Article
Religion in the Digital Age: An Irreversible Process

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Abstract: Digital technology is fundamentally changing what it means to be human, in particular what it means to be a religious or spiritual human being, as it becomes an "irreversible" process. Indeed, the process is having a seismic impact on the religious and spiritual lives of "digital natives", who have never known a world without the Internet. This paper will seek to determine, by way of the Digital Theology method put forward by Sutinen and Cooper, if the religious-disaffiliation trend among younger populations is connected to the digitalization of society, either causally or correlationally, and what, if anything, religious leaders and faith communities can do about it. Research on the effects of high social media usage will be given special attention, in order to highlight the double-edged nature of digital technology.

Keywords: digital theology; digital natives; existential opportunity and threat; irreversible commitment; religious disaffiliation; social media

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> Nothing vast enters the life of mortals without a curse.
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> —Sophocles

1. Introduction

In 1976, more than a decade before the advent of the World Wide Web and the age of the Internet, the famed MIT computer scientist and artificial intelligence (AI) researcher, Joseph Weizenbaum, had noted the possibility if not probability that in the future we would reach the point of no return with the development of computer technology. With extraordinary prescience, the extent to which he himself may not have fully understood at the time, Weizenbaum (1976) would introduce the idea of "irreversibility" into the discussion about our relationship with computers. As he wrote in his seminal book, *Computer power and human reason: From judgment to calculation*, "Some human actions, the introduction of computers into some complex human activities, may constitute an irreversible commitment" (1976, p. 28). Half a century later, the "irreversible commitment" to technology that Weizenbaum had in mind has already become a fait accompli, which is no time at all when viewed through an evolutionary lens. Our "commitment" to digital technology has reached nothing short of a critical-mass dependency, so that even if we wanted to take a "pause" from any further development and usage, even if we wanted to "hit the brakes", our economy, along with our society, would collapse overnight (Harari 2017, p. 51). For example, the global financial markets are increasingly driven by digital algorithms; exponential technology has changed the face of healthcare and medicine; commercial aircraft, big and small, are guided by sophisticated computer systems; regional and national power grids are reliant on AI for maintenance and security; and so on, just to name a few. On an individual level, we are more reliant than ever on our smartphones and digital voice assistants, leading the theologian, Ilia Delio (2008) to conclude that even if we are not yet literal cyborgs, we are at the very least, through our active participation in a digital culture, "metaphoric cyborgs" (p. 162). To that, we could also add the powerful digital tool of social media, which we will be doing later in this paper, increasingly central to the study of religion, theology, and spirituality in a digital world. Indeed, the digital

revolution has even prompted Delio (2008) to argue that the integration of computer technology in human life has already reached such a degree that "we must consider the possibility of being techno-sapiens" (p. 13). This may, in fact, sound a bit hyperbolic to the casual observer of digital technology, until we begin to grasp the unprecedented pace and scope of the digital transformation. For when we encounter something as unprecedented as artificial intelligence (AI), "we automatically interpret it through the lenses of familiar categories, thereby rendering invisible that which is unprecedented" (Zuboff 2020, p. 12).

What is important to keep in mind is the rapid advance and proliferation of digital technology, in only a matter of a few decades, which lends considerable support to Weizenbaum's irreversibility hypothesis. But as far as we have come in the development of digital technology, and we have come a long way in a relatively brief period of time, it is worth remembering that we are still in the early stages. We have not, in other words, seen anything yet, compared to what is coming in future years and decades. Elon Musk has famously used the example of the early and *very* primitive video game, Pong, to illustrate this point: "40 years ago, we had Pong, two rectangles and a dot", but today, "40 years later, we have photorealistic 3D simulations with millions of people playing simultaneously and it's getting better every year" (as cited in Kapoor 2019). To repeat, digital technology is getting better and better every year, and as such is "moving at a far faster rate than most of us can grasp" (Harari 2017, p. 50). Musk adds, "Soon we'll have virtual reality and augmented reality, and if you assume any rate of improvement at all, the games will become indistinguishable from reality" (as cited in Kapoor 2019). The same can be said of social media, as it gives way in its current shape and form to a more immersive, interactive, and interconnected social-networking experience within the emerging metaverse, with virtual reality becoming more indistinguishable from the so-called "real world".

The implications for human spirituality are staggering, which we can gather from the very beginning of Wildman and Stockly's book, *Spirit tech* (2021). It opens by quoting the robotics engineer, Mikey Siegel: "There is a depth to the potential of these technologies that is rarely addressed . . . What if the deepest aspects of human experience, which are often only accessible through twenty thousand hours meditating in a cave . . . , are all of a sudden accessible at the push of a button" (p. 1). This is hardly hyperbole, given that the development of enhancement technologies is already well underway, for example with cognitive augmentation via brain–computer interfaces (BCIs), as well as the genome-editing advances with CRISPR. It has led Buttrey et al. (2022) to suggest that "as enhancement technologies increase, we will be able to make ourselves stronger, calmer, able to think more quickly and sharply, maybe even have more intense and transformative spiritual experiences, and possibly become more virtuous with the help of biomedical moral enhancements (BME)".

In any case, whether it be the smartphone, digital assistants, video games, or, on a much larger scale, financial markets, transportation, energy security, biomedicine, and/or cognitive enhancement, computer technology has now become, to use Weizenbaum's (1976) word, "indispensable" to human society. "The computer", he writes, "becomes an indispensable component of any structure once it is so thoroughly integrated with the structure, so enmeshed in various vital substructures, that it can no longer be factored out without fatally impairing the whole structure". He adds:

> It is not true that the American banking system or the stock and commodity markets or the great manufacturing enterprises would have collapsed had the computer not come along "just in time". It is true that the specific way in which these systems actually developed in the past two decades, and are still developing, would have been impossible without the computer. It is true that, were all the computers to suddenly disappear, much of the modern industrialized and militarized world would be thrown into great confusion and possibly utter chaos. The computer was not a prerequisite to the survival of modern society in the post-war period and beyond; its enthusiastic, uncritical embrace by the most "progressive" elements of American government, business, and industry quickly

made it a resource essential to society's survival *in the form* that the computer itself had been instrumental in shaping. (pp. 28–29)

2. The Emerging Field of Digital Theology

The remainder of the paper will focus on the impact of digital technology on lived experience, including religious and spiritual experience, through the lens of a fairly recent research modality, namely Digital Theology. I will begin with an overview of the Digital-Theology method put forward by Sutinen and Cooper (2021), followed by a discussion of the double-edged nature of digital technologies, giving special attention to the powerful influence of social media, and concluding with a focus on technology's impact on religious and spiritual preferences, in particular those of digital natives. If digital technology has in fact become an indispensable component of human life, becoming thoroughly integrated into society as a whole and therefore enmeshed in various vital structures and substructures, then it follows that the enmeshment would also extend into the world of religion. For example, as Campbell and Tsuria (2022) have found, "the interdisciplinary study of religion and the Internet highlights the growing recognition that digital media have become embedded in our everyday lives and a common platform for spiritual engagement" (p. 7). Or, as Sutinen and Cooper have put it, in their important book, *Digital Theology: A computer science perspective*, "the proliferation of information technology over the past thirty years has driven fast-paced change throughout every aspect of society—the ways in which we work, learn, socialize, date, interact with family and engage in acts of worship have all adapted to embrace a new technology" (p. 1). Note the authors' careful and precise choice of words: the dramatic advance of digital and information technology has driven *fast-paced change* throughout *every* aspect of society, including the way we engage in acts of worship. This, of course, would include more traditional forms of religious practice and worship, as well as the spiritual practices of those not religiously affiliated, the so-called "religious nones" who famously identify as "spiritual but not religious (SBNR)". In either case, digital technology has become an indispensable component of our religious and/or spiritual lives, more thoroughly integrated with and enmeshed in our practices. And yet, "while the role of technology in most walks of life has been well documented, the role of technology in the expression of faith and, conversely, the role of faith in technology, have thus far received surprisingly little discourse" (Sutinen and Cooper 2021, p. 1).

This is more than a little surprising, when we stop to consider how dependent religion was already becoming on technology in the years leading up to 2020, and how much more dependent it has become as a result of the COVID-19 pandemic. In a 2018 book, I addressed the issue of *Pastoral and spiritual care in a digital age*, followed by, in a 2020 article, the issue of "Religious and spiritual experience in the digital age", noting that pastoral and spiritual care providers are now dealing with evolutionary forces of an unprecedented nature. In his review of the 2018 book, David Hogue (2020) had remarked that it "entered an arena where few pastoral theologians have feared to tread", and as such "it is hoped that more pastoral theologians will follow" (pp. 151–52). It is a curious thing that the role of technology in the expression of religious faith, as well as in the field of pastoral theology and the practice of spiritual care, has received such little discourse, when it has become nothing less than a game-changer. Nevertheless, Hogue (2020) reminds us, "pastoral theologians and practitioners who work intimately with suffering persons are in a unique position to make critical assessments of the risks and potentials [of technology] and provide guidance oriented toward healing and wholeness" (p. 151).

There can be no doubt that digital technology is here to stay, even in the context of religious faith communities, whether we want to talk about it or not. It has become so integrated into the fabric of society, so enmeshed in the various substructures of daily living, that it is even now an indispensable and irreversible commitment across the board. And, its growing power and reach have only been extended that much more in the wake of the pandemic, as faith communities make greater use of the digital technology resources at their disposal. As Heidi Campbell (2021) has observed, "religious leaders who had

been technologically resistant in early 2020 have had to rethink their critiques of technology; indeed, many have had to embrace it for their survival". For example, the idea of livestreaming Sunday worship services was not even on the radar of many religious faith communities at the beginning of 2020, but months later had become commonplace via Zoom. Three years later, after most churches have resumed in-person worship, many have decided to continue offering a livestreaming option, as well as a recording of the service posted on YouTube.

"The COVID pandemic which began in 2020", writes David Wilkinson (2021) in the foreword to the book, *Digital Theology*, "has changed our view of the world in many ways", which is something of an understatement. He urges religious leaders to be mindful of the new terrain:

> Broadcasting of services on the web became the norm rather than the preserve of mega churches. Small groups no longer met over tea and biscuits in the living room of a house but over Zoom and the constant refrain of "you are on mute". Pastoral conversations were offered by church leaders on digital platforms and the guardians of faith and order had to consider whether communion could be done online. These questions of mission, liturgy, community, and discipleship have been talked about for over a couple of decades by digital enthusiasts and by those who have been excluded from church life on grounds of accessibility. But for many in the church these questions were not seen to be central to our understanding of the mission of God in the world. (p. xv)

Wilkinson (2021) encourages religious leaders and spiritual care providers not to "sleep walk" into the future, because we have an aversion to digital technology, because we are afraid of the advances of AI, and/or because we hope that God will somehow, someway intervene to steer us in the right direction. Put another way, now is not the time for us to "look away", for we are, in the words of the MIT physicist, Max Tegmark (2018), "the guardians of the future of life now as we shape the age of AI" (p. 335). Tegmark's comment, coming from a scientist, almost sounds theological, *is* in many ways a theological statement. How much more is his appeal to be guardians of the future, primarily intended for the scientific community and humankind in general, applicable to religious leaders and faith communities who worship and serve a God of the future? There is obviously an urgent need for more theological reflection and discourse vis à vis digital technologies, and how they are changing everything, including what it means to be human and what it means to be a person of religious faith. Precisely because we still have some choice regarding how we will use the current and emergent technologies, "we had better understand what is happening and make up our minds about it before it makes up our minds for us" (Harari 2017, p. 55).

For pastoral theologians, religious leaders, and faith communities, this presupposes intentional theological reflection and discussion, which, as Sutinen and Cooper (2021) have noted, have thus far been in fairly short supply. Fortunately, there is some hope that this might be starting to change, thanks in large part to the new and emerging field of Digital Theology, which is gaining momentum by "exploring the complex and rapidly evolving relationship between the fields of technology and theology" (Sutinen and Cooper 2021, p. 1). Digital Theology is grounded in the foundational work of Paul Tillich (1973), specifically his method of correlation, "in which religious and theological knowledge and experience is held in dialectical and dialogical tension with the findings of science" (Bingaman 2018, p. xi). To Tillich's correlational method, I would also invite digital theologians to ground their important work in Ian Barbour's (1997) approach to science and religion, which intentionally goes beyond a healthy *dialogue* between two very different conversation partners, toward a more robust *integration* of scientific knowledge and findings into our theological reflection and discourse. Barbour (1997), in his groundbreaking *Religion and science: Historical and contemporary issues,* has stated that it is important for religion to be "open to an extension of what are taken to be the boundaries of acceptable science and religion and to the possibility of new paradigms that are more inclusive" (p. 98).

But what is Digital Theology, and what are its defining characteristics? There is of course some overlap with its predecessor, digital religion; there are also some notable differences. "While digital religion explores the integration of technology within the phenomenon of religion, the perspective of Digital Theology is that of a given faith and its intellectual conceptualization as digital representation" (Sutinen and Cooper 2021, p. 1). The "given faith" could be any faith tradition, although in the case of Sutinen and Cooper (2021), their focus is on Christian theology and the Christian faith tradition. More specifically, their view of Digital Theology "focuses on expression of faith, as do the classic fields of Christian theology: exegetics, systematic theology, church history, and practical theology when they explore and analyze the sources, methods, trends, and practices of the intellectual exercise of expressing and conveying faith as various forms of information" (Sutinen and Cooper 2021, p. 1). The interrelatedness between the expression of faith and the classic fields of Christian theology, "between faith as spiritual belief and its intellectual, tangible, expression as creed, doctrine, or concrete behavior forms the basis for the dialogue of theology and computer science applied in IT, as Digital Theology" (Sutinen and Cooper 2021, p. 1).

This is not to suggest that the authors' approach is exclusively or even primarily theology-driven, as we might assume from the title of their book, *Digital Theology*, which is also the name of the emerging field itself. But the subtitle of the book, *A computer science perspective*, is most telling, and lets us know ahead of time that a central focus of their inquiry will be the application and use of the powerful digital technologies that are at the disposal of clergy, faith communities, and anyone else in today's world who identifies as religious or even "spiritual but not religious". This should not come as a surprise, as both authors are in fact computer scientists. They write:

> Thus far, the discussion and debate surrounding Digital Theology has tended to be theology led, with reflections on the applications and uses of technology in faith communities being framed from a theological perspective. The field of computer science has yet to offer a robust response to this discourse and, therefore, the unique perspectives which computer scientists can bring to this fascinating topic have so far not reached the mainstream. This book seeks to . . . present a discussion on Digital Theology from a computer science, or more extensively computing, perspective—by exploring what the field might encompass, the types of problems the field might address and the approaches which the field might take, all through the lens of computer scientists. (Sutinen and Cooper 2021, p. 2)

While both authors have a background in computer science, one of them is also an ordained priest, which helps to explain the additional focus on the contextual application of theory and theology to lived experience in a digital age. As the discussion and debate surrounding Digital Theology has thus far tended to be theology led, so has it "also tended, so far, to be academically focused—the debate has largely taken place in academic journals and at research symposia" (Sutinen and Cooper 2021, p. 2), in what some would refer to, colloquially, as the "ivory tower". Here, it might be worth keeping in mind the distinction between religious and theological studies: at the risk of oversimplification and overgeneralization, the former primarily takes an academic and theoretical approach to the study of religion, which is important, whereas the latter, while still academically and theoretically oriented, is also concerned with the practical application of the theory to lived experience in today's world. Similarly, the work of Sutinen and Cooper (2021) "seeks to address a wider audience than the typical academic circles who have tended to be the primary target audience for work published to date" (p. 2), whether in the emergent field of Digital Theology and/or the more established field of digital religion. For example, the authors are very intentional about engaging "readers from a variety of backgrounds—academics, students, technical developers, leaders of diverse churches and denominations, religious laypeople and the curious individual simply intrigued by how emerging technology might shift faith-based behaviors and practice and by how faith might inspire new approaches to technical design and innovation" (Sutinen and Cooper

2021, p. 2). To the list of "readers from a variety of backgrounds", we might want to add the "religious nones" or the "spiritual but not religious", along with the religiously disaffiliated. They, too, could also benefit from learning how emerging technologies are having a profound impact on contemporary religion *and* spirituality, and how spirituality, along with religious faith, might inspire more hopeful, ethical, and humane approaches to the use of very powerful digital tools and platforms. In sum, while Digital Theology, like digital religion, is very much grounded in theory, it is also praxis-based, with a distinct focus on how digital technology is changing what it means to be a human being and, by extension, what it means to be a religious or spiritual person in a techno-driven world.

The importance of developing an in-depth understanding of digital culture cannot be overstated, if we are in fact in the midst of an irreversible evolutionary process. While some of us may have been hoping that the digital age would be short-lived, a temporary thing that would soon be passing, the reality is that it is here to stay, and it is changing everything. Indeed, if we have become metaphorical cyborgs in a sense, so attached to our digital devices that even now we are witnessing the human–machine merger, then as Harari (2017) has said, there is an urgency that we understand what is happening and make up our minds about it before digital technology and AI make up our minds for us. Rarely do we stop to consider the power of our digital devices, for example the smartphone we now carry with us at all times. It has become so commonplace that we take it all for granted, a gadget for filling our calendars, mapping our driving route, making purchases and paying bills, playing video games, texting and emailing, taking pictures and building photo albums, downloading music, surfing the Internet, accessing social media platforms, and so on and so on. And, lest we forget, it is also a *phone*.

When we stop to consider the amount of digital power we have at our fingertips, inside a device that fits inside our hip pocket, it literally staggers the imagination: the smartphone we use today has "more computer power than *all* of NASA when it put two [astronauts] on the moon in 1969" (Kaku 2014, p. 9), millions of times more computing power to be more specific. "This may sound like hyperbole", writes Murray Shanahan (2015), working in the field of cognitive robotics, "but today's emerging technologies have a potency never before seen" (p. xxi). The rapid advance and increasing power of digital technology is an extraordinary development, and to think that it is only the beginning. Only forty years ago, we were happy playing Pong, and before long, as Elon Musk has said, we will have virtual reality and augmented reality, so that the games will become indistinguishable from reality. This is a pivotal moment in human history, in the life of the church, with "a window of time and opportunity to very carefully reflect on how we intend to go about navigating the uncharted landscape before us" (Bingaman 2018, p. 103). Pastoral theologians, religious leaders, spiritual care providers, with the resource of Digital Technology, can be much more intentional about being, in the words of Tegmark (2018), the guardians of the future of life in a digital world, co-creators with God if we put it more theologically, helping to guide the momentous change "towards wholesome and loving ends" (Peters 2007, p. 182).

The need for immediate theological reflection about the growing reach and power of digital technology, and its "wholesome and loving" application within society in general and in religious faith communities in particular, should now be more obvious. But, as Ilia Delio (2008) has made clear, "it cannot be merely a religious way of dealing with technology, as if it were external to who we are; rather, technology has become part and parcel of who we are" (pp. 163–64). Perhaps, to a certain extent, this has always been the case with any technology throughout human history. And yet, there is something fundamentally different about *digital* technology, and the way that "life on the screen", to use Sherry Turkle's (1997) words, has completely altered and transformed human lived experience, in a matter of a few decades no less. The rate of transformation is therefore historically unprecedented. As such, it is not enough for religion and theology "simply to come to terms with the integration of technology in daily life", but rather, "we must begin to see technology as integral to the whole evolutionary process because it has driven us to a whole new level

of culture and consciousness" (Delio 2008, p. 163). We could also say that the digital revolution is driving us, potentially, to a whole new understanding of dynamic divine presence, as God, in keeping with the words of the prophet, is forever doing a *new thing* (Isaiah 43:19, RSV). The "new thing" occurring in the digital age is, once again, historically unprecedented, which raises all kinds of questions about God, religion, theology, and the expression of religious faith. In terms of the study of God and of active divine presence in today's digital world, we will need, according to Sutinen and Cooper (2021), to go "much further than simply *using* technology to study God;" rather, in a methodological move that parallels the theological perspective of Delio (2008), we will need an approach in which digital technology is "*central* to the study of God" (p. 15).

3. Results: A Double-Edged Sword

In making technology an integral component of our theological reflection, as well as central to the study of God, we will also need to keep in mind the observation of Richard Rogers (2015), who almost a decade ago in his groundbreaking book, *Digital Methods*, had already announced "the end of the virtual/real divide" (p. 38). Moreover, Rogers (2015), a self-described "web epistemologist" and, more formally, director of the Digital Methods Initiative at the University of Amsterdam, had characterized the web, and particularly a search-engine-based web, as "a potential collision space for alternative accounts of reality" (p. 31). Almost ten years later, we can now say that the search-engine-based web in general, and its social-media offspring, are far more than a *potential* collision space for alternative and competing accounts of reality. They have become, in so many ways, the quintessential "collision space" in today's world, a space that can at times reflect the very best of humankind, while at other times reflecting the most disturbing and alarming aspects of human nature. For example, in terms of putting social media and networking to good use toward loving and compassionate ends, "the potential to spread information at breakneck speed in countries where information may be repressed or controlled is a vital tool", writes the neuroscientist, Susan Greenfield (2015), as is raising consciousness about humanitarian and refugee crises, crowdfunding for disaster relief, and helping patients and families locate the best treatment facilities for medical implants and transplants (pp. 148–49). We can even add to this brief list the delivery of religious resources in faith communities, via social media, such as worship services, Bible studies, prayer groups, and so forth, which before the pandemic would have been unavailable to those congregants excluded from church life on the grounds of accessibility. Conversely, "some of the very worst aspects of being all too human . . . are now being given free rein throughout the uncharted territory of cyberspace" (Greenfield 2015, p. 268), turning social networking into a breeding ground for misinformation, harassment, bullying, hate speech, and religious and political extremism.

It is important to keep in mind that digital technologies, and more specifically social media platforms, are something of a double-edged sword, or, as Susan Greenfield (2015) has put it, "an unprecedented and complex cocktail of opportunity and threat" (p. 23). Indeed, the emerging field of Digital Theology is attempting to hold the good and the bad, the opportunity and threat in dialectical tension, as it continues to develop. For example, Sutinen and Cooper (2021) refer to *The Social Dilemma* (Orlowski 2020), the critically acclaimed documentary that premiered in 2020, as a powerful resource for better understanding the threat posed by the juggernaut of social media. "An indictment of the tech industry, the film succinctly lays out the damage being done by companies such as Facebook, Google and Twitter through their social media platforms and search engines . . . and helps explain so much of the craziness we see right now in the real world" (Crust 2020). Below is what Sutinen and Cooper (2021) glean from the film, for the purposes of Digital Theology:

> The movie warns of the [pernicious] role of artificial intelligence that has turned what was expected to be digital tools for enhancing social connections, open participation and global sharing into a manipulation engine that transforms humans into products for sourcing marketing data and addicts of 24/7 connectivity and

recognition by likes. Demonization, a term that theologian Paul Tillich (1973) uses for a process where an idea with a good intention transforms to its evil opposite, has altered technology with an agenda to make the world a better place into an agent for the age of misinformation . . . Digital Theology has a mission as a countermovement to digital demonization—sanctification of technology for the prosperity and liberty of humanity. (p. 10)

Sutinen and Cooper (2021) have good reason for highlighting *The Social Dilemma*, which features interviews with tech insiders, those who have worked with some of the major tech companies, including the technology ethicist and founder of the Center for Humane Technology, Tristan Harris. A former design ethicist at Google, Harris testified before the United States Congress in 2020, urging lawmakers to take more decisive regulatory action vis à vis the powerful social-media industry. In my 2018 book, *Pastoral and spiritual care in a digital age: The future is now*, I had argued that "technology, in and of itself and like any other 'raw material,' is not good or bad, but rather a neutral entity; it simply 'mirrors' the very best and the very worst of humanity" (p. 31). But after listening to Harris' testimony before the U.S. Congress, after watching the interviews with him and other tech insiders in *The Social Dilemma*, I no longer believe that digital technology, in the form of social-media platforms, is in any way a "neutral entity". It is much too powerful and influential to be neutral, when it operates on "a business model of commodifying the attention of billions of people per day, sorting tweets, posts, and groups to determine which get the most engagement (clicks, views, and shares)—what gets the strongest emotional reactions" (Harris 2021).

To be sure, the commodification of attention is anything but neutral, when a large target audience is children and adolescents still in their formative years. But it is not only younger populations who are targeted; through less-than-transparent neuromarketing practices, social media companies find ways to commodify the attention of everyone, young and old. "These commodification platforms", writes Harris (2021), "have warped the collective psyche", for they ultimately lead us to "narrower and crazier views of the world". Harris (2021) adds:

YouTube's recommendation algorithms, which determine 70% of daily watch time for billions of people, "suggest" what are meant to be similar videos but actually drive viewers to more extreme, more negative, or more conspiratorial content because that's what keeps them on their screens longer . . . Recommendation systems like this have created a downward spiral of negativity and paranoia, slowly decoupling billions of people's perception of reality from reality itself. Seeing reality clearly and truthfully is fundamental to our capacity to do anything. By monetizing and commodifying attention, we've sold away our ability to see problems and enact collective solutions. This isn't new. Almost any time we allow the life support systems of our planet or society to be commodified, it drives other breakdowns.

Harris (2021) analysis of social media's hold on the collective psyche, not to mention the developing brain of "digital natives" during their most formative years, is more than a little sobering, which is why Sutinen and Cooper (2021) explicitly call our attention to *The Social Dilemma* documentary. As religious leaders and educators make greater use of digital technology tools, as well as social media platforms, we need to keep in mind that digital technology is inherently a double-edged sword, a complex cocktail of opportunity and threat, with important implications for religion, spirituality, and mental health. In recent years, there have been important research studies focusing on the impact of social media, and whether there is any correlation with the noticeable decline in human empathy simultaneous with the sharp rise in mental-health disorders. The landmark study of Konrath et al. (2011), director of the Interdisciplinary Program on Empathy and Altruism Research at Indiana University, a meta-analysis of fourteen thousand college students spanning more than thirty years, revealed a significant decline in empathy, with a much steeper drop in the latter years of the study. Why? Konrath et al. (2011) note that the

precipitous drop in empathy, in the final years of the study, happens to coincide with "the meteoric rise in popularity of social networking sites . . . as younger people more frequently remove themselves from deep interpersonal social situations and become immersed in isolated online environments" (p. 183). Or, as Greenfield (2015) puts it, commenting on the study, it is "a time frame that corresponds well with the advent of social networking among digital natives" (p. 36).

Is it simply a coincidence, the sharp decline of empathy and the rapid and powerful advance of social media? I think not, if we are guided by the evidence before us. This is not to say that social media platforms are necessarily the *cause* of the steep drop in empathy, along with the downward spiral of negativity and paranoia. There may very well be a causal connection, but at the moment we do not know this for sure; more research is needed. What we do know for certain is that there is at least a correlation between the advent and proliferation of social networking sites and a reduction in empathy among college students. "These physically distant online environments", the authors of the study conclude, "could functionally create a buffer between individuals, which makes it easier to ignore others' pain or even at times inflict pain on others" (Konrath et al. 2011, p. 183). Perhaps more fundamentally, they create a buffer within one's own psyche, between more primitive limbic responses and higher-order executive functioning. "There is ample evidence", writes Van Eyghen (2021), "that dispositions rooted in evolved psychology tend to resurface when subjects lack the time or resources for adequate reflection". This is a finding of extreme importance, when viewed in the context of a fast-paced if not frenetic digital world, with life on the screen demanding more and more of our time and attention. It could very well be that we will need the help of biomedical moral enhancements (BME) to ultimately surmount our primitive dispositions, to become more virtuous if not spiritual in a digital world. Apropos to life on the screen, Van Eyghen (2021) adds: "The evidence suggests that although humans can overcome evolved dispositions on many occasions, the dispositions tend to resurface when humans let down their cognitive guard and act unreflectively".

4. Discussion: Beyond the Point of No Return

In a way, social media is neutral, in the sense that it can be what we want it to be: simply an online photo album and/or memory book, for example, nothing more, nothing less if we so choose. The problem is that we often have less choice than we realize, as powerful neuromarketing forces and algorithms conspire against our ability to think rationally when we are using the sites. Sean Parker, the former president of Facebook, made this very clear a few years ago, when he stated categorically that the goal of the company has been all along, "How do we consume as much of your time and conscious attention as possible?" (as cited in Pandey 2017). At the time, it was a stunningly transparent revelation, albeit post facto, after he had left Facebook after making billions of dollars. Nevertheless, it gives us a clear window into the covert operations of Facebook executives in designing a "social validation feedback loop:" "We needed to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post or whatever . . . [We're] exploiting a vulnerability in human psychology" (as cited in Pandey 2017). Not surprisingly, the "mission to exploit", for lucrative gain, has contributed to a sharp increase in rates of depression and anxiety for frequent users of social media, adolescents and young adults in particular, even *before* the pandemic. But, once again, while it is not entirely clear at the moment if Facebook and other social networking sites are the *cause* of this sharp increase in mental health disorders, there is plenty of evidence that the association is at the very least correlational. Therefore, "even if social media are not causing this problem, they surely are not helping to solve it" (Bermúdez 2017, p. 68).

What we do know for sure is that there is a causal link between high usage of social media and mental health risk, if the individual is using networking sites for frequent "social comparisons". Media, observes Rončáková (2021), in keeping with Sean Parker's revelation, very intentionally strive to arouse an emotional response in all of us, "bound by a specific media event" (p. 32). A landmark study in 2014, "Seeing everyone's highlight reels: How

Facebook usage is linked to depressive symptoms", made very clear the "specific media event", which has subsequently been confirmed by other studies:

> These studies found that spending more time on Facebook and/or viewing Facebook more frequently, provides people with the opportunity to spontaneously engage in Facebook social comparisons (of any kind), which in turn, is associated with greater depressive symptoms. This pattern of higher depressive symptoms after engaging in Facebook social comparisons may be especially true for college students since they may still be struggling to establish their identities apart from their families, and consequently, may be more susceptible to peer influences. Thus, the current research holds important implications for general populations and, in particular, college students who are depressed and might also be addicted to Facebook. (Steers et al. 2014, p. 728)

We can only imagine, for example, what the "social feedback validation loop" does to the psyche of an adolescent girl who is struggling with body image; she becomes trapped in a vicious cycle of social comparison, via Facebook's covert exploitation, from which there is seemingly no exit. Once the initial "dopamine hit" wears off, after receiving a "like(s)" from a friend, the extended time she spends on the screen, engaging in social comparisons, can make her feel worse rather than better, more anxious and depressed than she was feeling before. This scenario, which occurs in the lives of billions of people of all ages every day, in the lives of our congregants, has important implications for pastoral theologians, religious leaders, and spiritual care providers; it is very much an ethical *and* theological issue, a matter of justice when the social-networking system is "predicated on constant social comparison and systemic hijacking of the human drive for connection" (Harris 2021). It is also an issue of power, given the enormous asymmetric power that social networking companies have over our lives in general, and over the lives of vulnerable congregants in our care. "Any asymmetric power structure", Harris (2021) rightly argues, "must follow the fiduciary or 'duty of care' model exemplified by a good teacher, therapist, doctor, or care worker—that is, it must work in the service of those with less power". To this, we could add the duty of care exemplified by pastoral leaders, who are sometimes quintessentially equipped, by way of a particular faith tradition, with an overt justice orientation when confronted with the exploitation of those most vulnerable and less powerful.

This is clearly a pivotal time to be a pastoral leader, a religious educator, a spiritual care provider, as we witness firsthand, on the "front lines" as it were, the alarming rise in mental health disorders simultaneous with a steady decline in human empathy and compassion. As Jamil Zaki (2019) has noted, with the social networking platforms foremost in mind, "The modern world has made kindness harder" (p. 7). Few, if any of us, would disagree with his assessment, if we have been paying attention to the erosion of social cohesion in today's digital world. Zaki (2019) adds:

> News organizations and social media platforms profit from our divisions. Outrage is one of their products, and it is a growth industry. Modern society is built on human connection, and our house is teetering. For the past dozen years, I've researched how empathy works and what it does for us. But being a psychologist studying empathy today is like being a climatologist studying the polar ice: Each year we discover more about how valuable it is, just as it recedes all around us. (pp. 8, 10)

As much as the world of digital technology presents us with an array of formidable and unprecedented challenges, as much as we may have mixed feelings about it or not even like it, we will need to keep in mind that it is not going anywhere anytime soon, if ever. It has become an indispensable component of everyday life throughout the world, an irreversible commitment as Joseph Weizenbaum (1976) predicted almost half a century ago. Once it is so thoroughly integrated into the fabric of human society, so enmeshed in vital substructures, it cannot, as he said, be factored out without the world being thrown into utter chaos. Nor would we, even if we could, want to factor it out, for digital technology, artificial

intelligence, even social media for that matter also constitute an existential opportunity *IF* we can find ways to guide the process toward loving and compassionate ends for all people, rather than to profit a powerful few. Moreover, to view the digital world one-sidedly as a toxic culture with little if any redeeming value, "is to risk alienating the 'digital natives' among us", young adults and younger who have no experience and memory of a former time before the advent and proliferation of digital technology (Bingaman 2018, p. 24). "Digital natives", writes Greenfield (2015), "know no other way of life other than the culture of Internet, laptop, and mobile" (p. 6), which is a fact of extreme importance for religious leaders and faith communities.

Gary Small, in his research more than a decade ago at the UCLA Brain Research Institute, discovered that as a consequence of the "overwhelming and early high-tech stimulation of the digital native's brain, we are witnessing the beginning of a deeply divided *brain gap* between younger and older minds—in just *one* generation" (Small and Vorgan 2009, p. 3). This dramatic leap in human brain evolution reflects the epistemological framework of digital natives: their fundamental way of knowing has always been techno-driven. He goes on to say, with words that capture very well the double-edged nature of digital technology:

> What used to be simply a *generation gap* that separated young people's values, music, and habits from those of their parents has now become a huge divide resulting in two separate cultures. The brains of the younger generation are digitally hardwired from toddlerhood, often at the expense of neural circuitry that controls one-on-one people skills. Individuals of the older generation face a world in which their brains *must* adapt to high technology, or they will be left behind—politically, socially, and economically . . . During this pivotal point in brain evolution, [digital] natives and immigrants alike can learn the tools they need to take charge of their lives and brains, while both preserving their humanity and keeping up with the latest technology. (Small and Vorgan 2009, pp. 3–4)

This helps to explain the religious orientation of many digital natives, or more accurately the lack thereof, as religious disaffiliation has taken firm hold among millennials and younger. Life on the screen has fundamentally altered what it means to be religious or spiritual, what it means to be human for that matter, and the process I would argue is becoming irreversible. This is obviously a significant, perhaps even insurmountable problem for religious faith communities, as many congregations, already with declining church membership, now face the prospect of disaffiliation becoming the norm among younger populations. In terms of religious disaffiliation numbers in the United States, it is worth noting that younger Americans are disaffiliating earlier than older Americans: "Among young adults (age 18 to 29) today, roughly three-quarters (74 percent) report that they were age 17 or younger at the time they no longer identified with their formative religion, including about one in four (26 percent) who say they left before their teenage years", whereas "for older Americans who have disaffiliated, it was much more typical to leave when they were of college age or older" (Cox 2022). Some still hold out hope that this merely reflects what Friedrich Schweitzer (2004) has called "life-cycle effects". The children and grandchildren of the baby boomers, so the thinking goes, who are leaving the religion of their youth in ever-increasing numbers, will inevitably return later when they are all grown up, just like their baby boomer parents and grandparents (Bingaman 2020, p. 292). I would urge extreme caution with this overly optimistic assumption, for it is quite possible, maybe even likely that digital natives leaving the church today and, in the future, may never return. Recall that digital natives, with a digitally hardwired brain, see the world in a fundamentally different way, which would include different ways of knowing when it comes to religion. More specifically, as Rončáková (2021) has found, people who are drawn to online religion and spirituality, which is ever the case with digital natives, are "typically averse to authority; they want to choose their own symbols, values, associations and ideas in order to construct their own identity and their own spirituality" (p. 30). It remains for

future researchers to see if there is a clear causal link between this digital hardwiring, from one's earliest formative years, and the growing trend in religious disaffiliation.

In the meantime, pastoral theologians, religious leaders and educators, and faith communities would do well to follow the research focusing on the correlational link between high usage of digital technology, in particular social media, and religious disaffiliation. For example, one study conducted at Baylor University, which has been corroborated by subsequent studies, found that frequent Internet use is "associated with increases in being religiously unaffiliated and decreases in religious exclusivism" (McClure 2017, p. 481), certainly reflective of the lived experience of digital natives. Put another way, "being online increases the likelihood of being religiously unaffiliated, and regardless of one's affiliation, Internet use also reduces the likelihood of maintaining an exclusivist posture toward one's own religious tradition" (McClure 2017, p. 494). When it comes to religion and spirituality in the digital age, particularly that of digital natives, there is a distinct shift away from religious exclusivism toward greater openness to a multiplicity of different religious and spiritual perspectives, clearly a reflection of life on the screen. "Because of the overwhelming variety of worldviews, beliefs, and religious ideas that are part and parcel of one's online experience, the Internet encourages tinkering with an assortment of spiritual options, and rejecting the exclusive truth claims of any one particular religious tradition becomes more likely" (McClure 2017, p. 494). To the image of "tinkering", we could also apply the "supermarket" metaphor put forward by Wildman and Stockly (2021): digital natives, having the freedom to "mix and match" from a wide variety of religious and spiritual perspectives, to "explore and customize", can if they want "shop from any aisle" (p. 4). Perhaps it might seem foolhardy for religious leaders and faith communities to become more digitally invested, paradoxically embracing that which is helping to erode the foundations of religion. Indeed, this is something of a dilemma, in light of the Baylor study, for "while the Internet may be used beneficially to express or receive a particular religious message, Internet technology may also undermine the exclusive truth of that very message" (McClure 2017, p. 494).

Sutinen and Cooper (2021), while aware of the risks involved, are nonetheless undeterred in encouraging religious leaders and faith communities to take the risk, to work in the dialectical tension between opportunity and threat. They believe it is possible, if we consider how various churches worldwide in 2020 managed to move quickly, out of necessity, to an online and/or hybrid ministry:

> Rapid research conducted to explore the response to the COVID-19 pandemic of churches in the UK, Finland, and Namibia (Cooper et al. 2021) found that the churches moved quickly and enterprisingly to embrace a wide range of new technologies to quickly provide for their congregations. Not only did the churches surveyed offer up Sunday services online, but many extended the wider offering of their church communities using online technologies including, for example, small group meetings, children and youth activities, prayer meetings, and quizzes. This enterprising response is interesting to observe and might also reflect the adoption of a "startup mentality", whereby the digitally literate might quickly apply technological solutions to a range of application fields, thus renewing the fields themselves ... Clearly, such online Christian communities have the potential to evolve over time as technology improves and develops, enhancing the experience of users (e.g., using virtual or augmented reality or other remote presence technology to create an increased sense of physical colocation). A key challenge for now is the ability to design technology which changes the experience from that of being a remote participant to that of being a teleparticipant. (pp. 18, 20)

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