

# The Problem of Technology

Thomas Storck

**1**t's easy to get disgusted with technology. Ugly yellow machines dig big holes on hillsides where once there were trees and grass, rabbits and birds. More and more highways are built and then more and more cars are driven and so they build even more roads and highways and again rabbits and trees and birds are the losers. You go for a walk in the woods or in a meadow and find bottles and cans, paper, cigarette butts, plastic bags, paper diapers, cellophane wrappers, cups, plates, old shoes, you name it. You see another shopping mall being built where once there was a farm. And there's pollution from factories, agricultural runoff from chemical farming practices, destruction of forests, all kinds of deadly things. So technology is really bad for us and for the earth, right? Well, probably most of us know that that's not always the case, and that it's necessary to make distinctions about technology. That's exactly what I hope to attempt to do here, to lay down the correct principles to use in evaluating technology. And I think there are in the end only two such principles:

1. That even though some technological device may make some single function or task cheaper or faster or easier, if while doing so it is destructive of the good of human society or of the natural environment, then it should not be permitted.
2. That it is wrong to use a more complex technological device when the same end can be attained by a simpler device or by no device at all, unless use of the simpler means would cause considerable damage to the social order because of the amount of human labor or time it entails.

A bit of explanation might be in order here. First, though, a short digression about purpose. People today are uncomfortable talking about the *inherent* purpose of a thing. If we talked, for example, about the inherent purpose of sex, then we'd eventually have to admit that in the natural order sex has an intrinsic linkage with procreation and that therefore the use of contraceptives is unnatural (and thus sinful). Or we could talk about the purpose of the economic system and then we'd find that its purpose is to provide for *all* people on the earth, not just the rich or the successful. But people don't want to talk about what the inherent purpose of a thing or process is; they want to talk about what their own purposes are. That's another way of saying that they want to talk about what they want to do. So some people want to use sex as *merely* a means of pleasure, with no reference to what sex's own purpose is. Or some want to use the economic system as merely a way of getting lots and lots of money with no thought for the reason the economy itself exists. The same is true of technology. It's kind of nice to have microwave ovens, electric knives, hair dryers, TVs, fancy toasters and suchlike. They help me fulfill *my* purposes, which is to say a real easy life and, hey, won't I look good to my neighbors

if I have some of those fancy gadgets? But we're going to have to ask a question less amusing than, "What can I buy this weekend?" Instead, we must ask ourselves, "Why do human beings have the capacity to invent and use technology anyway? What is it for in itself?"

Well, the answer to that, I think, is simple. It's to help us with our lives, chiefly with the material side of our lives: getting food, building shelters, and so on, and also with the material means that directly support our spiritual, cultural and intellectual lives, such as printing books, making musical instruments or building churches. So, let's say this one point is established: technology exists to help us. But, if technology exists to help us, what if someone invents some gadget which instead of helping us humans, harms us? We'd never go for it, right? Well, unfortunately, the way we go about it is this: we find some little problem, maybe not so important, but some little problem we can solve with a piece of technology, and we solve it, but in the process we create so many big problems that it would be better if we had never invented the damned thing in the first place. Now, what am I talking about? I'll give one of my favorite examples.

If you have to go ten miles on a hot day it's a pain to have to walk and you'll be all tired and hot when you arrive at your destination. And though riding a bike or a horse would be easier, it would still be hard if you had to go, say fifty or a hundred miles. It's not easy to do that and still have time for a power lunch. So someone invented the automobile. And the automobile certainly solves the problem of how to get someplace on time (forget the traffic jams for a little while). The invention of the car solved the small and comparatively unimportant problem of moving small groups of people around quickly. But, of course, in doing so it created a lot of more serious problems, such as: making society more atomistic, making it easier for cities to grow to monstrous sizes by allowing people to live in suburbs far from their work, killing the economies of small towns and villages, making an enormous quantity of pollution, and creating a seemingly never ending desire for more and more roads, highways, and parking lots. If you think what I'm saying is nonsense, just think about society before cars were invented. Was there really any *serious* problem existing that cried out for the invention of the automobile? I grant that most of us probably need them now, but that's only because we have now organized our cities and countryside around the existence of the car. Cars facilitate a certain way of living, which, in turn, makes us even more dependent on them. Most of us live far from our workplaces, to the usual detriment of our families. Many of our towns and neighborhoods have been cut up by highways, sometimes making walking or biking actually hazardous, and in villages and small towns stores and

*The improvement in city conditions by the general adaptation of the motor car can hardly be overestimated. Streets clean, dustless and odorless, with light rubber-tired vehicles moving swiftly and noiselessly over their smooth expanse would eliminate a greater part of the nervousness, distraction, and strain of modern metropolitan life.*  
—Scientific American, July 1899

post offices have often closed, making a car necessary for shopping in the city. All this and more, all to the destruction of our society, has been caused by the widespread use of the automobile. I submit that the small and relatively unimportant benefit which it has conferred on mankind is entirely dwarfed by the grave harm it has caused to society and to the environment.

I think that this discussion of the automobile sufficiently explains and illustrates what I meant above in principle number one, namely that a device, while making some one narrow thing cheaper or faster or easier can create a host of problems that are extremely detrimental to the social order. Now what about the second principle, that it is wrong to use a more complex device when a simpler device or none at all would suffice? This principle is rich with implications for the right organization of life. For example, let's suppose we are going to have a dance. Where will we get our music? We can use recorded music, which entails electricity, produced either from a complex hydroelectric facility miles away by burning oil or coal, which in turn were extracted from the earth miles, or even continents, away and shipped by another set of complex devices to the place where they will be burned. Then we will employ another complicated machine, again usually made miles away in a factory (from God-knows-what materials) again carted from the four corners of the earth. We then use some kind of plastic or metal disc or tape, created from a chemical process which doubtless resulted in waste materials that disfigure streams and rivers. Put all this together and we have our music!

Or how about another way: We could make musical instruments, largely from wood (which seems to grow in most places) and we could make these instruments in the places we actually live, getting real live music. Which is better? It seems indisputable to me that the second is far superior. It uses fewer of the earth's limited resources, both in production and shipment, and moreover allows local people to use the talents that God gave them.

Before I stop I'd like to give a few examples of technology that I think is good, both because by giving instances of good technology I will make the principles clearer and because I feel I sort of owe it in fairness to say a few kind words about technology. So let's think about this from our two first principles.

Human beings have a real need to carry heavy things

about, such as hauling wood from a forest to build a house or a boat or carting stones from a quarry to build a church or a school. Wagons drawn by beasts are a perfectly appropriate way of taking care of this need. I don't see that they disrupt society in any way nor do they require a needless elaboration of technology. To argue that the wood or stones must be carried or dragged individually by men seems to me to violate the second principle, for it causes a great burden of labor for no reason. Wagons, then, are an example of technology conceived and used in the right way, to support human life without disrupting it.

People need to wear clothes. These can, of course, be manufactured locally, but with what machines? It seems to me that looms and sewing machines powered by foot-driven pedals are again excellent examples of technology truly serving man. In contrast to electric machines, they do not necessitate all the involved apparatus for producing and transmitting electricity, including possible bad health effects of transmission wires. And is the reason we use electric sewing machines sufficiently serious for all this? Is pushing a pedal with one's foot really so difficult that we have to call into being the whole electricity-producing complex? Moreover, when considering technology we must look not just at the devices themselves, but at the attendant economic organization necessary for it: the grouping of people into large cities so that we can have large factories, the transportation facilities (and the factories necessary to make *them*), the use of natural resources, not to mention the financial arrangements necessary to make all this work. Non-electric machines are simpler and can more likely be produced locally than machines run by electricity. Every town or village could have a forge and small machine-shop to produce the simpler machines, but complexity feeds bigness which in turn feeds more complexity and so on.

I often have occasion to explain to people after articulating such views that, no, I don't somehow expect an agrarian traditional society in the next few years and that, yes, I do realize that it would be hard to do away with harmful technology. But I usually explain to them that all practice begins with ideas, or a vision, and that until we get our thinking straight we can hardly hope to get our acting right. So, for those of you who are skeptical about doing away with most or all electricity in the next couple months—don't worry, I share your pessimism, but I hope we can, little by little, think about what a good and rightly ordered society would be, so that if we ever get the chance, we'll know how to build one.

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