

Professional Ethics notes
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PHILOSOPHY OF TECHNOLOGY

As philosophy goes, philosophy of technology is a relatively young field. Courses called “History of Modern Philosophy” cover philosophers of the Renaissance and the seventeenth and the eighteenth centuries. Philosophy of the early twentieth century is covered in “Contemporary Philosophy.” The main branches of philosophy go back over 2200 years. Philosophy of science was pursued, in fact if not in name, by most of the early modern philosophers in the seventeenth and eighteenth centuries. By the mid-nineteenth century several physicists and philosophers were producing works that focused solely on the philosophy of science. Only sporadically were there major philosophers who had much to say about technology, such as Bacon around 1600 and Marx in the mid-nineteenth century. Most of the “great philosophers” of this period, although they had a great deal to say about science, said little about technology. On the assumption that technology is the simple application of science, and that technology is all for the good, most philosophers thought that there was little of interest. The “action” in early modern philosophy was around the issue of scientific knowledge, not technology. The romantic tradition from the late eighteenth century was pessimistic about science and technology. Romantics emphasized their problematic and harmful aspects, and only a handful of academic philosophers concerned themselves with evaluation and critique of technology itself. Particularly in Germany, there was a pessimistic literature on the evils of modern society in general and technological society in particular.

Only with Hiroshima and Nagasaki, and the realization that atom and hydrogen bombs could literally cause humanity to go extinct, did widespread, popular, critical evaluation of technology occur in the English-speaking world. With the widespread popular awareness that industrial pollution and its degradation of the environment was a major problem, perhaps dated from the publication of Rachel Carson’s *Silent Spring* in 1962, or from Earth Day of 1970, a further wave of concern for the understanding of the negative side-effects of technology arose. With the advent of genetic engineering and the specter of human cloning in the late 1970s, with the possibility of technologically manipulating human heredity and even human nature, there was yet another set of issues and impulses for the critical evaluation of technology.

The scope and the agenda for ethics of technology to a large extent depend on how technology is conceptualized. The second half of the twentieth century has witnessed a richer variety of conceptualizations of technology that move beyond the conceptualization of technology as a neutral tool,

as a world view or as a historical necessity. This includes conceptualizations of technology as a political phenomenon, as a social activity, as a cultural phenomenon, as a professional activity, and as a cognitive activity. Despite this diversity, the development in the second half of the twentieth century is characterized by two general trends. One is a move away from technological determinism and the assumption that technology is a given self-contained phenomenon which develops autonomously to an emphasis on technological development being the result of choices. The other is a move away from ethical reflection on technology as such to ethical reflection of specific technologies and to specific phases in the development of technology. Both trends together have resulted in an enormous increase in the number and scope of ethical questions that are asked about technology. The developments also imply that ethics of technology is to be adequately empirically informed, not only about the exact consequences of specific technologies but also about the actions of engineers and the process of technological development.

TECHNOLOGY AND TECHNOLOGICAL REDUCTIONISM:

Technology both during the Greeks and our times is an event of unconcealment which means it reveals. In the current times our perception towards the rivers, mountains, oceans, plants, animals, other humans etc. have undergone a radical change. Today we bring them all into the light of modern machination. What has gone wrong here is our perception towards revealing the truth. One major difference between the Greek and the modern technology is that, the Greek notion of *techne* does not fit with the modern machine-powered technology. And according to many philosophers of technology the modern machine technology is the most disturbing one and which indeed pushes us to make an enquiry into the question concerning technology as such. Modern technology, though it is a revealing, unlike the Greeks it does not unfold into a “bringing-forth”, rather it manifests as a “challenging-forth” which enables man to have an unduly control over the nature. Unlike the windmill of the yesteryears which exists to perform certain functions according to the flow of the wind, today we use machinery to manufacture energy that can be extracted and stored up. This is the challenging-forth of the modern technology. Here our perception towards the earth completely changes, earth turns out to be a “coal mining district” and the soil as a “mineral deposit.” A 20th century German Philosopher Martin Heidegger argues that when the farmer uses the land, he sets-it-in-order and here to set-in-order means to take *care* of it and to *maintain* it. In the modern technological age what counts mostly is the *use-value* of a thing. Today with the help of the modern machinery we almost change the shape of the earth. Land reclamation is a normal phenomenon especially seen in the cities. This brings in a radical destruction in the nature and in the

course of the environment. The modern mechanism brings in a different setting-in-order of the nature. Against such mechanised move is what Heidegger compares the peasant, as he says: “The work of the peasant does not challenge the soil of the field.” It is obvious that the modern technological way of revealing reality has brought about a new world order, which is the objectification of the world. In our modern technological projects, Heidegger argues: “Air is now set upon to yield nitrogen, the earth to yield ore, ore to yield uranium..., uranium is set upon to yield atomic energy, which can be released either for destruction or for peaceful use.”

The greatest danger of technology is the technological reductionism. Technological modernity proposes a form reductionism, where everything that we consider good and sacred, gets reduced into its mere use value.

Heidegger argues: “The coal that has been hauled out in some mining district has not been supplied in order that it may simply be present somewhere or other. It is stockpiled; that is, it is on call, ready to deliver the sun’s warmth that is stored in it. The sun’s warmth is challenged forth for heat, which in turn is ordered to deliver steam whose pressure turns the wheels that keep a factory running.”

comportment = behaviour

In this sense reductionism exposes the “for-ness” of a thing. Things exist *for* our manipulation and use. We no more look at things with respect and admiration. They are always there “for” something. Reductionism converts all our comportments towards things as a form of utility oriented and we merely see them as “standing reserve” for our further use. In modern reductionism objects are devoid of its object-ness and they are merely seen as tools for our manipulation. In this form of reduction we fail to see the gorgeousness in objects, their splendour and beauty gradually vanish and eventually what remains is only a brute tendency towards squeezing the last bit of charm out of them. Due to our over exploitation and arrogance the nature itself is at the verge of destruction and disintegration.

In the entire technological reductive enterprise, more than nature, it is the man himself who is reduced into nothingness. In the modern scenario there are all the incentives for an individual to move from the *rational animal* to a *technicized animal*. A technicized person ceases to be inquisitive and gradually fabricates an “*epoch of the total lack of questioning*.” Heidegger calls this epoch as the *total lack of questioning* because this is the epoch of the **abandonment of beings by be-ing**, this philosophical expression means that everything or every entity is devoid of its originality or **truth** and merely stands as a resourceful object for the human manipulation.

Acknowledgements:

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3. Tibor R. Machan, *A Primer on Ethics*, 1997.
4. Stanford Encyclopedia of Philosophy.