view of technology is

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[2] As defined in Dyer, *From the Garden to the City,* 85.

[3] In November of 2010, Reverend Cedric Miller of Living Word Christian Fellowship Church in New Jersey banned Facebook accounts for staff and volunteer workers at his church and called on all the married members of his church to delete their Facebook accounts in order to protect their marriages. He insisted that Facebook ruined marriages by connecting people with former lovers. See Yin, "Delete Facebook to Save Your Marriage," n.p.

[4] Adapted from Dyer, *From the Garden to the City,* 86.

[5] One-eyed prophets are discussed in Postman, *Technopoly,* 5.

Technological Instrumentalism, a view that technology is merely the instrument of the person using it.[6] Instrumentalism is behind the popular saying that "guns don't kill people, people kill people." This cliché is often employed in opposition to gun registration and argues that guns should not bear the blame when one person kills another. The gun is simply the instrument the killer chose to use. If a gun was not at hand, the killer would have exchanged it for some other weapon. There is therefore no need to worry about the availability of guns.

There are dozens of studies arguing back and forth as to whether societies with guns are more violent than those without guns. While this discussion is outside the scope of this thesis, the point is that a gun comes with a set of values and cultural assumptions. When a person chooses to carry a gun – even more so, when a person chooses to *use* a gun – they are adopting this set of values. To own a gun assumes that you are able to safely operate a gun and that you have some proficiency in hitting a target, otherwise it would be pointless to own one. To use a gun embraces the cultural belief that you are authorized in using lethal force to protect yourself or enforce your interpretation of the law. Furthermore, when you bring a gun into your home you bring these cultural values into your home and your family embraces these values (to some extent) as well.

Technology should never be considered as an object only, disconnected from its user and the world in which it is used. Dyer writes that "technology is the human activity of using tools to transform God's creation for practical purposes."[7] Much within this definition is significant to our discussion here. Technology is not just the tools, but it is an activity using tools. Technology is not an independent practice, but a communal practice. One person's use of technology profoundly affects those around them. Each technology has a set of values that go with it and

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6   As defined in Dyer, *From the Garden to the City*, 84.
7   Dyer, *From the Garden to the City*, 65.

when you participate in a technology – a human activity using tools to transform God's creation – you need to ask yourself, "will I adopt the values that the technology supports?"

For example, this summer my friend and I both brought our sons deep into the woods on a canoe trip. My friend brought his Blackberry, while I did not. Despite the fact that we were both in the same place, staying in the same tent, my friend and I had different camping experiences. I left my ministry job far behind for the weekend and was fully present with my son, experiencing nature first-hand. My friend experienced nature with his son also, but every night after the kids were in bed he would turn on his phone and get caught up with the emails that had piled up during the day. This changed his perception of the whole weekend. On the surface it would appear that his Blackberry simply transfers information from one place to another, but it does more than that. His Blackberry changes space and brings a whole part of the world closer. His place of work is less than thirty kilometres from mine, but while we were on that lake, sleeping in that tent, his workplace was much closer than mine was. Half way through the weekend he informed me of a message he had received: My brother's father-in-law had passed away. There was nothing I could do from there with this information. I would have much preferred to learn that at the end of the weekend but now this information had changed my weekend, too. A Blackberry device supports the value of constant and instant access to information. They bring parts of your life closer and overcome natural boundaries. When you use a Blackberry without reflection you embrace the values that it supports and in a way you force those around you to embrace them too.

Philosopher Steven Kline extends this line of thinking when he writes that technology, at its most complex, is an activity that includes a set of customs and rules around how we practice

the technology in question.[8] The automobile, for example, is more than just a horseless carriage. It is the vehicle, the roads, the rules that govern the road, and the supporting economy that makes the construction, maintenance, and owning of a vehicle possible. Technology is a human activity that is not morally good or bad, but it is not neutral either. It has values that profoundly affect the user and the community the user lives in. Technology even affects the content that it carries.

Marshall McLuhan's provocative statement, "the medium is the message," issues a direct challenge to the instrumentalist understanding of technology. He writes, "our conventional response to all media, namely that it is how they are used that counts, is the numb stance of the technological idiot. The 'content' of a medium is like the juicy piece of meat carried by the burglar to distract the watch dog of the mind."[9] McLuhan might be a bit alarmist (and a tad cynical) but his warning has validity. For a technology to be considered fairly, its strengths, weaknesses, and its effects on the user and his or her community must be considered.

The practice of text messaging supports a certain set of values: it values instantaneous communication, factual transmission, efficiency and being succinct. Text messaging does not value dialogue, nor does it value feedback. Therefore, hearing about a death in the family through a text message is a particular kind of communication event. I am constrained into being the receiver of a piece of data. I do not get to discuss the circumstances of this death, or reflect on the significance of this event for my brother. Because of the medium that is chosen, I am not hearing about my brother's father-in-law, I am informed of a death. The information is the same but the medium that carries this information makes a big difference.

Some technologies preclude certain kinds of discourse. By their nature, and because of their values, they cannot transmit certain kinds of messages. Smoke signals can communicate

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[8] Kline, "What is Technology?" 210.
[9] McLuhan, *Understanding Media*, 18.

some basic facts but cannot be used to convince someone of a deep conviction you have. Text

messaging can be used to communicate the specifics of a date with a loved one but it cannot

express the richness of the affection one feels for another. Text messaging informs the user but

does not invite one into conversation. In fact, because of the values that text messaging supports,

text messages are easily misunderstood. They often lack a sense making context which makes

interpretation difficult. Because of the values that some technologies support, mediation

influences communication.

Consider the example of money. Currency is not often thought of as a technology but it

is a technological innovation that facilitates the exchange of goods and services. The technology

of money, in and of itself, is not morally good, nor is it morally bad. It has no moral orientation

but it does not take a very fertile imagination to conceive of ways that money, as a tool used in

human community to transform God's creation, has negatively impacted the communities where

it is practiced. Money supports a set of values and when you acquire money, and use money

without reflection, you also choose to embrace the set of values that money supports. Money

evaluates objects: expensive objects, as far as money is concerned, are more important and

therefore more valuable. This ignores the reality of sentimental value. Some very valuable

objects have no monetary value at all. You must reflectively choose when to use the value

system that money comes with, and when to ignore it. Another example is how money values

some career fields above others. A career as an options trader is more valuable than a career as

an early childhood educator based on earning potential, but when considered in light of your

personal preferences, or in light of the benefit to the community, the opposite might be the case.

Money is amoral, neither good nor bad, but it is not neutral either. The pursuit of money

can make some people capable of unspeakable evil. Money has an associated set of cultural

values. How can you use a technology like money and choose which values you will adopt and which values you will reject? This is where theological reflection using a robust theology of money comes in handy. In *Culture Making: Recovering Our Creative Calling,* author Andy Crouch uses five questions to evaluate a technology.[10] As part of theological reflection I would simplify them to three: What does this technology assume about the world? What meaning does this technology impose on the world? How does a biblical worldview interact with the assumptions, meaning and values of this technology?

Consider once more the example of money. *What does the technology of money assume about the world?* Money assumes the existence of some economic system of valuation, and a governmental authority that validates a particular kind of currency. *What meaning does money impose on the world?* Money imposes a kind of hierarchy of value on the world. Expensive objects are more valuable than less expensive objects by definition. Money also imposes the notion of ownership. If I have paid for an object and hold title to it, then I have absolute domain over it. *How does a biblical worldview interact with the assumptions, meaning and values of money?* A biblical worldview embraces worldly authorities (economic systems and governments) and directs a believer to live in subjection to their authority (Rom 13:1). Jesus says, "give to Caesar what is Caesar's, and to God what is God's" (Luke 20:25).

A biblical worldview, however, stands in contrast to the imposed value that people have absolute domain over their possessions. From the beginning of Israel's time in the promised land God reminded them that, "the land is mine, and you are but aliens who have become my tenants" (Lev 25:23). God declares that, "every animal of the forest is mine, and the cattle on a thousand

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[10] Crouch's five questions are: What does this technology assume about the way the world is? What does this technology assume about the way the world should be? What does this technology make possible? What does this technology make impossible? What new culture is created by this technology? See Crouch, *Culture Making,* 29.

hills" (Ps 50:10). We could also consider the words of Abraham Kuyper, "There is not a square inch in the whole domain of our human existence over which Christ, who is Sovereign over all, does not cry: 'Mine!'" A biblical worldview insists that money, like everything else, belongs to God. He has granted it to us so that we may steward it well. Money is best used in the service and worship of God. A person with a biblically informed imagination concerning money will consider each of the values that money imposes before using a technology like money.

Similarly, consider the human activity of text messaging. *What does the technology of text messaging assume about the world?* Text messaging assumes the existence of a global communications network, access to electricity, and the availability of tools like cell phones. Text messaging also assumes constant availability on the part of its users. If I own a mobile device, it is assumed to be on and I am assumed to be attending to it. Interestingly, it is this expectation that many Digital Immigrants resent. *What meaning does text messaging impose on the world?* Text messaging imposes the notion that succinctness is of more value than clarity. A 140 character limit makes messages clipped, disjointed, and without any but the most obvious of contexts. Text messaging imposes a value of instantaneous response. In many text exchanges, the sender is left wondering if a non-response is meant to be interpreted or not. "Do they not want to see me or do they not have their phone on?" *How does a biblical worldview interact with the assumptions, meaning and values of text messaging?* A biblical worldview is consistent with many of the values of text messaging. The first century church communicated together daily (Acts 2:46) and were aware of the mundane details of each other's lives. Praying continually (1 Thes 5:17) is greatly facilitated by SMS text service. There are, however, certain meanings and values that imposed by text messaging that are contrary to a biblical worldview.

The biblical practice of Sabbath is contrary to the imposed value of constant connection. Many mobile communication users find it difficult to "shut down" at the end of the day when a communications device is still at our finger tips. A day of rest is almost impossible if people are able to continue instantaneous communication about work related topics. Many work places require that employees remain available for communication during off hours. This is where a faith community needs to reflectively consider a technology like text messaging and decide if it is an activity that they can redeem, or if it is an activity that they must reject. I will deal with this in more detail in chapter four.

Theological reflection also requires the consideration of the history of the church and the experience of the faithful. In order to avoid behaving like McLuhan's "technological idiot," it would be helpful to consider how the church has responded to technological innovations in the past.

A History of the Church and Technology.

The church does not have a great track record with reflecting on and adapting to new innovations in technology. Survival was the primary order of the day during the first three centuries of the church's existence but, following the Edict of Milan in 313 CE, the church established a consistent pattern of first rejecting technological innovation, then reacting against it before potentially redeeming technological innovation for its own benefit.

For example, singing has long been a part of Christian worship (1 Cor 14:15; Jas 5:13) but musical instruments took a long time to be embraced as part of corporate worship. With a few exceptions, early Christian literature does not mention the widespread use of musical

instruments in worship for the first thousand years of Christian history.[11] In his *Summa*

Theologica, Thomas Aquinas is quoted as saying, "Our church does not use musical instruments,

as harps and psalteries, to praise God withal, that she may not seem to Judaize."[12] Reformers

like Zwingli, Luther, and Calvin all initially resisted the use of an organ – seen as too strongly

associated with the Pope and Catholic worship. It was, however, received and largely adopted

by the end of the seventeenth century, and integrated into public worship.

John Wesley, however, imagined a different use of music altogether. John and his

brother Charles wrote hundreds of hymns for use in gospel meetings and congregational

worship.[13] John was accused at the time of raiding the bars for song ideas and asking, "why

should the Devil have all the good tunes." In adapting popular music for worship, Wesley was

redeeming a neglected artistic form that had been abdicated to the saloons and bars of

seventeenth century England. He wanted to do, what the church should always do: use the best

available resources to expand the Kingdom.[14]

The printing press was also a technology that was first rejected, then reacted to, before

being redeemed, in a sense. Pope Innocent III banned unauthorized translations of the Bible in

1199 and it remained a dangerous thing to copy a Bible right up to the development of the

printing press. John Wycliffe's translation of the Bible in 1383 from the Vulgate to common

English had been opposed during his lifetime and he was later declared a heretic for it.[15]

The printing press was first used by the church for printing indulgences; hardly a

redeemed use of printing technology.[16] The next year, the first run of 200 Gutenberg Bibles was

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[11] Ferguson, *The Church of Christ*, 272.
[12] Bingham, *The Works of the Learned Joseph Bingham*, 314.
[13] Brilliantly adaptive as hymn writer, he was not so creative in his book titles. His first collection of hymns was disappointingly titled, "Tunes, Set to Music." See Westermeyer, *Let the People Sing*, 186.
[14] Westermeyer, *Let the People Sing*, 187.
[15] He was also posthumously exhumed and burned at the stake on May 4th, 1415, 31 years after his death.
[16] Eisenstein, *The Printing Revolution in Early Modern Europe*, 34.

printed in 1455, and before long the church virtually controlled all of the printing trade.[17]

Luther's ninety-five theses were printed using a printing press in Wittenberg, and it could be

suggested that the printing press was the one thing that made the difference between Luther's

success as a reformer and Jan Hus's limited success at reform one hundred years earlier.[18]

Printing and the access the church had to mass media made all the difference in Luther's reform

movement.

Many mass media technologies have come and gone in the past few hundred years and

the church has often struggled to implement them effectively. In his work with the Centre for

Media, Religion and Culture, Stewart Hoover has observed that the church seems to always

develop an awareness for each mass media form about twenty years after the secular world does.

Religious radio programming boomed in the 1920s, twenty years after the arrival of radio in the

United States. Televangelists arrived on the scene in the 1970s, twenty years after the television

first began appearing in American homes.[19] It remains to be seen what form of mass media

engagement the church will take with the Internet, but as the twentieth anniversary of the advent

of the Internet arrives, some glimpses can be seen.

LifeChurch.tv is a mega church started by Craig Groeschel in Oklahoma City and is a

leading voice in on-line church interaction. In 2007, LifeChurch made waves by being the first

church to host on-line worship services within the Second Life virtual reality game.[20] Players in

the game could visit the site of the on-line church and attend a worship service where a video

feed from the main campus in Oklahoma City was streamed live to a screen that appeared in the

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[17] Eisenstein, *The Printing Revolution in Early Modern Europe*, 143.
[18] Just like Luther, Hus opposed the sale of indulgences and other abuses of power that the Catholic church
      practised in the early fifteenth century. Like Luther, he also preached publicly against these abuses but was
      called out before church officials and burned at the stake in 1415, almost one hundred years before Luther
      opposed the same practices and succeeded in leading a Reformation Movement in Germany.
[19] Hoover, *Religion in the Media Age*, 34.
[20] Gruenewald, "LifeChurch.tv has a Second Life Church Campus," n.p.

game. They presently have fifteen satellite services in Oklahoma, and four other states. They

now offer a streamed worship service, twenty-four hours a day, seven days a week, with an

associated chat room, moderated in real time.[21] The browser window has a live prayer button

that links you instantly with a prayer partner. In January 2012, this same platform was made

available to any church that signs up for the service, free of charge.[22] All you need is a digital

video camera and a live Internet connection and you can stream your own congregation's

worship service. This is the same church that also developed the YouVersion Bible App which,

as of the end of 2011, has had more than 10 million downloads. Every minute on average, 240

Bible applications are open and over half a million verses have been tweeted since 2008.[23]

In order to evaluate technological advances, we need to theologically reflect on the values

and the assumptions that these technologies impose on their users. *What does this technology

assume about the world? What meaning does this technology impose on the world? How does a

biblical worldview interact with the assumptions, meaning and values of this technology?* But

simply answering these questions is not enough. Theological reflection with specific attention to

the task of correlation is necessary in order for us to be able to articulate what faith means in

light of changes in our culture and in order to help us with the task of correlation we need a well-

grounded biblical theology of technology.

A Biblical Theology of Technology

Brian J. Walsh and J. Richard Middleton in their book, *The Transforming Vision:

Shaping a Christian Worldview,* say that a worldview answers the following questions: "What

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[21] The live worship service can be joined at any time here: http://live.lifechurch.tv.

[22] This service is available at the site: http://churchonlineplatform.com/.

[23] Statistics retrieved from http://thenextweb.com/socialmedia/2010/11/16/the-youversion-bible-2-years-10-million-downloads-0-advertising/.

are we? Who are we? What is wrong? What is the remedy?"[24] When the Old Testament was being written, the contemporary world of the Old Testament answered these questions in a very particular way.

For example, as early as 3000 BCE the *Enuma Elish* described a contemporary account of creation.[25] The god Marduk won victory over the serpent Tiamat and her company of monsters. Having vanquished Tiamat, Marduk fillets her, turning one fillet into the heavens and the other into the earth. Human beings were Marduk's crowning achievement. They were created as a solution to a divine political problem: The other gods complained to Marduk that there is no one to worship them so Marduk's solution was to create people to serve this purpose. The *Enuma Elish* was written as a narrative, explaining early human culture's answer to at least the first two of Walsh and Middleton's questions. *What are we?* We are the products of cosmic chaos. *Who are we?* We are the product of one deity for the satisfaction of others. We are an attempted solution to preventing further cosmic political conflict.

In contrast, Genesis begins with a Creator, purposeful and ultimately pleased with His work. Gen 1:1 is not just the start of a creation narrative; it is a theological statement: "In the beginning, *God* created the heavens and the earth." There is no violent conflict among gods or monsters. Out of disorder comes divine order. God separates light from dark (v. 4), water from sky (v. 6), and water from land (v. 9). Genesis chapter one therefore makes a second theological claim: Not only is God the creator, but He is also ruler – one who maintains order and separation.

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[24]   Walsh and Middleton, *The Transforming Vision*, 35.

[25]   The Enuma Elish was preserved in Ashurbanipal's great library at Nineveh. The adaptation of the legend that follows is borrowed from Crouch, *Culture Making*, 21.

On the sixth day God reaches the pinnacle of His creation. "So God created human beings in His own image, in the image of God He created them; male and female He created them" (Gen 1:27). It goes well beyond the scope of this thesis to do more than briefly address the depth of this theological statement. What does it mean to be made in the image of God? Crouch writes,

> Perhaps the best way to answer this question is to ask another: What "image of God" is conveyed by Gen 1:1-26? The God we meet in these verses, so unlike the alternative gods on offer in the Ancient Near East, is first of all a source of limitless, extraordinary creativity. For the writers of the *Enuma Elish*, the world is a by-product of divine conflict. ... In contrast, the writer of Genesis looks at the world, from stars to starfish and sees a purposeful, engaged creative intelligence at work. Every "kind" of animal is further testimony to the extraordinary fruitfulness of this Creator's imagination.[26]

Therefore, to be an image bearer is to practice this creative instinct. Men and women were made to be co-rulers and co-creators in the world. We were made to practice technology: the human activity of using tools to transform God's creation for practical purposes.

Right from the beginning God gives each part of his creation a purpose and function. The stars have the job of separating day and night and marking the seasons: "To the fish, what the Hebrew literally calls, 'the swimming things,' God says simply, 'swim.' To the birds, literally, 'the flying things,' he says, 'fly.'"[27] Finally, God creates humankind "in His image." This purpose or function is explained in greater detail in Gen 2:15 where we read, "The LORD God took the man and put him in the Garden of Eden to work it (Hb. *'abad*) and take care (Hb. *shamar*) of it."[28] These two Hebrew words describe the basis of the cultural mandate for

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[26] Crouch, *Culture Making*, 21.

[27] Dyer, *From the Garden to the City*, 45.

[28] Eden is presented here as an archetypical sanctuary. These two Hebrew words are also used together in describing the work of the priests and Levites (Num 3:7-8; 18:7). Adam serves as the priest in this proto-temple and God is physically present there (Gen 3:8). Like the tabernacle and the temple it has an entrance opening to the east. This idea of priestly ministry also connects with Peter's description of believers as "a royal priesthood." 1 Pet 2:9. See Wenham, "Genesis," 40.

humanity.[29] Humanity images God in being creative cultivators. *What are we?* We are divine

image bearers. We are creative cultivators of God's creation. *Who are we?* We are objects of

divine pleasure (Gen 1:31) who tend God's creation and rule it in His stead.

Andy Crouch provides a context in which this creative mandate can be recognized a little

more clearly. He says that "culture is what we make of the world. Culture is, first of all, the

name for our relentless, restless human effort to take the world as it's given to us and make

something else."[30] Therefore our mandate to work and care for the garden is not just to keep our

yards nice. All creative enterprise is the product of this divine mandate and Technology is, by

definition, intimately tied to this enterprise. Since technology is a human corporate activity that

uses tools to transform God's creation for a practical purpose we cannot respond faithfully to our

calling as image bearers without using some kind of technology.

Work is not simply the result of the fall. Humanity was created to "image" through the

work of tending and taking care of creation. Dyer observes that God created the garden, even

before the fall, "in such a way that it needed to be worked on."[31] There was nothing wrong with

the garden, but God wanted Adam to, "take the 'natural' world (what God made) and fashion it

into something else – something not entirely 'natural' – but sanctioned by God."[32] Image bearers

tend and cultivate, but they also create and Crouch adds that "every act of creation involves

bringing something into being that was not there before – every creation is *ex nihilo*, from

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[29] Mettinger believes this word (*'abad*) forms an *inclusio*. In Gen 2:5 we are told that, "there is no one to till the ground." Adam was placed in the garden to "till and keep it," (Gen 2:15) and even after he is evicted form Eden, he is instructed to "till the ground from which he was taken" (Gen 3:23). Working the ground is not simply the result of the curse of Gen 3. Cultivating creation is part of mankind's purpose on earth. See Mettinger, *The Eden Narrative*, 13.

[30] Crouch, *Culture Making*, 23.

[31] Dyer, *From the Garden to the City*, 46.

[32] Dyer, *From the Garden to the City*, 46.

nothing, even when it takes the world as its starting point. Something is added in every act of making."[33]

The garden and all of creation, however, is under a curse. Because of Adam and Eve's sin, God says,

> Cursed is the ground because of you; through painful toil you will eat food from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field. By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return. (Gen 3:17b-20)

As a result, "the very thing we were called to cultivate is now flawed and broken. From that point forward all of our creative acts and everything we make – even the most advanced of today's technology – will be built from sin cursed material."[34] Never-the-less our mandate remains intact. We are to be cultivators and creators, but we live in a fallen world using tools made from sin cursed materials.

A Theology of Technology in a Fallen World

What does this mean that our mandate to participate in technology is intact but the materials which we work with are subject to the curse? It means that the practice of using technology has a redeemed motive but it uses unredeemed materials. As a result of the fall the pursuit of technology has a fallen nature and retains the capacity to enslave us and make our fallen state worse. One of the very first examples of technology – the human activity of using tools to transform God's creation – is Adam's attempt to cover himself with fig leaves (Gen 3:7). Here Adam is trying to prepare for a life separate from God. God does not condemn this

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[33] Crouch, *Culture Making*, 23.
[34] Dyer, *From the Garden to the City*, 72.

particular act but rather he improves on it (the world's first technology upgrade). In Gen 3:21 we read that God makes new clothing from animal skins before sending Earth's first family from the garden.

In making new clothes, God demonstrates that He has not abandoned His creation. He will from time to time participate with humanity in technology: creating for the benefit of humankind. God affirms Adam's attempt at continuing to cultivate creation by taking what Adam has done and improving on it. Here we see that although technology can sometimes reduce our suffering from the fall, it is not the ultimate source of our hope. Just as animal skins required the blood of animals to be spilt, sacrifice and blood would ultimately be required to restore humanity from its fallen state. Technology's redemptive capacity is always temporary and limited.

Adam's son Cain is described as, "a worker of the ground," (Gen 4:2) doing in fact, exactly what God had commanded humans to do in Gen 2:15.[35] Despite being engaged in the work of cultivating, something goes terribly wrong. Cain's sacrifice is rejected and out of envy and jealousy he kills his brother Abel. The writer of Genesis does not explain what was wrong with Cain's sacrifice but the writer of Hebrews writes that "by faith Abel offered to God a more acceptable sacrifice than Cain, through which he was commended as righteous, God commending him by accepting his gifts" (Heb 11:4). The apostle John also writes that "we should not be like Cain, who was of the evil one and murdered his brother. And why did he murder him? Because his own deeds were evil and his brother's righteous" (1 John 3:12). Here Cain illustrates a sobering reminder that, we can practice technology, even in ways that God has commanded, but do it in a faithless way. Sin has corrupted everything, even our motivation for accomplishing our creation mandate.

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[35] The Hebrew word used here in Gen 4:2 to describe Cain (*'abad*) is exactly the same word used when God described the mandate of humanity in Gen 2:15: to work (*'abad)* the garden.

Sadly, Cain continues this unfortunate pattern. God told Adam that "the ground is cursed because of you" (Gen 3:17) but to Cain God says, "*You* are cursed from the ground ... When you work the ground it shall no longer yield to you its strength" (Gen 4:11-12). Things appear to be going from bad to worse. As Dyer puts it, "in Genesis two, three, and four the language of 'cultivate the ground' is repeated over and over again, but with each successive sin the ability to do it is tainted and damaged, putting further distance between humanity and God's design."[36] As a demonstration of this further alienation we read that Cain "went away from the presence of the LORD and settled in the land of Nod" (Gen 4:16).[37] Cain goes on to start a family but he also does something that has never been done before, he builds a city.

Jacques Ellul explores the significance of this text in his book, *The Meaning of the City*. Cain's motivation in creating this city is to create an "anti-garden," a place of security where people can live without any need of God. Ellul writes, "Cain has built a city. For God's Eden he substitutes his own, for the goal given to his life by God, he substitutes a goal chosen by himself."[38] Cain does technology, but now it is in rebellion to God. Dyer adds that

> the city is humankind's first idol, the first attempt to use our relative powers to dislodge God from his place of pre-eminence and his rightful status as the sustainer of life. We use our idols fundamentally as a way of meeting our needs apart from God and this is our greatest temptation with technology – to use it as a substitute for God.[39]

Technology is neither morally good nor is it morally bad. It cannot be considered morally neutral either. Technology uses fallen materials and also, our motivation to use technology is

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[36] Dyer, *From the Garden to the City*, 75-6.

[37] The Hebrew word, "*Nod*" sounds like the word for "wanderer," which has lead some scholars to speculate that this is not a geographical location but rather a state of being. Cain was homeless the rest of his life. See Morris, *The Genesis Record*, 144 and Ellul, *The Meaning of a City*, 3.

[38] Ellul, *The Meaning of a City*, 5.

[39] Dyer, *From the Garden to the City*, 77.

subject to the fall as well. Technology is a formidable idol in twenty-first century culture. We will explore this idea further in chapter three.

An even more vivid picture of technology used in rebellion comes at the end of this downward spiral, from chapter three of Genesis all the way to chapter eleven. Again, another city features prominently in the story. The people of Babel said, "Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise we will be scattered over the face of the whole earth" (Gen 11:4). Like Cain, the people of Babel saw technology as a means by which they could remain independent of God. Again Dyer captures it when he observes that "when God created the garden, He put humankind in it to reflect His image. At Babel, we find humans creating a city as their anti-garden and a tower as an image to themselves."[40] Genesis records God's concern that "nothing that they propose to do will now be impossible for them," (Gen 11:6) however, God is not concerned that they are growing too powerful. Instead, God grieves that the people of Babel are misusing their technology to derail His plans for humanity.[41] The tower is an idol that is distracting them from His command to spread out and fill the earth.

God chooses a technological intervention here that is quite surprising. We do not usually think of language as a technology but it is. Language is a human activity, practised in community for a practical purpose, and, rather than destroying the tower or killing all the inhabitants of the city to solve this problem, God innovates a new way for people to see themselves. God does not use technology to change people (*Technological Determinism*) but He does use technology to present new options. God essentially reprograms their sense of self and

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[40] Dyer, *From the Garden to the City*, 104.

[41] Dyer writes that the Hebrew word translated here as, "do" is the same word as "make" used in the first few chapters of Genesis. God's concern here is the way they are "making" and not that they are getting too powerful. See Dyer, *From the Garden to the City*, 105.

how they view the world. Here, Dyer notices that these people "who deeply trusted technology to give them security and meaning had those very things stripped away from them by technological change."[42]

In one sense or another, all of our technology can be understood as an attempt to overcome the effects of the fall. Dyer writes, "we create shovels and tractors to help us work the unruly land, and we invent soft bedding and epidurals to help ease the pain of childbearing."[43] Technology is not, however, always used in opposition to God for destructive purposes. As we can see in the Tower of Babel, God sometimes participates in technology with humanity for their redemption.

Technology and Redemption

The story of Noah and the flood is so familiar to people with a history within the church that it has long ceased to be remarkable. This is unfortunate, because if the story could be considered objectively, it is as outrageous as it is remarkable. The people of Earth had become so wicked that God was sorry that he made them.[44] There is one family that found favour in God's eyes, so rather than exercising some divine power to wipe out all other people, God sends blueprints to Noah on how to build a vessel that will deliver him from a coming flood. Perhaps it is difficult to conceive of, but in this way the Ark is a technology: a human activity using tools within community, for a practical purpose.

Here, again, God participates with humanity in technology to accomplish His purpose for humankind. God did not need an Ark to save Noah and his family but for some reason He used it. The Ark was a technological means of redeeming mankind through the agency of God, but it

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42 Dyer, *From the Garden to the City*, 106.
43 Dyer, *From the Garden to the City*, 72.
44 Gen 6:6. That statement alone is profound, worthy of significant reflection.

is interesting that it did not eradicate sin. After the floodwater receded, God renewed His commands to be fruitful and multiply and fill the earth. It looked like humanity was getting a fresh start and Noah planted a "neo-garden" recalling the image of the Garden of Eden. But sin had not been washed away by the waters of the flood; rather it had already infected the passengers of the Ark. Noah's sons corrupted the fruits of their father's vineyard, and "instead of cultivating and keeping it for God's glory, they perverted it for their own sinful lusts (Gen 9:21-24)."[45] From this story we learn that technology can have a redemptive capacity, but it is both temporary and limited.

God has often practised technology with humankind in the process of restoring humanity and bringing about redemption. When Moses was on Mount Sinai receiving the tablets – though it may be easy for us to forget that written language was the very leading edge of technology at that time.[46] In delivering the law, God is leveraging a brand new form of technology. Later, God instructed Moses to "write this on a scroll as something to be remembered and make sure that Joshua hears it, because I will completely blot out the name of Amalek from under heaven" (Ex 17:14).[47] Here we see the technology of writing being used as a leadership succession aid. At that time cultures were led by the oldest person in the community because they had the largest collection of wisdom.[48] The technology of writing meant that any person who could read had access to information that would normally take a lifetime to accumulate. In choosing Joshua to follow Moses in a role of leadership, God was using a brand new technology to develop the leadership culture of Israel.

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[45] Dyer, *From the Garden to the City*, 102.

[46] Hieroglyphs had been around for over a thousand years but they had proven to be fairly inefficient. Scholars debate about precisely when a phonetic alphabet first appeared but everyone agrees that it was in the region of Canaan, Sinai, or Egypt between the nineteenth and the fifteenth century B.C.E. See Goldwasser, "How the Alphabet Was Born from Hieroglyphs." 40–53.

[47] See also Ex 24:4; 34:27, Deut 31:9.

[48] Dyer, *From the Garden to the City*, 110.

God does not ignore or discount technology but uses the latest and the greatest advances to further His purposes. When God handed over the law in written form to the people of Israel on Mount Sinai, it was a tablet revolution, the most up to date technology these freed slaves had likely ever seen.

God takes technology seriously. It is interesting that the same people who preserved Gen 1:27, "So God created mankind in His own image," also knew the second commandment, which insisted, "you shall not make a graven image" (Ex 20:4). Writing, and carving and making is serious business. Humanity's attempts at imaging God are deficient and destructive, but God's own image of God is humanity itself. Crouch writes that "It is the summary of everything He has made, crowned with the words, 'It was very good.'"[49]

Not only does God use technology for His redemptive purposes, God can redeem existing technologies from ordinary, sometimes even evil purposes and use them for good. It should come as no surprise that Jesus is described as a carpenter. The Greek word used here is *tekton* which could also be translated as mason, or builder.[50] Jesus was an artisan and a craftsman who worked in the technology of His day. It is ironic that Jesus, a builder, would die by the same tools with which He made a living. Even in this twist of fate, Jesus' redemption of technology can be seen. The cross, which symbolized the most cruel and painful technology of its day, was redeemed in that one case by Jesus' death. After Jesus' resurrection, the Christian community was formed by the new meaning of that cross. The symbol of the cross has been appropriated and redeemed and is now no longer just a symbol of deformation, shame, and death but it was transformed into a symbol of faith and hope.

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[49] Crouch, *Culture Making*, 21.

[50] The Greek root for the word *tekton* is where our English word for "technology" comes from. When translated into Latin *tekton* becomes *faber* which is where the English word "fabricate" comes from.

Jesus takes the Passover meal and transforms the unleavened bread and the wine into symbols of the new covenant. He invests new meaning into the symbol of the Passover lamb, and He fulfills the ultimate purpose of the high priest. God even uses what has previously been an image of evil (a city) as a redeemed image.

The first city was built by Cain as a fallen city. It was built to distract its residents from their fallenness and help them live apart from God. Yet when God created the nation of Israel, He began to hint that He would not only restore humanity but also many of the creations of humanity, including the city. This begins with the designation of "cities of refuge" (Num 36:15) as places of protection from retribution. Instead of being places that kept people out, God was now instructing Israel to maintain cities as places to invite people in. God chose the city of Jerusalem as a place where He would live with His people, first in a tabernacle, then later in a temple. Even God's presence could not keep His people from the sin they were engaged in. God judged Israel guilty and ordered the destruction of all their cities, even Jerusalem: "Because of you, Zion shall be ploughed as a field; Jerusalem shall become a heap of ruins" (Mic 3:12).

Yet, in His grace, "God made a promise to the people of Jerusalem to restore their city, not because it was a good and worthy city, but as a symbol of God's redemptive work in which He transforms unworthy things into holy things."[51] Micah predicts that the nations will "flow into the house of the Lord" in Jerusalem so that "He may teach us His ways and that we might walk in His paths" (Mic 4:1-2). Dyer summarizes that "the Old Testament visions of the future are focused on the removal of sin and the dwelling of God among His people, and the place of this restoration is always the city."[52]

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[51] Dyer, *From the Garden to the City*, 137.
[52] Dyer, *From the Garden to the City*, 137.

In the final chapter of the Bible, John tells of God creating a new heavens and a new earth for a redeemed humanity (Rev. 21:1). God does not describe a plan to rebuild a new Garden of Eden but instead God reveals that heaven will come down to Earth in the form of a redeemed and restored city. God fills this city with what would appear to be human inventions: buildings, roads, musical instruments. Dyer adds, "this promise of this new city tells us that God's plan is not merely to regenerate human bodies and resurrect human souls but also to restore human creations to a world untainted by sin."[53] Our tools do not disappear when the earth is renewed and although the Bible does not make this explicit, it seems that our tools are finally redeemed in the sense that they are no longer liable to distract us. They do not lead us into rebellion but into greater and greater joy.

Conclusion

On the one hand, technology is not morally good nor is it morally bad. On the other hand it is not morally neutral either. Technology is a human activity within community that uses tools to transform God's creation for a practical purpose, and while our participation in technology is not cursed, our tools are made of the stuff that is. In the same way our motivation to use technology can be corrupted and, due to the fall, technology retains the capacity to enslave.

Technology operates within a fallen world and every form of technology has a set of values and a set of cultural behaviours that come with it. Until Jesus comes to restore all things, a believer needs to discern what the implied values of a technology are before participating in it. As technology users we need to reflective ask the questions, "What does this technology assume about the world? What meaning does this technology impose on the world? How does a biblical worldview interact with the assumptions, meaning and values of this technology?" Rather than

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[53] Dyer, *From the Garden to the City*, 138.

blindly (and arbitrarily) rejecting all technologies that were invented after we became adults, or

blindly receiving all technological innovations without reflection, we must theologically reflect

on each embedded value that a technology embraces, through the task of correlation, in light of

the Scriptures, and decide which values we can embrace and which ones we cannot.[54] We may

even decide there are some tools we will not use or some technologies we will not participate in

because of the values they embrace. This leads us to the practical consideration of the effect that

our technologies have on us as we participate in them. This will be the focus of our next chapter.

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[54] In a column in the London Times on Aug 29, 1999 titled, "How to Stop Worrying and Learn to Love the Internet," Satirist Douglas Adams observed that all technologies invented before a person is born are taken as granted. Any technologies invented before a person is thirty years old are great. Any technologies invented after a person turns thirty are wicked and evil and liable to cause the end of society as we know it until they are ten years old at which time they become O.K. Retrieved from http://www.douglasadams.com/dna/19990901-00-a.html on Nov. 20, 2011.

CHAPTER 3: MEDIA'S EFFECT ON US

Introduction

I have demonstrated in chapters one and two that our tools influence us. They are not an

unstoppable force in our lives, changing us against our will, but on the other hand they are also

not unrelated to the radical cultural changes around us. They are complicit with us in

transforming and changing both us and the way we see the world. In this chapter we will explore

what is happening to us, Digital Natives and Digital Immigrants, as we engage in the use of

social media tools. We will look at the plasticity of the human mind and how our culture, our

behaviour, and even our language are being transformed by the tools that have been developed

for the twenty-first century.

Media's Effect on Us

We learned in chapter one that Marshall McLuhan considers all media to be an extension

of the human mind or body and later in his book, *Understanding Media,* he wrote that our tools

end up "numbing whatever part of our body they amplify."[1] When the automated loom was

invented, weavers could manufacture far more cloth during the course of a work day, but they

also subsequently lost their "feel" for the fabric. Their fingers, in McLuhan's terms became

numb. A farmer similarly lost his feel for the soil when they used a tractor to plough a field

rather than ploughing on foot behind a single horse. Nicholas Carr writes, "when we're behind

the wheel of our car, we can go a far greater distance than we could cover on foot, but we lose

the walker's intimate connection to the land."[2]

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[1] McLuhan, *Understanding Media,* 63-70.
[2] Carr, *The Shallows,* 210.

Social media is an intellectual technology. It is a communication tool that operates as an extension of the mind. Applying McLuhan's maxim here, we would expect to find that our capacity to communicate and to perceive each other is diminished through the use of social media. As we leverage the capacities of social media, we are able to communicate far more broadly and easily than ever before, and yet McLuhan would warn us that we are in danger of becoming numb to each other. Do digital tools tend to make our communication less human?

In September of 2006, Lori Drew conspired with her daughter Sarah to create a fake MySpace account for a fictional 13-year-old named "Josh Evans."[3] The plan was to use this profile to lure a classmate of Sarah's, Megan Meier, into an on-line relationship with "Josh" to find out what Megan was saying about Sarah on-line. But one month later one of the conspirators, writing as Josh, turned against Megan and told her that "the world would be a better place without you." Shortly afterwards, Megan hanged herself in her bedroom.

When the conspiracy was uncovered, neighbours turned on Drew and her daughter and local law enforcement officials did not know what to do. At the time there were no laws against cyber-bullying, so in the eyes of the law, Drew had committed no crime.[4] The anonymous nature of the social media profile made it possible to mislead Megan, and, after her tragic death, it also prompted a terrible backlash. After the incident became national news, an anonymous group of on-line vigilantes dedicated themselves to tormenting Drew and her family.[5] The Drews have moved twice since 2006 and are presently living in an unknown location under new names.

It would seem that social media sites like MySpace and Facebook draw the worst out of people, and a technological determinist would say that computers and anonymous on-line

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[3] Zetter, "Judge Acquits Lori Drew in Cyberbullying Case," 17.

[4] Prosecutors in California devised the novel idea to charge her under the anti-hacking statute, filing the case in Los Angeles because this is where MySpace's servers are based. She was convicted in 2007 but the charges were overturned in 2009. The Meier family is considering a civil suit at this time.

[5] Lanier, *You Are Not a Gadget*, 60.

communication technology are making people mean and nasty: "If we just got rid of Facebook, these sorts of things would not happen."[6]   Perhaps they are right, but on the other extreme, a technological instrumentalist would rightly observe that bullying has been around since the dawn of human culture and the capacities for human cruelty are no different with or without technology.[7] An instrumentalist would say, "Technology is completely inert. It cannot be morally responsible for the actions of its users. What we need are new laws that would punish those who are criminally irresponsible with the way they use technology." They are likely right as well; we need laws that address the new technological world we are now living in. The problem is that both perspectives, determinist and instrumentalist, miss the point. As we discussed in chapter 2, technology is neither fully to blame, nor is it completely innocent. All communication technologies have values. The question is what are those values and should we embrace them?

Consider a social media interface. When you use Twitter or Facebook, or when you participate in an on-line discussion, you must create for yourself an on-line profile. To do that you must adopt the values that are inherent in on-line profiles and one thing they claim to value is anonymity. One advantage of anonymity is that prejudice along the lines of gender and race and sexual orientation becomes impossible. You cannot be biased against someone who goes by the name of "DigiCat2029" because you have no prior knowledge about them. In an on-line forum you are treated entirely on the basis of your conduct. Never-the-less, an anonymous profile influences us and the way that we relate to the group. Many people would agree that they sometimes say things in an on-line forum that they would never say in person. Jaron Lanier,

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[6]   See chapter two for definitions of technological determinist and technological instrumentalist.
[7]   Another corroborating piece of evidence that we are not witnessing a slow degradation of on-line etiquette (for those old enough to remember) is the Usenet discussion boards of the 1980s and 1990s. Internet access was largely limited to university students and staff in computer science departments and there were still on-line bullies. It is the interface and not the participating demographic that concentrates bad behaviour.

scholar in residence at Microsoft says in his pro-human manifesto, *You Are Not a Gadget,* that "the user interface designs that arise from the computing cloud make people, all of us, less kind."[8] On-line anonymous responses tend to be more reactionary and less reflective. When we are not held responsible for what we say, we risk saying things we normally would not.

Never-the-less people are not universally nasty on-line. Nearly everyone has had at least some positive experiences within an on-line community. Behaviour varies considerably from site to site. Lanier believes that there are two kinds of anonymity. He calls the first kind, *transient anonymity,* and says that it is what brings out the worst of on-line idiocy.[9] He believes that the character and behaviour of an on-line community is largely dictated by the design of the interface. A design that offers effortless, consequence free, transient anonymity in the service of promoting a point of view will help create a community where trolls can thrive.[10] On the other hand, responsible structures related to your on-line identity, like voting or peer review, are

> examples of *beneficial anonymity.* Sometimes it is desirable for people to be free of fear of reprisal or stigma in order to invoke honest opinions. To have a substantial exchange, however, you need to be fully present. That is why facing one's accuser is a fundamental right of the accused.[11]

Some websites therefore, by nature of their interface style (beneficial anonymity as opposed to transient anonymity) will support healthier dialogue than others but more is going on than just whether or not we are polite with each other.

Interfaces used by social media sites like Facebook, Twitter, and Pinterest have inherent values that produce a kind of attentiveness that affects the people that use them. Research into

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[8] Lanier, *You Are Not a Gadget,* 61.

[9] Lanier observes that when a forum allows people to instantly make pseudonyms in order to post comments (YouTube, Blogger, some Wordpress blogs) you often get truly cruel content. In forums where your pseudo identity has an attached value, people often behave better. On Ebay, a profile with positive feedback is tremendously valuable for its owner. Boundaries like a waiting time between creating a profile and posting on a forum and responsible moderation will improve the quality of the discourse. New boundaries are something we will talk about in chapter four. Lanier, *You Are Not a Gadget,* 63.

[10] Troll is a term for an anonymous person who is abusive in an on-line environment.

[11] Lanier, *You Are Not a Gadget,* 63.

Internet addiction is in its infancy but one of the effects that is being explored is Continuous

Partial Attention (CPA). Linda Stone is a writer and researcher who has looked into CPA and, in

an article she wrote for *Business Week,* she writes that "with CPA, we feel most alive when we're

connected, plugged in and in the know. Continuous Partial Attention is an always on, anywhere,

anytime, anyplace behaviour that creates an artificial sense of crisis. We are always in high

alert."[12] Constant connection is not a neutral influence in the life of a Digital Native but rather it

contributes to a unique kind of attentiveness that has an effect on us. New social research is

giving us a clearer picture of what Continuous Partial Attention is doing to us.

The practice of Internet connection through mobile devices for a Digital Native is one

that favours short, fast bursts of information that are highly connected to other short random

responses of visually intense bursts of further information. Social media engagement is fast,

broad and shallow; it is the perfect environment for training a state of CPA. Stone writes that

"continuous partial attention and the fight or flight response associated with it sets off a cascade

of stress hormones, starting with norepinephrine and its companion cortisol. As a hormone,

cortisol is a universal donor. It can attach to any receptor site. As a result, dopamine and

seratonin, the hormones that help us feel calm and happy have nowhere to go because cortisol

has taken up the available spaces."[13]

A state of CPA exacerbates a state of anxiety and uneasiness that many Digital Natives

find increasingly familiar. Without the expenditure of significant amounts of focusing energy,

Digital Natives often suffer from what sociologists call "absent presence." They are physically

present, but their attention drifts, "ever focused on the new, rather than on the now."[14] When we

practice CPA, we enter every moment distracted and distant. This lack of attention can cause a

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[12] Rice, *The Church of Facebook,* 102-3.
[13] Stone, "Continuous Partial Attention," n.p.
[14] Rice, *The Church of Facebook,* 147.

loss of intimacy and lead to greater incidences of anxiety, depression, lack of fulfilment and poor school performance.[15] Admittedly, this is not an entirely new phenomenon, however new research is finding that CPA, connected with social media devices, is testing the limits of what our brains are able to do.

The Plastic Brain

Recent brain research suggests that there is a limit to how broadly you can stretch your attention. The information flowing into your working memory at any given moment is called your "cognitive load."[16] When the load exceeds your mind's ability to store and process information, you are unable to retain information or draw the appropriate connections. In Carr's words, "experiments indicate that as we reach the limits of our working memory it becomes harder and harder to distinguish relevant information from irrelevant information."[17] In other words, as researcher Torkel Klingberg puts it, "when our brain is overtaxed, we find distractions more distracting."[18] Carr adds that, "the Net is, by design, an interruption system, a machine geared for dividing attention,"[19] so when we use it as a social media device it should come as no surprise that it values a specific kind of social relationship. Social media interfaces value many relationships over few, and, as a consequence, with the user's attention divided among many contacts, the relationships tend to be more shallow and less deep.

Malcom Gladwell, in his book, *The Tipping Point*, talks about the work of anthropologist Robin Dunbar. Dunbar published a now famous study in 1990, in which he suggested that the optimal size of a social group for humans is 150. Gladwell says, "the figure of 150 seems to

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[15] Sweet, *Nudge,* 105.
[16] The working memory is a specific kind of short term memory that acts as the mind's scratch pad. Nicholas Carr , author of *The Shallows* quotes educational researcher John Sweller, who says, "we are conscious of what is in working memory and not conscious of anything else." See Carr, *The Shallows,* 123.
[17] Carr, *The Shallows,*125.
[18] Klingberg, *The Overflowing Brain,* 75.
[19] Carr, *The Shallows,* 131.

represent the maximum number of individuals with whom we can have a genuinely social

relationship."[20] When a person is engaged by a social group larger than 150, the quality of the

relationships, all of them, becomes poorer.[21] Dunbar's research is now more than 20 years old but

the US General Social Survey suggests that Dunbar may be right. It reported in 2004 that "the

number of people saying there is no one with whom they can discuss important matters has

nearly tripled since 1984."[22] Christine Rosen writes,

> Today's on-line social networks are congeries of mostly weak ties. ... It is surely
> no coincidence then, that the activities social networking sites promote are
> precisely the ones weak ties foster, like rumor-mongering, gossip, finding people,
> and tracking ... popular culture and fad.[23]

Social media sites like Facebook are ideal for quick information exchanges and, despite

the fact that relationships take time, our social habits are being influenced by the devices we use.

Because we are cultivating broader networks, they are necessarily more superficial and more

one-sided; the way we communicate determines the nature of our relationships.

Jesse Rice observes that for most Digital Natives, "[their] communication style on

Facebook is one-way, like a walkie-talkie. I say something and you respond (or do not). You

say something and I respond (or do not). In either case what we end up with is communicating in

order to get a reaction."[24] With this approach, communication tends to be all talking and no

listening. What sets Digital Natives apart, or as Emily Nussbaum calls them, "the Facebook

Generation," is that they communicate under the assumption that they always have an audience.

"They have a mental image of a large group of people interested in postings such as '25 Random

Things About Me.' Part of their identity rests on an invisible entourage that accompanies them

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[20] Gladwell, *The Tipping Point,* 179.
[21] See Rice, *The Church of Facebook,* 107-8. Interestingly, Rice notes that the average Facebook user has 120 friends, a number rapidly approaching Dunbar's theoretical limit. See also Bialick, "Sorry, You Have Gone Over Your Limit," n.p.
[22] McPherson et al. "Social Isolation in America," 353.
[23] Rosen, "Virtual Friendship and the New Narcissism," 31.
[24] Rice, *The Church of Facebook,* 111.

everywhere."[25] As we develop through pre-adolescence, we are behaving in front of what

psychologists call our "imaginary audience." This is how we work out our beliefs about

ourselves and the world around us.[26] A social media interface used at that same pre-adolescent

developmental stage is at risk of stunting our social development. What happens if we never

give up our imaginary audience?

> The world of on-line social networking is practically homogenous in one sense.
> Its users are committed to self-exposure. The creation and conspicuous
> consumption of intimate details and images of one's own and other's lives is the
> main activity in the social networking world. There is no room for reticence;
> there is only revelation.[27]

A social media interface values self-expression over self-reflection, and before long its users do

too.

But what does a social media interface do to the brains of those who use them? Is there

any clinical effect? Gary Small, a professor of Psychiatry at UCLA, published clinical research

in 2008 that supported a notion that computer media experts had believed for some time. Small

confirmed that the use of digital media has a neurological effect on the brain.[28] He writes, "the

current explosion of digital technology is changing not only the way we live and communicate

but is rapidly and profoundly affecting our brains."[29] In his study, Small observed the brain

activity of some novice computer users and compared it to brain activity in computer experts

who were asked to complete the same task, which was: look for information on the Internet.

Small found that, of course, novices behaved differently than experts, but, more importantly,

they used different parts of the brain when asked to complete certain tasks. The amazing part of

the study came six days later. In the interim, the novices were told to spend an hour a day on-

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[25] Rice, *The Church of Facebook,* 111.
[26] This observation is adapted from Rice, *The Church of Facebook,* 111.
[27] Rosen, "Virtual Friendship and the New Narcissism," 31.
[28] Small et. al., "Your Brain on Google," 116. See also Champeau, "UCLA Study Finds," n.p.
[29] Small, *iBrain,* 1.

line, searching the Internet. "After just five days of practice, the exact same neural circuitry in the front part of the brain became active in the Internet naive subjects. ... If our brains are so sensitive to just an hour a day of computer exposure, what happens when we spend more time [on-line]?"[30] Jesuit priest and media scholar, John Culkin, said it well, almost fifty years ago, "We shape our tools, and thereafter they shape us,"or as Carr turns the phrase, "we program our computers and thereafter they program us."[31]

Becoming Like Tools

If our brains are that adaptable, then we really are at risk of becoming like the tools we use. Computers can speak but cannot listen, and their users are becoming like that too. Social media interfaces tend to "pull us into life patterns that gradually degrade the ways in which each of us exist as individuals. These unfortunate designs are more oriented toward treating people as relays in a global brain." The metaphor of the global brain is one that twenty-first century Western culture is finding more and more compelling.[32]

An increasingly connected world has been compared to a collective consciousness.[33] The debate about when, if at all, the mass of information that is stored on the Internet will become its own consciousness goes well beyond the scope of this thesis but a couple of features of that discussion are valuable here: crowd sourcing, and the anti-human bias of social media.

Crowd sourcing is currently a popular fad in computer studies as well as marketing research. In his book, *The Wisdom of Crowds,* James Surowiecki retells the story of Francis Gaulton, a British statistician and amateur scientist, who observed that a crowd of 50 uninformed

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[30] Small, *iBrain*, 16-7.
[31] Culkin, "A Schoolman's Guide" n.p. and Carr, *The Shallows*, 214.
[32] Lanier, *You Are Not a Gadget*, x.
[33] See note 81 on page 34 of this thesis.

onlookers were each individually unable to guess the weight of an ordinary ox in a county fair,

but the aggregate guess, the arithmetic average of all the guesses, was surprisingly accurate.[34]

Social engineers today are absolutely in love with the idea that the group knows better than the

individual and it has influenced the way in which our computer interfaces are designed.

The typical social media interface requires a certain level of approximation. It is not the

device, however, that reduces or minimizes the relief of a human being; we do it to ourselves!

When filling out our profile and crafting the personal fictions about ourselves, we minimize

ourselves. Our relationships and our values are diminished when they become database entries

that are classified and entered into the social database of the hive mind. In Lanier's words,

> The most effective … Facebook users … tend their doppelgangers fastidiously.
> They … manage off hand remarks and track candid snapshots at parties as
> carefully as a politician. Insincerity is rewarded, while sincerity creates a
> lifelong taint. Certainly some version of this principle existed in the lives of
> teenagers before the web came along, but not with such unyielding clinical
> precision.[35]

Our individuality is of no value to the hive mind, only our contribution to the collective, so that

in the same way a social media interface doesn't value our individual identity, neither do we. We

no longer have an inherent identity, we are what we say. Psychotherapist Michael Hausauer

notes that teens and other young adults "have a terrific interest in knowing what's going on in the

lives of their peers, coupled with a terrific anxiety about being out of the loop. If they stop

sending messages they risk becoming invisible."[36]

The Bubble Effect

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[34] Suroweicki's entire book, *The Wisdom of Crowds,* deals with how the collective wisdom of the group can be harnessed to make better decisions. This example is found on p. xi.
[35] Lanier, *You Are Not a Gadget,* 71.
[36] Carr, *The Shallows,* 118.

After we have approximated ourselves, the fancy web 2.0 social media interface begins

classifying people and sorting them into bubbles. On December 4, 2009, Google quietly

announced that it was changing the metrics it used to calculate search results.[37] Starting that

morning, fifty-seven signals such as where you were logging in from to what kind of browser

and what kind of computer you are using, now factor into what search results you see. The

impact of such a small change is surprising in its scope.

Eli Pariser, in his book *The Filter Bubble,* tells of how in the spring of 2010, while the

remains of the British Petroleum's Deepwater Horizon oil rig was spewing hundreds of gallons

of crude oil into the Gulf of Mexico, he asked two friends to search BP (British Petroleum) on

Google and send him the results. "One of my friends saw investment information about BP.

The other saw the news. For one, the first page of results contained links about the oil spill; for

the other there was nothing about it except for a promotional ad from BP."[38] When he asked

other friends to search "Egypt" and send him the search results, one friend received links to up to

the minute news results of the uprising that was unfolding at that time while the other received

travel information and the CIA Factbook; nothing about the protests at all.[39]

In a similar way, since September of 2011, Facebook has used EdgeRank to filter what

appears on each person's Facebook news feed.[40] Certain Facebook news items appear more

prominently than others. Some updates do not appear at all. Through this invisible algorithmic

editing, my view of my Facebook world has changed. I no longer see as many dissenting views

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[37] *Very* quietly. The announcement appeared without fanfare in a trade publication announcement between a weekly round-up of top search terms and an update about Google's finance software. Discussion about the announcement can be found in Pariser, *The Filter Bubble*, 1.

[38] Pariser, *The Filter Bubble,* 2.

[39] Taken from a TED talk from February 2011. Retrieved from http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html.

[40] The calculation is complicated but it is looks at affinity (how many common contacts do you have with this person?), the relative weight of the content (relationship status changes are more important than pictures of your cat), and timing (recent posts are preferred to older posts). See Pariser, *The Filter Bubble*, 38 for more on EdgeRank algorithms.

or contrasting opinions to my own. The entries most like mine appear more prominently while contrary opinions are nearly impossible to find.[41] Whenever I click a link, I cast a vote for the kind of Facebook news I want to see and, as a result, my view of my Facebook world changes.

Likewise, Yahoo News and a host of other news feeds filter the news content and target the kind of news you are likely to respond to. For them, what is relevant becomes what will appeal to you and cause you to click the link. Since their ad revenue is driven by clicks, getting you to click a link becomes the most important event. Providing you with an objective view of the world is of so little value to these websites, it is not even on the table. As we talked about in chapter two, there is great danger in using technology without reflection. When you use these websites on a regular basis as your source for news you embrace these embedded values as well. An informed technology user should reflect on these values and decide whether they will embrace them or not but the problem is that most technology users are completely unaware the degree to which their content is filtered. Unfortunately, most users believe that news feeds on websites are unbiased and they are fully embraced without any reflection at all.

Mark Zuckerburg, founder of Facebook, has said that rather than having an identity at work, one at school, and one with your friends, every person should have one identity, one complex single statement of who they are. In an interview Zuckerburg said, "having two identities for yourself is an example of a lack of integrity."[42] Adding to this sentiment, in 2010, Facebook COO, Sheryl Sandberg, said that "people don't want something [a social media platform] targeted to the whole world – they want something that reflects what they want to see and know." Within three to five years, Sandberg believes that will be the norm and Facebook wants to be at the centre of that process: the singular platform through which every web service

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[41] A mutual friend of my wife and I shares an affinity for a musical group that my wife likes and I do not. While she noticed our friend's status update. I could not see it at all.

[42] Kirkpatrick, *The Facebook Effect*, 199.

and website incorporates your personal and social data. You *will* have one identity: your Facebook identity.[43]

The radical impact of social media filtering becomes more apparent when you consider where Digital Natives get their news and how they form their own worldview. In 2011, three quarters of teens polled said they use social media such as Facebook, Twitter and Tumblr at least several times a week to get news and information. Those using mobile devices such as iPhones and Blackberrys to get news and information at least several times a week have increased from fifteen percent in 2006 to fifty percent in 2011.[44] Social media like Facebook, Twitter and others, as well as search resources like Google, exercise a significant influence on the worldview of Digital Natives. By controlling what they are even aware of, these on-line resources exercise a significant influence on how they see the world. If church leaders are going to be helping Digital Natives form a Christ-centred worldview, they cannot afford to ignore where Digital Natives get their news. The Christian community needs to establish new behaviours and new boundaries for on-line life in order for them to form an identity that is based on what God says about them rather than what their socio-economic profile says about them.

We have seen that social media exposure can inhibit healthy identity formation. Digital Natives, particularly those who began using mobile communication devices during the highly formative pre-teen years, are at risk of having difficulty seeing themselves apart from their imaginary audience. Writing before the advent of social media, psychoanalyst Heinz Kohut wrote about fragile people, whom he called "narcissistic personalities."[45] They are characterized

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[43] Adapted from Pariser's discussion in *The Filter Bubble,* 110.

[44] Dautrich, *Future of the First Amendment,* 11.

[45] People generally think Narcissism has to do with having an unnaturally high opinion of yourself but that is not true. In the ancient Greek myth, Narcissus drowns while looking at his reflection in a pool not because he loves himself too much but because he cannot tell where he stops and his reflection starts. Narcissism is characterized by the inability to distinguish yourself from your surroundings. It is a disconnection with oneself. See Pinsky, *The Mirror Effect,* 88.

not by a love of self, but by a damaged sense of self. "They try to shore themselves up by turning other people into what Kohut calls *selfobjects*. In the role of *selfobject*, another person is experienced as part of one's self, thus in perfect tune with a fragile inner state. The *selfobject* is cast in the role of what one needs."[46] This disorder works hand in hand with the kind of interaction that social media specializes in: one-directional broadcast of personal information and feedback tuned to reinforce preconceived notions of self.

While it is obviously true that not every social media user becomes mentally unstable, Drew Pinsky, in his book, *The Mirror Effect,* describes how obsessive use of social media can turn anyone into someone who has difficulty empathizing with others. For the narcissist, the sole purpose of being around other people is to support their pseudo-self with a constant stream of affirmation. Pinsky says,

> A narcissist will value a friend so long as that person provides validation. When narcissists feel they're not getting sufficiently supportive feedback, they're prone to lash out at or simply drop their offending friend with no regard for their feelings or how important the relationship may have been.[47]

All teens demonstrate some level of narcissism since most "lack the rational empathetic power that comes with a fully developed prefrontal cortex."[48] When advising parents on how to raise teens to have a healthy sense of self, Pinsky advises that parents should help teens to:

1. Strive for an increased self-insight and embrace the concept of something greater.

2. Practice rigorous honesty.

3. Keep things simple and live up to commitments.

4. Spend time with a broad range of people.

5. Share your feelings and learn to appreciate the feelings of others.

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[46] Turkle, *Alone Together,* 55.
[47] Pinsky, *The Mirror Effect,* 104.
[48] Pinsky, *The Mirror Effect,* 216.

6. Be of service.[49]

All of these practices are part of living in community with others which we will talk about in

chapter four.

Anti-Social Media

We are witnessing a new form of social life in which connectedness is absolutely vital to

people's identity.[50] Digital Natives have difficulty acquiring an integral sense of self apart from

their digital devices. In order to be themselves they must be in connection with others. As

Turkle puts it,

> Public spaces are no longer communal spaces. They are a place of social
> collection: tethered selves come together but do not speak to each other. Each
> person ... is more likely to be having an encounter with someone miles away than
> with the person in the next chair. Each inhabits a private media bubble.[51]

Turkle argues that our dependence on digital devices has created a malformed sense of identity;

we are fused with our devices. "When we say, 'I'll be on my cell,' ... we mean, 'you can reach

me; my cell phone will be on, and I am wired into (social) existence through it.' *On* my cell, *on*-

line, *on* the web, *on* instant messaging – these phrases suggested a *tethered* self."[52]

Technology (even connective technology) alienates its user by design, and sometimes this

is a good thing. Sewers were designed to alienate us from raw sewage. Coats and warm clothing

were designed to alienate us from the cold. But what if connective technology actively alienates

us from what we were created to be: image bearers of our Creator? As we talked about in chapter

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[49] Pinsky, *The Mirror Effect*, 240-7.

[50] A disturbing recent example of this came from my work volunteering at a local high school. A student had a mobile phone confiscated, in keeping with the school's code of conduct. It was confiscated by a staff member who later left the school for the rest of the day with a sports team. At the end of the school day this student was emotionally devastated when she was unable to retrieve the device at the end of the day. Her parents drove her back to school later that night in an attempt to retrieve the phone from the teacher. She could not imagine passing one evening without her phone.

[51] Turkle, "Always-on/Always-on-You: The Tethered Self," 122.

[52] Turkle, "Always-on/Always-on-You: The Tethered Self," 122.

two, technology is not inherently evil but it is made of materials that are under the curse of Genesis chapter three. Technology has a tendency to enslave and to alienate us from God. Without an eye to our role as stewards and co-creators, humanity can be distracted by technology from its ultimate purpose. When humanity chases its tools, it can become convinced that all of reality, including humanity, is one big information system. In this same line of thinking, Lanier wonders if "a web page is thought to represent a higher level of description than a single letter, [and] a brain is a higher level than a web page, an increasingly common extension of this notion is that the net as a whole is, or soon will be, a higher level than a brain."[53] In this worldview, there is nothing special about people. They are component parts of what is higher and more evolved.[54]

Alan Turing was a pioneer in computer science and he is given credit for developing the standard theoretical answer to the question of whether or not computers could ever be considered sentient. His theoretical thought experiment has since been called, "the Turing test," and it goes like this. If a person interacted with a machine of sufficient sophistication, and they were completely convinced they were talking to a person, then this machine should be considered intelligent and worthy of equal rights as a sentient being.

What nobody in the computer science community seems to want to address is that the test objectively fails because it uses human intelligence recursively in its own test. Lanier says, "machine intelligence can only be known in a relative sense, in the eyes of a human beholder."[55] If there was no intelligent being there to observe, would the computer actually be sentient? What

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[53] Lanier, *You Are Not a Gadget*, 27.
[54] Perhaps in the future it will be more remarkable to Digital Natives that God sent his Son to redeem people rather than sending science or technology.
[55] Lanier, *You Are Not a Gadget*, 31.

we are seeing is not actual intelligence, but our own intelligence reflected back to us. We are

like Narcissus, looking into a pool, adoring ourselves.

A perfect example of the anti-human bias of the Turing test came on May 11, 1997. On

that day in New York, chess world champion, Gary Kasparov, took on a computer opponent

called Deep Blue in a much hyped rematch. Kasparov had defeated an earlier iteration of his

computer opponent the previous year, but not without losing the first set, much to delight of the

programming team from IBM. This time Deep Blue prevailed, winning two sets, losing one and

tying three. It was a monumental achievement and the media was captivated. It was the first

time a reigning world champion had been defeated by a computer in regulation tournament play.

The press at the time wondered aloud, was Kasparov still champion, or was Deep Blue

the new champion? Were human beings still special now that computers were becoming our

equal? The framing of the question, however, reveals an anti-human bias inherent in

technological circles. Lanier asks, "what happened was primarily that a team of computer

scientists built a very fast machine and figured out a better way to represent the problem of how

to choose the next move in a chess game. People, not machines, performed this

accomplishment."[56] Whenever a computer is imagined to be intelligent, what is really happening

is that humans have abdicated their own intelligence and attributed it to the computers. When

computers are thought to be caring, we are recognizing our own compassion reflected off of the

object. It is as though humanity as a whole is ashamed that each one of us is born rather than

made. The fallen nature of the material of our earthly tools continues to lead us east of Eden and

further from the God that made us.

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[56] Lanier, *You Are Not a Gadget,* 34.

Conclusion

If McLuhan is right and social media, as an extension of humanity, does numb what it amplifies, and if Turkle is right, that our digital technology is becoming fused with a Digital Native's own sense of self, then we come to a sobering conclusion. Extended use of social media and digital communication technology numbs and reduces the user's sense of identity. Clinical research shows that even casual use of technology has the capacity to rewire the user's brain, so it is not too much of a stretch to suggest that obsessive use of communications technology, particularly at the highly formative pre-adolescent stage of brain development, will have a significant impact on the identify formation of a whole generation of social media users. How then does a community of faith guide the spiritual formation of the Digital Native generation? For those of us who grew up with identities formed before the Internet, how can we lead churches that, through the agency of the Holy Spirit, make twenty-first century disciples? We cannot blindly assume that the practices and behaviours that formed us will form them. We need to reflectively consider what behaviours will continue to form people in the image of Christ and what new behaviours and new boundaries are necessary for healthy identity formation within the body of Christ. Can these new tools be used for new purposes? A God that resurrects the dead and restores souls can also redeem technologies for new purposes.

CHAPTER 4: NEW BOUNDARIES AND NEW BEHAVIOURS

Introduction

As we draw together the three streams of historical practices, theology, and contemporary

technological issues for the church, let us consider again the hypothetical example of the

Caribbean church plant from our Introduction. Ministers and church leaders in present day

evangelical churches are like the Caucasian Canadian nationals in the analogy who are trying to

lead a church that serves an increasing number of Caribbean immigrants. In our example, it was

the Caribbean members who were immigrant; they were the ones entering an unfamiliar world

with foreign cultural practices and values. The church leaders, on the other hand, are serving

from a place of cultural power and privilege. In the present day digital world, however, the

tables are turned.

In the digital example today, it is the existing church leadership who are immigrant.[1]

Almost without their noticing it, most leaders in evangelical churches today, who are in their late

thirties or older, are Digital Immigrants, finding themselves in a strange world that is

increasingly foreign. With a widening cultural divide separating them from teens and young

adults in their faith communities, how should church leaders at the beginning of the twenty-first

century address the growing boundaries separating them from the youth in their congregations?

Is it possible that connected life in the digital world leaves people with spiritual deficits or areas

of spiritual immaturity that churches need to learn to address in order to better serve Digital

Natives? In identifying some areas of weakness in chapter three the question is raised, "what

disciplines and practices should we use in our churches to address these deficits?"

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[1] This observation is established by the fact (observed in the Introduction) that nearly all church leaders in the early twenty-first century church were born before 1985. For the time being, church leaders are all Digital Immigrants.

The wrong question to be asking, as we discussed in chapter one, is how to blindly use new technology as a way to attract Digital Natives. It is naive to be asking, "should we make it easier to tweet during the sermon? How about Wi-Fi service for the auditorium? Does our website need to be updated?" These questions look at the symptoms and not the core issues.

In order to build a bridge between Digital Natives and Digital Immigrants, we need to address three issues of great importance. Firstly, Digital Natives and Digital Immigrants alike need to protect their inner life from the distraction and constant contact of what author William Powers calls "the screen crowd." Secondly, Digital Natives need to attend to the margins of the pages of God's Word, something that is increasingly hard to see when we are reading from digital devices. Thirdly, Digital Natives and Digital Immigrants need to assist each other in attending to the practice of embodied community.

In this chapter we will address these three issues with attention to new behaviours and new boundaries that the digital world now requires of us. New tools present the possibility of new practices but the big question is not how often should we use these tools but, rather, what values do these tools come with? Are they values that are shared by our communities of faith? Before we talk about whether we *could* tweet sermon summaries to our community members, we should stop and ask if we *should*! Our church's behaviours ought to be directed by our values and the biblical principles on which we stand, and not by what is new, or even by what is most efficient.

In addition to needing new media behaviours, Digital Natives need new boundaries to live balanced lives in the twenty-first century. This is not to say that our behaviour will be managed by a new legislated morality that takes its cues from media habits of this century or any other. The truth is that we have adopted a number of new tools and we are still learning about

what they do to us. Digital communication tools have moved some social boundaries and made others obsolete.[2] As the effects of our new digital communication tools become more clear, we need to establish new boundaries for what we are willing and not willing to do to ourselves and to our families in the twenty-first century.

The Boundary Between Our Inner and Outer Self

In chapter one I discussed the extent to which our devices change us. As a result of these changes our society has changed also. Marshall McLuhan and others have noticed that our inventions and our tools are more than objects that we own. They often do some inventing of their own. McLuhan observed that Gutenberg's invention created what he called the "Typographic man."[3] This archetype stands for all of modern humanity, which characteristically used its mind favouring a linear, objective, logical approach. This set of mental habits fosters a radical individualism in its host culture. Equipped with this left-brain way of thinking, the Typographic man has thrived for centuries and built Western civilization as we know it. But by the end of the twentieth century, McLuhan predicted that he was about to be replaced.

Powers paraphrases McLuhan by saying that "because mass electronic media work on us in a different way than print, those technologies were creating a new person whose mind was less linear and individualistic, more group-oriented."[4] McLuhan predicted that because of this, in the future, our minds would operate more like the oral mind of Socrates' era.[5] Before the print age, information was shared in an oral, more fluid way. Family units or entire communities would

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[2] One of the best examples of this is the constantly evolving social norms related to cell phone use. It is clear to those who use cell phones on a regular basis that our society is still developing the social etiquette surrounding how and when we should answer our phones in public.

[3] This term, and the term, "the global village," were both coined in his publication, *The Gutenberg Galaxy: The Making of Typographic Man*.

[4] Powers, *Hamlet's Blackberry*, 198.

[5] McLuhan, *The Gutenberg Galaxy*, 98.

collectively consider a course of action and make a collective decision together and during these discussions seemingly contradictory viewpoints could be entertained.[6] The print era on the other hand created a much more individualistic, propositional culture. Debates were a product of the print age mindset, and so was the Scientific Method. A person in the modern, print age came to know things via clinical observation, or by didactic reasoning.

It appears that this new future that McLuhan had described has arrived in the form of the Post-Modern era. Debates are certainly not a spectator sport anymore, but the change runs deeper than that. A citizen of the Post-Modern Age is much more comfortable with contradictory viewpoints and is able to hold them in tension. There is, in general, a feeling of incredulity toward meta-narratives and people's deeply held convictions are less grounded in reason and logic. This is one of the reasons for the angst and unsettled dread that is common among Digital Natives. Print had given modern twentieth century humanity a meta-narrative or a sense-making structure – what Riesman, in his book, *The Lonely Crowd*, called an "inner direction" – and now we feel it slipping away.[7]

Neil Postman suggested it was the arrival of the telegraph that was the turning point in the deconstruction of the Typographic man. With the telegraph came the notion that information no longer "derived its importance from the possibilities of action."[8] What he means by that statement is that before the telegraph, information had an immediate value to the information receiver that led to action. If "Mr. Wentworth told you that there was trouble at the mill," that information required a response from you.[9] Its importance was tied to the need for you to

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[6] Herlihy, "The Making of the Medieval Family," 193.
[7] See Riesman, *The Lonely Crowd,* 14. See also McLuhan's discussion of Riesman's work in, *The Gutenberg Galaxy,* 28.
[8] Postman, *Amusing Ourselves to Death,* 68.
[9] In his discussion Postman uses the notion of an action – information ratio. A high action information ratio means that the information you receive almost always causes you to respond. Postman says that because of the telegraph, information now has the capacity to be separated from its context. The post - modern information

respond. The telegraph conquered space and time and therefore removed information from its

context. Information was now contextless and directionless. Postman later remarked that in the

twenty-first century,

> the tie between information and action has been severed. Information is now a commodity that can be bought and sold, or used as a form of entertainment, or worn like a garment to enhance one's status. It comes indiscriminately, directed at no one in particular, disconnected from usefulness; we are glutted with information, drowning in information, have no control over it, don't know what to do with it.[10]

In addition to commodifying information and removing it from its context, the telegraph,

and its twenty-first century counterpart, the Internet, have also breached the membrane between

the inner self and the outer self. This idea can be more clearly seen when you consider a

person's typical day in a pre-technological world. Before 1900, a person had an inner world and

an outer world with many natural divisions between them. A person could travel to town to hear

the news of the day and interact with "the crowd," but it was never immanent; there was always

a physical distance between yourself and the crowd. There was also the natural unavailability of

the crowd; they went home at the end of the day. In addition, you could only gather so many of

them together at any one time. Every person, no matter who they were, would at some time in

the day be left with nothing but their own thoughts.

Mass Media, however, began to erode that barrier. The printing press made millions of

books available in just the first few decades of operation.[11] Seventeenth century scholars

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consumer rarely responds to any of the information they receive. A twenty-first century computer user will receive huge quantities of information each day and do almost nothing with it. As a result, they have a low action-information ratio. See Postman, *Amusing Ourselves to Death*, 69.

[10] From a speech delivered to the German Informatics Society (*Gesellschaft für Informatik*) on October 11, 1990 in Stuttgart, sponsored by IBM-Germany. A transcript was retrieved from http://w2.eff.org/Net_culture/Criticisms/informing_ourselves_to_death.paper.

[11] 12 million books were estimated to have been published before the end of the fifteenth century. See Carr, *The Shallows*, 70.

complained that reading had taken over European culture.[12] Famous Spanish playwright, Lope

de Vega, expressed the feelings of many theatre-goers when in his 1612 play *All Citizens Are*

Soldiers, he wrote:

> So many books – so much confusion!
> All around us an ocean of print
> And most of it covered in froth.[13]

In his book, *An Anatomy of Melancholy,* written in 1628, Robert Burton described "the vast

chaos and confusion of books" that confronted the seventeenth century reader: "We are

oppressed with them, our eyes ache with reading, our fingers with turning." Earlier, in 1600,

another English writer, Barnaby Rich, complained that "one of the great diseases of this age is

the multitude of books that doth so overcharge the world that it is not able to digest the

abundance of idle matter that is every day hatched and brought into the world."[14] Everyone was

reading and their connection with the outer world was becoming more and more blurred. Poet

William Stafford captured it nicely by saying that when he was done reading, "closing the book I

find I have left my head inside."[15]

If the printing press blurred the line between the inner and outer life, the telegraph blew it

wide open. McLuhan considered all media an extension of the body, but he said the telegraph

was "an extension of the human central nervous system."[16] It used to be in colonial North

America that news, and therefore events themselves, travelled at the speed of a horse. Mail

services like the Pony Express delivered the mail by horseback but they also effectively

delivered the horizon of an event. Since there was no other way of delivering news any faster, it

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[12] England's first official book censor wrote in 1660, "more mischief than advantage were not occasion'd to the Christian world by the invention of Typography." Quoted from Raymond, *The Invention of the Newspaper,* 187.

[13] Quoted in Carr, *The Shallows,* 71.

[14] Quoted in Carr, *The Shallows,* 168.

[15] Powers, *Hamlet's Blackberry,* 135.

[16] McLuhan, *Understanding Media,* 3.

could be said that a far away event had not happened until mail from that place had arrived.

After the telegraph was commercially deployed, events travelled at the speed of light. Local

news became of less and less interest and national news, even international news, became of

more value.

The Internet is simply a variation on the telegraph. They are both, according to Powers,

"devices meant to relieve burdens [by] imposing new ones, pulling people away from life's most

meaningful experiences."[17] Henry David Thoreau wrote in *Walden*, "But lo! Men have become

the tools of their tools." Of the telegraph he said, "[it is] but an improved means to an

unimproved end. ... We are in great haste to construct a magnetic telegraph from Maine to Texas,

but Maine and Texas, it may be, have nothing important to communicate."[18]

Every electronic communication media from the telegraph to the SMS texting devices has

an outward bias; its orientation is outward. "Computers and other digital devices ... keep

everyone relentlessly focused outward, beyond themselves. ... The implication is that [you are]

just conduits for data, with nothing valuable to offer."[19] All devices have a bias or a set of values

and to unreflectively use any device means you blindly accept this set of values. When you make

a text messaging device your primary communication method you are at risk of adopting its

purpose as your purpose. Subconsciously you begin to conceive of yourself as just a node in the

world-wide network, existing to communicate. This is why some Digital Natives are so

compulsive about their need to tweet. It addresses their need for ultimate meaning: they are a

node and they exist to communicate. If they have not tweeted the event it has not happened, and

in a sense, they do not exist.

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[17] Powers, *Hamlet's Blackberry,* 185.
[18] Thoreau, *Walden,* 30.
[19] Powers, *Hamlet's Blackberry,* 169.

In light of this new reality, what new practices should Digital Natives and Digital Immigrants observe? In order to be a balanced user of technology one needs to tend to the "inner self." There is no "Sleepy Hollow" on the Internet.[20] The Internet is a communication technology designed for fast, broad, and shallow communication and the human mind has demonstrated that it needs to unplug from time to time. Psychological studies over the past twenty years have revealed that spending time in a quiet rural setting helps people exhibit greater attentiveness, stronger memory, and generally improved cognition. Rested and self-reflective brains become calmer and sharper.[21] This is the basis of a whole new area of behavioural therapy called Attention Restoration Theory (ART). A recent study of ART published in *Psychological Science* in 2008 found that for study participants, not only did spending time walking alone in a park improve their performance on tests of their focus and working memory, just looking at pictures of the outdoors helped their performance. The researchers concluded, "simple and brief interactions with nature can produce marked increases in cognitive control."[22] Leaders in Christian communities need to model this kind of reflective lifestyle. Author Tim Challies suggests,

> seek[ing] times and places that are far removed from the digital. Solitude can be intimidating for those who are accustomed to the beeps, to the hustle of digital living. Worse still, silence can seem boring, far less interesting than all the distractions we are sure we enjoy. Yet it is a practice Christians need to rediscover.[23]

Another reflective practice that Digital Natives should consider is a fast: a spiritual discipline that serves as a declaration of empire. By going without speaking, or going without

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[20] Sleepy Hollow is featured in the short story *The Legend of Sleepy Hollow*, written by Washington Irving in 1820. It typically stands for a quiet restful, out of the way kind of place where you can collect your wits. It did not work out, however, for Ichabod Crane.

[21] Powers, *Hamlet's Blackberry*, 219.

[22] Berman, et al., "The Cognitive Benefits of Interacting with Nature," 1212.

[23] Challies, *The Next Story*, 133.

food, or going without sex, you are making a declaration of who you are and who you belong to.

Your physical appetites are not in control of you but rather you are submitted to a higher

authority. With this in mind, Digital Immigrants and Digital Natives both need to practice

technology fasts as a spiritual discipline. Perhaps it can be a day, or even a period of time, where

the devices are off and your mind can fully attend to where you are. In order to be more present

when he was home, author John Dyer began a discipline of putting his mobile devices, his

computer, and all his digital devices away when he arrived home. He made a habit of not getting

them out until all his kids were in bed. This is not as elaborate as a regular fast but it does

demonstrate creating a deliberate boundary that helps to define a healthy limit for how available

John was willing to be to his job and how available he is going to be to his family.[24]

Separation from the Screen Crowd

Digital Natives are beginning to sound like the first generation of book readers in the

sixteenth century when talking about their own on-line lives. Sanjay is a sixteen year-old high-

school student interviewed by Sherry Turkle in her book, *Alone Together.* He shares how the

pressures of an always-connected life are getting to him and when his one hour interview is over

he realizes that he has received over a hundred text messages in that time. Turkle writes,

> [Sanjay] feels a lot of pressure to reply and begins to pick up his books and laptop
> so he can find a quiet place to set himself to the task. As he says good-bye he
> adds, not speaking particularly to me but more to himself as an afterthought to the
> conversation we have just had, "I can't imagine doing this when I get older." And
> then, more quietly, "How long do I have to continue doing this?"[25]

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[24] See Dyer, *From the Garden to the City*, 173.
[25] Turkle, *Alone Together*, 169-70.

Like Sanjay, a number of other Digital Natives are coming to a point where they are

questioning the assumption that more connection is better.[26] For many Digital Natives

there is a hunger for slower, more reflective pace of life. A community of faith ought to

be a place that embraces this value and helps people know to be fast and how to be slow.

In his book *Hamlet's Blackberry: Building a Good Life in the Digital Age*, Powers

concludes that the struggle that Digital Natives are facing has to do with establishing healthy

boundaries between themselves and "the screen crowd." Powers uses "the screen crowd" to

describe the shallow aspect of humanity that communication technology brings us into contact

with: "Influential technology critics praise new devices for the extent to which they broaden and

speed up not just our reach but our availability, [the devices] bring the crowd ever closer in ever

more dimensions of life."[27] But no one seems to be asking if this is a good thing. In order to find

and cultivate a healthy sense of self we need to develop boundaries and skills that keep the

crowd at a distance. Everyone, but a Digital Natives in particular, needs to cultivate a private

personal life. As we discussed in chapter three, without some distance between us and our

devices, we cannot develop a balanced sense of our own identity.

The screen crowd can have an overwhelming impact on identity development in a Digital

Native. From her interviews with teens and adults, Turkle concludes that Digital Natives are not

simply wasting time on their digital devices, they are engaging in what she calls "identity

experiments." Facebook functions for most Digital Natives as a representational space for self

experimentation. Status updates or other chatter is used by Digital Natives to present to their

invisible entourage a preferred self that they would like to promote. As we discussed in chapter

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[26] Powers discusses how Digital Natives are beginning to question this assumption on p. 43-4 of *Hamlet's Blackberry*.

[27] Powers, *Hamlet's Blackberry*, 134.

three this is nothing new, but having multiple identities with our various on-screen and off-screen friends and acquaintances "encourages a kind of self that Robert Jay Lifton called 'protean.' ... The protean self is challenged by the persistence of people and data. The sense of being 'protean' is sustained by an illusion with an uncertain future." [28] What Lifton means is that teens are asking an identity question when they comment on things like the Grammy Awards. Mocking the winner or praising a performance is not just a declaration of their personal musical preferences. It is an identity question that is answered by the feedback they receive.[29]

Constant connection means constant exposure to the screen crowd and constant identity correction. This constant interactivity runs the risk of eroding a Digital Native's sense of self and their ability to define what is them and what is "the crowd." Overexposure leads to a weakened sense of self. Turkle does not suggest a moratorium on the use of Computer Mediated Communication but instead she encourages on-line practices that include some time at a distance:

> The people who do best with their lives on the screen are those who use them as material for self-reflection. ... When we [step back and] see what we do in our lives on the screen, we can learn what we feel we are missing and use this information to enhance our lives in the "real."[30]

What practices make it possible to keep the crowd at a distance? In the pre-digital world, distance worked well to keep the crowd at bay and that remains true today to a certain extent. It is a healthy habit to allow some physical distance between you and your digital devices from time to time.[31] The practice of leaving your devices at home when you go for a walk or having a

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[28] Turkle, *Alone Together*, 260.
[29] In chapter three we referred to Drew Pinsky's book, *The Mirror Effect*, which deals with this idea. Teens collect information about themselves by casting a picture of their preferred self through status updates and photos and comments and then they gauge and carefully craft the responses they get. For many teens, identity is always a work in progress.
[30] Turkle, *Alone Together*, 324.
[31] This past summer my family rented a cottage in Northern Quebec that we found on the Internet. Upon arrival I discovered that there was no cell phone coverage at the cottage. After a day or so of awkwardness this became

basket next to the front door of your sanctuary for mobile devices to be stored during worship services helps as well. The teen program at the Tintern Church of Christ makes a practice of collecting everyone's cell phones in a basket before their midweek devotional begins. This helps to provide teens with a chance to personally reflect and see themselves, untethered, and without their phones. Providing this distance between them and their devices helps cultivate this inner life and teens are then allowed to explore the spiritual aspect of their own identity by asking, "Who am I in the sight of Christ?"

American author, Henry David Thoreau was frequently frustrated by the distractions of living in the city of Concord, Massachusetts, so as a writing experiment, he moved from town into a small cabin built on a family property and spent eighteen months recording his observations on life in a book called *Walden: Life in the Woods*. It is important to note that Thoreau was not a Luddite, for he would walk to town whenever he needed something.[32] He was, after all, just a couple of miles out of town, but he recognized that this small distance provided a buffer that would keep needless distractions out while allowing important interactions to get through. Thoreau wrote of his experience, "In town, people would drop by on any excuse, but here, fewer came to see me on trivial business. In this respect my company was winnowed by my mere distance from town."[33] Distance, however, was not the only factor. Thoreau's cabin on Walden pond was designated for a specific purpose and people knew it, or they soon found out. When they overstayed their welcome he let them know: "I went about my business again

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one of my favourite features of that cottage. I truly became unplugged and could leave my work behind. I was the most relaxed I had been in years.

[32] The term, "Luddite," has come to mean naive opposition to the advance of technology. It is unclear where the term was first used but legend has it that a man named Ned Lud, led a group of weavers and loom operators in violent protests against the effect of the industrial revolution on his trade. Wage cuts, child labour and the elimination of laws which protected the weaver's trade had put many weavers out of business and as a result, between 1811 and 1816 a number of weaving factories were destroyed by angry mobs. This led to laws in England that made destroying a weaving loom a capital offence. Until recently a person in England who unlawfully destroyed a weaving loom could be sentenced to be hanged! See Postman, *Technopoly*, 43.

[33] Powers, *Hamlet's Blackberry*, 189.

answering them from greater and greater remoteness." In this way the crowd was never overwhelming.[34]

Like Thoreau, Digital Natives need to cultivate technology habits that keep the "screen crowd" at a healthy distance from time to time. Moving into a cabin on a wooded lot, though appealing, does not accomplish the task the way it did in the eighteenth century. With wireless Internet, and nationwide cell phone coverage, it is harder and harder to get away from the crowd because the screen *is* the crowd. Church communities should be innovative in the habits they encourage their members to practice. Digital fasts are one healthy habit, but another is cultivating distance from the screen. For example, why check email ten times a day when twice will do. When running errands on the weekend, leave your phone at home, or at least leave it off, in the glove compartment, to be used only in emergencies. As a practice of our faith, we should control our cell phones, rather than having them control us.

Church leaders can help model good behaviour by being fully present in their interactions with members of their churches. During worship gatherings, ministers should turn off their phones, or leave their phones with an assistant or trusted friend who can answer urgent calls promptly. During pastoral meetings, church leaders should be disciplined in how they use their devices. If a minister meets with a member of their congregation and checks their phone a number of times, it communicates a value system that is not desirable. On the other hand, when the leadership of a church demonstrates discipline in how they use computer mediated communication, it helps to create a cultural expectation within their church community that technology ought to lead to richer relationships. Churches ought to be communities that do relationships well and making space between us and our tools will leave room for people to get closer.

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[34] Powers, *Hamlet's Blackberry*, 189.

A Loss of Margins

Encouraging Digital Natives to leave technological devices behind, however, leads to

some interesting conundrums. While no solid statistics for this assertion have been published, in

my own observation, more than half of the teens I have worked with make a habit of bringing

only their digital devices (iTouch, iPhone, smart Phones etc.) to a Bible class or a worship

service, rather than a print copy of the Bible.[35] Is there a qualitative difference between reading

from a screen versus reading from a physical page? I think it can be demonstrated that there is.

Electronic books exploded onto the marketplace in 2010 and research into the impact of

these devices has only just begun.[36] The first published study on the effect of electronic book

readers on reading comprehension was published in October 2011.[37] Researchers involved in the

study said, "there are no disadvantages to reading from electronic reading devices compared with

reading printed texts."[38] Their tests showed negligible difference in reading comprehension but

this finding is in stark contrast with the anecdotal responses of the study participants: "Almost

all of the participants stated that they liked reading a printed book best. This was the dominant

subjective response, but it does not match the data obtained from the study,"[39]

Why is it that people consistently prefer printed reading material over digital reading

material. The computer revolution of the late 20th Century was supposed to bring about the

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[35] The idea for this thesis topic came from a moment in worship in 2009 where I was going to correct some teens who appeared like they were playing with their phones during a Scripture reading. When I was close enough to see their screens I found they were following along with the reading on their phones. This led me to consider: what kind of church will we have ten years from now when these teens are the young adults in our church?

[36] Amazon reported that ebook sales surpassed hardcover sales in July of 2010 and by January 2011 they sold more ebooks than print books (hardcover and paperback combined). All this less than four years after the Kindle was released to the public. See Kincaid, "That Was Fast," n.p.

[37] The objectivity of this first study might be questioned. It was funded by a German company that is developing electronic book devices for University students. More research in this field is obviously needed.

[38] Kretzschmar, "Different Reading Devices," n.p.

[39] Kretzschmar, "Different Reading Devices," n.p.

"paperless office" but anyone who works in an office can tell you that this has not taken place.[40] There are more documents being created now using desktop publishing software than ever before. Why do people seem to prefer holding a document to viewing one on a screen? Book publishers have always known that the tactile experience of holding a book is an inseparable part of the experience of reading a book. That is why book publishers invest so much in the design, and the texture of the covers of the books they publish. As we talked about in chapter 3, reading from the screen of an electronic device adds to the cognitive load of the reader by requiring them to keep track of their place relative to the other words (a moving target) rather than the easier task of reading off a page where the text is not moving. By employing more of the reader's working memory, this, subtly, and almost imperceptibly, adds to the cognitive fatigue of the reader. Readers prefer print copies over digital because they are less taxing to read.

Never-the-less Gordon Crovitz of the *Wall Street Journal* boasts that eBooks "can help return to us our attention spans and extend what makes books great: words and their meaning," but Columnist Nicholas Carr believes that is wishful thinking.[41] Carr charges that "Crovitz has fallen victim to the blindness that McLuhan warned against: the inability to see how a change in a medium's form is also a change in its content."[42] An electronic book is not simply an electronic, digital version of a print book; a straight-up trade of pixels for ink. An eBook is a whole new technology with its own unique embedded values that must be reflectively evaluated.

A similar study of screen comprehension published in the journal, *Media Psychology*, in 2007, compared the reading comprehension of two randomly-selected groups.[43] One group was given a text-only briefing on the country of Mali while the others were given a multimedia

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[40] The phrase, "the paperless office," was first coined in an article published in *BusinessWeek*, June 30, 1975, entitled "The Office of the Future." See Sellen, *The Myth of the Paperless Office*, 3.

[41] Crovitz, "The Digital Future of Books," n.p.

[42] Carr, *The Shallows*, 102.

[43] Rockwell & Singleton, "The Effect of the Modality of Presentation, " 179-91.

presentation on computer with the same information. Test subjects in both groups had no time limit, and those in the latter group were able to stop and start the multimedia presentation whenever they wished. What this study found was that text-only readers scored significantly higher on comprehension and recall than the multimedia viewers.[44] Video and sound supplements to the reading material did not enhance learning as was previously thought, but instead impeded it. The researchers concluded that multimedia technologies "would seem to limit, rather than enhance, information acquisition."[45]

Another study, this one at Cornell University, that looked at laptop use and compared academic performance of two different classes on the same material. The two classes heard the same lecture but only one of them was allowed to use the Internet or their laptops during class. The researchers reported that those who had access to their computers "performed significantly poorer on immediate measures of memory for the to-be-learned content."[46]

Despite these findings, some educational researchers have been able, in some cases, to develop carefully designed presentations where multimedia does indeed enhance learning, but what they find is that when a typical user has access to digital distraction and is directing their own experience, they are likely to use interactive media to the detriment of their own learning.[47] What is clear is that a device has a significant impact on how the user is able to internalize the information carried by that device. The more interactive the device, the more shallow the experience.

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[44] Text only readers answered an average of 7.04 of the questions correctly, while the multimedia viewers answered just 5.98 correctly. The text only readers were also more likely to report that the presentation was interesting, educational, and understandable.

[45] As quoted in Carr, *The Shallows*, 130. See Rockwell & Singleton, "The Effect of the Modality of Presentation," 179-91.

[46] Hembrooke & Gay, "The Laptop and the Lecture," 46-64.

[47] Carr, *The Shallows*, 131.

When it comes to reflective Bible reading, there is little research into how a digital device

influences a person's devotional practices but it does not take much imagination to speculate

how a device that is so easily used for distraction could impede a person's ability to read the

Bible at depth. A smart phone with LifeChurch's YouVersion Bible app downloaded on it might

be better than no Bible at all, but when compared to a print Bible, its capacity to distract might

make it highly undesirable after all. Meditative practices like *Lectio Divina*, *Examen*, or simply a

deliberate, slow reading of the Bible would require tremendous discipline. A smart phone or

other mobile device almost precludes such a reading.

As McLuhan has warned, a digital device also influences the content in other ways. Carr

observes that when a book is digitized, "the cohesion of [the] text, the linearity of its argument or

narrative as it flows through scores of pages is sacrificed. What the ancient Roman craftsman

wove together when he created the first codex is unstitched. The quiet that was 'part of the

meaning' of the codex is sacrificed as well."[48] What is ignored when a book is read digitally is

that the margins of each page are gone.[49] With nothing to physically landmark, the reader must

track two things while reading: the page (a fixed point in the text) and where they are on the page

relative to that point. To do this more working memory is required which reduces your capacity

to read deeply.[50] Any book, but particularly the word of God, benefits from the fact that it stands

as an entity, distinct from the frenzied digital world. It is separate from us and we come to it, our

self intact. When a book is manifested by the same tool that we use to get the scores from last

night's game or the endless stream of text messages from our friends, it loses its edges. Our

digital devices value breadth over depth and they already train us to skim and sample texts that

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[48]   Carr, *The Shallows*, 165.
[49]   This would explain why pundits have repeated predicted the end of print media and have been so famously
       wrong, time and again. See Carr, The Shallows, 125.
[50]   Behavioural psychologist Daniel Kahneman writes that "anything that occupies your working memory reduces
       your ability to think." See Kahneman, *Thinking Fast and Slow*, 30.

are presented to us. Therefore, when we read the Bible on a digital device we are likely to do the same with the Bible on a screen as we would do with any other data on a screen. Carr continues,

> We're no longer guided toward a deep personally constructed understanding of the text's connotations. Instead we're hurried off toward another bit of related information, and then another, and another. The strip mining of relevant content replaces the slow excavation of meaning.[51]

As a result of this tendency, reading from digital devices requires the development of some new skills, and perhaps Digital Natives are already learning these skills.

Researcher Gary Small believes that Digital Natives are growing up with greater capacities in their working memory. He writes that "many of us are developing neural circuitry that is customized for rapid and incisive spurts of directed attention."[52] Perhaps it is the Digital Immigrants that will need help with reading from digital devices and Digital Natives will have no trouble meditating over their iPads. The experimental evidence that would answer this question is sparse at this time, but the introduction of new devices is a significant development that should not be taken lightly.

Another example of a change in tool causing a change in meaning was shared by a friend who grew up in Hong Kong, within a Chinese culture, and later immigrated to Canada. He observed that while a meal is a way of feeding yourself, a way of ingesting sustenance, it is obviously more than that. A meal is a cultural experience. When a Chinese family eats a traditional meal together, a single dish is placed in the centre of the table and each person uses their own utensils to eat from this common bowl. Western culture, on the other hand, serves from this single bowl onto individual plates. This change of dishes, while only a change in serving tools, radically changes the meal experience. Changing the tools does radically change the experience. A Western meal retains an individualistic identity while a traditional Eastern

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[51] Carr, *The Shallows,* 166.

[52] Small, *iBrain,* 21.

culture like the Chinese culture retains a communal identity primarily through the tools that are employed.

Believers of every generation have been encouraged to read the Bible regularly and to read it at depth, and the same is true today. The difference is that digital reading devices have unintended consequences and many church leaders are unaware of the impact of reading the Bible off of a phone or a digital book reader. Educational research suggests that a reader absorbs more, and can interact with what they read at more depth, when they are reading off of a physical paper copy, rather than a digital representation of a book. Digital Natives benefit from attending to the edges of the pages when reading God's word and should therefore make use of tactile media like the printed page whenever possible.

One way to practice a greater awareness of this is to use tactile interaction with God's word during worship and Bible study. At the Tintern Church of Christ, we make a practice of using a video projector to display the lyrics of songs that we sing, and the words of the Bible readings that we read, but during the sermon we do not display the words to a text that we are studying. We have a standard pew Bible and, when preaching, I will give people a Scripture reference and page number and allow people to find it. Once we begin reading, I will sometimes encourage members of the congregation to "put your finger here and turn to page seventy-one." Or I will ask listeners to "find the word, 'salvation' on the page. Reading the words to a Bible reading on the screen remains an external experience for the participant; the words are "out there" on the screen and remain outside us. When we physically hold the Bible, and read it from our hand, and refer to it, there is a greater opportunity for the study to become internal. Personal digital devices, because of their outward bias, present reading the biblical text as an external experience. They are a portal to an external text source and the words are still "out there."

Ideally people will bring their own personal copy of the Bible to worship and make notes on the page, which further reinforces and internalizes the connection.

The Need for Embodied Community

In chapter two we discussed briefly the example of LifeChurch.tv, a mega-church from Oklahoma which began as Life Covenant Church and has grown from forty members in 1996 to serve over 38,000 attenders in 2011 at fourteen satellite locations.[53] LifeChurch and its staff are among the most innovative users of technology. It is no coincidence that they changed their name to the Internet domain LifeChurch.tv in 2005. LifeChurch began streaming an interactive worship service in February of 2006 but they are by no means the first to use an Internet platform to make an on-line worship experience possible.

The first virtual church was created back in 1985, by an unnamed group who met together regularly for worship through a text-based interface.[54] Other pioneering groups met over the first few years of the Internet's existence but the first on-line worship environment that leveraged web 2.0 tools such as a visual 3D virtual environment was the Church of Fools.[55] With the support of the Methodist Church in the UK, this virtual church was a four-month experiment of the on-line publication called *Ship of Fools*.[56] From May until September of 2004, the group

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[53] Statistics quoted from http://en.wikipedia.org/wiki/LifeChurch.tv. These attendance figures do not include the on-line worship service which is streamed live and then available in archive form 24 / 7.

[54] Estes, *SimChurch*, 25.

[55] The first legal on-line marriage in the US was performed on May 8th, 1996, inside AlphaWorld, one of the oldest virtual worlds on the Internet. The couple spent weeks planning the wedding, constructing an on-line pavilion for the event, making avatars for themselves and sending out invitations. After the on-line service, Tomas, who lived in Texas, drove 3,100 miles to Tacoma, Washington, to be with his bride, Janka, which Simon Jenkins called, "the longest delayed, 'you may kiss the bride' in history!" See Jenkins, "Rituals and Pixels," 99.

[56] The Ship of Fools (http://ship-of-fools.com/) is a satirical on-line publication that has become an on-line community. Founding editor Simon Jenkins writes on the website that, "Our aim is to help Christians be self-critical and honest about the failings of Christianity, as we believe honesty can only strengthen faith." Simon Jenkins publishes a blog (http://simonjenkins.com/blog/) and wrote an article for the *Heidelberg Journal of Religions on the Internet* entitled, "Rituals and Pixels, Experiments in Online Church" that tells the story of the Church of Fools project.

held weekly worship services, discussion forums, and their attendance peaked at 41,000 distinct

visits in one day, making them, as Jenkins puts it, "the most popular church in the world on that

day."[57] The group has since moved on and formed an ecumenical on-line church called St.

Pixels.[58]

But the question remains: are on-line communities of faith actually churches? One

perspective is that the tens of thousands of attenders who participate in LifeChurch's weekly

streamed worship broadcasts are simply supplementing their experience of real-world

churches.[59] With this mindset, an on-line church is similar to a small group ministry or some

other outward-oriented service that appeals to people outside of organized religion. But Doug

Estes, in his book, *SimChurch: Being the Church in the Virtual World* disagrees. He resents

virtual churches being treated like second class communities and says that

> labelling virtual churches as supplements is like giving them the award for
> honourable mention or a gold star for perfect attendance. ... One thing virtual
> churches could use is good, healthy constructive dialogue with real-world
> churches – and not being looked down upon the way just about every new group
> of churches has been looked down upon through church history by more
> traditional forms of the church.[60]

Estes believes that the move toward on-line faith communities is just the latest in a

historic trend of innovation in the history of the church. In the same way the Christian

community of the first century moved from synagogues to house churches, Estes believes that

Christians in the twenty-first century will move from real-world churches to on-line churches.[61]

Predicting the future is a tricky business, however, and even though Estes' book is only

three years old now, it is already clear that the preferred future that he imagined is not quite

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[57] Jenkins, "Rituals and Pixels," 108.

[58] St. Pixels opened in 2007 as an on-line worship site with more than 1,500 registered members. By 2009 the worship gathering had migrated to a Facebook Application that you could sign up for. They continue to meet there to this day. See http://www.stpixels.com/wp/ and Jenkins, "Rituals and Pixels," 114.

[59] Campbell, *Exploring Religious Communities Online*, 161, 191.

[60] Estes, *SimChurch*, 40.

[61] Estes, *SimChurch*, 15.

coming to pass in the way he had expected. He observed the explosive growth of a virtual reality platform called Second Life in 2008 and 2009, and assumed it would continue to grow. Virtual churches in those environments were growing exponentially at the time and he expected this to continue. "As the virtual world becomes more and more actualized in the coming decade, more and more people will turn to it for everyday interactions including the fulfilment of their spiritual needs."[62] The reality is that this growth didn't continue. Population (the number of user accounts) in Second Life peaked in 2008 at over 2 million and have plateaued since. Monthly averages of active and casual users in 2011 were around 800,000.[63] Many on-line worship platforms have since migrated to Facebook in the form of Facebook apps. As of early 2012, most of the viable on-line worship environments are simply streamed versions of real-world churches and not predominantly virtual world faith communities. This brings to light one of the most significant weaknesses of on-line churches. On-line users are notoriously fickle and platforms and environments are constantly changing. It is very difficult to keep up, or to predict how things are going to continue to change in the virtual world.

One thing Estes definitely got right is the need for churches to engage the on-line world. Estes writes, "The virtual world is by far the largest unreached people group on the planet Earth." He quotes Simon Jenkins, of Church of Fools who says, "it's like someone has created a new town and no one has thought to build a church there. It's almost scandalous."[64] Identifying the on-line world as a potential place for evangelism is an essential twenty-first century practice. The research that we discussed in chapter one by Reginald Bibby underlines how many Digital Natives have no active ties to any existing church family. On-line church platforms are an

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[62] Estes, *SimChurch*, 27.
[63] Population Statistics have not been updated since the first quarter of 2011. They can be found at http://community.secondlife.com/t5/Featured-News/Q1-2011-Linden-Dollar-Economy-Metrics-Up-Users-and-Usage/ba-p/856693
[64] Estes, *SimChurch*, 29.

excellent way to reconnect to people who are searching, but the question remains, are on-line

faith communities actually churches?

Estes makes the same mistake McLuhan talked about when he said, "the medium is the

message." Whether it be Second Life, or Church of Fools, or Facebook apps, or a live video

streaming Java apps, the on-line platform mediates the spiritual encounter. It has a significant

impact on the nature of what is being experienced. To avoid being naive, an informed user must

ask, "what embedded values does this media have that I am being asked to blindly accept?"

LifeChurch, for example, cannot see through the computer monitor to determine who is

watching, so in order to evaluate the effectiveness of their broadcasts, due to the nature of the

media, they track how many IP connections are active.[65] Because of the nature of the interface,

an attender is therefore reduced to a connection.

Here again we see how our tools are at work on us: During Craig Groechel's first sermon

of 2008 at LifeChurch, he outlined some changes in direction and one of those changes was to

drop the notion of membership. LifeChurch no longer has members but instead encourages

people to become partners.[66] Because of the nature of the on-line interface, Groechel's, and

therefore LifeChurch's, imagination regarding its faith community had changed. Members at

LifeChurch are now conceived as partners, in part because of the nature of their fellowship. The

tool has altered their perception of their fellowship.

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[65] One could make a strong case that 'real-world' churches counting noses as a measure of impact is no better than counting active IP connections but that proves the point. Whether counting noses or counting IP addresses you need to be aware of the potential weaknesses of the media you are using.

[66] Groechell's message from Jan. 6, 2008 is available on their archive at http://www.lifechurch.tv/watch/archive/. One of the members of LifeChurch blogged about the sermon here: http://www.bigisthenewsmall.com/2008/01/07/lifechurchtv-gets-rid-of-church-members-no-longer-a-mega-church/

The question of whether or not a virtual church is a 'real' church can be addressed by looking at this notion of membership. Can a person truly belong to a group of people they have never met? Jenkins, relates a poignant example from his experience with the Church of Fools:

> In 2002, one of our members, whose alias on the boards was Miss Molly, was diagnosed with terminal lung cancer. She decided to share the last three months of her life with us, in a thread she posted called, "Fields of Gold," named after the song by Sting. "It will be a sort of diary," she said, "a place to post my musings, and a place where I will try to answer any questions you may have about this time in my life."
> The response from the community was amazing. The hospital where Miss Molly was being treated received so many bunches of flowers, cards and other gifts that the nursing staff asked her if she was a film star. She received practical and emotional support during those months, including a quilt which was put together by a team from pieces sent from all over the world. After three months, and almost 1,000 posts on the thread, Miss Molly died. This episode had a very powerful effect in strengthening the bonds of the community.[67]

It is obvious in this example how the on-line community of the Church of Fools served as the body of Christ for Miss Molly. Through her last few months this faith community was truly present to her. Through her suffering, the whole group was brought closer together, but what is key, however, is how the physical, "real-world" connections manifested themselves in these on-line responses.

There is something irreducible about the embodied experience of Christian community. The expressions of support that were shared with Miss Molly through the chat room interface and the emails that were sent were, of course, invaluable, but without Miss Molly informing the community through her "real-world" computer of her terminal illness, none of this would have happened. If she had suddenly fallen ill and had been unable to communicate her change in health status, there would have been no response from the on-line community.[68] The on-line

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[67] Jenkins, "Rituals and Pixels," 96.

[68] I was a member of an on-line sailing forum when another member, I will call Bill suddenly stopped posting. I didn't notice but another member who was closer to Bill did. It wasn't until he contacted Bill's wife that we learned the severity of his condition. He had been transferred to a hospice with terminal lung cancer. Without

experience of the community was invaluable to Miss Molly, but receiving flowers and visitors and well wishes in the real-world is what made this on-line experience meaningful. The virtual world community is real and it is of tremendous value, but the community experience of the virtual world is always derivative of a real-world community.

God Himself was not satisfied with a "virtual-world" experience of humanity. God came in the flesh (John 1:14) in the form of Jesus and through Him lived a physical life. The church as the community of faith is frequently described in the Scriptures as the body of Christ (Rom 12:4-8; 1 Cor 12:12-27; Eph 5:30; Col 1:24). This metaphor points to this irreducible aspect of Christian community: it is embodied. By way of analogy, Paul describes the church as the bride of Christ in Eph 5:25-27. He alludes to this image in 2 Cor 11:2 and John also describes the church as the bride of Christ in Rev 19:7-9 and 21:1-2. The metaphor is significant for we can certainly see that in physical terms you cannot have a "virtual marriage" in the Christian sense of the word. Marriage is embodied: it is physically consummated and it is practised as a life together. A husband and wife would have a poor relationship indeed if they were never physically together. One might even describe that relationship as dysfunctional if neither one was ever physically present with the other. A husband and wife can, of course, be separate from time to time. One could even imagine a husband and wife spending months, even years apart, but that would be the exception and not the rule.

It is not too far a stretch to suggest that for Paul's use of the metaphor to be valid, a church must also practice a congregational life that involves some kind of physical togetherness. If you were a partner with a church and participated fully with its on-line worship platform, but

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the "real-life" intervention of one of the members, the rest of us would have never known he was sick. Our expressions of concern and prayer were no doubt appreciated but I am sure the most treasured expression of community came when the forum's founder drove three hours across upstate New York to visit Bill in the hospice a few weeks before he died. On-line community is derivative of real-world community.

never physically met with anyone from this community, you would be missing an invaluable aspect of Christian life. Diversity in the Christian community is one of the traits that causes spiritual growth even when it sometimes causes discomfort. In chapter three, we talked about how homogenous community can inhibit the formation of healthy self identity. Drew adds,

> In an unfallen Paradise (where Adam enjoyed open communion with God and fear-free dominion over the animals) God never-the-less said, "It is not good for the man to be alone." Adam's naming of the animals only serves to emphasize his loneliness and paves the way for the first human friendship, when at last God brings to the man someone who is like him. He does not discover himself until Eve appears.[69]

When we are surrounded by opinions and attitudes that are identical to our own, we have difficulty learning where we end and the community begins. Estes himself admits that "while geography forces some degree of heterogeneity, the virtual world strongly encourages ideological homogeneity."[70] In homogeneous communities, like those that are typical in on-line communities, the feedback loop of similar opinions and attitudes tend to create communities that are increasingly more and more sectarian and extreme.[71] And yet it is through diversity that we "bear with one another" (Col 3:13) and learn to be patient with one another. The New Testament is clear that working out our differences produces character.[72] Proponents of on-line community often miss the value of awkward diversity that is common among embodied fellowships of believers. It is often in bearing with each other that we apprehend a clearer sense of self.

We are meant to worship and serve with one another on the basis of our common faith in Jesus Christ, not on our common preferences for worship style, or our shared enjoyment of a particular minister's oratory delivery. Rather, as Challies says,

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[69] Drew, *A Journey Worth Taking,* 91.
[70] Estes, *SimChurch,* 214.
[71] Lanier, *You Are Not a Gadget,* 119-20.
[72] See Rom 5:3-5; Jas 1:2-11.

we are to love as the Bible instructs us to – through real-life situations, in the real-world, from house to house, even in the laying down of our lives for one another. No mediated virtual church can do this. None can replace it, improve on it, or even provide the barest shadow of it. The mediated [on-line] community will span the limitation of space, but it must do so at the cost of immediacy, of true presence, of the truest manifestations of love.[73]

Digital Natives and Immigrants both need to practice using their digital devices for the purpose of fostering the embodied life, rather than replacing it.[74] What that means is seeing my Facebook account, or my mobile device, or my computer as a tool that leads *to* face-to-face interaction rather than *from* it. Rather than using your Facebook account to stalk your friends that you have not seen since Grade school, use it to set up times to have coffee and get reacquainted. John Dyer, puts it like this:

> technology is for the table. ... Everything we do with our tools – scheduling appointments on our phones, heating up meals in the microwave, reading updates from friends and family on social networks – should all be directed toward enriching the few precious face-to-face encounters we have in our busy world.[75]

This is a family value of the community of faith. In this way, tools can be redeemed. The goal is therefore not to simply limit my technology use (or reject it all together) but to deliberately choose its place and be aware of its effect on me and the community to which I belong.

For example, to the uninformed, it would appear that the Amish reject technology like the telephone in a deterministic way, as though the phone itself was evil. Diane Zimmerman-Umble, however, explains that rather than seeing technology as evil, they choose as a community to resist certain destructive patterns of life that they see as associated with a particular technology.[76]

> Instead of rejecting all use of the telephone, the Amish choose to resist how [it] ...interfere[s] with [their] valued patterns of family life by privatizing communication. The telephone is domesticated by becoming a communal rather

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[73] Challies, *The Next Story*, 109.
[74] Dyer, *From the Garden to the City*, 173.
[75] Dyer, *From the Garden to the City*, 173.
[76] Zimmerman-Umble, "The Amish and the Telephone," 183-94.

than an individual resource, phones being shared by a number of families and located in a central location, such as a phone being placed in a shed at the intersection of several farms. In this way they reconstruct technology by situating it in the community, thus allowing use while still affirming their values about maintaining distance from secular society.[77]

This approach to technology redeems it by choosing the space it will occupy rather than having the tool dictate the terms of its own use.

Conclusion

In this chapter we have attended to the new behaviours and new boundaries needed by Digital Natives in their spiritual formation and we explored these two tasks in relation to three new issues that confront Digital Natives.

The first issue addressed was the need for Digital Natives to protect themselves from what Powers calls "the screen crowd." The Internet followed in the tradition of the telegraph in breaking through the boundary between a person's inner and outer world. Natural boundaries of space and time used to keep us from being overwhelmed by the persistence of data and people. Now, however, we bring our distractions with us. Computer mediated communication breaks through this barrier and confronts us with the need to construct new limits to how available I am willing to be. Digital Natives and Digital Immigrants are at risk of being constantly available and constantly in touch. In order to cultivate healthy spiritual growth and identity as a person made in the image of God, we need to keep some distance between us and our tools. That involves the spiritual practice of fasting.

When I limit my consumption of something, whether it is electronic media or food, I am declaring to the world that I choose my engagement, rather than having it decided for me. Another practice that brings some distance is leaving a gap between yourself and your device by

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[77] Campbell, "Spiritualising the Internet," 4.

actively deciding when you will use your device and when you won't. Things like turning your

phone off during meals or leaving it behind when you take a walk help you to conceive of

yourself as separate from your phone. These will need to increasingly become the spiritual

practices of a twenty-first century Christian.

The second issue addressed was how our reading of the Bible is impacted when we read

it on a digital device. Digital Natives are much more likely to use a mobile phone or electronic

device when reading the Bible. Marshall McLuhan warned that the medium affects the message

and education research has shown that we naturally absorb and understand less when we have

the ability to distract ourselves with other forms of media. Using a digital device to read

anything at depth requires a significant amount of discipline. It might not seem important, but

reading a book on a digital device "loses the edges of the pages." The text stands in less relief

from the surrounding media world and it blends in with all the other digital noise. Our reading

of the word of God suffers when it is blurred into the background, so a devotional, reflective

reading of the Bible is made easier through the use of a paper copy of a book. That is not to say

that electronic Bibles are bad for you, they just are not as good as paper copies. In a pinch, a

Bible on your phone is a great resource, but not a replacement for a physical book. Digital

Natives should be encouraged to continue using a print version of the Bible whenever they can.

The third issue we dealt with is the media revolution of on-line virtual faith communities.

These come in two forms. Many larger "real-world" churches have on-line worship services that

can be accessed twenty-four hours a day, seven days a week. These web services supplement a

person's "real-world" membership in a church. There are even some who see themselves as

members of churches that they regularly worship with, but have never physically attended.

Another form of virtual church is the less common on-line community. These groups meet

through Facebook pages or other platforms for more than just worship. They study and learn together. They do life together, but rarely meet in the "real-world." These kinds of communities looked like they were going to be a huge part of Christendom in the West but have not grown as expected. The question is, "are these on-line communities real churches?" All on-line communities can trace the source of their spirit of community to some embodied "real-life" interaction. They all have actual computers in the real-world and when they are in crisis they are likely to have sent or received help through their real-world connections. Virtual community is derivative of real-world community. Jesus Christ embodied humanity, and Paul's most vivid metaphors for the church and for congregational life were the "body of Christ" and the, "bride of Christ."

There is something irreducible about physical presence when talking about spiritual formation and a Digital Native who is unwilling or unable to be physically present with others who belong to Christ will never be fully formed. They will always have a deficit in their spiritual development. That is not to say that virtual communities are not valid or valuable. They do however have a tendency to form homogeneous groups that do not force their members to deal with differences or practice the Fruit of the Spirit with each other. When faced with socially awkward situations, Digital Natives are at great risk of bailing out and moving on rather than doing the spiritual heavy lifting of serving people who are not like them. God intentionally seeks to bless us by placing us in places to serve. The church through its diversity helps each of us to develop our identity as servants of Jesus Christ.

The challenge is not to use technology less but to use it well. Our tools ought to lead us into embodied community. We need to be informed about the values that our tools have and we

need to deliberately choose whether we will adopt those values or not. This is a new spiritual

discipline that Digital Natives and Digital Immigrants alike both need to develop.

CONCLUSION

Reginald Bibby has recently published findings that suggest a significant change among teens and young adults is taking place among Evangelical and Mainline churches in Canada. While, in general, the percentage of teens and young adults who are regular attenders at worship services has remained the same for the past thirty years, the percentage of casual attenders is dropping. Teens and young adults who report never attending a worship service have more than doubled in the past thirty years. I have suggested that one explanation for this shift is related to the appearance of a radically different cultural group that some sociologists have called Digital Natives.

Digital Natives are those who have grown up since the advent of the Internet. Anyone born since the 1990s has never known a world that is not digitally connected. They have grown up using social media and computer mediated communication their whole lives. Those of us who are older also live in this same world but we have radically different media habits. Sociologists call this other group Digital Immigrants, for we have arrived in the twenty-first century with cultural practices from the "old country." Digital Immigrants have a way of speaking that is increasingly foreign in today's digital culture. They have the same tools and occupy the same space, but they use digital technology in very different ways.

The present challenge for the church is that the leadership in most churches is made up entirely of Digital Immigrants. Their different media habits have created a growing culture gap between teens, young adults and the existing leadership in most churches. This thesis suggests that this culture gap is what is causing the sudden drop in teens who are casual attenders in our churches today. Teens who are regular attenders grow up digital but also grow up learning how to function within the cultural space that is the church. They are not as put off by the

expectations or differences in language or media habits of their church families. In a very real way, they are bilingual and they function in both worlds with comfort. On the other hand, Digital Natives who are casual attenders, and especially those who never attend a worship service, run into this culture gap like a retaining wall and few are able to climb it. Without a Digital Native who is a regular attender to advocate for them, they are more likely to drop out of this increasingly foreign cultural space.

Digital Natives are growing up seeking authentic connection and community like every generation before them. Teens have always been thought of as different by the generation that preceded them, but Digital Natives are a different kind of different. What has changed is that they are seeking community and connection using radically different tools than the generation before them, and the difference in tools makes a big difference. In order to respond to this growing concern one needs to understand the role that digital media and digital tools play in creating this cultural divide. How should the leadership in churches in Canada respond to a whole generation of young people who are seeking identity, community, and a sense of spirituality outside the church?

In the twenty-first century we live in an increasingly mediated age. Our digital tools connect us to our friends, family, job, and leisure activities. Media scientists have been warning for years that the effect of electronic media on our culture is exceedingly complex. Our tools are involved in our understanding of what the world is like. They are not neutral channels through which information travels but rather they are an extension of us. Digital media extend or amplify the capacities of humanity. We use our tools in constructing meaning so when a media revolution like the Internet appears, the impact is ecological and not additive. A new tool changes how we use all the other tools in our lives. In less than twenty years the Internet has changed how we use

televisions, telephones, newspapers, radio, and personal music devices.[1] This one tool has changed everything, and since Digital Natives and Digital Immigrants tend to use social media, computer mediated communication and the Internet differently, they are becoming increasingly distinct cultural groups.

New media tools change our language by introducing new vocabulary and changing the meaning of existing words. For a Digital Native, community is increasingly becoming known as the group of people I am connected to. The distinction between information and knowledge is becoming increasingly blurred, and truth is becoming the same thing as consensus. When Digital Immigrant leadership addresses this culture gap by using Twitter in a church service to create a stream of conversation during a sermon, they address the gap in appearance only. The deeper practices of discipleship and spiritual formation need to be addressed for Digital Natives to grow to be formed in the image of Christ.

Social media tools have great potential for good within faith communities when they are understood fully. It is important to understand that technology is not inherently good, it is not inherently bad, and it is not morally neutral either. Rather, every technology embraces certain values and imposes them on its users. Believers need to theologically reflect through the task of correlation on each embedded value that a technology assumes, and decide which values they can embrace and which ones they cannot. It is reckless to use a new technology without reflecting on its embedded values.

Technology is not the result of the fall but it is made from materials that are subject to the curse of Genesis chapter three. As a result our tools have the capacity to enslave us and distract

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[1] And the change comes incredibly quickly. Mike Reynolds of Multichannel News reported that in 2011, one third of US households watch television primarily via the Internet. Over the 2011 Christmas season, 4% of US households purchased an Internet video media receiver. See http://www.multichannel.com/article/480725-Study_One_Third_of_U_S_Households_Watch_TV_Video_via_Internet.php

us from the cultural mandate we have received from God. Technology is a human activity, practised within community, using tools to transform God's creation for a practical purpose and while our participation in technology is not cursed, it is essential to understand that technology is made from stuff that is.

Extended use of social media and digital communication technology tends to numb and reduce the user's capacity to form an intact sense of identity. It starts with the brain. Clinical research shows that even casual use of technology can rewire the user's brain particularly at the highly formative pre-adolescent stage of brain development. Digital Natives are using social media platforms as identity workshops and some are becoming dependent on the constant feedback of their "invisible entourage." In extreme cases, this results in people who are physically adults with a "protean" sense of self. Everyone, Digital Natives and Digital Immigrants alike, is in danger of becoming addicted to constant connectivity and the need for constant feedback from the digital cloud.

Christian community can bring hope to the world by embracing cultural practices in their midst that help people to avoid the dehumanizing extremes of digital slavery that are becoming increasing common in youth culture. Digital Immigrants cannot blindly assume that the spiritual practices and behaviours that helped to form them more than thirty years ago will also be effective in forming Digital Natives, too. In order to bridge the cultural gap and be a blessing to new believers who are Digital Natives, Christian communities need to cultivate new practices that address the effects of our digital tools.

A healthy Christian community in the twenty-first century will train Digital Natives and Immigrants to protect themselves from overexposure to the "screen crowd." It used to be that some quiet time spent at home, or spent in a library, or an office would provide you with some

time to reflect on your thoughts, but with the use of mobile technology, the constant buzz of the crowd is as close as any computer or phone. Many Digital Natives are unwilling to ever be parted from their phones and this leaves them constantly in the middle of the digital buzz of the crowd. The natural boundaries of space and time used to keep us from being overwhelmed by the persistence of data and people, but now we bring our distractions with us. Computer mediated communication breaks through this barrier and confronts us with the need to construct new limits to how available we are willing to be. There is a hidden cost to being constantly available and constantly in touch. In order to cultivate healthy spiritual growth and an identity as a person made in the image of God, we need to keep some distance between us and our tools. One way to provide that space is the spiritual practice of fasting. A day, or even just a part of the day, where one is separate from their mobile devices allows time for reflection, time for the brain to subconsciously process, and space for the Holy Spirit to speak. Habits like turning your phone off during meals or leaving it behind when you take a walk help you to conceive of yourself separate from your phone. As a community of faith we need to see digital fasts like a spiritual discipline.

Another spiritually healthy practice is to attend more carefully to how we read the Bible. Digital Natives are much more likely to use a mobile phone or electronic device when reading the Bible than Digital Immigrants. McLuhan's infamous warning, from fifty years ago, is confirmed by recent education research, which has shown that there is a significant risk that we may absorb and understand less when we read from digital devices. Mobile phones are designed to be interruption devices; by their nature they are distracting. Using a digital device to read anything at depth requires a significant amount of discipline. It remains to be seen whether Digital Natives will successfully acquire this skill. Whether you are a Digital Native or a Digital

Immigrant, reading from digital pages represents a larger cognitive load for the reader and requires more working memory, making recall, comprehension, and understanding more difficult. It might not seem important but reading a book on a digital device "loses the edges of the pages," and, as a result, the text stands in less relief from the surrounding media world; it blends in with all the other digital noise.

Our reading of the word of God suffers when it is blurred into the background, so a devotional, reflective reading of the Bible is made easier through the use of a paper copy. That is not to say that electronic Bibles are bad for you, they just are not as easily read as paper copies. In a pinch, a Bible on your phone is a great resource, but not a replacement for a physical book. For hundreds of years the church and parachurch organizations like the Gideons and the American Bible Society have struggled to make Bibles available. In the twenty-first century, with the propagation of digital reading devices, availability is becoming less and less of a problem. The bigger problem now is engagement. Billions of people now have access to Bibles, they can read them, but the question is they engaging deeply with them? Spiritual formation is the key and reading the Bible at depth is the only way that can take place. Research into this field is inconclusive, however, it may be a healthy spiritual practice to encourage new Christians (whether they are Digital Natives or Digital Immigrants) to read reflectively from a printed copy of the Bible, especially for the purpose of prayer and meditation.

Digital media has presented new opportunities to the church that would have been impossible fifty years ago. This thesis has not considered the host of ways that technology has assisted the spiritual formation of Christians in recent history. Members of the church I serve are able to download sermons onto mobile devices and listen to them later or review material I have

preached about before.[2] People can take advantage of live streamed worship services from all

over the world. Internet resources have made ancient documents like the *Codex Sinaiticus*, the

Dead Sea Scrolls and a host of other resources available to anyone with a computer. Even a web

service like Google Books is invaluable in research for finding quotes or specific phrases in

books that Google has digitally downloaded.[3] It is a brave new world indeed.

At the beginning of the twenty-first century, virtual realities appeared to be taking over

the Internet and many pundits predicted that Internet users would soon spend most of their lives

in these worlds.[4] This media revolution also pointed to an explosion in the number of on-line

virtual faith communities. Despite expectations, the expansion of virtual churches has not

materialized in the way it was expected to – and perhaps it should have! There are faith

communities who meet through Facebook pages or other platforms for worship, Bible study,

accountability, missions and service, but these expressions of the church are not common. What

is more common is an on-line supplement to a "real-world" church, which amounts to a streamed

worship service, sometimes with interactive computer mediated communication through chat

windows or SMS text service.

Whether or not a faith community is real or virtual, all on-line churches can trace the

source of their spirit of community to some embodied "real-life" interaction. They all have

actual computers in the real-world and when they are in crisis they are likely to have sent or

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[2] Another example of the blessings that come with new technology is a new Christian at my church who drives a truck for a living. He shared with me that, on an eight hour drive he listens to four or five hours of sermons from various different speakers. In one year he listened to the Old and New Testament twice. None of this would have been possible without the Internet and his iPod.

[3] I have found this and Amazon's book search capacity invaluable in my research for this thesis.

[4] Discussion of virtual reality is now second to the latest buzz surrounding augmented reality. In this field of computer technology the aim is not simply to simulate entire aspects of reality but rather to add computer function to existing reality. Google announced on February 22, 2012 a plan to develop a pair of glasses that will project a computer display directly onto the retinal surface of the eye. The screen display will be modified by movements of the wearer's head as well as hand gestures. See http://tech.ca.msn.com/augmented-reality%e2%80%99s-potential-uses

received help through their real-world connections. It is vital for Digital Natives and Immigrants to understand that virtual community is derivative of real-world community and that the two work together. The goal is not to replace one with the other. One cannot find full spiritual formation without some aspect of embodied fellowship and on the flip side, virtual reality brings a brand new richness to spiritual community. Both are vital! I am not saying that virtual churches are not valid, but rather virtual churches that do not understand their grounding in the real-world are not healthy, and real world churches that demonize virtual churches have squandered a great opportunity. Jesus Christ embodied humanity, and the church of Jesus Christ has one defining characteristic. It is not a church building, or a kids program, or a contemporary worship service. The one thing the church must have is the presence of Jesus Christ in their midst

There will be more technological innovations in our future, some that we probably cannot even imagine at this time. Whatever they may be, it is important to highlight that there is something irreducible about physical presence when we are talking about spiritual formation. A disciple of Jesus Christ, whether they are a Digital Native or a Digital Immigrant, who is unwilling or unable to be physically present with others who belong to Christ will never be fully formed. They will always have a deficit in their spiritual development. Virtual communities tend to form homogeneous groups that do not encourage their members to bear with each other. When faced with socially awkward situations, Digital Natives are at grave risk of bailing out rather than doing the spiritual heavy lifting of bearing with people who are not like them. God intentionally seeks to bless us by placing us in places to serve and the church develops its identity through its diversity.

In general the challenge is not to use technology less, but to use it well, to reflectively consider the assumptions it makes about the world, and what it asks of us, the user. Our tools ought to lead us into embodied community. We need to be informed about the values that our tools have and we need to deliberately choose whether we will adopt those values or not. This is a new spiritual discipline that Digital Natives and Digital Immigrants alike both need to develop and it needs to be practised as an exercise of communal discernment. Churches need to gather, and through the practice of Theological Reflection, ask the question, "what way is the Holy Spirit directing us to use this particular piece of technology, whether it be video projectors, song lyrics on the screen, twitter feeds during worship, email bulletins, or streaming video of the weekly worship service?"

In 2 John we catch a glimpse of the kind of discernment the church needs to exercise. John warned against playing host to false teachers and in conclusion John writes, "I have much to write to you but I do not want to use paper and ink. Instead I hope to visit you and talk with you face to face so that our joy may be complete" (2 John 12). Papyrus and ink were by no means a new technology, but here John gives us evidence that he is thinking critically about the strengths and weaknesses of the medium he has chosen to use to communicate.

John discerns the technology of writing in light of its theological impact. He clearly recognizes the shortcomings of his letter, for he cannot write all that he wants to say about false teachers and the practice of hospitality. There is more that he wants to share than is written in this brief letter, but rather than saying nothing, John writes this letter in the hope of a richer interaction on the subject. John uses the modern technology of his day, with an eye to its effects,

for the purpose of preparing for an embodied interaction for spiritual benefit: "so that our joy may be complete."[5] In light of all we have discussed, what spiritual wisdom should be received?

Marshall McLuhan's famous axiom is actually only part of the complete phrase. Popular culture now demonstrates on a daily basis how this first part of the statement functions. The second part is only now becoming understood. Shared first in his book, *Understanding Media,* the full statement is "the medium is the message, *and the user is the content.*" A recurring on-line myth illustrates this idea perfectly.[6]

The myth is some variation on the idea that Facebook is going to begin charging its users a user fee to use the Facebook web platform. The myth goes on to say that unless you want to pay to use Facebook you need to propagate this message, or sign a petition, or call a congressman, or something like that. There is, of course, no way that Facebook is ever going to charge for the use of its platform because Facebook's product is not access to the website. Facebook's product is its users. You do not use Facebook, but rather, Facebook uses you.[7]

In 2011, Facebook generated $3.7 billion dollars of revenue and reported a profit of more than $1 billion dollars. By the end of 2011, it averaged about 480 million daily users.[8] This works out to a *per capita* value of $4.39 per user. Facebook is not going to charge you to use the website because your attention is worth more to Facebook than you would likely be willing to pay. Facebook drives massive amounts of Internet traffic to its advertisers and they in turn pay

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[5] In 2 John 12, John alludes to John 3:29 where John the Baptist considers the anticipated fellowship of Jesus Christ and his bride, the church. Embodied fellowship is not always possible but it remains the church's ultimate desire. The church desires unity and peaceful fellowship with all believers, anticipating the reunion of the whole church at the return of Christ.

[6] McLuhan, *Understanding Media,* 23. This statement is discussed at length in Robert Logan's book, *Understanding New Media: Extending Marshall McLuhan.* See p. 24.

[7] A clever comic satirizing Facebook shows two pigs talking to each other outside of a barn. One pig says to the other, "Yeah, it's great! Not only is the barn provided without charge, we can eat for free!" Below the picture the caption reads: "Facebook: If you are not paying for it, you are not a customer. You are the product."

[8] Yukselir, "Facebook Revealed," n.p.

Facebook millions of dollars for access to the highly specialized consumer data that Facebook users willingly post on their own Facebook pages.

The same can be said for Google. Google does not charge for the use of its search engine because a small but significant percentage of its users click on the specially targeted ads in the margins of the page. Advertisers will pay big money to have access to this specially streamed market. An ad promoting the services of a paralegal is bound to be more successful when it appears in the margin of a search query that contains the word "divorce," and since Google keeps track of your location, and your recent search requests, they can offer a remarkably specific market to its advertisers.

The Internet is not all bad, but it is far more influential than we realize. Without establishing healthy limits on how we use computer mediated communication, we are in danger of being consumed by our own creation. It is highly significant that the most sensitive users of social media, the ones most likely to be harmed by overuse, are the ones that use it most vigorously. Not every preteen uses Facebook obsessively, but every teen that does is being radically influenced by it. Internet addiction was not part of the Diagnostic and Statistical Manual of Mental Disorders until 2009 so research into this field has only just begun; however, faith communities would be justified in assuming that each church likely has a number of young people associated with them in their wider community that have difficulty establishing healthy boundaries with their use of technology. But even if this is true, why do the technology habits of Digital Natives matter? After all, what does a person's social media habits have to do with them being saved?

Without cultivating a healthy distance between ourselves and our digital devices, we develop, as Sherry Turkle calls it, "a tethered self." We become dependent on the feedback we

receive from various social media outlets like Facebook, Twitter, and Pinterest. Turkle warns

that we are at risk of failing to define who we are. A real, actualized sense of self can only be

realized when we are separated from the avenue of performance. Who are we when we are

without our devices? When our identity is formed by the word of God, we become who God says

we are. We realize our value in being made in the image of God; but when our identity is

formed by the continuous stream of digital feedback, who are we if someone pulls the plug on

us? Without feedback we are at great risk of losing any sense of who we are.[9]

Discipleship and spiritual formation are all about identity formation. When the apostle

Paul asks the church in Rome, "shall we go on sinning so that grace may increase?" (Rom 6:1),

the answer is no, but Paul does not appeal to the destructiveness of sin, nor does he appeal to the

limits of God's patience. Paul instead appeals to identity: "We are those who have died to sin;

how can we live in it any longer?" (Rom 6:2). When Paul confronted the backsliding churches

of Galatia, he does not express surprise about their lack of church attendance, or their poor

donation levels, or their poor media consumption habits. Paul writes, "I am astonished that you

are so quickly deserting the one who called you to live in the grace of Christ" (Gal 1:6). The

crisis in Galatia was not just the product of poorer behaviour but, instead, the rejection of a

personal affiliation with Jesus Christ. Later Paul models this identity, saying, "I have been

crucified with Christ and I no longer live, but Christ lives in me. The life I now live in the body, I

live by faith in the Son of God, who loved me and gave himself for me" (Gal 2:20).

Discipleship is all about the formation of a Christ-centered identity, for Jesus can only be

Lord of your real self. A Mediated version of you cannot have a lord. If we remain a "protean

self," we can never have anything but ourselves as lords. In order to develop as a servant of

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[9] This brings to mind the ancient riddle, "If a Digital Native falls in the forest, and no one is there to tweet it, did it actually happen?"

Jesus we must unplug so that we can isolate the distinction between ourselves and our mediated selves. That is why social media habits matter to the question of how to bridge the cultural gap between Digital Natives and Digital Immigrants.

A person (Digital Native or Digital Immigrant) who has a highly mediated view of the world and is obsessed with themselves runs the risk of trying to use Jesus like what Heinz Kohut called a *selfobject* or a "relational artifact."[10] We cannot just add Jesus to this cultural moment and call it evangelism. More than ever, evangelism is about proclaiming a new order.[11] Jesus must subvert the powers of the digital world. Evangelism with the Digital Native world must always address, at some level, where our identity lies. Jesus Christ is either Lord of all or He is not Lord at all.

As I mentioned in the Introduction, Paul Tillich believed that the disillusionment that followed World War I was a cultural crisis that Christianity was called to respond to. He believed this crisis required "a re-evaluation of the tasks and nature of theological discourse."[12] Tillich believed that the existential and moral questions of every age were the subject matter that Christian theologians of that time were supposed to address. This thesis concludes similarly that the issues raised by the rapid advances of social media technology require a re-evaluation of the tasks and nature of theological discourse in the twenty-first century. The Holy Spirit is active within this challenge and seeks to bring new life into the church through our re-evaluation of our community practices. Our struggle to address the needs of the Digital Native Generation may end up being a blessing for Digital Natives and Digital Immigrants alike.

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[10] A *selfobject* or relational artifact is a spare part, used to confirm preconceived notions of self. See Turkle, *Alone Together*, 56.

[11] The Greek word for evangelism, (*euangelion*) is military term used to describe the news that would be spread when a decisive military victory had been one. To evangelize is to announce a regime change.

[12] Graham, et al., *Theological Reflection: Methods*, 156.

Social media causes users to redefine what is meant by the word "community," and it blurs the lines by which identity was traditionally understood. In a song titled "Obsolete," recording artist and theologian Sara Groves asks,

> And I don't know where we are;
> Are we passing through these wires?
> Are we walking through the streets,
> Of invisible empires?[13]

Groves asks the questions of a Digital Immigrant. Our identities – even those of us who arrived in the digital age with what we thought were intact identities – are they lost in the digital buzz, passing through the wires? Or are they lost to invisible empires? Nobody talks about Google and Facebook as empires, but they have all the markings of the most powerful forces in our world. Google and Facebook are, after all, eager to help you form your identity, made in their own image.

Google's official mission statement is to "organize the world's information and make it universally accessible and useful."[14] The scope of this vision is global and the momentum behind it seems almost unstoppable. Google has secretly let it be known that it will not be satisfied until it stores one hundred percent of all user data.[15] Part of that master plan involves scanning every book ever published and making it available to be purchased, searched, and discovered on-line.[16] The project began secretly in 2002, but when it went public in the fall of 2004, a dozen of the largest trade and academic publishers signed on as Google's partners. Not everyone was happy with the project, however, for Google was scanning not just old books that were in the public domain but also new publications that were covered by existing copyright legislation. The Authors Guild and the Association of American Publishers both filled lawsuits in 2005, but three

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[13] Groves, "Obsolete." N.p.
[14] Available on-line at: http://www.google.com/about/company/.
[15] Quoted in Carr, *The Shallows,* 160.
[16] Toobin, "Google's Moon Shot," n.p.

years later they backed down and everyone settled out of court. All the while, Google continued to scan books and make them available on the Internet.[17] The settlement gives Google a monopoly on searching capacity of all this data and copyright rights to any orphan books (books whose copyright owners are unknown or can't be found).[18] In addition to these achievements, Google is working on a translation program that can translate between sixty different languages. Google is exploring operating systems on mobile phones (Android), their own web browser (Chrome), and hardware devices, including a set of glasses that can project a computer display directly onto your retinal surface.

Facebook is equally ambitious. When considered on its own, Facebook has a daily population that would make it the third most populous nation in the world – behind only China and India. Facebook CEO Mark Zuckerberg bragged that "Facebook has the largest photo collection in the world and it makes more news in a single day than any other media outlet has in its entire existence.[19]

The church finds itself in a place of diminishing influence and power in Western culture; Christendom is over. International political power continues to fluctuate but corporate entities like Facebook and Google are bigger than some countries and will have a far bigger impact on the church in the twenty-first century than any nation state will.

Perhaps in God's providence, He is preparing the church of the twenty-first century for this new world by teaching the church what it really meant to be "the body of Christ" and, "the bride of Christ." Perhaps in re-evaluating the practice of placing membership with a church we will realize that it has been a way of thinking that was not very helpful. We do not place

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[17] Carr, *The Shallows*, 160-62. According to Pariser, *The Filter Bubble*, 201, as of December 2010 Google had scanned 5.3 million books spanning over five hundred years in over sixty languages.

[18] Carr, *The Shallows*, 163.

[19] Pariser, *The Filter Bubble*, 37.

membership in our physical families. We are born into them. We enter them through covenant.

After all, it is the Holy Spirit who adds us to the body of Christ (Acts 2:47) and not we ourselves.

Digital Natives have a natural sense of ease regarding ambiguity, which is exceedingly

valuable in the practice of theological reflection. Those of us who are very clear of our place as

Digital Immigrants struggle to live in the tension of two seemingly divergent viewpoints.

Perhaps Digital Natives are God's gracious gift to the church for times such as these. Author

Francis Chan writes,

> There is a new generation rising up. Young adults are studying the Bible without missing the obvious. They see how shallow methodology is incongruent with the Jesus of Scripture who asked everything of his followers. They are bored with Sunday morning productions and long to experience the Holy Spirit. They need to be challenged with the awesome responsibility of praying for, baptizing, and making disciples of their acquaintances. They need to be reminded of the Spirit who supernaturally empowers them for this task.
>
> The days of merely bringing our friends to an event so the pastor can save and disciple them needs to end. New churches must be formed where all believers are expected to do the work of evangelism and discipleship. This generation sees the potency of a church where pastors equip and shepherd disciple-makers rather than service-attenders.[20]

To re-evaluate the tasks and nature of theological discourse is an uncomfortable

enterprise but the need to re-evaluate could hardly become clearer. Social media habits are not

the only reason teens and young adults appear to be leaving churches in droves. Too often

churches are holding tightly to answers to questions that people are no longer asking. Like the

Rata vine and the Rimu tree, we need each other in order to flourish in God's preferred future.

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[20] Kinnaman, *You Lost Me,* 125.

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