

**INTRODUCTORY NOTE:** Gordon Graham is a professor of moral philosophy at the University of Aberdeen in Scotland. The following passage is adapted from his 1999 book *The Internet: A Philosophical Inquiry*.

### ASSESSING THE VALUE OF TECHNOLOGY

In a recent interview, Neil Postman, professor of communications at New York University and author of *Technopoly*, offers us a test by which we might assess the usefulness of technological innovation. He invites us to ask of any piece of new technology, "What is the problem to which this is a solution?"

I recently went to buy a car, a Honda Accord, and the salesman told me that it had cruise control. I asked the salesman a question that took him by surprise. I said: "What is the problem to which cruise control is the solution?" Well, apparently no one had ever asked him this question before, so he pondered it for a bit, and then he said, as his face brightened, "Well, it's the problem of keeping your foot on the gas." And I said, "Well, I've been driving for 35 years, and I've never really found that a problem." So then he said, "Well, you know, this car also has electric windows." So, you know what I asked him--"What is the problem to which electric windows are the solution?" He was ready for me this time. He said, "Well, it's the problem of having to wind the windows up and down with your arm," so I said "Well, I never really found that a problem. As a matter of fact, as an academic, I live a rather sedate life and I like the exercise of moving my arms occasionally." Well, I bought the Honda, and with cruise control and with electric windows, because you cannot buy a Honda Accord without cruise control and electric windows, whether you wish to or not. Now that fact causes an interesting realization, which is that technology, while it obviously increases options in many instances, also frequently limits options. People who are very enthusiastic about technology are always telling us what it will do for us. They almost never address the question of what it will undo.

There is reason to examine Postman's question more closely. Is it true that the need which any technological device is intended to serve exists prior to and independent of that device? There is reason to think not. Postman's question is a natural one, but we might as readily ask of any new piece of technology: what does this make possible that was not possible before? This is just as plausible a test for any innovative device, but it is a much less static one; it does not assume a fixed set of desires and purposes. The question about new possibilities is also more in keeping with our shared experience, since it seems evident that we can and do come to desire things which formerly we did not desire, or even had no idea existed.

From what do new desires arise? More information is one obvious source. I come to want things that I come to know about. I knew nothing of Chinese food until yesterday, say, but having discovered it, eating Chinese food is added to the list of my desires. I can also come to want things because I discover that there are means of accomplishing them. I never thought of holidaying in the Caribbean, let us say, until I discovered the availability of relatively inexpensive flights. Now that it is possible to travel long distances easily and cheaply, I come to want to do it. New technology presents new possibilities, and these new possibilities awaken new desires.

Consider this example. It is plausible to attribute to human beings a general desire to engage in picture-making, which is found in virtually every culture past and present; the cave paintings which archaeologists have uncovered suggest that this is a deep-seated feature of human

behavior. Nevertheless, to classify every form of visual art as simply another means of fulfilling this basic inclination ignores significant differences between different forms-- painting and photography, for instance. Because painting does not have the speed or cheapness that photography does, it does not allow the ordinary person to make pictures of family outings or to record their schooldays. These are applications of picture-making which the technology of photography has made possible. Nowadays, we all can relive our past visually in a way that was denied to almost all members of earlier generations, since in the past portrait-painting was largely the preserve of the well-to-do. Furthermore, with the advent of the video camcorder, photography extends to the wealthy and not-so-wealthy alike a new possibility: re-experiencing the past through moving pictures. Now we can want to do, because we can do, something which previously we could not have wanted, except in the imagination.

The point to be emphasized is that, though the desire to make pictures may indeed be a basic of human motivation, the possibility of satisfying it in new and easier ways alters the role of pictures and picture-making in our lives. Photography, indeed, may be said to have reversed the relationship between memories and picturing. As Daniel Boorstin notes in his book *The Americans: The Democratic Experience*, "Now, instead of merely photographing persons or scenes that were especially memorable or historic, [people can] photograph at random and then remember scenes because they had been photographed. Photography [has become] a device for making experience worth remembering." Thus, what the example of photography shows is that technological innovation does not always leave the stock of desires as it was. New technologies can alter the stock of desires at a deep level. One assumption behind Postman's "test" question is that the value of technology lies ultimately in its serving certain needs and that these needs can be characterized in an enduring and recurrent way. But in fact there is this further possibility: new technologies can alter our desires by altering our conceptions of those needs.

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### ESSAY TOPIC

What fundamental conflict does Graham identify between his view of the role of technology and Postman's view? What is your own position on this question? Please support your answer with specific illustrations.