

All Technology is Value-neutral, but Not Always Beneficial

Wayne Iba
Westmont College
(revised: 2/2015; 1/2014)

Rather than present a critique of technology, I instead want to critique humans themselves. Certainly, what humans have done technologically has often been negative. But it is always the human *doing* that should be the focus of critique. Many have claimed that technologies represent an autonomous force that determines the character of human life. Others, repudiate this claim (but continue to let it slip into their reasoning), have argued that technologies cannot rightly be understood without including the social systems in which they exist; that technologies are *infused* with values. Although this approach has much to offer, I will argue that we should completely reject the view of technology as having embedded or infused values. Instead, we should focus our critical attention on the humans who make and use technologies. That is, I will initially claim that technologies are indeed value-neutral, concluding that *persons* are the only value-holding agents in a system where technologies either advance or undermine human values. It is in this respect that technology impacts human flourishing. Reminiscent of St. Paul's comments in 1 Corinthians 6:12 and 10:23 on law and liberty, technology is neither inherently bad nor good, yet not all technology is beneficial. Furthermore, it is humanity's responsibility to resist enslavement to technology.

Humans have been called, among others: communicators, image bearers, meaning makers, etc. Here, I will assert that, in addition to these, humans are also tool makers and users. That is, to be human is to make and/or use tools and techniques. Even more importantly, I assert that humans are value makers. Whatever humans are (all these and more), manifesting these multiple facets seems to play an important role in human flourishing.

We can benefit from an improved understanding of technology prior to engaging in full-scale critique; too often critics of technology do not understand what it is that they are critiquing. By technology, I refer to both tool and technique and my conclusions should apply to both. We have good reason to resist ascribing values to technology. On the one hand, this amounts to a form of anthropomorphizing. This mistake is widely acknowledged (although not consistently avoided) by critics of technology such as Neil Postman, Jacques Ellul, and Albert Borgmann. The risk in anthropomorphizing is that we abdicate human responsibility, which is perhaps the most insidious and dangerous mistake we can make when critiquing technology.

I will present a model of humans and technology that might serve as a better framework for understanding humans and their technology. Following Philip Kenneson (and not at all inconsistent with a sociotechnical systems approach), we can think of humans as comprised of: convictions, values, character, stories, practices, and institutions. The first three

facets pertain to the individual while the latter three reflect social constructs. Michael Bratman's belief-desire-intention (BDI) model of human reasoning bears similarities with Kenneson's features of the individual where desires, together with beliefs, inform an individual's actions and collectively a society's practices.

Technologies allow humans to accomplish goals that were previously unachievable or in new ways. As such, we may think of technology as enabling previously unavailable actions. (A new way to achieve a goal that can already be reached does so with a different matrix of costs and side-effects.) A state-space represents the set of all possible situations together with the available transitions between those states. If an action transforms the world from one state to another, then the state-space has a directed link from the first state to the second. The introduction of a technology adds (or removes) a transition between states, possibly bypassing other intermediate states. Consider going from point A to point B. Suppose the preferred (perhaps the only) route from A to B runs from A to C and from C to B. If we add a direct route from A to B (e.g., a tunnel), then people may start using the new route as the preferred route. Using this example and the BDI model, we can gain clarity on the separation of values and technologies.

Given the BDI model, values come into play as humans act in ways that transform the world from one state to another. Human actors select actions that they *believe* will transform the world into states that are *desired* or more highly valued. Given this view of human action, technology then alters the connectivity of the state space in which humans exist by either adding or removing transitions between states. The introduction and use of such transitions reflect the values held by humans themselves. The transition has no value in itself; only as humans use it does it *reveal* the users' values.

In subsequent discussion, I will address a number of problems with and implications of the position sketched here. First, although technological change is unquestionably accelerating at unprecedented rates, we need to consider at what point, if any, this quantitative change gives rise to a phase shift that amounts to a qualitative change invalidating my present claims. This qualitative shift based on sufficient quantitative change seems to be an implicit assumption of some critics of technology, but the assumption needs to be addressed explicitly. Second, I use the BDI model to explore the connection between contentment and both technology and human flourishing. Finally, although humans currently seem to be the only kind of artifacts that make and hold values, it is at least plausible that sufficiently advanced AI systems could be said to make value judgments and thereby hold values; at that point, I would need to revisit this argument and perhaps revise my claims.