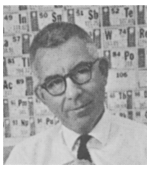
COMMENTARY

". . . AND THE FULLNESS THEREOF"



Last month we discussed the responsibility of scientists and engineers to be human, advocating a particular attitude toward human relationships. Now we consider a responsibility that transcends provincialism in a different but still important way.

In 1960 I visited Yugoslavia in connection with a hot laboratory then under construction. One delightful recollection of that trip is the overwhelming beauty of the Adriatic coast and the charming quaintness of villages like Senj. I wish that every American could ascend Mt. Kravavec and that every Yugoslav could behold the majesty of Niagara and the wonder of Yellowstone! The beauties of nature properly belong to all mankind and not to the clique that happens to reside in the vicinity of a particular wonder or to the nation within whose borders lies some natural spectacle.

Yet nations claim sovereignty over lands within their boundaries, and differing political idealogies are allowed to interfere with the rights of world citizens to have access to natural phenomena. Nevertheless, as an inhabitant of the planet Earth, I should be allowed to visit and enjoy freely, if only briefly, any spot on the globe, and I should also regard Long Island's Great South Bay as one of nature's handiworks whose thrilling beauty should be shared with foreign boating enthusiasts from every country.

Moreover, this moral obligation to share with all mankind the glories of the Earth extends in time as well as space. If I owe my foreign brethren a glimpse of the Grand Canyon, I also owe my great grandson a similar glimpse. Yet, at the rate civilization is progressing, Louis (IV) will be lucky if the Grand Canyon will not already have been turned into a king-size subway tube covered over with cigarette butts and empty beer cans. Axiomatic is each generation's profound responsibility to pass along to the next generation a planet that, if no better, is at least no worse physically than when inherited, but this axiom seldom receives more than casual lip service.

True honoring of this principle requires that as a minimum we set aside large perpetual wilderness tracts in every country and that we actually begin to control population size so that posterity can take advantage of our foresight and visit these spots for a glimpse of how the old planet used to look. Honoring this principle also demands that we stop using up fossil energy sources at such an alarming rate and begin to derive all of our energy from more abundant sources, even before such sources become economically competetive with coal and oil. The notion of literally burning up something whose proven reserves are sufficient for only a few score years has always seemed ridiculously shortsighted to us.

Admittedly, the choice of a reference state is a problem. The only absolute one is total wilderness unperturbed by man, but, by definition, this is impossible, and few would want to approach it. Apparently what is objectionable is not change itself but too rapid a change. We deplore urbanization of beautiful farm land, but few would want to eliminate every large city. We recall nostalgically the era of small villages and the occasional metropolis, but few would want to return to pioneering hardships. One hundred years hence, our progeny will look back wistfully on the relative simplicity of the twentieth century. Nevertheless, the difficulty of the problem must not deter us from its solution.

Mankind is obligated to act not only to conserve mineral resources and to preserve scenic spots while making them available but also to restore the air and water to their original unpolluted condition to promote the welfare of mankind and prevent from extinction various forms of animal, fish, and plant life. All of this calls for true international cooperation and for imaginative efforts by nuclear scientists and engineers. Next month we consider some subtle causes that are drastically altering our environment and some forms of pollution that are seldom regarded as such.

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