

avoid information chaos, are thoughtfully described by Bonnie Juergens and Gloriana St. Clair.

And in one of the book's most useful chapters, Adrian W. and Julie S. Alexander summarize the transformation of intellectual property rights that may accompany the electronic dissemination of information. As the Alexanders make clear, the traditional business of libraries has been the distribution—at both circulation desks and interlibrary loan departments—of copies of printed works. Digital and other dynamic media (such as recording tape) bring radical change to our notions of "distribution" and "copy." These changes have prompted many to observe that libraries are now in competition with other information providers and may not survive, except as museums for materials that predate the electronic age of information distribution.

Two observations might be offered on this vision of the future. The first is that someone will have to ensure continued access to printed information, and no one can do that better than librarians. Perhaps librarians should avoid pejorative descriptions of this vital and enduring function of libraries. We have other functions as well, one of the most fundamental of which is captured in the phrase "resource sharing." Ever since libraries began to function in the public interest about 250 years ago, their economic and social function has been to enable users to share among themselves, rather than to own individually, the books, journals, and other materials they need. The question before the library profession now is not whether we embrace digital media (we have!), but whether we will continue to deliver the economic and social benefits of shared usage to our readers. Powerful technological and marketplace forces are arrayed against such service.

Libraries will not "advance" by competing with the for-profit sector on its own terms. Libraries, working in a transformed environment, must instead find ways to preserve a different communal set of terms for information use that protects the individual economic benefits

and the more general public interest that have so long been embedded in both copyright law and the profession of librarianship.—*Scott Bennett, Johns Hopkins University, Baltimore, Maryland.*

Pool, Ithiel de Sola. *Technologies without Boundaries: On Telecommunications in a Global Age.* Eli M. Noam, ed. Cambridge, Mass.: Harvard Univ. Pr., 1990. 283p. alk. paper, \$27.50 (ISBN 0-674-87263-0).

Ithiel de Sola Pool had a long and illustrious career as a political scientist and pioneer in the field of communications research. For thirty years, he was on the faculty of M.I.T., where he founded and headed both the political science department and the interdisciplinary Research Program on Communications Policy. He was a prolific writer, and his books consistently won acclaim. Even in the last two years of his life, he published some twenty articles and two books. One of these, *Technologies of Freedom* (1983), dealt with the social and political status of the media in the United States. A second volume was to deal with the same issue in the international realm. This manuscript, edited by Eli M. Noam of Columbia University, became *Technologies without Boundaries*.

The extraordinary mental vigor and optimism that enabled Pool to continue working at an intense pace after the onset of his illness are evident in this book, which Noam describes as "a specialist's book for generalists, and a generalist's book for specialists." Clearly written and passionately argued, *Technologies without Boundaries* is the final expression of Pool's missionary conviction that the new telecommunications and computing technology will have untold social, material, and political benefits, if only they remain free of government regulation. To this battle against government encroachment, Pool brought an impressive understanding of technology as well as a humanistic perspective and a close familiarity with social science research in the field of communications.

Technologies without Boundaries contains a very good introduction to the technologies of telecommunications and

their social and political histories. Pool also speculates about the ways in which telecommunications will free our lives geographically and professionally. Most of the book, however, is devoted to refuting charges that global communications will destroy indigenous cultures, wreak havoc on the economies of the have-not nations, and imperil their security. In the 1970s, these fears led both developing and developed nations to create idiosyncratic standards and rates and to enact a spate of protectionist legislation controlling the importation of both hardware and information. In Pool's view, recent technological developments and social science research have proven all these concerns to be unfounded. The charge of cultural imperialism, he argues, is but a smokescreen for the more real economic fears of the business community and the political insecurity of those in power.

Protectionism in economic and cultural matters betrays an elitist attitude on the part of Third World governments and their American supporters. Pool cites current social science research that suggests that people do not passively absorb information fed to them, but rather reject unsought information not relevant to their lives (witness the birth-control campaign in India). Research also supports the notion that the flow of information may at first be centralized in one area of the world, but then soon becomes diffused to other areas, which then develop their own fields of expertise.

On the economic front, Pool maintains that protectionism can only be self-defeating for developing countries. It is in their interest to adapt the inventions of large, well-capitalized countries for local use and leapfrog into the next stage of development. Pool also argues that global telecommunications no longer pose a threat to national security. The development of minicomputers and intelligent terminals should lay to rest the fears of governments wary of storing important and sensitive information abroad.

In fact, the availability of various means of telecommunications makes it likely that, in the future, businesses and governments will employ a mix of cen-

tralized and local data processing. Though data needing large storage facilities and powerful processing may still have to be centralized or processed abroad—bibliographic data, for example—local storage and manipulation of most data have become economically advantageous. It is in the political sphere, however, that global telecommunications will have the most beneficial effect, because the development of interactive modes of communication makes possible the political participation of the citizenry inhabiting even the most remote locations.

Pool's vision of what telecommunications can do to humanize our environment, promote cultural diversity, and empower the individual is provocative and useful for information specialists to bear in mind. Yet how realistic is it? Even with desktop publishing and camcorders, can a small enterprise compete as a provider of information with large, well-funded news organizations? How valid is Pool's rejection of government regulation in any form? Can the marketplace be trusted as the only regulator of new technologies, especially when large telecommunications corporations already hold an unfair advantage? Pool's passionate belief in personal liberty and in the value of free access to information is inspiring, if not entirely convincing.—*Eva M. Sartori, University of Nebraska-Lincoln.*

Computer Files and the Research Library.

Gould, Constance C., ed. Mountain View, Calif.: Research Libraries Group, 1990. 59p.

An outgrowth of a 1989 Research Libraries Group (RLG) workshop on machine-readable data files, this booklet is intended to fill a need, in its editor's words, for "a succinct publication describing innovative approaches to collecting, describing, and providing service for computer files in research libraries." The volume consists of four brief essays on specific aspects of computer file management. Also included are the agenda and discussion summaries from the RLG workshop, as well as an appendix presenting summary results