

Technology at the Turning Point. Edited by William B. Pickett. San Francisco: San Francisco Press, 1977. Pp. 80. \$6.25.

Included in this collection are six papers on the history and future of American technology, originally presented at a Bicentennial Conference on American Technology at Rose-Hulman Institute of Technology in April 1976. Characterized by the editor as being "in varying degrees, optimistic" (p. 1) about the future of American technology, the contributors to this seventy-five-page publication do not actually fit such a tidy typology. Melvin Kranzberg's defense of "Technology the Liberator" would undoubtedly qualify him as an optimist were it not for the fact that technology interacts with society, whose "outmoded values, institutions and lifestyles" (p. 48) he deems suspect. And as for the other contributors, they either disregard the question of value orientation or are, if you will, in varying degrees *pessimistic*.

Paul Horwitz defends the use of public funds to support research in the private sector—whether it be undirected basic research, (government) mission-oriented research, or even profit-motivated "marketplace research"—so long as the laboratory thus aided shares the costs. Thomas Parke Hughes, in the most meticulously researched of the contributions, is content to argue that Thomas Edison's research method was almost always systems oriented and that, accordingly, it has been unfairly contrasted with more recent approaches to technological problem solving.

Joseph Weizenbaum, reflecting on "Computers and Hope," leaves the reader with little reason to hope that computers will not continue to be used by the powerful to concentrate power in their hands (p. 59). Ruth Schwartz Cowan, whose carefully noted piece bemoans the failure of male-dominated technology to free housewives from domestic chores, provides reason to expect something better only if her unsubstantiated expectation of attitude transformation does in fact come to pass. Victor Ferkiss, addressing directly "The Future of American Technology," clearly wants to see appropriate technology dominate future goal setting in our nation's technology; but he sets forth no reasons to encourage belief that his preference will prevail, and the thrust of his historical observations is rather counterindicative.

Taken as a whole, the contributions to this collection provide an interesting cross section of knowledgeable opinion about America's changing role in technology. The self-congratulatory flavor that was so commonly afforded by bicentennial dicta here tends markedly toward the bittersweet, as one writer or another takes note of the oil embargo, the decline of the dollar, and other mid-seventies' symptoms of this nation's finitude. Innocence is almost entirely gone,

and in its place, perhaps, is Kranzberg's law: "Technology is neither good nor bad, nor is it neutral" (p. 38).

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Technology and Social Shock. By Edward B. Lawless. New Brunswick, N.J.: Rutgers University Press, 1977. Pp. xii+616. \$6.95.

Technology and Social Shock originated as a government document, and this is still its essential literary form. It is the end product of a 1972-73 research project, "Unstructured Technology Assessments—Case Histories of Public Alarm Over Technology," carried on by the Midwest Research Foundation under a grant from the National Science Foundation. It consists primarily of some forty-five case histories, supplemented by a discussion of other cases not studied in detail, various charts, appendixes, etc. The case histories deal with reproduction and genetics (three), food and medicines (twelve), "unique hazards of the x-ray" (three), various environmental problems (thirteen), and "issues created by the federal government" (nine), including such subjects as Project Sanguine, Project Able, and chemical mace.

The investigators were concerned with public reaction to technology. The histories are "descriptions of the cases as we think they were perceived through the eyes and ears of the public" (p. 8); therefore the narratives are based on general press coverage rather than writings in technical publications. Case histories are divided into discussion of background, "key events and roles," and disposition.

How useful this whole enterprise has been will be a matter of dispute. The title of the book is in itself misleading. "Social shock" conveys the meaning of some kind of effect on the structure, processes, and future of society. This is a different matter, of course, from media coverage. Some of these cases were disposed of in ways that involved such social action as new legislation or regulations, but there is no sustained attempt to relate the public attention variable to any social change variables. The "shocks" are really simply media events, or chains of events, not different in kind perhaps from the technologically conditioned exploits of Evel Knievel. There is no theoretical rationale for choosing the forty-five cases discussed at length as opposed to some or all of the fifty-five additional cases treated only in synopsis form, since they do not differ systematically in subject matter or types of reactions or social consequences.

The conclusions drawn from this study are, as is to be expected,

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