

Technology, Culture, and Virtue

Patrick J. Deneen

Technology is the mark of modern life. From transportation to engineering, entertainment, finance, warfare, communication, sports, art, medicine (the list could expand almost without limit), every sphere of human life is influenced and shaped by the modern technologies that continually change—and in turn change us and the way we live. No other age has seen such a rapid and profound transformation of the human way of life in the course of only several generations. Many of us can still remember a time without computers or the Internet—not to mention cable television or cell phones—while our grandparents or great-grandparents could tell tales of a life before automobiles and telephones, or even before electricity and indoor plumbing. Within the span of a human lifetime our world has been transformed; it would be largely unrecognizable to the grandparents of the oldest person alive today.

And yet, even if this age of technology is something new in scope and speed, the central place of technology in human life is not itself a novelty. The human being has always been a technological creature. Consider these lines from the *Antigone*, written by Sophocles in 442 B.C.:

Numberless wonders [*deina*]
Terrible wonders walk the world but none the match for man—
That great wonder crossing the heaving gray sea,
Driven on by the blasts of winter
On through breakers crashing left and right,
Holds his steady course
And the oldest of the gods he wears away—
The Earth, the immortal, the inexhaustible—
As his plows go back and forth, year in, year out
With the breed of stallions turning up the furrows.

And the blithe, lighthearted race of birds he snares,
The tribes of savage beasts, the life that swarms the depths—
With one fling of his nets
Woven and coiled tight, he takes them all,

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Man the skilled, the brilliant!
He conquers all, taming with his techniques
The prey that roams the cliffs and wild lairs,
Training the stallion, clamping the yoke across
His shaggy neck, and the tireless mountain bull.
And speech and thought, quick as the wind
And the mood and mind for law that rules the city—
All these he has taught himself
And shelter from the arrows of frost
When there's rough lodging under the cold clear sky
And the shafts of lashing rain—
Ready, resourceful man!
Never without resources...

Resourceful man has always employed tools; we might better understand ourselves by calling our species *Homo techne* rather than *Homo sapiens*, for many creatures know things, but few use tools, and none have transformed themselves and their world through the use of tools as thoroughly as the human creature. So while we rightly consider ours an age especially dominated by technology, we should recognize that humanity has always altered its world through technology. The historical record tells us this—a record that is itself largely the result of the technologies of writing and reading.

Myth and storytelling have long recognized that human beings would not exist—would have long ago perished, perhaps without a trace—if not for our capacity to employ technologies that compensate (and then some) for our absence of natural powers. Updating myths from ancient Greece, the Renaissance thinker Pico della Mirandola composed an oration in 1487 entitled “On the Dignity of Man,” in which he described God’s fashioning of all creatures at the time of Creation. Pico relates that God bestowed a succession of talents or abilities or natural “tools” upon each species—great speed and the ability to burrow to the rabbit, flight to the birds, size and the trunk to the elephant, and so on. God then decided as an afterthought to fashion a creature that could understand and admire His handiwork, but found that He had assigned all tools and talents to the other creatures. To this creature He therefore bestowed the ability to make himself.

The Great Artisan...made man a creature of indeterminate and indifferent nature, and, placing him in the middle of the world, said to him “Adam, we give you no fixed place to live, no form that is peculiar to

you, nor any function that is yours alone. According to your desires and judgment, you will have and possess whatever place to live, whatever form, and whatever functions you yourself choose. All other things have a limited and fixed nature prescribed and bounded by Our laws. You, with no limit or no bound, may choose for yourself the limits and bounds of your nature. We have placed you at the world's center so that you may survey everything else in the world. We have made you neither of heavenly nor of earthly stuff, neither mortal nor immortal, so that with free choice and dignity, you may fashion yourself into whatever form you choose."

Lacking natural tools, humanity has employed its intelligence to manipulate its world, through such inventions as agriculture, irrigation, weaponry, the ability to start and keep fire, shelter, and language. We are truly the self-fashioning creature.

Culture as Technology

This basic and extraordinary fact about human beings means another thing: we survive and flourish not by instinct, but by behavior that is learned, preserved, and transmitted. Unlike all other species that walk upon, fly above, or burrow below the earth, we are almost wholly instinct-deficient: left to our own devices without even our most basic technological achievements, most of us couldn't survive for even several weeks. Lacking agricultural knowledge and the tools used to hunt, we would starve, if first we didn't freeze or become a modest meal for a wild beast. Lest our race be forced to begin anew discovering the most basic activities necessary for our survival—how to cultivate crops, how to build shelters, how to communicate; not to mention our more peculiar achievements, such as how to bake bread, how to make cheese, how to brew beer—we transmit this knowledge through institutions and traditions. Indeed, there can be little doubt that the greatest technology of human origin and making is culture itself. Culture is the repository of memory and the medium of transmission of human accomplishment as well as human failings. It is the conduit of past to future, the vessel of memory of countless generations of the past to countless generations in the future, an inheritance and a memorial. The Greeks understood this well, counting the nine muses as the primary goddesses of culture, and the daughters of Mnemosyne, or Memory. Culture is indeed the offspring of memory, the collective wisdom of humanity that allows us not merely to survive, but to flourish—essentially, to become human.

The necessity of culture for human survival and flourishing also demanded a human vessel in which such memory could be transmitted—namely the city, itself a masterpiece of technology. Indeed, for this reason Aristotle writes that “man is by nature the political animal,” understanding that we would not be human but for our capacity to govern ourselves in concert with one another, to create stable and longstanding human communities. Culture couldn’t perpetuate itself in the absence of politics, and thus politics and culture are mutually reinforcing; politics and *polis* are shaped by culture even as they shape the culture.

While Pico undoubtedly understood rightly that humanity thus in a sense “makes itself,” we should be cautious about the more Promethean inclinations of his assertion about the primacy of human choice and freedom. Culture is not an amorphous or infinitely flexible creation of humanity. Culture—as the word, so closely related to *cultivation* and *agriculture*, suggests—is deeply related to, and dependent upon, the facts of the natural world, including human nature. This stands to reason, since culture arose as a way for us to preserve and transmit our inheritance of how to survive and even thrive in a world at once replete with gifts and dangers. Culture has always centered on the most elemental: our relationship to the earth and the plants that spring from it; our relationship to the beasts, both their bounty and the threats they pose; our relationship to one another—through marriage, in raising children and making families, and in forging lasting communities that remember the past and are mindful of the future; and our relationship to the divine, the mysterious powers that order and govern a universe that we did not create and that we do not own. Human culture is itself a technology, and the technologies that have been preserved in human cultures have worked alongside nature. To use the language of Wendell Berry, culture “proposes an atonement between ourselves and our world, between economy and ecology, between the domestic and the wild.” Culture, in a sense, is the intermediate realm between nature and the human, keeping us tethered to the natural world even as it enables us to stand apart from it, and to use and alter it.

Berry—a poet, novelist, essayist, and farmer—is an especially able guide in this terrain. His work has drawn deeply from his experience and defense of traditional farming. Eschewing most modern advances that have ushered in an age of industrial farming with their emphasis upon economies of scale and efficiency, Berry has insisted that small-scale and family-based farming is a form of culture that pervades not just the production of food, but a way of life that emphasizes localism, community, a moral economy and culture, and a necessary and inescapable recognition

of limits. He has argued that the human relationship with nature is complex and challenging, never the easy assumption that humans can simply exploit nature to their ends, nor that we can live in simple harmony with nature. “As humans,” he writes, “we may elect to respond to this necessary placement by the self-restraints imposed in neighborliness, stewardship, thrift, temperance, generosity, care, kindness, loyalty, and love”—in short, in the cultures that humans make alongside nature.

In a sense, then, every age has been an age of technology, for as long as humans have been human we have been creatures that exist only in cultures, and culture is itself a technology. And yet it is surely also self-evident that the present age—at least the past several decades—has been unusually dominated by technology. What is the connection between the technology that is culture and the technologies that characterize the contemporary world?

Anti-Cultural Technology

When we think of airplanes and iPods, computers and cell phones as the mark of the moment, we miss a deeper and truer point that distinguishes this age from those that preceded. Our current technological age is marked, above all, by the expansion of technologies that have increasingly, and quite purposively, *undermined and destroyed culture*. Our present age of technology is thus unique in that it directs our newest technologies against our oldest technology; it poses our technologies of novelty and rupture against the technology that sustains us.

For most of human history, technology was devised to work with and alongside nature, even as it allowed humanity a degree of control over the natural world. Agriculture, husbandry, the harnessing of the power of rivers and wind were all examples of ways that previous cultures at once used nature even while recognizing that the bounty of culture was dependent upon nature. As Berry put it in a 2001 essay, “we must know both how to use and how to care for what we use. This knowledge is the basis of human culture.”

Our present age has divided these two preconditions for culture—the knowledge of how to use and how to care for what we use. We have done this, in particular, through the replacement of culture with industrial production. Industrial processes above all stress efficiency and productivity, prizing the ability to produce maximally by means of uniformity and repetition. They are oblivious to local conditions—machines and processes are designed precisely to ignore or overcome the obstacles of local conditions.

In fact, local conditions are forced to conform to industrial processes. Thus, if we consider the example of farming, whatever the acidity of the soil, whatever the lay of the land, whatever the availability of local water and fertilizer, whatever the climate, whatever the kinds of insects that might help or threaten a crop, industrial farming homogenizes production and pursues the most efficient agricultural monocultures. The same holds true for the industrial production of meat, of music, of housing, of entertainment, of education—in all these instances and many more, industrial processes ignore or obliterate local conditions. Everywhere our strip malls and box stores are the same, an endless national repetition of Wal-Marts and McDonald's, Starbucks and Home Depots. Dying or gone are local general stores, restaurants, cafés, and hardware stores, and along with them, a connection between production and consumption, local knowledge, and the willingness to care for and invest in one's own communities because the owners live there too. (To be sure, there is a small "local food" movement, but the very fact that such a movement is seen as necessary makes the point.)

By contrast, culture is inescapably local. The knowledge of local conditions is the precondition and the very essence of culture. And it is the localness of culture that ensures that nature is the standard for work and production; as Berry argued in a 1998 essay, "in a sound local economy... producers and consumers... will not tolerate the destruction of the local soil or ecosystem or watershed as a cost of production. Only a healthy local economy can keep nature and work together in the consciousness of the community." By contrast, he writes, "the global economy institutionalizes global ignorance, in which producers and consumers cannot know or care about one another, and in which the histories of all products will be lost. In such circumstances, the degradation of products and places, producers and consumers is inevitable." An economy based on the opposition to nature is also by definition opposed to local conditions, and by definition, opposed to culture. It is the very diversity of local conditions that leads to a diversity of cultures, and it is that diversity (not our faux claims to a politically-correct "diversity" that lies at the heart of our modern educational monoculture) that industrial processes everywhere seek to render irrelevant or destroy.

Lying deep at the heart of this division of use and care—the opposition to nature—are philosophies that reject the idea of the bounties and limits of nature, philosophies that regard nature chiefly as an obstacle to the fulfillment of our desires, that dismiss the lessons of culture to moderate our desires in light of the limits of local conditions, that elevate

human comfort and wealth above other ends, and accordingly not only stress our opposition to nature, but to cultures that developed alongside local natural conditions. Francis Bacon called for a change in humanity's relationship with the natural world, to view nature as an enemy and to understand the human mind as a weapon. In describing the modern scientific project, he charged us to understand that "knowledge is power," and at points described nature as a kind of prisoner withholding precious secrets from us, justifying our extraction of those secrets even by torture, if necessary. Following Bacon, we have transformed technology from ways of using nature that nevertheless coexist with nature—that "care for what we use"—to ways of exerting human will and fulfilling human desire in spite of nature and therefore, ultimately, in spite of culture.

It has been during this short period of industrialization that most of our longstanding cultural forms have attenuated, faded, or gone wholly out of existence. Writing as a farmer, Berry has repeatedly lamented the decline of the family farm as a locus of human community and the embodiment of numberless forms of cultural knowledge and practices. But everywhere we see around us the ruins of once vibrant culture. Most of us know little or nothing of how to produce food. More and more of us cannot build, cannot fix, cannot track, cannot tell time by looking at the sky, cannot locate the constellations, cannot hunt, cannot skin or butcher, cannot cook, cannot can, cannot make wine, cannot play instruments (and if we can, often do not know the songs of our culture by which to entertain a variety of generations), cannot dance (that is, actual dances), cannot remember long passages of poetry, don't know the Bible, cannot spin or knit, cannot sew or darn, cannot chop wood or forage for mushrooms, cannot make a rock wall, cannot tell the kinds of trees by leaves or the kinds of birds by shape of wing—on and on, in a growing catalogue of abandoned inheritance.

My grandmother could do most of the things on this list. And by many measures, our time would regard her as uneducated or look upon her as "simple" in spite of the variety and the complexity of things she knew how to do. But if the lights went out tomorrow, she would have been the smartest person we know; she (and not our college professors) would have seen us through. She's gone now, and much of that knowledge has been laid to rest with her because, by the time of my generation, we didn't need to know those things anymore.

Some people might respond to this list with perhaps a modicum of regret, wishing at least that we could track—that would be cool—but also recognizing that we don't *have* to. After all, we have handheld GPS

gadgets for getting around, industrial agriculture for food production, cheap clothing from China so that we don't have to make or repair garments, cheap labor from Mexico so that we don't have to build or fix, and the Internet for everything else. But this is precisely the point: within roughly two generations we have lost a vast storehouse of cultural memory that was the accumulation of countless generations who saw it as their duty to posterity, grounded in gratitude to ancestors, to ensure safe passage of this knowledge to future generations. Culture itself has come to be viewed as disposable based on the illusion of independence from nature that our modern technologies have bequeathed us. Why spend time diligently learning at the side of your father how to repair a bucket or navigate by the stars or grow vegetables when every young person knows that a machine will do this work—or that cheap replacement products are readily available?

Everyone knows that if you have a problem with a computer, you go to the youngest person in the family for advice about how to repair it: ancestral knowledge has been replaced by the constantly up-to-date. So, too, we professors are told that we need to adapt our teaching to the modern technologies used by our students, as if these won't in fact influence the teachings themselves. If all technologies ultimately replace themselves with something else, we are living in a time when our technologies are replacing the original and essential human technology of culture. However, if culture is one of the preconditions for technology of all sorts that make us human, then we are employing technology in ways that increasingly dehumanize us. By destroying nature and culture, we ultimately destroy ourselves.

The War on Virtue

If we are indeed at war with nature—as Bacon and other moderns declared—we should seek a full accounting of the costs and losses associated with the struggle. As with any war, we avoid that accounting because we would like to cling to the illusion that we are winning. But in his 2005 essay “Agriculture from the Roots Up,” Berry offers a starker assessment:

This war, like most wars, has turned out to be a trickier business than we expected. We must now face two shocking surprises. The first surprise is that if we say and believe that we are at war with nature, then we are in the fullest sense at war: that is, we are both opposing and being opposed, and the costs to both sides are extremely high.

The second surprise is that we are not winning. On the evidence now available, we have to conclude that we are losing—and moreover, that there was never a chance that we could win. Despite the immense power and violence that we have deployed against her, nature is handing us one defeat after another. Even in our most grievous offenses against her—as in the present epidemic of habitat destruction and species extinction—we are being defeated, for in the long run we can less afford the losses than nature can. And we have to look upon soil erosion and the spread of exotic diseases, weeds, and pests as nature’s direct reprisals for our violations of her laws. Sometimes she seems terrifyingly serene in her triumphs over us, as when, simply by refusing to absorb our pollutants, she forces us to live in our mess.

The record splayed out on the front pages of any daily paper provides enough evidence to this effect: climate change, erosion of the topsoil, pervasive toxicity, water shortages based on overtaxing of aquifers, species extinction, overfishing of our oceans and lakes, rainforest clearcutting, and so on. And lest we believe the phenomena unconnected, we see a depletion of our moral culture as well, as would accordingly follow upon our prosecution of a war against nature—the self-destruction of the modern family, our scandalous levels of debt, the travesty of our modern public schooling system, sexuality that has little joy, the ease and frequency of abortions, the vulgarity of our popular culture, sarcasm and irony that pervade every conversation, and so on. Our political parties each regards one of these depletions—the depletion of natural or moral ecologies—as problematic, but not the other, lacking the vision and understanding to apprehend that the modern assault upon nature is deeply linked in every respect to the assault on culture. We argue over effects without properly grasping the deeper causes, investing our hopes in political parties and candidates who would trim the claws of one paw of the monster even as they sharpen those of the other, and altogether fatten the beast.

By disconnecting culture from nature and regarding nature as an enemy to be conquered, we have, above all, disconnected ourselves from the most important aspect of culture: the inexorable lessons of the limits of human power and the pitfalls of human efforts at mastery. Every culture in some way teaches this same fundamental lesson: to respect what we did not create, to revere the mysterious and unknown, to be bound by the limits of nature and to be cognizant of the perpetual flaws of the human creature. As Berry has written in a recent essay entitled “Faustian Economics,” “every cultural and religious tradition that I know about, while fully acknowledging our animal nature, defines us specifically as

humans—that is, as animals (if the word still applies) capable of living not only within natural limits, but also within cultural limits, self-imposed.” In our own tradition, whether inscribed in the ancient Greek teachings against hubris—like the tale of Icarus flying too close to the sun—or the Biblical warnings against pride—such as the effort to build a tower to heaven—culture has historically been a force of profound resistance against the human tendency to act slavishly on behalf our limitless desires. By contrast, the overarching teaching of our culture—such as it is—is the mindless mantra “Just do it.”

But as Berry argues in his essay “Two Economies,” good culture not only teaches what to do, but also advises us what not to do and how not to act, “by forbearance or self-restraint, [by] sympathy or generosity.” Part of that forbearance or sympathy derives from one of the most important legacies of culture—an enlarged sense of time that long predates our births and stretches out vastly past the point of our deaths. We forbear, in part, because of our forebears—because of the living presence of our ancestors in our land and our memories. We are aware of the similar sacrifices made by those who came before us in ensuring us a good place, good land, and a good community, and we seek to ensure conditions as good if not better for our children and theirs after them.

Living as we do in what Berry calls “a dimensionless present,” we diminish our relationship to the past and the future alike, and in turn justify actions that pretend as if neither has any relevance to who we are and what we do. As Berry observes, we are prone to commit deeds “that we may call use, but that the future will ‘theft.’” In our relentless use of the bounty of the earth, our civilizational reliance on nonrenewable and hugely polluting sources of energy, our insatiable willingness to accumulate debt that will be handed over to future generations, our unwillingness to account for the true costs of all those “cheap” products that we celebrate as the bounty of “globalization,” we reflect the reality of a society that knows little or nothing of our ancestors and owes no allegiance to children many are electing no longer to have.

Finally, it is culture that teaches us virtue. Like culture itself, “virtue” is an old-fashioned word, one that we now associate with outmoded Victorian admonitions against girls showing their ankles when in the presence of boys. It was the very assault on culture that both necessitated and resulted in the denigration of the practice of virtue. Virtue is deeply related to the capacities to “forbear” and to “sympathize,” but virtue is more than simply forbearance or not acting: virtue, as Berry reminds us—echoing Aristotle—is only possible when enacted and embedded in

the practices of life within communities. One can only know what not to do in the midst of doing many other things. Ultimately, he writes, virtue moves toward virtuosity. “When the virtues are rightly practiced, we do not call them virtues: we call them good farming, good carpentry, good husbandry, good weaving and sewing, good homemaking, good parenthood, good neighborhood, and so on.” All these “technologies” at once provide us goods of life, but also operate with rules and limits, and thus teach us not only how to do things, but also how *not* to do them. In superseding those limits with technologies that dispense with nature and culture alike, we cease the practical education of ourselves and our young in limits, and learn how to be not human beings or citizens, but consumers. We make ourselves ever more into those creatures that attack Earth in the film *Independence Day*, creatures of extraordinary technological competence but no capacity to make a home upon a fruitful planet.

A Conversation with Nature

We live, in Berry’s words, “at the far side of a broken connection.” We have embraced technologies that are destructive of the most fundamental technology—culture itself—and which, in their destruction of the very natural order from which we ultimately derive sustenance, threaten our future and that of our children. Rather than seeking to repair the very culture that our war against nature has all but destroyed, we seek to find new technologies that can allow us to continue to live in “global ignorance.” We crave to continue the condition of living thoughtlessly, of not having to think beyond the span of our own lifetimes, to recognize our debts to the past and our obligations to the future. As the news creeps into our consciousness that we are reaching the upper limits of our ability to extract petroleum—that lifeblood of the modern industrial economy—from every corner there comes the response, *We will need something to replace it*. Coal, uranium, the rainforests transformed into biofuels—we seek to make our way out of a deep hole by digging deeper. The last thing we will consider is altering our own behavior—because, surely, someone else is at fault. The Oil Companies, the Saudis, Dick Cheney—anyone but me. As has been described by Jason Peters, editor of a fine volume on Berry, it’s like heavy traffic. Heavy traffic is always other people. When you say “traffic was terrible,” you’re never talking about yourself.

Wendell Berry asks us to understand how we are a cause of the terrible traffic we complain about. His basic argument is that we must become more thoughtful about what we are doing. We must seek to understand

the ways in which we are ourselves complicit in bad work, and seek to avoid that complicity where possible and, better still, to do good work instead. He does not advise withdrawal from the world, but full and active engagement in it. He fully acknowledges that we are technological creatures: to survive and thrive we must use nature. But again, “we must know both how to use and how to care for what we use.” We are necessarily engaged in a relationship with nature; what is at issue is the form that the relationship will take. At the moment, he writes, our relationship with nature is “dictatorial or totalitarian.” We need something and we take it; we want something and we exploit it. Instead, he writes, the proper relationship with nature is that of a conversation. We would ask of a place what it can offer and what we can offer in return, and listen even as we express our wants. In his essay “Nature as Measure,” he reflects:

The conversation itself would thus assume a creaturely life, binding the place and its inhabitants together, changing and growing to no end, no final accomplishment, that can be conceived or foreseen....And if you honor the other party to the conversation, if you honor the otherness of the other party, you understand that you must not expect always to receive a reply that you foresee or that you would like. A conversation is inimitably two-sided and always to some degree mysterious; it requires faith.

To achieve that good faith that underlies such a conversation, we must overcome our bad faith, especially that bad faith in technology premised on the self-deception that we can continue to live at odds with nature. Rather, in beginning anew a conversation with nature—that permanent negotiation about what it means to be simultaneously creatures of nature and artifice—we must embrace another kind of technology, the technology of culture that is based in local knowledge, that binds the generations, that teaches a proper understanding of limits, and which, in encouraging the virtuosity of good work, allows us to practice virtue not abstractly and humorlessly, but joyfully and harmoniously with nature and our neighbors alike. The ineluctable reality of nature and the inescapable necessity of culture mean, as Peter Lawler has put it well, that we are “stuck with virtue.” The difficult challenge we must now confront is whether enough virtue has stuck.