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## A Philosophy for Technology

We are told that an aura of antitechnology abounds in many areas and is spreading. Especially, we are told, this is true among the young people. I am in no position to prove that this is not true, but the evidence is not all that convincing to me.

Virtually everyone within my ken, regardless of age or of the opinions they profess to hold, continues—almost without thinking—to rely on technology as the mainspring of their well-being.

Let me inquire, for example, what would happen if progressive technology were no longer available to assist in the production of food, clothing, and shelter, health care, education, transportation, employment, and recreation.

I think it is safe to say that, if most of us were denied the *opportunity* to enjoy the benefits that technology has created for us in these categories, we would raise merry hell.

I am not overly worried that the antitechnology fad, to whatever extent it exists, will take us to the point of breaking up the material base of modern civilization. Long before that happens, it seems to me, we are likely to feel the pinch of *inadequate* technology to such a degree and in such a way as to stimulate a counterdemand for *improved* technology. This is already happening, in some measure, in all of the fields I have mentioned. We are in fact struggling to stay on the treadmill of adequate nourishment, housing, medical care, and the like.

My apparent preoccupation with technology is not intended to denigrate the social sciences or the arts and humanities. I take it for granted that progress in the latter is equally as important as progress in technology and that advances in these fields are quite as necessary as advances in the field of science. I assume further that we must learn to handle issues arising from the interaction of all these fields.

For example, as we look ahead at what is developing through biomedical research and what some call genetic engineering, we can see that a host of nonscientific issues are bound up with the scientific ones. These issues are legal, political, ethical, economical, even religious.

Yet I can see now, having survived for more than eight decades, certain things that were not apparent to me when I was younger. One of these is that mankind was never destined nor intended to get along without problems. As man has increased his capabilities, so has he increased his problems. What lies ahead for civilization is obviously going to be far more complex than the conditions that confronted civilization when I was born and far more intricate than the conditions that face us today. I take it that this pattern is not going to change.

Whatever else he may be, man is at once a problem-creating system and a problem-solving tool. If he sits around for very long without any serious problems, man goes out and makes some. Apparently, he considers this superior to the alternative—which is something akin to vegetating. Such a tendency may perhaps seem a cause for despair, since it leads to conflicts, some of them severe, and, historically speaking, even to wars. All of my reading of history, however, and all of my personal experience, leads me to the observation that it is through this arrangement that the human species is gradually seeking its goal and fulfilling its destiny—which is the discovery of truth and how to live with it.—GEORGE P. MILLER, *Retiring Chairman of the House Committee on Science and Astronautics*

Adopted from an unpublished paper given at the North Atlantic Treaty Organization Advanced Study Institute, Milan, Italy, September 1972.