What is Technology?

Dr. Lawrence Terlizzese uncovers a disturbing new view of technology: not as neutral, but a way of life that objectifies everything, including people.

The Neutrality View

Most people take a favorable view towards technological progress; new cars, cell phones and computers – what's not to like? They embrace technological innovation as a plus despite the suspicions of questionable things like cloning, genetic engineering and nuclear weapons. But what is technology anyway? Do we really understand this all-embracing phenomenon directing human history? We often take for granted that we think we know the answer when in fact the meaning of the greatest social mover of all times remains elusive. When it comes to defining technology we are beset with the problem of defining more than just a word, but a concept and whole way of life and worldview.

The typical definition of technology these days says technology is neutral, suggesting that technology is nothing more than tools that people use as needed. Technology is a means to an end and nothing more. All objects are separate and disconnected. They are neutral and value-free, right? Tables, chairs, and light fixtures have nothing to do with each other and express no values in themselves and are completely determined by our use. They are simply objects at our disposal and present no moral problems so long as we use them for good. We can pick up a hammer and use it, then place it back in the tool box when finished. The hammer has appropriate and inappropriate uses. Hitting nails into wood is one of the acceptable uses of a hammer; using it to play baseball is not acceptable. So long as we act as good moral agents we use our technology rightly, or so we think. This definition is so

widely accepted that we have trouble ever questioning it. When faced with morally questionable uses of technology we fall back on this old cliché: “technology is neutral,” and that settles all disputes. We are all familiar with this popular view and embrace it to some extent. The problem is not that the cliché is so simple or popular, but that it is so wrong. Philosophers have been telling us for decades now that the neutrality of technology definition is wrong and dangerous because it blinds us to the true nature of technology.

The Holistic View

The second view of the nature of technology, held mainly by philosophers, we call the “holistic view.” This view states that the “neutral view” is false because people hold to it as a means of justifying every type of technology. The neutrality view blinds us to the true nature of technology, which is not value-free. The lack of understanding regarding the true nature of technology creates a serious problem for a society so heavily influenced by technological development. As sociologist Rudi Volti says, “This inability to understand technology and perceive its effects on our society and on ourselves is one of the greatest, if most subtle, problems of an age that has been so heavily influenced by technological change.”{1} Technology is understood as a social system. We can also call it a worldview, a philosophy of life that sees all things as objects, including people. Instead of defining technology as disparate tools unconnected to each other, philosophers have suggested a more comprehensive definition that says technology does not mean neutral objects ready for use at our convenience, but a way of life that informs and controls everything we do. In other words, technology is a belief system with its own worldview and agenda—more like a religion than a hammer.

This belief system is often called the *essence of technology* or *spirit of technology* and cannot be seen in technological

objects because we cannot see the entire system by looking at individual parts. We must grasp the spiritual essence before we can understand its technical parts. The "neutrality view" looks only at parts rather than the whole and misses technology's true nature. This is a lot like looking at the tires of your car or its engine parts and thinking you now understand a car from seeing separate pieces of it and never seeing how the whole thing fits together.

The holistic view understands technology as a way of life and spiritual reality that shapes all our thinking. Philosopher Martin Heidegger gives the example of how the Rhine River exists not as a river, but as a source for electricity. Everything becomes stuff ready for usefulness.{2}

Technology really means an interconnected system rather than a neutral tool. The neutral definition blinds us to the true nature of technology and prevents us from mastering it. Heidegger argued that "we are delivered over to [technology] in the worst possible way when we regard it as something neutral; for this conception of it, to which today we particularity like to do homage, makes us utterly blind to the essence of technology."{3}

Technology as Spirituality

The neutrality argument reassures us that we remain in control of our means rather than our means controlling us. It does not allow us to find the essence of technology in everyday technological objects such as cars, computers, or screw drivers and baseball bats; rather, technology is a way of life and thought that creates a universal system. Technology means the grand accumulation of all the different technological parts into a global system.

Technology is a system of interlocking systems. As philosopher Jacques Ellul said, "It is the aggregate of these means that

produces technical civilization."{4} Technology is our modern frame of reference that speaks of the profoundly spiritual and not the strictly technical. If we look at individual everyday technologies we will miss it. Instead we must see past the common objects to the larger global system that comprises technology as a social process. In the technological system both humanity and nature have no separate standing or value outside of technical usefulness. People are simply resources to be used and discarded as needed.

This view reveals the depths to which technology shapes our thinking by informing us and conforming us into the image of the machine, which represents the greatest example of technological thinking. Everything is understood as a machine and should function like a machine including the government, the school, the church and you! Bureaucracy is a social machine.

The machine is predictable. It has no freedom. It follows mechanical steps, or linear logic. Step one leads to step two, and so forth. Any deviation from its programming causes chaos and possible break down, which is why the machine is the worst possible analogy for human beings to follow. Yet this is the basis of the entire modern conception of life.{5} People are not machines that can be programmed; to adopt this conception reverses the role between humanity and its machines, making people conform to the image of the machine rather than vice versa. Machines are our slaves. They do what we tell them to do. They have no will, feelings or desires. Philosophers tell us that the natural relationship between people and machines is in a process of reversal so that we are becoming slaves to technology. We may control our individual use of technology but no one as of yet controls the entire system.{6}

Neutrality as Modern Myth

Nothing can be explained by the neutrality argument, not even

the meaning of “neutrality.” It is simply not possible for any technology to be neutral; even the most primitive tools such as fire or stone axes take the form of their designers. Every technology bears inherent values of purpose and goals. Fire has value for a particular reason, to clear the land, cook food, keep people warm and ward off dangerous animals. By their very design, all inventions and tools reflects our values and human nature. Philosopher of Science Jacob Bronowski argued that “to quarrel with technology is to quarrel with the nature of man.”{7} Technology is an extension of ourselves and expresses human nature, which is never entirely good or bad, but ambivalent. Our technology reflects who we are and nothing more; it is not divine, it will not save the human race; but neither is it animal, but fully human, whose nature is always ambiguous, capable of great acts of kindness and mercy as well as cruelty and evil. People can be self-sacrificial and giving and self-destructive and greedy. There will always be good and bad effects to our inventions. They are a double edged sword that cuts both ways and it is our responsibility to discern between the two.

The modern bias in favor of neutrality reveals our protectionist tendencies towards all things technological. How is it that sinful people can produce morally neutral technology? We would not say that about art. “Oh! All art is morally neutral! It is all a matter of how you use it!” Yet the same creative forces go into producing technology as art. Is there anything neutral about the works of Caravaggio, Da Vinci or Picasso? Why then should there be anything neutral about Facebook or MX missiles?

This appears simple enough, but as modern people addicted to our latest toys and novelties we have difficulty admitting we may have a problem. We don’t like to think that too much Facebook might be causing young people to be further isolated from the community because they are more accustomed to relate electronically than in person, or that email actually reduces

our ability to communicate because of the absence of tone of voice, body language, eye contact and personal presence. TV and film may have a surreal effect on its message, giving it a dream like quality rather than communicating realism.

Controlling Technology

The solution is not to abandon any of the incredible inventions of the modern age, but to recognize their limits. It is the sign of wisdom that we understand our limits and work within them. We should proceed along a two tiered path of questioning and the application of values. Ellul said that "It is not a question of getting rid of [technology], but by an act of freedom, of transcending it."{8} The act of questioning is the first act of freedom; by becoming aware of the problem we can assert a measure of freedom and control. Through critical questioning we recognize our limits and thus we are able to exercise a measure of control over technology.

We should develop technologies that reflect our values of freedom, equality and democracy. For example, Ellul did envision in the early 1980's the potential use of computer technology in a way that would create a decentralized source of knowledge that would maintain the values of democracy. We know this now as the internet. However, as Ellul also argued technology cannot change society for the better if we don't change ourselves. The computer can also be used to bring in stifling State control.{9} We will never have a perfect technology that has no problems, but we should be visionaries in how we think about technology and the application of our values to it.

Limits serve as a warning to us. It is obvious that society has progressed in many ways thanks to advanced technology, but society's spiritual regression shares the same condition as advancement. We have not become better people because we live in the twenty-first century rather than the nineteenth

century. Without a renewed spiritual and moral framework to direct our development and give new purpose to the system, technology may become the source of our own destruction rather than improvement. An inventory of advancement compares starkly with the litany of potential catastrophe. We have eliminated disease, but also created dangerous levels of overpopulation. We live longer and more abundant lives materially, but are pushing the natural world into extinction. We are able to travel quicker and communicate instantly, contributing to world peace and understanding, but have also developed the weapons of war to unimaginable levels of devastation.

Without a moral framework to control technology and understand its ethical limits we will go down a path of losing control of technology's direction, allowing it to develop autonomously. This means it will develop in a predetermined linear direction, like a clock that will inevitably strike midnight once wound up. That direction as we have seen moves inexorably closer to the mechanization of humanity and nature. With the right value-system we can begin to reassert control. The choice is yours. Where do you want to go?

Notes

1. Rudi Volti, *Society and Technological Change*, 4th ed. (New York: Worth Publishes, 2001), 3.
2. Martin Heidegger, "The Question Concerning Technology" in *The Question Concerning Technology and Other Essays*, trans. by William Lovitt (New York; Harper, 1977), 16, 17.
3. Ibid., 4.
4. Jacques Ellul, *The Technological Society*, trans. by John Wilkinson (New York: Vintage, 1964), 2.
5. John Herman Randall, Jr. *The Making of the Modern Mind: A Survey of the Intellectual Background of the Present Age* (New York: Columbia University Press, 1976), 227.
6. Lewis Mumford, *The Myth of the Machine; Technics and Human Development* (New York: Harcourt Brace Jovanovich, 1966); Idem, *The Myth of the Machine: The Pentagon of Power* (New York:

Harcourt Brace Jovanovich, 1970); Neil Postman, *Technopoly: The Surrender of Culture to Technology* (New York: Knopf, 1992); Lawrence J. Terlizzese, *Hope in the Thought of Jacques Ellul* (Eugene, OR: Cascade, 2005).
7. Jacob Bronowski, "Technology and Culture in Evolution," *Philosophy of the Social Sciences* 1. 3(1971): 199.
8. Ellul, *The Technological Society,* xxxiii.
9. Jacques Ellul, "New Hope for the Technological Society: An Interview with Jacques Ellul" in *Et cetera* 40.2 (1983): 192-206.