## Introduction

There is no escaping technology . . . It isn't just that we have got a lot of machines. But that the entire life of man is being totally revolutionized by technology. This has to be made very clear. We are not at all living just in an age where we have more tools, more complicated tools, and things are a little more efficient, that kind of thing. It's a totally new kind of society we're living in . . .

Thomas Merton, "The Christian in a Technological World"

HEN I WAS A little boy, my grandfather in West Virginia told me that when he was born things were not much different than during the life of Jesus. Okay, Jesus didn't have a railroad or a telegraph, to be sure, but in many respects my grandfather was right. People traveled by horses and read by oil lamps. But our technologies now advance at lightening speeds. For almost a century our computing power has doubled every eighteen months (Moore's Law) and our wireless communications has doubled every thirty months (Cooper's Law).

As a result of such rapid technological advances, we live as Merton stated in a "totally new kind of society" because of technology. Just consider our first hour in the morning after we awake. We are sleeping in homes that are regulated by heaters and air conditioners to provide a comfort zone of temperature. Then the alarm clock rings. We arise to take a bath or shower with internal plumbing that is heated to our preference. We eat a breakfast that has been processed at factories and preserved with chemicals. Even the milk for our cereal comes from a production line of cows who are pumped full of hormones and antibiotics. We sip our coffee

6. Ridley, "Why Can't Things Get Better Faster (Or Slower)?".

procured from a machine and watch the morning news on television. Walking outside, we commute to our job in a car, bus, or a subway. We turn on our cell phones. Welcome to your first hour.

These forms of technology seem innocent enough. They make our lives easier, perhaps even more pleasurable, but the advance of technology also presents ethical challenges that are not so benign. Consider these three scenarios.

- 1) As chapter 2 will discuss, we have developed atomic weapons with the capability to destroy the planet. The containment of such weapons of mass destruction places us in a position of either pursuing questionable attacks based on uncertain intelligence or accepting nuclear proliferation. We wonder how many nations have this weapon. Will we go to war to prevent countries from acquiring a nuclear weapon? But with an increasing proliferation that may eventually extend to terrorists, it is not difficult to imagine that some use of this weapon will result in the deaths of millions at some point.
- 2) The deluge of data from our modern communications is threatening to overwhelm us in a different way. Consider this one fact—more to follow in chapter 3. It is predicted that we will soon produce five exabytes of digital information every ten minutes. We will produce in roughly an hour the equivalent of all the information in all the books ever written.<sup>7</sup>
- 3) Our minds and bodies face another threat through the conscious designing of the human species, transforming us into a new technological being, the transhuman. As chapter 4 will suggest, this is no longer science fiction. In a neuroengineering lecture at the Georgia Institute of Technology that I attended by Dr. Michael Chorost on March 9, 2012, he lectured on "How to Put Your Brain on the Internet, Lessons from a Cyborg." He indicated that we are now developing technologies to read and alter our brain activity. He indicated that we will connect our brains through our biotechnologies in the "World Wide Mind."

All of these forms of problematic machinery and techniques are technologies. So before we proceed a fair question to ask is, what is a technology? When I use the term *technology*, I am referring to instruments or processes that control, shape, and modify our environments and to

<sup>7.</sup> Shermer, "Defying the Doomsayers," A 13.

an increasing degree, in our own time, our selves. These technologies supplement our natural capacities by adding to our physical strength and senses. With the extension of capacities, technologies allow us to manage the natural world in order to meet our needs and desires as a species. With these capacities technologies shape how we live and think.

Thomas Merton's relationship to technologies creating a "totally new kind of society" was ambivalent. He rejected the worse features of a technological world that threatened our humanity, but he knew that we could not ignore technology or revert to a more innocent age. He was amazed at the mastery of technology over nature, but beneath the shiny surface accomplishments of our inventions there lurked inherent problems. Technology was about action, changing nature to conform to our desires. It plunged ahead guided by the imperatives of control, efficiency, and productivity. These imperatives were indifferent to humane concerns about beauty, love, or art. Technologies raised other troubling questions. Could a person be a contemplative in such a world of relentless change? Should we raise important ethical questions? The tension of positive and negative possibilities, for Merton, was never far beneath the surface; they were often expressed in consecutive sentences.

Yesterday in the morning when I went for a breath of fresh air, before my novice conference, I saw men working on the hill-side beyond the sheepbarn. At last the electric line is coming! All day they were working on holes, digging and blasting the rock with small charges, young men in yellow helmets, good, eager hard-working guys with machines. I was glad of them and of American technology pitching in to bring me light as they would for any farmer in the district. It was good to feel part of this, which is not to be despised, but admirable. (Which does not mean that I hold any brief for the excess of useless developments in technology.)<sup>8</sup>

Merton advanced a probing analysis of technology that freely acknowledged this ambivalence. He knew that technology was an unavoidable aspect of modern life even in a monastery. Any monastic calling that ignored technology would turn monasteries into museums. But we needed discernment to determine how technology affirmed or demeaned human life. Merton confided that, "What I am 'against' then is a complacent and naive progressivism which pays no attention to anything but the fact that

8. Merton, Dancing in the Water of Life, 206 (hereafter DWL).

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wonderful things can be done with machinery and with electronics." What was lacking then was the wisdom to know how to accept the undeniable utility of technology without violating the requirements for a fully human life, a life that praises God, aids other people, and nurtures creativity and freedom.

This critique had an interesting trajectory. His views prior to entering Gethsemani in December of 1941 were largely unknown, but there were a few scattered clues. In 1939, under the spell of his latest enthusiasm, James Joyce, he made a list of "modern words" that included "sterile, sterilize . . . Lockheed dive bomber, magnetic mine, heavy and light machine guns, tommy guns, minesweeper . . ." On another occasion after participating in a radio broadcast as a student at Columbia University, he was awed at his instant contact with so many people. <sup>10</sup>

When he entered the monastery in 1941, Merton rejected a modern world infected with corruption and falsity. The former bon vivant of Cambridge University was now a crusading Trappist who contrasted the redemptive mission of the monastery with a fallen America. He later confessed that he entered the monastery with "Thoreau in one pocket, John of the Cross in another, and [was] holding the Bible open at the apocalypse." Even with its relative seclusion in the hills of northern Kentucky, Gethsemani was not immune to secular maladies. The reorganization and expansion of the monastery in the 1940s and 1950s imported a "small-mechanized army of builders" whose noisy machinery built the facilities for a flood of new postulants. He lamented the "infernal concerto of chain saws" with their "yell of hot metal, diabolical intervals of atonal discord."

The problem at the monastery was more than one of external noise. The internal assumptions of a technological mentality had infiltrated the

- 9. Technically, the abbey is a monastery of the Order of the Cistercians of the Strict Observance (O.C.S.O.). They are known as Trappists because their founding abbey was at Soligny-la Trappe, France. Merton, *The Road to Joy*, 98–99, "Circular Letter" (Lent 1967), hereafter *RJ*.
- 10. Merton, *Run to the Mountain*, 110, 280, entries of December 14, 1939, December 18, 1940.
- 11. Merton, *Entering the Silence*, 44, entry of March 11, 1947 (hereafter *ES*); Merton, *DWL*, 225, entry of April 7, 1965.
  - 12. Merton, "Is the World a Problem?," 305.
  - 13. Merton, Sign of Jonas, 5.
  - 14. Merton, CGB, 308.

cloistered walls. Some monks held that a rigorous adherence to rules and regulations insured salvation. This "pitiful faith" in a mechanical spirituality made Merton's "blood run cold." A psychology of progress had infiltrated the Church at many levels. Merton was astonished that Pope Paul VI referred to contemplatives as "aviators of the spirit." The pope's comments suggested an "illusion" that contemplatives knew the mechanisms guiding the "secrets of interior life" and could use them. <sup>16</sup>

This technical spirituality was allied with another error. The Harvard Business School trained abbot, Dom James Fox, wanted the abbey to be "successful, secure, 'prosperous." The monks like cogs in a machine were to efficiently produce their cheese and fruitcake. For Merton this was a mistaken concession to the cultural and economic patterns of the broader society.

With his opening to the world in the mid-1950s, Merton advanced a more nuanced view and admitted that technology, for better or worse, was an inevitable reality for the monastery. Monks in modern air conditioned rooms could no longer claim a separation from technology. He admitted that he treasured a refrigerator and running water when he acquired them at his hermitage at the monastery. Merton adopted a carefully qualified reconciliation not only with technology but also with the persons living in a technological world. A major stimulus in his transformation was the separation of individual persons from the technological and modern systems that had diminished but not eliminated their humanity. As early as August of 1948, during his first visit to Louisville in seven years, he stated that, "Although I feel alienated from everything in the world and all its activity, I did not necessarily feel out of sympathy with the people who were walking around. On the whole they seemed to me more real that they ever had before, and more worth sympathizing with." 18

Always searching for new insights from an array of sources, Merton would develop, as will be detailed in the first chapter, a prophetic and contemplative critique of technology. He addressed a wide and complex array of issues connected to the technological world. What should we make of materialism, Marxism, capitalism, alienation, technological

- 15. Merton, Search for Solitude, 72 (hereafter SS).
- 16. Merton, ES, entry of August 21, 1967.
- 17. Merton, SS, 353, entry of December 6, 1959.
- 18. Merton, ES, 223, entry of August 14, 1948.

warfare, mass society? New issues appeared by the 1960s from questions about DDT, Vietnam, computers, and television.

In analyzing technology, Merton wanted to avoid a further fracturing of the Catholic Church, especially with the advent of the Second Vatican Council. He was not ready to swear allegiance to the opposing camps of traditionalists and progressives. He declared in 1965 that, "I am frankly quite alienated from much of the thinking going on in my Church, on both sides, both conservative and 'progressive." This bifurcation of the Church into traditionalists and progressives was problematic because of their foundational assumptions. Merton rejected both "a large mass of passive conventionalists who cling blindly to what is familiar, and a small minority of eccentric faddists who are in love with anything new just because it is new." <sup>20</sup>

Despite being frustrated, Merton wanted to be a "bridge builder for everybody and to keep communication open, especially among fellow Catholics. So much depends on it." The desire to be a bridge builder was the result of a realization that the temptation to quickly judge others was problematic. The faith was "not a kind of radio electric eye which is meant to assess the state of our neighbor's conscience." Instead we should envision faith as a "needle by which we draw the thread of charity through our neighbor's soul and our soul and sew ourselves together in one Christ."

There were other dangers. This binding of humanity in charity must begin with a spiritual connection or it would lose its bearings.

Those who seek to build a better world without God are those who, trusting in money, power, technology and organization deride the spiritual strength of faith and love and fix all their hopes on a huge monolithic society, having a monopoly over all power all production, and even over the minds of its members. But to alienate the spirit of man by subjecting him to such monstrous indignity is to make injustice and violence inevitable.<sup>23</sup>

<sup>19.</sup> Merton, Witness to Freedom, 319, "Letter to Lord Northbourne," (Easter 1965), hereafter WF.

<sup>20.</sup> Merton, Disputed Questions, 152 (hereafter DQ).

<sup>21.</sup> Merton, WF, 325, "Letter to Rita" (November 14, 1965).

<sup>22.</sup> Merton, DQ, 125.

<sup>23.</sup> Ibid., 129.

Hence, secular ideologies were not an anchor point for Christians. Moreover, they were transient; the "life expectancy of the average secular ideology today is about five years." He acknowledged that many protests in the world were "little more than pose or declamation." Ideologies with shrill slogans whether communist or capitalist suffered from an inability to ask fundamental questions including a probing of basic premises. Rather than adhere to such ideologies, Merton supported a renewal of culture in Christ. The role of Christian education in this process was to move the technological society beyond its rational and sub-rational levels to engage a transcendent level of experience, the reality that would humanize our lives. In this cultural renewal that was sought by Vatican II, the Church should seek neither domination nor a faddish popularity, neither a rejection of science nor an unqualified adoption of its products—the latest technologies. <sup>26</sup>

For the Church to be successful in this balancing act, its path of wisdom must draw not only on theology, but also on philosophy, literature, and other faith traditions. A full range of human experience must be brought to bear on the subject of technology. This path to wisdom required us to distinguish the "useless or harmful from what is useful and salutary, and in all things glorify God."<sup>27</sup>

In this journey Merton's hard questions and careful reflections addressed the harm resulting from the triumph of technology in the modern world. The problem was not merely the development of new knowledge or capabilities. Indeed, these capabilities were not problematic per se, but they often nurtured a mentality that was destructive of authentic human ends. The technological world and its compulsive mentality were not currently balanced by "other aspects of human existence in the world," and as a result "the very splendor and rapidity of technological development is a factor of disintegration." This was the problem with Marxism that had pushed technological progress to the point of endowing "material things with intellectual life and stultifying human life into a material force." The result of this type of economic and historical reductionism was inevitably "the moral collapse of the material world." 28

- 24. Merton, Faith and Violence, 148 (hereafter FV).
- 25. Merton, DQ, 151.
- 26. Merton, *CGB*, 13, 53–55, 195; Merton, *WF*, 315, "Letter to Lord Northbourne" (February 23, 1966).
  - 27. Merton, CGB, 15.
  - 28. Ibid., 23, 60, 72.

Merton's analysis assumed the need for a careful examination of the problems resulting from a technological mentality dominating culture. My first chapter will initially consider Merton's formulation of the foundations of wisdom in the ideal of purity of heart, theoria physike, and sapientia or wisdom before surveying the specific sources of a technological mentality and its consequences. In analyzing the technological mentality, Merton relied on Jacques Ellul's notion of technique, Lewis Mumford's analysis of urban life, and Hyman Rickover's public policy principles. In the end, as the noted Merton scholar William Shannon observed, Merton sought through such principles the creation of a true community in contrast to a thoughtless technological collectivity.

In the second chapter I will analyze Merton's connecting of modern warfare and a technological mentality as they were applied to atomic weaponry. Turning to the issue of modern communication techniques in chapter 3, I will apply Merton's observations and general insights to assess problems from the current flood of information from constantly evolving communication technologies. Moving from the past and present into the future, chapter 4 will be the most speculative of my efforts and will apply Merton's insights to our ability in the near future to radically alter human nature through a variety of technologies in our search for human perfection. In the end we risk creating another species—transhumans.

In chapters 2–4, the goal is to explore how Merton's search for wisdom can provide a framework for analyzing specific aspects of the technological world. He not only issued prophetic warnings, but as chapter 5 will demonstrate, Merton provided some hope for our troubled culture through careful reflections on humanizing work, applying a measured approach to using technologies, recognizing the role of nature as a source of healing, and the adoption of the philosophy of a solitary.

In all of these chapters, the impetus of the book is to challenge a technological mentality which is seeking to solve problems at hyper-speed and is justified by the mandates of expediency and efficiency. At times, the power of our technological paradigm is startling and even on occasion sublime. Still, we remain uneasy; there are inner yearnings for meaning, love, mystery, and community that remain unfulfilled in our technology saturated world. William Shannon reminds us why Merton's contemplative quest for wisdom and reality is still attractive.

Those who choose to live a contemplative life are convinced that there is much more to life than what you see. There exists, they would claim, a world of reality below and above (indeed all around) our ordinary daily experience. It is this world which is alone truly real. People who are content to live simply on life's surface, are completely oblivious to the wonders that exist within them and all about them. How mightily their lives would be changed if they became aware of this other deeper dimension.<sup>29</sup>



29. Shannon, "Can One Be a Contemplative in a Technological Society?," 17.