

BLAMING TECHNOLOGY

WHEN Samuel C. Florman, the vice president of a construction company, wrote a provocative book called *The Existential Pleasures of Engineering*, he found himself invited to take part in dozens of debates with proponents of the anti-technological movement. Visiting the college campuses, he discovered that professors could be deceptively serene. Jovial at dinner, they nonetheless carried theories "under their tweeds like stilettos." Their students, "after disarming a visitor with wide-eyed veneration," delighted in tossing up "challenging statements like cherry bombs." A scientist by training, Mr. Florman decided that academia was not a likely place to hunt for the truth.

It somehow got under Mr. Florman's skin when he heard a young man, with professorial encouragement, disparage farm tractors in comparison with oxen. But Florman's mood really soured when a young woman solemnly arose to an-

nounce that the building they were meeting in should never have been built since it was constructed on terrain sacred years ago to an Indian tribe.

Florman's adventures in academia provoked him into writing a second book, *Blaming Technology: The Irrational Search for Scapegoats* (St. Martin's Press, 175 Fifth Avenue, New York, N.Y. 10010, 206 pp., \$12.95). It is a markedly gentle book considering some of the violent speeches that moved Florman to undertake a work that had to be done.

Florman concedes that we live in a world filled with ambiguities and paradoxes. The good points of oxen can be admitted: they don't consume gasoline, and they provide manure to enrich the soil. Their only drawback is that they are no longer capable of ploughing Kansas in a way to feed the world. As for the Indians who once hunted in Michigan woods, Florman does not quarrel with the idea that they were wronged. But

Hiawatha has been a long time dead. Demolishing a modern building would not give him back his tepee.

Whatever ails business in the United States today, it is not the fault of engineers. Simply by analyzing *Who's Who in America* Mr. Florman deftly refutes the notion that we are run by technocrats. Despite John Kenneth Galbraith, who thinks power resides with the planning staffs of a "technostructure," our industries are still guided by graduates of liberal arts colleges who, in many instances, have gone on to law school. During the past thirty years only 7 per cent of our college graduates have had engineering majors. Lawyers, not engineers, make our laws in Congress. Mr. Florman concludes, quite sensibly, that "the myth of the technocratic elite is an expression of fear, like a fairy tale about ogres."

The army engineers, who have a direct impact on the environment, have been called Public Enemy No. 1 by Supreme Court Justice William O. Douglas. Florman does not deny that there is such a thing as "big dam foolishness" in some parts of the West. But the environmentalist in him is pleased every time he sees a barge being propelled gently along a man-made waterway. If we didn't have barge canals—and deepened rivers—we would have to compensate by building more concrete highways for roaring trailer trucks. On

balance, the army engineers haven't done such a bad job in developing our inland waterway system. If they have done harm to wetlands, it was in a day when the worth of wetlands was not clearly understood by anybody.

Florman understands the phenomenon of nuclear *Angst*. When, some three months before the Three Mile Island disaster, he visited the Connecticut Yankee nuclear plant in Haddam, Connecticut, he felt that *Angst* as he gazed at the pale blue glow of the nuclear pool. It seemed unearthly. He recognized his dread as irrational, but he understood the general hysteria that was to come in the wake of Three Mile Island. With people thinking as they do, he takes the need for providing for the disposal of nuclear waste very seriously. The apprehensions of ordinary people, he says, must be factored into our nuclear decisions. Florman is for mixing boldness and caution in going ahead with nuclear projects, but he would take it as a political blessing if fusion (a safe process) would come along to make power from fission academic.

Small Is Dubious in an Age of Mass Production

When Florman encounters smallness in the shape of a canal barge, he delights in it. But the whole "small is beautiful" movement, which produced a book by E. F. Schu-

macher that sold a million copies, does not impress him. "Small is dubious," he says, for it results in such silly business as installing wind-powered pumps in India where they have long seasons of windlessness. The ironies that attend the "small is beautiful" craze are practically limitless. Large technologies and small are inevitably intertwined. The backpack, for example, is what Florman calls "the very essence of the counterculture life-style." Yet the backpack is made of aluminum and nylon, both of which require very large energy-intensive, mass-production technologies. Even the bicycle depends on large-scale mining and metallurgy.

Florman pays his attention to regulation as practiced by the Federal Trade Commission. He discovers that it is over-legislation, not over-regulation, that is the basic cause of the FTC's troubles. If our Congress were not so "over-lawyered" and "under-engineered," the regulatory agencies would be provided with better rules. They would not be compelled to keep plastic pipe out of buildings in deference to the plumbers' unions, which prefer the more labor-intensive cast-iron pipes.

Florman thinks the Club of Rome, which was started by Aurelio Peccei, an Italian industrialist, to give quantitative expression to such things as population growth, mineral resources, food supply, pollu-

tion and poverty as they affect each other, is well-intentioned. The Club is looking for nothing less than a mathematical model for the whole world. As a beginning, its first publication, *The Limits to Growth*, was designed as a report to the Club, not as a statement of Club policy. Unfortunately, the statement of exponential growth trends was taken as a slap at the very desirability of growth. The Third World countries considered this an affront. "How," so the Third World nations asked, "can you have the effrontery to talk about limiting growth while we are starving and impoverished, just planning to embark on some growth of our own?"

The Third World's fears are well-taken. Florman considers the publication of *The Limits to Growth* to be valuable in a negative way. "People," he says, "will indeed take action, not only because of automatic factors such as price changes (whose effect the report has possibly underestimated), but because of reasoned programs resulting from forecasts such as the report itself."

In other words, exponential curves are never a proof of the inexorable. Population trends can be reversed or be made static; new metals can be substituted for old; plant geneticists can give us higher corn yields, and so on. There is even a possibility that the world will cease to spurn the professorial engineer.

THE MAN VERSUS THE STATE

by Herbert Spencer

Foreword by Eric Mack; Introduction by
Albert Jay Nock

(Liberty Classics, 7440 North Shadeland,
Indianapolis, Indiana 46250)

518 pages ■ \$13.00 cloth, \$6.00
paperback

Reviewed by Edmund A. Opitz

It was Albert Jay Nock who acquainted me with Spencer's book on the State. Nock used to appear regularly in Paul Palmer's old *American Mercury*, and in 1938 devoted one of his columns to *Man versus the State*. This book, Nock averred, was the best single volume ever written to counter the New Deal ideology, and it said little for the perspicacity of the conservative and business opponents of the welfare state, he added, that they had let this book go out of print.

Shortly after reading this essay on Spencer I wandered into a little bookshop on Copley Square—led by the invisible hand, no doubt—and for one buck picked up a copy of the last American edition of *Man versus the State* published in 1916 by the house of Mitchell Kennerley in New York. This edition was edited by Truxton Beale, and Mr. Beale's personal card was still in the book, which appeared to be unread.

Herbert Spencer wrote four essays

for *The Contemporary Review* in 1884 and brought them out in book form the same year, adding a Preface and a Postscript. A second edition appeared in 1892. Americans had to wait twenty-four years for their own version, and a vastly expanded version it was. Mr. Beale not only added five more Spencer essays to the original four, but he had each essay introduced by a distinguished public figure: William Howard Taft, Charles W. Eliot, Elihu Root, Henry Cabot Lodge, David Jayne Hill, Nicholas Murray Butler, Judge E. H. Gary, Harlan F. Stone, and Augustus P. Gardner. This blue ribbon crowd contributed 72 pages of text, which might be regarded as a representative sampling of American opinion in the pre-World War I era: the publication of this book in 1916 attests to the nation's individualism and its dedication to political and economic liberty.

The American mind was radicalized during the two decades between the wars; the older ideas were not rebutted, they were simply ignored as a new set of ideas swirled around them. A novel (for America) ideology was grafted into place during the thirties, and men like Nock were becoming superfluous.

It was of little consequence that I read Nock's praise of Spencer, but it was of great moment that the *Mercury* essay was also read by James Gipson of Caxton Printers in Boise,