

What's in a Tech? Factors in Evaluating the Morality of Our Information and Communication Practices

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THERE ARE CERTAINLY MANY INTRIGUING and enlightening stories within the gospels. One that I have found particularly interesting over the years is the Transfiguration, in particular Saint Luke's account of it (Luke 9: 28-36). A portion of my fascination certainly comes from the sheer drama of the events that are recounted. Up on the mountain, in the midst of his very sleepy friends, Jesus is revealed as the Son of God in spectacularly dramatic fashion. "[H]is face changed in appearance and his clothes became dazzling white" (v. 29). The prophets Moses and Elijah appear and talk with him. A voice from the clouds identifies Jesus as the Son and instructs Peter, James, and John—and presumably the reader—to "listen to him." There is no question that this is an important revelation, and the events measure up to the enormity of the message. Moreover, conditioned by a century of film and television depictions of divine appearances, the miraculous scene is exactly the kind of thing that we would imagine would happen when God makes God's self manifest. Indeed, it is a story worthy of a big budget film by the likes of Michael Bay or Ridley Scott, minus the explosions, of course. It all makes for an engaging story to reflect on and imaginatively enter into in prayer.

Yet, as interesting as the large-scale drama is, I find equally fascinating the hints of how challenging this experience was for Jesus' disciples. In particular, we get a glimpse of Peter struggling to respond well to this unexpected situation. Instead of doing what we might hope we would do—namely falling on our knees to adore the divine presence—Peter responds by offering hospitality to these travelers. Given the importance of hospitality in ancient near eastern cultures, this makes sense: Strangers need to places to stay, and Moses and Elijah are strangers, so it must be time to build some lodging. Yet, laudable as it is, Peter's action ultimately falls short of living up to the reality that he witnesses. It's almost as if he simply can't process this world-changing event. Luke goes so far as to say that Peter offers his idea, "not knowing what he said." Perhaps the words of the paraphrase in *The Message Bible* gets closer, though, when it says that Peter "blurted this out without thinking." Here is Peter—the rock, the foundation of

the church—at wit’s end, defaulting to his community’s typical script. It is a drama writ small, a portrait in human limitation more typical of Sofia Coppola or Woody Allen than Bay or Scott. The Transfiguration marked a new world, and it went beyond what he could even begin to process.

While some of Peter’s experiences are certainly more dramatic than our own, we struggle with the same underlying dynamics that challenged Peter. We work hard to cultivate virtues of thought and action that enable us to act well within the contexts that we find ourselves. These virtues serve us well most of the time, for the moral wisdom of our ancestors and the Christian tradition has grown, in large part, through encounters with many of the very same struggles we experience today. At the same time, we are living in an age of significant change. While we have not seen a new transfiguration, we have seen our world radically reconfigured over the past thirty years by digital information and communication technologies, transforming the way that human beings work, learn, socialize, and engage in spiritual pursuits. As a result, all of us have had to reassess the particular practices we take up as we aim to live out lives of discipleship and devotion.

On one hand, there is no shortage of voices to assist us as we consider the role of new information and communication technologies. Pastors and bloggers, journalists and PR professionals alike offer their assessments of how technology can alternately enhance or compromise our lives.¹ Yet, on the other hand, scholars in moral theology play a very small part in this conversation. Reflection on the theological and moral implications of communication and information technologies—reflection that would assist churches and broader society—is still relatively unusual in the disciplines of theology in general and moral theology in particular. We have not been able to bring the wisdom of the tradition to bear on the public discourse aimed at revising our image of how we are to live lives worth living.

One place where this can be seen most clearly is in the absence of a robust method that can be used in assessing the morality of technological practices. While there are exceptions to the rule, conversations around the ethics of technology frequently involve what we might call a “comparative morphology” approach, where technologies are evaluated by comparing their shapes with their non-technological counterparts. Are relationships that we engage in using online communication “real” in the same way that face-to-face friendships are? Is reading the Bible on a screen as transformative as reading it from a book or a

¹ This article will use the concise term “technology” to refer to the broad range of digital technologies (i.e., cell phones, tablets, computers, and gaming devices) that generally fall under the more unwieldy rubric of “information and communication technology.” It will use “new media” to refer to media (i.e., email, texting, video conferencing, social media, podcasting, blogging, and microblogging) that have emerged on these technologies. Relevant distinctions will be noted where necessary.

cyber-ritual as meaningful as physical participation? Is being a parent or child in the digital age as authentic as it was “back in the good old days”? This sort of comparative approach suffers, in part, because it often sets up artificial binary oppositions (e.g., online and offline, mediated and unmediated, real and virtual) that do not exist in practice. But, more problematically, it presumes that we are describing these realities accurately and in sufficient depth. To assess the morality of any action, one needs to understand that action fully. Yet, by starting with a particular comparison drawn from previous life experiences, it becomes easy to overlook critical factors that lie beneath the surface, factors that distinguish the new from what has come before. Without a deep methodological well to draw upon, we can end up like Peter, with the best of intentions, but misreading the signs we see.

This article will offer a framework for considering the morality of contemporary information and communication technologies and new media. The proposed framework moves beyond the one-dimensional approach of comparative morphology. It will begin by considering the three primary models that are most frequently used to conceptualize technology's influence on human life—instrumentalism, determinism, and cultural materialism—identifying their limitations as well as their central insights. While these approaches originated and developed primarily within the fields of philosophy and history of technology, they serve as the methodological underpinnings of a great deal of scholarly and popular work on technology ethics, including the eighty year body of work of Catholic social teaching on social communication.

Using the traditional notion of the three fonts of moral wisdom as a guide, this essay will argue that alone, none of these approaches is adequate to the task of understanding the moral implications of contemporary information and communication technologies and digital media, but that together, they function to provide sufficient information to assess the central elements necessary for a moral evaluation of action. The essay will close with some examples of how utilizing the approach recommended by the three fonts frame can help us include a much broader range of considerations in a determination of digital media's effects on moral and theological reflection, and thus increase our ability to understand the new realities before us, offer a more insightful witness into civic society, and more effectively meet the moral and pastoral needs of people living in today's hyper-mediated, connected world.

APPROACHES TO THE INFLUENCE OF TECHNOLOGY IN HUMAN LIFE

Instrumentalism

As I suggested, scholars in moral theology have, to this point, played a small role in the scholarly and cultural conversation on the

ethics of new digital technologies. That being said, over the past eighty years, the Roman Catholic magisterium has produced a significant body of work on theological, moral, and pragmatic aspects of communication and information technology that was particularly influential during the emergence of moving image technologies. In the early part of the twentieth century, especially in the United States, there was a widespread mistrust of the new medium of film, including a broad-based movement in the 1920's to establish government censorship of the motion picture industry.² As early as Pope Pius XI's 1936 encyclical *Vigilanti cura*, Catholic social teaching on Social Communication (a.k.a. "mass media") offered to this debate the particular insight that no communication technology is innately good or bad; rather, media receive their theological significance and moral species from the messages that they are used to convey.³ By emphasizing the instrumental character of communication technologies, Catholic social teaching on social communication stood firmly against those—even within the Church—who believed that film, as well as radio and television, were inherently evil. In doing so, the Vatican played a part in opening up space for the development of new and powerful forms of art, information, and expression.

Broadly speaking, as it applies to technology, instrumentalism will be familiar to many readers, either through knowledge of Catholic social thought on communication or as a result of living in a cultural context in which instrumentalism provides the primary mode of understanding the use of material objects. When used both within the discipline of philosophy of technology and in daily discourse, instrumentalism is the view that technologies are human creations that have the primary characteristic of extending existing human powers. Like any object, a common technology can be used for a variety purposes, thus the character of their influence is dependent upon the person who uses them and the way in which they are used. Because it coheres strongly with our daily experience of tools, this is a popular approach to technologies across the board, not just communication and information technologies. As we often here people say in the U.S., "guns don't kill people, people kill people."

This approach can be seen in Catholic social teaching on social communication when documents like Pope Pius XII's 1957 encyclical *Miranda prorsus* suggest that the means of social communication are

² On the censorship climate, as well as the history of Vatican writing on social communication, see James F. Caccamo, "The Message on the Media: Seventy Years of Catholic Social Teaching on Social Communication," *Josephinum Journal of Theology*, 15 no. 2 (2008): 394.

³ Pope Pius XI, *Vigilanti cura*, (1936), www.vatican.va/holy_father/pius_xi/encyclicals/documents/hf_p-xi_enc_29061936_vigilanti-cura_en.html.

morally neutral gifts of God.⁴ One of the classic statements from this perspective can be found in the 1973 Pastoral Instruction *Communio et progressio*. *Communio* presents the means of social communication as human creations—born of God's creative power—that enable human beings to reach for communion with one another and with God. As such, media have an “allotted place in the history of Creation, in the Incarnation and Redemption” through increasing the common good in accord with truth.⁵ This role, however, is not guaranteed. “If... men's minds and hearts are ill disposed, if good will is not there, this outpouring of technology may produce an opposite effect so that... evils are multiplied.”⁶ Any harm done cannot be ascribed to the means of social communication themselves, for the TV is just a TV and a cellphone is just a cellphone. Rather, harm is ascribed to the particular intention and act of the communicator. The Pontifical Council on Social Communications put it a bit more directly in 1997's *Ethics in Advertising* when it stated:

There is nothing intrinsically good or intrinsically evil about advertising. It is a tool, and instrument: it can be used well, and it can be used badly. If it can have, and sometimes does have, beneficial results..., it can, and often does, have a negative, harmful impact on individuals and society.⁷

While this statement is specifically focused on advertising, it is a fair representation of the general approach to social communication across the Roman Catholic tradition, as well as other parts of the Christian community. Where media goes wrong—be it in sexual, violent, or degrading programs, news that makes private matters public or invites scandal, or new media that foment discord—it goes wrong because those who use technologies of communication seek to carry out evil.⁸

⁴ Pope Pius XII, *Miranda prorsus* (1957), www.vatican.va/holy_father/pius_xii/encyclicals/documents/hf_p-xii_enc_08091957_miranda-prorsus_en.html.

⁵ Pontifical Council for Social Communications, *Communio et progressio*, (1971), nos. 15-17, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_23051971_communio_en.html.

⁶ Pontifical Council for Social Communications, *Communio et progressio*, no. 9.

⁷ Pontifical Council for Social Communications, *Ethics in Advertising* (1997), no. 9, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_22021997_ethics-in-ad_en.html.

⁸ Notably, this instrumental approach is not unique to Catholicism. As James Gustafson notes, the story of the Protestant approach to the Industrial Revolution is the story of instrumentalists as well. Factory owners and those who reshaped the land understood themselves not as the destroyers of nature that England's Romantic poets called them. Rather, they saw themselves as instruments of God's creative impulse to tame nature, to recreate a fallen world in the image of God's original design. See James Gustafson, “Christian Attitudes Toward a Technological Society,” *Theology Today* 16 (July 1959): 173-189.

At its core, then, instrumentalism understands technology as a powerful force that is fundamentally shaped and controlled by human beings. The flip-side of this emphasis is that instrumentalists are resistant to the notion that technologies have an interior formative function. A person uses a gun, but the gun does not change the person who uses it. The gun—or the media, or a cell phone—expresses the intentions, meanings, and views of the actor, but does not shape the actor in the process of expression. Our messages clearly affect receivers. *Ethics in Advertising*, for instance, recognizes that advertising “helps shape the reality it reflects.”⁹ But the meaning here is clear: The messages in advertisements do not change the advertisers as much as they transform those who see or hear them. Communicators need to be formed separately in order to use the means of communication well. The danger for the formation of society is that media will be used effectively, in the technical sense of communicating a message clearly, but that the message will be aimed at the wrong goal.

Determinism

While instrumentalism has won the day in the philosophical, popular, and broader theological understanding of communication and information technology and the media, it is not the only way of thinking about the power of our gadgets. Two other approaches are particularly important.

The first alternate approach picks up from this question of formation, but moves in the opposite direction, understanding technology not as a tool for shaping the world, but as a powerful force that forms its users. Referred to as technological determinism, this approach is probably most strongly identified with Marshall McLuhan. Well known for his pithy and often misunderstood comment, “the medium is the message,” McLuhan’s sense was that the material conditions of our existence as human beings shapes our experience, often in unknown ways, and beyond our control, regardless of our stance toward the influence. Consider, for instance, his notion that the real power of any communication medium lies not in content of the communication, but rather in the way that it “shapes and controls the scale and form of human association and action.”¹⁰ While originally predicated of the changes in media that McLuhan saw in the 1950’s, with the widespread adoption of television, it is easy to see the wisdom of his claim in the Internet age. Blogging and tweeting, for instance, have reshaped the reach of the individual, effectively eliminating the relevance of space as a separator between individuals, regardless of the message we wish to communicate.

⁹ Pontifical Council for Social Communications, *Ethics in Advertising*, no. 3.

¹⁰ Marshall McLuhan, *Understanding Media*, ed. by W. Terrence Gordon (Corte Madera, CA: Ginko Press, 1964, 2003), 20.

New media have also reconfigured the entire system of metrics by which the American media landscape is governed. Using the Internet, citizen journalists have wrested power from big media. Even if you have never read a blog or tweet, the news you consume—and your perception of what you can know—has been transformed by the new communication realities. The case of the shooting of an unarmed teenager, Michael Brown, by police officers in Ferguson, Missouri in August, 2014 is a dramatic example of this: It was a minor local news item that was catapulted onto the national and international stage only after the news of protests spread on Twitter. As the *Financial Times* noted, there were “almost 1m tweets sent before CNN had spent a single minute reporting.”¹¹ By enabling anyone with a cell phone to report and share news instantly, Twitter brought new information into the national “public square.” Critically, this largely happened without our explicit intent or informed consent, or even our awareness. Little messages, meant simply to share information, reshaped national news and the American conversation on race and policing in the process.

Of course, McLuhan is not the only thinker or critic to take this approach. Preceding McLuhan, Martin Heidegger fundamentally challenged the presumed radical autonomy of the human subject, which undergirds the instrumentalist approach. Albert Borgmann has written a substantial body of work on technology that is nuanced and varied, evincing shifts, development, and a good deal of wrestling back and forth with a wide variety of issues, yet his general orientation over the decades has been a determinist one. A central theme in his work has been that the technologies that we use shape the basic patterns of our daily living. Borgman’s influential early work centered on the disruptive influence of technological devices on our focal practices.¹² Focal practices are daily practices that human beings do to accomplish particular goals, but that have value not solely for the good produced as the end, but also for the goods internal to the practices as

¹¹ Hannah Kuchler, “TV Networks Play Catch-up to Twitter in Ferguson’s Rolling Story,” *Financial Times*, August 22, 2014, www.ft.com/intl/cms/s/0/3b9243ce-2984-11e4-8b81-00144feabdc0.html#axzz3IVq2Snkr. See also David Carr, “View of #Ferguson Thrust Michael Brown Shooting to National Attention,” *The New York Times*, August 17, 2014, http://www.nytimes.com/2014/08/18/business/media/view-of-ferguson-thrust-michael-brown-shooting-to-national-attention.html?_r=1.

¹² Albert Borgmann, *Technology and the Character of Contemporary Life* (Chicago: University of Chicago Press, 1984). Neo-naturalists like John Dyer, *From the Garden to the City* (Grand Rapids: Kregel Publications, 2011), follow in Borgmann’s footsteps. For an interesting application of Borgmann’s work to the ecclesial and liturgical experience, see Richard Gaillardetz, *Transforming Our Days* (New York: Crossroad Publishing Company, 2000).

they are carried out and to the network of relationships that they require.¹³ The introduction of technologies (like central heating) interrupt focal practices, destroying the associated goods and networks of relationships as they are adopted. Technologies, by their simple existence and use change users, whether or not they agree to be changed, even if they are unaware of the changes.

More recently, the determinist approach has come into full force in the popular press. While no one wants to admit to taking McLuhan's kitchy-sounding and often hyperbolic claims particularly seriously, an array of contemporary technology critics have received much more notice espousing this approach. We see, for instance, journalist Nicholas Carr's approach to the inherently destructive power of digital technology on reading and intellectual culture in popular book *The Shallows*.¹⁴ In the other direction, we see media scholar Clay Shirkey's optimism that the cognitive surplus created by networked populations will enhance, even liberate, society.¹⁵ Also consider the work of Kevin Kelly, whose book title really says it all: *What Technology Wants*.¹⁶ Indeed, we see determinism across the board in the rhetoric surrounding the detrimental effects of violent video games, a rhetoric that persists in spite of an absence of empirical evidence supporting intuitions about their destructive influence.

Cultural Materialism

In addition to the instrumentalist and determinist perspectives on the influence of technology, there is a third approach worth noting. Referred to as cultural materialism (with variations like political materialism and social materialism), this approach picks up the determinist's suspicion of our power over technology and the instrumentalists' recognition that technologies have multiple uses, but triangulates them through a belief in the profound role that social structures play in shaping the life, desires, and actions of the person. Cultural materialism notes that, strictly speaking, technologies are never the product of an individual. Even when we name an inventor, every single technology is built on the work of others, from experimenters who came before, contemporaries who collaborate and compete, and even material suppliers and social systems that make the creation and development process possible. More importantly, perhaps, technologies are only adopted broadly when they meet the preexisting interests, rationality schemes, and broader social practices of the cultures in which they are

¹³ There are significant resonances here with the approach to practices taken in Alasdair MacIntyre, *After Virtue* (Notre Dame: University of Notre Dame Press, 1981).

¹⁴ Nicholas Carr, *The Shallows* (New York: W. W. Norton, 2010).

¹⁵ Clay Shirkey, *Cognitive Surplus: Creativity and Generosity in a Connected Age* (New York: Penguin Press, 2008).

¹⁶ Kevin Kelly, *What Technology Wants* (New York, N.Y.: Penguin Books, 2011).

introduced. Thus, despite how they are used, technologies never solely serve the ends of the individual user. Rather, they always serve multiple layers of ends that are intertwined with the structures and ends of society. It should not be surprising, then, that the Internet—championed at its birth as an empowering technology where “information wants to be free”¹⁷—has grown into a massive marketing and commerce machine over the course of a thirty year development in the American capitalist context. Insofar as technologies shape the actions of persons or groups, they do not do so in isolation, but in concert with the larger forces of the culture in which they are adopted.

Cultural materialism is a popular approach among historians of technology. Exploring diverse technologies like farming and nuclear power, Langdon Winner and Jared Diamond explore the role of social valuation in adoption and deployment of technologies, noting the “auto-catalyzing” nature of technological adoption—the systems we use build upon one another, recapitulating and reinforcing the power structures and social practices that led to their adoption in the first place.¹⁸ Cultural materialism is also a popular approach among philosophers. Perhaps the most well known cultural materialist writing on technology from philosophy is Jacques Ellul, whose writing on the technological society predicted a whole swath of changes that happened in industrialized societies over the course of the late twentieth century. Perhaps the most significant change that Ellul described was the eclipse of all appreciation of good that is not expressed as a factor of instrumental value as the result of the technologization of all modes of labor.¹⁹ In *The Homeless Mind*, sociologist of religion Peter Berger and co-authors Brigitte Berger and Hansfried Kellner trace some of the same lines as Ellul, but—interestingly enough—emphasize the increasing role that social self-differentiation will play as human beings increasingly see themselves as just another interchangeable technological device in the economic system.²⁰ The self-orientation at the core of social media is not blatant narcissism, but rather the necessary outlet for identity formation in the nameless and faceless technological society.

¹⁷ The notion originated in the 1970s, but this particular language is generally attributed to Stewart Brand, “Discussions from the Hacker’s Conference, November 1984,” *Whole Earth Review* (May 1985): 48-9. Notably, this formulation misrepresents Brand’s position. His whole quote read: “On the one hand, information wants to be expensive, because it’s so valuable. The right information in the right places changes your life. On the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time. So you have these two fighting against each other.”

¹⁸ Langdon Winner, *The Whale and the Reactor* (Chicago: University of Chicago Press, 1986); Jared Diamond, *Guns, Germs, and Steel* (New York: W. W. Norton, 1998).

¹⁹ Jacques Ellul, *The Technological Society* (New York: Knopf, 1964).

²⁰ Peter Berger, Brigitte Berger, and Hansfried Kellner, *The Homeless Mind* (New York: Random House, 1973).

In the popular press, cultural materialists are much rarer than instrumentalists or determinists. Among the most well known and influential of them is Jaron Lanier. An influential programmer and early virtual reality pioneer, Lanier has been outspoken about the way in which Internet technologies have been subsumed into the capitalist framework to the point that the freedom and generativity of the early Internet have given way to a gadgetization of the user.²¹ We may use social media software to communicate, but its primary reason for existing today is to gather information about you that can be sold to third parties. You are, it turns out, a natural resource. Perhaps the people most strongly in the materialist camp are security specialists and reporters like Laura Poitras and Glenn Greenwald, who broke the story on the NSA's collection of phone metadata and PRISM system.²² You can use your phone to reach your family, but ultimately it is also a tool for surveillance at the service of national security. While we as individuals have illusion of control over our devices, technologies are made available for use in limited ways—ways that support the economic, political, and social interests within social groups. What is important, then, and morally significant about technologies are not the technologies themselves, but the larger systems in which we participate and the ways in which those systems condition, enable, or block certain kinds of actions.

THE APPROACHES TO TECHNOLOGY AND THE CHRISTIAN MORAL TRADITION

While there are other models for understanding the influence of technologies like communication and information technology, these three approaches—instrumentalism, technological determinism, and cultural materialism—dominate the broad lines that we see within both scholarly and popular debates about how technologies should be used. Notably, there is a good deal of debate outside of theology that centers on which one of these approaches or methods most accurately portrays the nature of technology and its influence on human life. As is typical within the scholarly world, the general presumption is that there can be only one right answer. There must be a winner and a loser,

²¹ Jaron Lanier, *You Are Not a Gadget: A Manifesto* (New York: Alfred A. Knopf, 2010).

²² Glenn Greenwald, "NSA Collecting Phone Records of Millions of Verizon Customers Daily," *The Guardian* (June 6, 2013), www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order. Glenn Greenwald, "NSA Prism Program Taps in to User Data of Apple, Google and Others," *The Guardian* (June 7, 2013), www.theguardian.com/world/2013/jun/06/us-tech-giants-nsa-data. Laura Poitras, "The Program," *The New York Times* (August 22, 2012), www.nytimes.com/2012/08/23/opinion/the-national-security-agencys-domestic-spying-program.html?_r=1&. Peter Maas, "How Laura Poitras Helped Snowden Spill His Secrets," *The New York Times* (August 13, 2013), www.nytimes.com/2013/08/18/magazine/laura-poitras-snowden.html?pagewanted=all.

so the influence of technology must be best described by instrumentalism, or by determinism, or by cultural materialism. This view is common outside of the academic debate as well, among pundits, journalists, and even theologians for whom technology is a passing interest, but not an area of significant work. It is not unusual to hear complaints about how technology has made this generation of students stupid, materialistic, instrumentalists, or to hear squeals of glee among teachers who believe they have finally figured out the secret to getting students to really engage in classwork by using the next type of listserv, wiki, or online learning module. As far as technology is concerned, we can be a lot like Peter, understanding new realities in terms of previous conclusions, and moving quickly to affirm what corresponds to the familiar.

However, what I find striking about these three different—and supposedly contradictory—approaches to the influence of technology is that none of them is wholly without merit. Indeed, each one is grounded in an important insight into our shared experiences of technologies like social media, smart phones, and digital media. Instrumentalism, for instance, rightly recognizes the importance of freedom and human choice and freedom in creating the world that we live in, both for ourselves and for the larger community. Digital technology has shown itself to be a powerful tool that enables people to extend the range of options available to them as beings who seek to find fulfillment through acting in the world. As Christians, we recognize the inviolability of a well-formed conscience, holding that through formation, serious deliberation, and reasoned judgment, the human person can discover the will of God in a particular situation in the form of right reason. Even though we may be constrained by the realities of the world, we are authentically free to act within our limits, and we hold out hope that through our actions, we will break through any and all limitations. Instrumentalism also upholds the notion of responsibility, by which, in the Christian view, we know ourselves as stewards not only of creation but also of our own search for fullness of being and return to God. Through all of this, we express and create our identities as unique children of God.

Technological determinism, on the other hand, rightly recognizes that our materiality matters. Human beings are embodied creatures who are shaped by the things we do and practices that we engage in. Thus, it is impossible to utilize tools that do not, at some level, shape who we are through the fact of their existence. Glimpses of the concerns behind determinism exist within the Catholic tradition. In recent decades, the Thomistic tradition has developed an account of practices as the foundation of the moral life, suggesting that the formation of virtue is a matter of imitation: We cannot become moral people without actually doing the things that moral people do, nor can we understand or come to love the good without first engaging our bodies and

minds in the actions that accomplish good. Even when they deemphasize them, determinists do not deny that human beings make authentic decisions that have real consequences. Rather, they focus on bringing to consciousness and attention the unintentional and unrecognized aspects of our behavior, emphasizing that everything we do influences us in ways that we may not want it to, or even realize.

While I have noted that Catholic social teaching on social communication tends to utilize an instrumentalist approach to technology, elements of determinism are evident throughout other areas of Catholic social thought. In magisterial work on poverty, for instance, Catholics have frequently emphasized global solidarity, in part because they recognize the realities of geographical determinism. Where you were born matters to your long-term prospects for health, education, and economic well-being. As our lives becomes increasingly enacted in and through technology, it makes sense that we would expand our understanding of relevant materiality to encompass technology and its ability to shape large parts of our lives and experiences, and perhaps even determine them.

Finally, cultural materialism rightly recognizes the deeply social nature of the human person. We begin our lives in relation and live them out as parts of groups. So, too, are the technologies that we use born through community effort and extend our reach into the social world. For good or ill, our lives are conditioned by the social structures and shared meanings that we are a part of. While we are able to make decisions and act on our own, all of our thinking and decision-making and actions happen within the context of family, friends, neighbors, church, workplace, city, nation, and globe. This understanding of the fundamentally social nature of the human person is, of course, dear to the Catholic moral tradition. Catholic social thought rejects materialism, but it does share with the materialist an attention to corporate identity, embodiment, and action. For example, integral human development is understood as the responsibility of the whole, often described in terms of the principle of common good achieved only through solidarity. This social nature is a component of the natural law, yet it is also grounded in the inner life of the Trinity, the model for self-giving and love. Social context, the social practices that people engage in, and the social structures people create to support one another are so fundamentally important, the Roman Catholic tradition has spoken of justice as a fundamental part of spreading the gospel. Society and its institutions are not merely the necessary stage upon which individuals live out their lives, but a robust environment that can alternately impair our ability to thrive or enable human flourishing. While there are debates about how it is to be achieved, this tradition has consistently aimed to transform society so that it continues to more closely approximate justice.

Thus, in light of the broader picture of human life that we see in Christian ethics, it is clear that instrumentalism, determinism, and cultural materialism each emphasize and build upon important insights into what it means to be human. Yet, while this affirms the underling reasonableness of all three theories, it also suggests that, from the context of Christian ethics, all three are insufficient when understood as the single method needed to frame moral inquiry because it marginalizes important aspects of human experience and action. The question to ask, then, may not be which of these three approaches best helps us understand the impact of technology in our lives. Rather, the question to ask is how we might draw on each of these methods within our moral analysis so that we can both provide an accurate assessment of what we have done and develop a plan for what we should do next. This will necessarily involve moving beyond the path laid out over the past eighty years in Catholic social teaching on social communications, a tradition that has thrown its lot in with instrumentalism when it comes to communication and information technologies. The key, however, may lie deeper back in the tradition.

FONTS OF MORAL WISDOM

If we want to move beyond the conflict among these three approaches to the influence of technology to draw fully upon the insights they offer, one fruitful strategy will be to take the lead from fundamental concepts within moral theology, which is a field that has as its bread and butter assessing past action and evaluating options for future action. More specifically, the classic model of intention, the object of the act, and circumstances—the “three fonts of moral wisdom”—can help us examine the appropriateness of these models of technology, and thus provide us a road map for a new model for understanding new and emerging social communication acts and practices.

When speaking about morality within the context of new communication and information technologies, it can be challenging to think in terms of existing moral norms, principles, and especially rules. As technologies emerge, we engage in new activities and develop new practices that sometimes map accurately onto existing moral standards, but often they just appear to do so, making it easy to misjudge the core morality of an action. (Some examples of this will be offered in the final section of this article.) In the grand scheme of things, the goal of life is fullness of being of the human person that leads to union with God in the beatific vision. At times, this would have been referred to as perfection, and more recently, as integral human development. While ultimately depending on the gift of grace, we do our part to contribute to fullness of being through accomplishing acts that enhance both our own and other people's development. Yet it is exceedingly rare that our actions are absolutely destructive of the human person or absolutely enhancing, absolutely moral or absolutely immoral.

Rather, in most cases our actions are mixed, imperfectly good. Thus, where it might sound strange to describe communication or information activities as being “moral” or “immoral”—outside of simple cases of lying or slander—it doesn’t sound strange at all to say that an event or system of communication can, to a lesser or greater degree, enable people to achieve the fullness of the being as children of God.

As has been noted, the three fonts framework provides a means for parsing actions in order to consider the extent to which they enhance fullness of being and achieve this goodness. Deriving from the Thomistic model of the four-fold goodness of the act, the three fonts suggest that to fully understand a past or future action, we need to examine three interrelated aspects: the intention (i.e., the end/*finis operantis*), the means (i.e., the object/*finis operis*), and the circumstances.²³ An analysis of circumstances is the most complex when considering the use and role of technology. The “intention” is the goal that we seek to attain through carrying out a particular action; it is what drives us to act in the first place. The “means” refers to the thing that is being done in order to achieve the intention. It is what is sometimes referred to as the “act-in-itself.” (Recall that the dominant Catholic instrumentalist view tends not to place the good or bad of technology in the technology-itself.) In contrast, “circumstances” is a somewhat amorphous category that can, at times, be quite sprawling, especially in relationship to technology.

In the broad sense, circumstances are the conditions that provide a context for the action, the “specific facts of the case or the relevant data of the moral setting in which the act takes place.”²⁴ A key part of the category of circumstances of an action is the consequences. The consequences are the concrete, objective results of the means that were chosen to achieve the intention. Yet, within the Catholic tradition, consequences do not exhaust the relevant circumstances. Circumstances would also include a whole host of situation-specific factors that exert influence on which means are chosen to achieve the desired end. It is the “who, what, where, and when” of the situation. When setting Internet connectivity prices, for instance, it would be a relevant circumstance that a company is the sole provider in a rural area, a factor that might tempt the company to choose a means that would take advantage of potential customers’ limited freedom. Finally, some have suggested that the alternative means available to the actor but have not been chosen are relevant aspects of the circumstances.²⁵ Our ability to

²³ The three fonts of moral wisdom comprise the three morally determinant parts of the “fourfold goodness” of an act. See Thomas Aquinas, *Summa Theologica*, trans. Fathers of the Dominican Province, 2nd and rev. ed., 1920, online ed., 2003; II-II, q. 18, a. 4, www.newadvent.org/summa/2018.htm#article2.

²⁴ Russell B. Connors and Patrick T. McCormick, *Character, Choices & Community* (Mahwah: Paulist Press, 1998), 50.

²⁵ Connors and McCormick, *Character, Choices & Community*, 51f.

do good is dependent on freedom and opportunities we have to act in particular ways. Thus, assessing the quality of actions must always be done in light of the possible means available to the actor.

What is notable here is that, except in a few cases, the Roman Catholic tradition maintains that actions are not understood as completely good, choice-worthy, or even reasonable unless all aspects of the action promote fullness of being.²⁶ Actions that are good are those that start with a good intention, use a means that is appropriate both to the nature of the human person and to the particular circumstances at hand in light of the options available, and result in the most positive effect on integral human development as possible. Realistically speaking, most of the things we do fall short of perfection in one or more of these areas. Yet, these actions are also suffused with goodness. The goal of life is to transform the “not so good” into the “pretty darned good,” creating habits of reliable action along the way.

MODELS OF TECHNOLOGY INFLUENCE IN LIGHT OF THE THREE FONTS

If we reflect on the models for the influence of technology in light of the three fonts of moral wisdom, it becomes a bit more clear why, despite their unique insights, a moral theologian might find that each of the three approaches to the influence of technology would ultimately fall short of providing a singular framework for accurately assessing past social communication acts or a plan for future ones.

Consider, for instance, instrumentalism. Instrumentalism argues that the influence of a technology is dependent upon the person who uses them and the way in which they are used. Mapped onto the three fonts, instrumentalism conceptualizes the influence of technologically mediated actions primarily in terms of the intention of the communicator. In the language of communication, this ties most strongly to the content portion of the messaging. Where social communication is successful, it is because communicators sought to enhance people's lives and sent out messages that fit those intentions. Where there are problems, they exist either because communicators had bad intentions that failed to live up to the good, and so created questionable content, or created content that failed to embody the good intentions they had. One could think, here, of advertisers who entice people to buy products that do not enhance goodness or who mean well but use degrading imagery. For the instrumentalist, good content flowing from rightly pointed intentions leads to good effects.

In contrast, technological determinism—the belief that engagement with a particular technology can shape the human person independent of intentionality—understands the influence of technologically mediated actions in terms of the means—the technology itself.

²⁶ *ST*, II-II q. 18, a. 1, and q. 20, a. 2.

More specifically, determinists focus on the many and disparate unintended consequences that accompany the adoption and deployment of any technology, which are ultimately more formative than the intended actions and circumstances. One might think here, for instance, of the transformation of human conversational patterns—moving from responsive, time intensive, and disclosive modes to controlled, efficient, and inauthentic—that has resulted from the physical and material experience of digital messaging that scholars like Sherry Turkle describe.²⁷ Determinists can sometimes come off as cagey or imprecise because they can gloss over the known positive uses of technologies, emphasizing instead the profound dangers of potential or systemic results, especially those that are slow developing, subtle, and below consciousness. Thinkers who use other approaches, such as instrumentalism would not deny that technologies have certain typical consequences. It is rare, however, for instrumentalists to recognize consequences that are independent of the intention. But from the determinist perspective, the significance and moral species of a technology comes not from what we mean to do, but effects that flow from its usual use.

For its part, cultural materialism understands the influence of technologically mediated actions in terms of the circumstances of the communication or information event. In other words, it holds that the primary influence of technology is found not as much in technologies themselves as in the social context, the preexisting interests, rationality schemes, and broader social practices of the cultures in which technologies exist. More particularly, cultural materialism emphasizes the way in which broader culture deploys technology to support existing cultural goals. As such, it can question the relevance of freedom and autonomy, suggesting that the range of options that we are afforded is already constricted in order to give manipulation the appearance of being meaningful choice while still serving social goals. In our contemporary communication environment, for instance, the cultural materialist would note how our online experience is shaped by algorithms created by the platform we use, the searches we have done, and the demographics that we demonstrate, to the point that the prices we may pay for things may end up higher as a result of who we are.²⁸ Here, the significance and moral species of a technology are largely a factor of

²⁷ Sherry Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (New York: Basic Books, 2011). For a brief outline of the primary argument of the book, see Sherry Turkle, "The Flight From Conversation," *The New York Times*, April 201, 2012, http://www.nytimes.com/2012/04/22/opinion/sunday/the-flight-from-conversation.html?_r=5&pagewanted=all&pagewanted=print.

²⁸ See, for instance, Dana Mattioli, "On Orbitz, Mac Users Steered to Pricier Hotels," *The Wall Street Journal* (August 23, 2012), <http://online.wsj.com/articles/SB10001-424052702304458604577488822667325882>.

the circumstances that originally shaped the technology and continues to shape how we use it.

Setting the models of tech influence in the context of the traditional hermeneutic of the three fonts of moral wisdom reveals that all three of these approaches are valuable in that they inform different parts of the complex decision-making process about technology and media use. It also shows that using any one of them alone—be it instrumentalism, determinism, or cultural materialism—leaves out important considerations when evaluating the moral significance of past practices or planning new ones. Strongly set in any one perspective, we might fail to account for information that is critical for assessing which path most fully achieves the good. But if we allow them to mutually correct the limitations found in the others, utilizing the insights of all three approaches would enable us to more fully understand the impact of our communication.

CATHOLIC SOCIAL TEACHING ON SOCIAL COMMUNICATION IN LIGHT OF THE THREE FONTS APPROACH

As noted previously, the single body of significant theological work on communication technology that is available to Christian ethicists is Catholic social teaching on social communication. Since 1936, two encyclicals, two pastoral instructions, one conciliar decree, two major sets of pastoral guidelines, forty-eight annual World Communications Day addresses, and at least ten minor documents—more than 210,000 words—have been written by various popes and offices of the Vatican on the theological, moral, and social implications of various mass communication technologies. As one part of the much larger tradition of Catholic social teaching, one might expect work on social communications to contain the same kinds of thorough descriptions of intentions, means, cultural circumstances, and systemic contexts that characterize work on other topics. One might consider, for instance, the depth of engagement with the economic particularities in the U.S. Catholic Bishops' letter *Economic Justice for All*.²⁹ Or one might consider the close reading of global capital markets that Pope Benedict offers in *Caritas in veritate* and his 2013 World Day of Peace message,³⁰ or the beautiful reflections of Pope John XXIII on the experience of living under threat of nuclear war in *Pacem in terris*,³¹ or the

²⁹ United States Catholic Bishops, *Economic Justice for All* (1986), www.usccb.org/upload/economic_justice_for_all.pdf.

³⁰ Pope Benedict XVI, *Caritas in veritate* (June 29, 2009), www.vatican.va/holy_father/benedict_xvi/encyclicals/documents/hf_ben-xvi_enc_20090629_caritas-in-veritate_en.html. *Blessed are the Peacemakers*, Message for The World Day of Peace (January 1, 2013), www.vatican.va/holy_father/benedict_xvi/messages/peace/documents/hf_ben-xvi_mes_20121208_xlvi-world-day-peace_en.html.

³¹ Pope John XXIII, *Pacem in terris* (April 11, 1963), www.vatican.va/holy_father/john_xxiii/encyclicals/documents/hf_j-xxiii_enc_11041963_pacem_en.html.

work of Paul VI on the experience of poverty in *Populorum progressio*, or of Pope John Paul II on the existential turmoil of living in the modern age in *Redemptor hominis*,³² or Pope Francis' observations on economic exclusion in *Evangelii gaudium*.³³ Each of these works evinces a realistic and savvy understanding of the influences of social and material context on life and society, an understanding that enabled pointed critique as well as solid recommendations for future action. One might argue whether or not the descriptions within the documents of Catholic social teaching are as accurate as they could be, but they clearly exist.

In contrast, Catholic social teaching on social communication does not provide substantial or regular examples of how we might do robust and thorough analysis of the theological and moral implications of technology.

As I noted, official Catholic documents on social communication played a significant role in the development of media during the twentieth century by adopting an instrumentalist perspective to promote the idea that that media receive their theological significance and moral species from the messages that they are used to convey. This instrumentalist approach formed the backbone of the Vatican's approach to communication throughout the twentieth century and provided a useful hermeneutic for examining mass media technologies like film, television, and radio.

As one would expect of an instrumentalist approach, the documents provide excellent engagement with issues of intentionality and the "means of social communication," where means is understood not as technologies, but rather as the messages that are communicated. This emphasis forms the core of Catholic social teaching on social communication: exhorting people to say good things in good ways for good reasons. In places, documents emphasize forming communicators to become better stewards of the tools of communication.³⁴ In

³² Pope Paul VI, *Populorum progressio* (March 26, 1967), www.vatican.va/holy-father/paul_vi/encyclicals/documents/hf_p-vi_enc_26031967_populorum_en.html. Pope John Paul II, *Redemptor hominis* (March 4, 1979), www.vatican.va/holy-father/john_paul_ii/encyclicals/documents/hf_jp-ii_enc_04031979_redemptor-hominis_en.html.

³³ Pope Francis, *Evangelii gaudium* (November 24, 2013), http://w2.vatican.va/content/francesco/en/apost_exhortations/documents/papa-francesco_esortazione-ap_20131124_evangelii-gaudium.html.

³⁴ For instance, Second Vatican Council, *Inter mirifica* (1963), nos. 8-12, 3-5, www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_decree_19631204_inter-mirifica_en.html; Congregation for Catholic Education, *Guide to the Training of Future Priests Concerning the Instruments of Social Communication* (1986), www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_19031986_guide-for-future-priests_en.html; Pontifical Council for Social

other places, the documents emphasize forming audiences to be able to identify the bad intentions of some creators, as well as the manipulative and nefarious messages that some communicators create.³⁵ Only through such training, for instance, will communicators desire to put forth positive programming with honest, uplifting messages. Only through such training will audiences become discerning viewers who can easily identify political, social, or consumer propaganda or can tell the difference between portrayals of immoral activity meant to titillate audiences from those that are necessary to teach moral lessons.

While this body of work does provide great insights into the intention and reception of messages through various media, as is typical of instrumentalist approaches, it tends not to pay significant attention to the broader factors associated with impact of the material practice of communicating or the systemic issues of social context beyond the intended and received messages. For instance, a full account of the moral character of communication practices would be well served by consideration of the deterministic aspects of the constitutive characteristics of the technological means we use to communicate. The areas of concern are numerous, such as the effect of anonymity on authenticity, the impact of broad adoption of cell phones across age groups and how family interaction and relational patterns are reconfigured, the development of new trends in journalism like “clickbait” and “churnalism,” the ways in which ubiquitous entertainment and gaming culture is influencing liturgical engagement, how technology use by children will affect their development, and the ongoing creation of gated communities of information.

A full account of the moral character of technology and media practices would also be well served by a cultural materialist consideration of the systemic aspects of communication industries and the ways in which they shape technologies to support particular social values, goals, and meaning structures rather than the user's own purposes. This might include exploration of the power dynamics that are involved in contemporary media ownership and consolidation, the expansion of for-profit “knowledge cartels” and control of scholarly in-

Communications, *Aetatis novae* (1992), nos. 20-21, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_2202_1992_aetatis_en.html; Pontifical Council for Social Communications, *Ethics in Advertising*, 15-19.

³⁵ Pope Pius XII, *Miranda prorsus* (1957), Pt. 1, no. 12, www.vatican.va/holy_father/pius_xii/encyclicals/documents/hf_p-xii_enc_08091957_miranda-prorsus.-en.html; Pontifical Council for Social Communications, *100 Years of Cinema: Training In The Interpretation Of The Motion Picture Medium* (1996), www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_19960101_100-cinema_en.html. Pontifical Council for Social Communications, *The Church and Internet* (2002), nos. 11- 12, www.vatican.va/roman_curia/pontifical_councils/pccs/-documents/rc_pc_pccs_doc_20020228_church-internet_en.html.

formation, the rise of data mining and predictive analytics at the service of marketing, dynamics of the digital divide (especially in the global context), and the expansion of surveillance, censorship, and filtering. All of these are significant influences on the impact of social communications on persons and societies, and considerations like these should find their way into contemporary work on the ethics of technology.

To defend, for a moment, the approach of Catholic social teaching on social communication, it could be argued that the literary form of official pronouncements and addresses limits the possibility for a thorough and nuanced approach to technology of the kind that I am suggesting. Most of the documents released over the past two decades have been the annual World Communication Day addresses. These have gained quite a bit of notoriety over the past few years in the popular press, but at an average of about 1500 words, they have little room for nuance and depth. One has to go back at least ten years to find documents in the 4,000-5,000 word range, such as the Pontifical Council for Social Communication's 2000 document *Ethics in Communication*, 2002's *Ethics and Internet* and *Church and Internet*, or Pope John Paul II's final Apostolic Letter, 2005's *The Rapid Development*.

These documents did engage some determinist and cultural considerations, albeit only briefly. *Ethics in Communication* mentions ideas as various as message fragmentation, media influence in education, and global inequity in communication technology.³⁶ *Ethics and Internet* and *Church and Internet* raise concerns about censorship in a few lines, but follow-up work has not been done to see if these concerns are the case, despite significant political, social, and technological changes around the world.³⁷ *Ethics in Internet* critiques straw-men anarchist libertarians, yet forgoes wrestling with the complexities of regulating the global Internet system.³⁸ Going back farther, *Aetatis novae* covers cultural, social, political, and economic contexts of communication in a mere two paragraphs, and *Pornography and Violence in the Communications Media* discusses the economic and political structure of mass media in a single paragraph.³⁹ The only document that really

³⁶ Pontifical Council for Social Communications, *Ethics in Communications* (2000), nos. 29, 17, and 14, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_20000530_ethics-communications_en.html.

³⁷ Pontifical Council for Social Communications, *Ethics and Internet* (2002), no. 12, http://www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_20020228_ethics-internet_en.html; *The Church and Internet*, no. 11.

³⁸ Pontifical Council for Social Communications, *Ethics and Internet*, no. 8.

³⁹ Pontifical Council for Social Communications, *Aetatis novae* (1992), nos. 4-5, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_22021992_aetatis_en.html. Pontifical Council for Social Communications, "Pornography and Violence in the Communications Media: A Pastoral Response" (1989), no.

moves beyond the instrumentalist approach in any significant way is 1971's *Communio et progressio*.⁴⁰ But this advantage is also its chief liability: At nearly 20,000 words, it is of limited interest for most readers.

That being said, these longer documents did pretty well to mention material or cultural aspects at all. The range of social factors and use patterns did not vary significantly in the early days of film and television. One sat down in front of a moving picture in an intentional manner to take in a story or message that was created and distributed by a major corporation. But the advent of the Internet, mobile technologies, and user generated content have created myriad ways to use technologies for communication and expression on platforms as varied as Facebook, 4Square, Wordpress, YouTube, Flickr, Pinterest, 4chan, and Sound-Cloud. Just as the Vatican's preferred format got shorter, the complexity grew.

And to be fair, it does seem that recent documents do at least recognize the critical nature of attending to material and social conditions for communication. For instance, the 2013 World Communication Day Address notes that:

Social networks are the result of human interaction, but for their part they also reshape the dynamics of communication which builds relationships: a considered understanding of this environment is therefore the prerequisite for a significant presence there.⁴¹

Clearly, there is a growing awareness of the social aspects of communication here.

However, if this awareness is growing, it is also fair to say that it is not yet mature. Despite this mention of social dynamics, the address does not go on to offer a considered understanding of the issues in a way that a social materialist would recognize. For instance, at the start of the fifth paragraph, the document states that "the challenge facing social networks is how to be truly inclusive."⁴² On the face of it, this statement makes sense: it certainly will be a challenge to get social networks to be inclusive. Yet, in the absence of a discussion of the dynamics in society and on the Internet that mitigate against this happening, the statement rings hollow.

20, www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs-doc_07051989_pornography_en.html.

⁴⁰ See, for instance, Pontifical Council for Social Communications, *Communio et progressio*, nos. 33-47.

⁴¹ Pope Benedict XVI, "Social Networks: Portals of Truth and Faith; New Spaces for Evangelization" (2013), no. 5, www.vatican.va/holy_father/benedict_xvi/messages/-communications/documents/hf_ben-xvi_mes_20130124_47th-world-communications-day_en.html.

⁴² Pope Benedict XVI, "Social Networks," no. 5.

The reality is that as they exist now, social networks are anything but inclusive. Indeed, many social networks exist for the sole point of being exclusive: to be places where people of like mind gather to share similar perspectives without the need to engage people who are different. There are social networks that put this bias front and center, such as the social networking platform Netropolitan, which is aimed squarely at the wealthy, requiring a \$9,000 joining fee and \$3,000 annual fees.⁴³ On social networks that are not structurally exclusive, the anonymity of the web affords the opportunity to marginalize and belittle those who are different. An October 2014 study by the Pew Research Center reported that “fully 73% of adult Internet users have seen someone be harassed in some way online and 40% have personally experienced it.”⁴⁴ The most common form of harassment is the use of offensive names, but also includes purposeful embarrassment, physical threats, and stalking.

As it stands, technological factors (anonymity) and cultural factors (classism/racism/sexism) mitigate against the transformation of these social practices through actions intended to embody Christian love through heartfelt messaging. To suggest otherwise rings as naïve and romantic as Microsoft CEO Satya Nadella’s 2014 comment that women will achieve pay equality not by asking for raises, but rather by trusting the system to reward them accordingly.⁴⁵ Thus, while the Pope Benedict’s comment is true—being inclusive is a great challenge—the address does not provide sufficient analysis to either describe just how complex the situation really is or provide a roadmap for its transformation. Lack of regular attention to aspects of means and circumstances limits the sizable body of Catholic social teaching on social communications from providing a helpful tutorial for effective moral analysis of technology.

AVOIDING THE “PETER MOMENT” A BROADER VIEW FOR FULLER UNDERSTANDING

Employing a robust analysis of intention, means, and circumstances that draws on the insights of the instrumentalist, determinist, and cultural materialist approaches to technology will enable moral theologians to offer more fruitful analyses of the impact of our gadget use on persons and communities. At this point, I’d offer two examples of the ways in which this fuller approach might lead us to different

⁴³ Amanda Kooser, “Social Network for Rich People Costs \$9,000 to Join” (September 17, 2014), www.cnet.com/news/social-network-for-rich-people-costs-9000-to-join/.

⁴⁴ Pew Research Center, “Online Harassment” (October 2014), 3, www.pewinternet.org/2014/10/22/online-harassment/.

⁴⁵ Selina Larson, “Microsoft CEO Satya Nadella to Women: Don’t Ask for a Raise, Trust Karma,” *ReadWrite* (October 9, 2014), <http://readwrite.com/2014/10/09/nadella-women-dont-ask-for-raise>.

conclusions than the “tried and true,” single approach method that is commonly used. Instead of examining issues that have received a great deal of attention in the press (i.e., worker justice, NSA surveillance, or drones), let us consider two small-scale, everyday practices that a typical teen or young adult is likely to engage in. One will consider the act of the teen or young adult, the other will consider the act of a teacher who instructs those teens and young adults.

One example of what it might be like to broaden our approach to technology to consider intentionality, technological means, and social context can be found in the question of the appropriate means for ending a relationship. During their high school and college years, most American youth engage in some way in the social practice of dating. Whatever the professed intention, dating serves as a way for people to become familiar with social protocols, explore what it is like to create deep relationships with different kinds of people, and ultimately identify someone to enter into a loving, long-term relationship with. Unfortunately, this exciting process of discovery carries with it the much less exciting experience of the break-up, where an unsuccessful relationship is ended, either mutually or unilaterally. Feelings, expectations, and investment of many different kinds lend even the most amicable break-up the potential for a great deal of emotional pain. This pain can be exacerbated through callous treatment of one party by the other, but it can also be mitigated through careful attention to the needs and emotional state of the other. But even with the best of intentions, the end of a relationship is often difficult.

Unfortunately, relationships have not become any easier with the advancement of digital information and communication technology. In the age of “play dates,” “helicopter parenting,” and a pervasive sense of unease with the state of safety for children, youth have fewer locations for unsupervised interaction with one another. With ubiquitous adoption of devices by youth, cell phones and social media have rapidly started to function in the same ways that malt shops, roller rinks, shopping malls, and arcades did for previous generations. As youth technology use researcher danah boyd puts it, “teens are looking for a place of their own to make sense of the world beyond their bedrooms. Social media has enabled them to participate in and help create... [new] networked publics” where they can interact with one another, even when stuck at home with parents.⁴⁶ Teens and young adults

⁴⁶ danah boyd, *It's Complicated* (New Haven: Yale University Press, 2014), 5; “Why Youth (Heart) Social Network Sites: the Role of Networked Publics in Teenage Social Life,” in *Youth, Identity, and Digital Media*, ed. David Buckingham (Cambridge, MA: MIT Press, 2007). On “hiding in plain sight,” see Laura M. Holson, “Text Generation Gap: U R 2 Old (JK),” *The New York Times* (March 9, 2008), www.nytimes.com/2008/03/09/business/09cell.html?pagewanted=all&_r=0.

use technology to engage in a wide variety of social interactions, including, naturally, dating and romantic relationships.⁴⁷ Indeed, technology use has even extended solidly into the sexual aspects of teen and young adult relationships. While findings vary among studies, recent studies have found that 27.6% of 14-19 year olds and 44% of 18-24 year old cell phone owners have received sexually suggestive or explicit messages or images on their devices.⁴⁸ Thus, these networked spaces are not simple by any means. In their digital lives, teens and young adults are working through the same complex and fraught aspects of growing up that they do offline.

In this social context, it might come as no surprise that young people use technology to accomplish the difficult task of ending a relationship. The advantages of using a text message or social media post are presumably quite apparent: The complicated business of making one's self vulnerable and of facing another's pain are significantly mitigated when you remove the face to face and dialogical components of the process. If "breaking up is hard to do," doing it digitally makes it much easier. However, this raises potential moral questions. At the very least, use of a private medium like text messaging would seem to be an expression of negligence, violating the basic requirement of solicitude.⁴⁹ The act may arise out of a lack of prudential judgment about the appropriate course of action to uphold care for the other, more a failure of good intention rather than the presence of a bad intention. It may also arise out of fear of what needs to be done due to the emotional pain that might be experienced through the face-to-face conversation, thus an intentional keeping at arms length.⁵⁰

However, the choice to break up over a public medium like a social network site adds to these failures, at the very least, an additional violation of the dignity of the other through making one's private life into a public matter, even when done out of ignorance.⁵¹ At its worse, it

⁴⁷ For particularly thoughtful, ethnography based treatment of teen dating in the digital age, see danah boyd, "Friendship," 79-116 and C. J. Pascoe, "Intimacy," 117-148 in *Hanging Out, Messing Around, and Geeking Out*, ed. Mizuko Ito (Cambridge, MA: MIT Press, 2010).

⁴⁸ Jeff R. Temple, et al., "Teen Sexting and Its Association with Sexual Behaviors," *Archives of Pediatric and Adolescent Medicine*, 166:9 (2012), <http://archpedi.jamanetwork.com/article.aspx?articleid=1212181>; Amanda Lenhart and Maeve Duggan, "Couples, the Internet, and Social Media," Pew Research Center (February 11, 2014), 18, www.pewinternet.org/files/2014/02/PIP_Couples_and_Technology-FIN_0211-14.pdf. On differences in study findings, see Bianca Klettke, David J. Halliford, and David J. Mellor, "Sexting Prevalence and Correlates: A Systematic Literature Review," *Clinical Psychology Review*, 34 (2014); 44-53.

⁴⁹ As in Aquinas, *Summa Theologica*, II-II, q. 54, a. 13.

⁵⁰ As in Aquinas, *Summa Theologica*, II-II, q. 125, a. 1.

⁵¹ The right to privacy has been affirmed throughout Catholic social teaching on social communication. See Pontifical Council for Social Communications, *Communio et progressio*, no. 42. Originally discussed under the rubric of the right to information afforded the public through the mass media, in the Internet era, this would conceivably

can easily become the kind of cruelty and derision aimed at humiliation that forms the foundation of bullying.⁵² Given this assessment, ending a relationship in any way other than through a face-to-face conversation appears as a less than morally laudable action grounded in either a failed intention or the choice of an inadequate means for embodying a good intention. Such evaluation might lead us to create a concrete moral norm that “one ought not to break up with someone online.”

While this norm sounds clear and sensible, a fuller description of the social world of current teens and young adults reveals that it may be inadequate to assess the moral character of breaking up over mediated channels. Several aspects are particularly instructive. First, the kind of strong distinction between “online” and “face-to-face” that many adults make—and that underlies any claim that one is “more authentic” than the other—does not exist for youth. “For most teens, social media do not constitute an alternative or ‘virtual world’. They are simply another method to connect with their friends and peers in a way that feels seamless with their everyday lives.”⁵³ Mediated emotional interactions are not disconnected from unmediated interactions, and thus participate as equals in the broader relational context.

Second, as a result, using social media as part of the breakup process can engage positive functions in relational lives.⁵⁴ Social media can be used to communicate through broader, overlapping friend networks and indirect communication channels in ways that are understood as more sensitive because they are less direct. By managing exposure to postings and news feeds, both parties involved in the end of relationship can manage their anxiety levels in ways that face to face encounters do not allow. And narrating one’s experience through social networks affords both parties many opportunities for validation from their peers in times where support is particularly important, as well as exit the relationship smoothly by slowly releasing bonds with former significant others. As the determinist would affirm, social media has changed the practice of rationality. As a result, our description of both the actor’s intentions and the fit between means and intention may be in need of revision.

A third aspect of the social world of current teens and young adults that is relevant to assessment of the choice to break up with someone digitally—particularly through social media—concerns the particular character of current online culture. It likely comes as no surprise, but women experience higher levels of harassment throughout their social

extend to non-journalistic communication posted on public sites. See also Second Vatican Council, *Inter mirifica*, no. 5.

⁵² As in Aquinas, *Summa Theologica*, II-II, q. 159, a. 2 and q. 75, a. 1.

⁵³ boyd, “Friendship,” 84.

⁵⁴ Pascoe, “Intimacy,” 135-141, 146.

media experiences. As noted previously, harassment is a common experience among Internet users, with 40% of adults having experienced some form of it personally. Among young adults, that number is higher, with a full 70% of Internet users ages 18-24 having been harassed online.⁵⁵ But women experience much higher rates than men of “particularly severe forms of online harassment,” including stalking (26% of female Internet users) and sexual harassment (25% of female Internet users).⁵⁶ Within the realm of sexting, while both males and females report similar levels involvement, teen girls experience much more pressure to do so. They are asked to send sexual pictures at a much higher rate (68.4%) than boys (42.1%),⁵⁷ and boys more frequently send pictures from girls on to their friends. They also experience significant negative consequences to their reputations for both sending pictures and refusing to send them, while boys do not.⁵⁸ Combining these two trends, a particularly heinous form of harassment emerged in 2010. Referred to as “revenge porn,” it consists in posting sexually suggestive or naked pictures of women (pictures of males are exceedingly rare) by disgruntled ex-boyfriends (identified posters are almost exclusively male) for the sole purpose of propagating embarrassing images across the web that will shame and harm women.⁵⁹ Indeed, between recent celebrity selfie photo hacks and threats of violence against high profile feminist media critics like Anita Sarkeesian, there is growing recognition of the widespread culture of misogyny that has been present for years in the online world, but that the social materialist would likely recognize as endemic to the intellectual, economic, and social patterns of western culture itself.⁶⁰

Given this asymmetry, it is plausible that in addition to being a way to take advantage of the positive aspects that it affords, using social media for the purposes of breaking up with someone may very well, for girls and young women, be best described as an exercise in self-

⁵⁵ Pew, “Online Harassment,” 14.

⁵⁶ Pew, “Online Harassment,” 15.

⁵⁷ Jeff R. Temple, et al., “Teen Sexting and Its Association with Sexual Behaviors.” See also, Bianca Klettke, David J. Halliford, and David J. Mellor, “Sexting Prevalence and Correlates,” 52.

⁵⁸ As Julia R. Lippman and Scott W. Campbell put it in “Damned If You Do, Damned If You Don’t... If You’re a Girl: Relational and Normative Contexts of Adolescent Sexting in the United States,” *Journal of Children and Media* 8:4 (2014), 371.

⁵⁹ Dave Lee, “IsAnyoneUp’s Hunter Moore: ‘The Net’s Most Hated Man,’” *BBC.com* (April 20, 2012), www.bbc.com/news/technology-17784232; Dan Goodin, “Feds arrest ‘most hated man on the Internet’ in Revenge Porn Hacking Case,” *ArsTechnica.com*, January 23, 2014, <http://arstechnica.com/tech-policy/2014/01/feds-arrest-most-hated-man-on-the-internet-in-revenge-porn-hacking-case/>.

⁶⁰ Catherine Buni and Soraya Chemaly, “The Unsafety Net: How Social Media Turned Against Women,” *The Atlantic*, October 9, 2014, http://www.theatlantic.com/technology/archive/2014/10/the-unsafety-net-how-social-media-turned-against-women/381261/?single_page=true.

care or self-protection than in failed intention or unfitting means. No matter how a breakup happens, there is always potential for embarrassment and shame. That is as unavoidable now as it has ever been. However, with today's digital tools, there is an increased potential that an ex-boyfriend will respond in a way that has long-term negative consequences for the young woman involved. By making the breakup itself public, a young woman has the primary role of shaping the messaging within her community, mitigating the chance that her ex will be able to use the situation as a launching point for harassment. In a social world characterized by falsehoods, derision, and willful spreading of other people's private and intimate information, it is critical for girls and women to be able to control the stories that are told about them. Breaking up online may be less about a lack of care or an intentional shaming than about initiative and intentionality in relationships that should be mutual but, all too often, are not. While "one ought not to break up with someone online" is clear and catchy, the material and social conditions of the act itself call into question the sufficiency of the underlying assumptions that support it.

A second example of how we might broaden our approach to technology beyond questions of intentionality to include the technological means and social context can be found in the question of what one might, as a college professor, ask of those whom we invite to learn and explore as part of the assignments in a course. It certainly goes without saying that across the spectrum of learning environments, educators strive not merely to impart information to their students, but to engage them in a process of self-discovery and personal growth such that they pursue not merely information, but integral human development. To do this, teachers sometimes invite students to do work that is very personal, exploring the depth of their experiences in a host of areas. Students in art programs, for instance, are using visual media to explore difficult topics like abuse, loss, and addiction. Students in communication programs are testing the creative waters, trying to find their voices by doing provocative and probing work, be it investigative journalism or shock media. Students in theology classes are invited to explore the complex realities of living spiritually in a consumer culture. Through these kinds of assignments, students develop who they are in addition to what they know.

To this, we might add another factor: Faculty members these days frequently ask their students to use social platforms like YouTube and free online tools like Google Docs as media for both academic work and more exploratory, reflective tasks. The intentions here are often fairly straightforward and unwaveringly good. Using digital tools can enable students to utilize their creativity through the media of photography, video, audio, and blogging. Using new media is a nice break from paper writing and exams, which, in turn, can increase student

motivation. And choosing “free” tools for these activities keeps educational costs down. These are all laudable intentions. Providing students interesting assignments and multiple pathways for expression are excellent ways to improve student engagement and, thus, performance. Using technology and new media at the college level seems like a win-win situation.

However, considering the normative technology practices within our broader social context suggests that in order to reap the benefits of technology in education, faculty must attend to much more than simply giving the assignment. One of the most controversial aspects of the social media landscape over the last five years has been privacy. Most recently, in the wake of Edward Snowden’s revelations about the National Security Administration in 2012, this concern has centered on government data mining of phone call information and social media accounts. Before that, there was significant concern about data aggregation by social media sites for the purposes of advertising. As problematic as these situations are, there is a deeper concern, namely of we might call the “existential” need for privacy.

In a *Heythrop Journal* article from 2010, political philosopher Hayden Ramsey explores the link between privacy and integral human development. He argues that:

Privacy is a human need: it is a good necessary for all people if they are to share in basic goods. Privacy, however, does not correspond with any specific basic good. It is not essential for participation in any one good. Rather, privacy is essential for effective participation in every basic human good—possessing privacy is necessary if we are to flourish in respect of health, knowledge, creativity, work, leisure, family, friendship, religion, peace of mind and practical thinking.⁶¹

Privacy, then, is a necessary precondition for basic human development. Ramsey goes on to offer examples of the links between privacy and different types of development, noting:

Our needs for education and job training will be satisfied more effectively where our needs for freedom from interference and from observation are also satisfied; we need cultural and spiritual development in order to share in art and religion, but to develop in these ways we need too a measure of solitude; to satisfy our need for linguistic and social skills we also need freedom to grow, security to experiment.... Solitude and freedom from interference with our thinking allow us to build respect for self, others and thinking itself which we will need if we are to plan our own lives reasonably.⁶²

⁶¹ Hayden Ramsay, “Privacy, Privacies and Basic Needs,” *Heythrop Journal* 60 (2010): 294.

⁶² Ramsay, “Privacy, Privacies and Basic Needs,” 295.

Privacy provides human beings with the space necessary to take our first steps in living our identities in concrete practices, experimenting with alternate selves, and entering into vulnerable spaces without fear of retribution or the cost of public failure. Without privacy, we will find it difficult to become our full selves.

Recognition of this role of privacy is important because there are times when faculty members ask students to explore the deepest parts of themselves, so they can grow into creative, intelligent, and responsible adults. Some professors are mindful of the importance of the full gamut of privacy needs, and they direct students to use closed university learning management systems like Blackboard or set up their own secure sites where students can post their work. Others, however, are not, inviting students to use public fora like YouTube, Wordpress, Instagram, and Stellar to put their work directly in the public forum. Yet, even when faculty set up private channels for submission, much of this work doesn't stay private forever. Many of the tools we use have robust sharing features built in, even if we do not use them for the assignment. Additionally, the culture of sharing that predominates today—that valorizes public collaboration and contribution—makes posting even the most personal work a laudable act. Many students have a very public sense of their lives: if they do something cool, they want to post it for their friends or family. Thus, between the invitation to share within the tools themselves (the means) and the encouragement to share within the student's cultural context (circumstances) students themselves may very well fail to respect the privacy that they themselves need to become their full selves.

Importantly, the stakes are high in a wired society. According to a 2012 study by placement firm CareerBuilder, more than a third of American companies examine social media when researching job candidates.⁶³ Sixty-five percent say they want to know if candidates present themselves professionally, 51% want to know if it is a good fit for company culture, and 12% say they are looking for reasons not to hire. In the end, 34% of hiring managers who looked at candidates' social media activity chose not to hire them as a result of things they found. The single biggest reason they chose not to hire: 49% they found material that they considered provocative or inappropriate.

Given the reality that self expression could, conceivably, lead to trouble finding a job, we are left with a question: Are faculty members developing responsible assignments for the twenty-first century? The work that students do in our courses might be tremendous, and their

⁶³ CareerBuilder, "Thirty-seven percent of companies use social networks to research potential job candidates, according to new CareerBuilder Survey," www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?id=pr691&sd=4%2F18%2F20-12&ed=4%2F18%2F2099.

personal and intellectual growth significant. Indeed, it might be something totally uncharacteristic, a moment on a journey to figuring out who they really are. Yet, in our digital sharing world, that material will follow them for years, and it might harm their employment possibilities. It is important not to have paternalistic concern, yet it is also important to consider whether or not we prepare students for the reality that what they see as a small part of their educational experience, carried out in the freedom and privacy of the university community, will—if ever entered into the public web—be part of a public profile that will be connected to them for years. Given the high stakes—both personal and professional—faculty members must do serious work—both technical and pedagogical—to ensure that what we ask students to do does not lead to problems down the line.

CONCLUSION

As we traverse the second decade of the twentieth century—forty years into the digital era—we know that contemporary information and communication technology poses complex problems that require more thorough analysis than would have been done a century ago. We know that while the Pope writes beautiful tweets, they are unlikely to have a positive spiritual effect when sandwiched in between updates from Fox News, Bacardi Rum, the Gap, and Nikki Minaj. And we know that if a young child wanders off from the park after you stop paying attention to watch a video on your cell phone, the fact that you were watching a lecture on the Eucharist will not make it all better. Thus, it is incumbent upon scholars to approach questions of technology and media with the same kind of sophisticated, multivalent analysis that we use when we approach any other moral question. Goals of the communicator, content of the message, material engagement with particular communication technologies, personal messaging practices and habits, and broader social realities—intent, means, circumstance, and consequences—all of these are critical parts of the communication event. Each one helps us understand one part of the whole process of messaging and the culture in which it is realized. If we, as moral theologians, want to understand the ways in which contemporary communication technologies are transforming individuals and communities as well as plan how to use communication technologies in ways that lead to integral human development and a global common good, it is incumbent upon us to understand each of these factors and draw all of them—be they instrumental, determinist, or cultural materialist—into our picture of communication as we work to help create students, churches, and communities in the twenty-first century. **M**