Book Reviews

Birdsall, William F. *The Myth of the Electronic Library: Librarianship and Social Change in America.* Westport, Conn.: Greenwood, 1994. 224 p., $55 (ISBN 0-313-29210-8).

Critiques of the paradigm of the electronic library in an information age are a dime a dozen, but William Birdsall's gripping polemic is not to be missed. Birdsall, who is university librarian at Dalhousie University, has been writing for years about the traditional social, political, and cultural meanings of American libraries. *The Myth of the Electronic Library* reads like a courtroom drama: "Myth of the Electronic Library v. Myth of the Library as Place." The author's clear intention is to expose flaws in the electronic library model and defend the virtues of traditional library organizations, buildings, and roles. The fact that he is scrupulously fair in his assessment of the electronic library only adds weight to his passionate defense of the values that it negates or ignores. He forces the reader to consider seriously the implications of a "post-library society."

The premise of the book is starkly dualistic: the electronic library contrasts with the traditional library in every respect. The former is epitomized by the corporate special library, the latter by small-town and urban public libraries. The electronic library myth is an abstract, technology-driven vision of the transmission of discrete information parcels. Librarians—if they exist at all—are freelance experts delivering a product to paying clients, exemplified by the scientific researcher. The public library myth is a sensuous, historically rooted vision of a community institution that organizes knowledge for the benefit of personal self-awareness and fulfillment; it serves as a bridge among the individual, the community, and the larger world of ideas.

Birdsall devotes several chapters to the historical origins and development of the electronic library, beginning in the 1930s. His account demonstrates that the forecasts of the early visionaries of the electronic library were amazingly accurate, at least from a technical point of view. Their utopian vision has had an irresistible attraction for librarians, for "clarity of purpose in a time of change is reassuring to an occupation unsure of itself even in the most stable of times." Ironically, librarians have been falsely stereotyped by apostles of the information age as sentimental, book-loving conservatives. In fact, librarians consistently have shown great interest in and support of new technologies. Too much so, according to Birdsall. This Darwinian technological determinism, he argues, "the impulse for consistency and simplicity," should be resisted.

By schematically contrasting two extremes, Birdsall is able to expose paradoxical tensions within librarianship. His aim is to historicize both myths, to place them within the context of the periods when they achieved dominance. In a discussion of politics and libraries, for example, he observes that "far from being a radical break from the past, an electronic revolution, the myth of the electronic library represents an effort to incorporate social change into a neo-conservative framework." Elsewhere, he calls the abstract image of the invisible electronic network "part of a more general modernist metaphor, the dematerialization of culture itself." This coldly objective scientist culture, however, is under attack; "people are rejecting the professional facade (and values) in favor of a return to a more emotive and

flamboyant image." He also argues that librarians attain professional authority through their control of "a bureaucratic organization having the power to distribute a public good." The professional model often touted as an alternative—that of the physician as solo practitioner—is actually anachronistic; even physicians now operate within bureaucracies.

The disadvantage of Birdsall's adversarial rhetorical strategy is that the two library myths seem to be running on separate tracks that never intersect. The library universe cannot be as Manichean as Birdsall paints it. If it were, how could the two visions ever be reconciled? (For reconciliation there must be, if historic library values are to be preserved.) If the electronic library is such a monster, how can it be contained by a physical building, as in Birdsall's recommendation that "the ritual library as place incorporate the transmissional electronic library."

Birdsall does not deal directly with academic libraries, except to note that they have been moving increasingly closer on the continuum to the special library model. It would have been more interesting, perhaps, to ask whether academic and school libraries have ruling myths of their own. In any case, the issues raised in this book can be transposed readily to an academic context. The academic library's function as place and institution, the academic librarian's role as teacher and guide, have no necessary place within the electronic library. Technology will not provide for them. Only humans can do that.—*Jean Alexander, Northwestern University, Evanston, Illinois.*

Mitcham, Carl. *Thinking through Technology: The Path between Engineering and Philosophy.* Chicago: Univ. of Chicago Pr., 1994. 397 p. $47.50 cloth (ISBN 0-226-53196-1), $17.95 paper (ISBN 0-226-53198-8).

Mitcham writes that as a student he was attracted to the idea that the distinguishing characteristic of our time was not so much modern science as modern technology. This is not startling if technology is taken, as it very often is, to be simply applied science; then it just means that applied science overshadows pure science. It has real force only if technology is seen to be an independent realm of activity that makes use of science when it can and otherwise works on its own. This is how Mitcham understands it. The issue is an important one that ought to interest librarians and information scientists and others involved with information technology. It makes a difference how one thinks of one's work and its goals and criteria of evaluation whether one is oriented toward a model of scientific practice or toward one of technological practice. It may have made a difference that people once thought there was or ought to be a "library science," or that information system designers thought of themselves as information scientists rather than as information engineers.

The science-technology relationship can be explored in many ways; Mitcham set himself the task of discovering what there was in the literature of philosophy that was of relevance to serious reflection on technology. He published bibliographies and anthologies as preparation for what he now offers—a critical introduction to the philosophy of technology. It falls roughly into two parts, one a historical review of relevant literature, the other an analytic exploration of four aspects of technology: as artifact, as activity, as knowledge, and as volition.

The historical review is dominated by a distinction between two supposedly opposed traditions: engineering philosophy of technology and humanities philosophy of technology. The engineering approach is analysis of technology from within. The humanities approach is interpretation from the outside, from the vantage point of religion, poetry, or philosophy (i.e., not just philosophers—Lewis Mumford and Jacques Ellul are prominent exemplars of the humanities approach). The engineering approach tends to be enthusiastically pro-technology; the humanities approach tends to be suspicious and critical. Mitcham quite pointlessly fusses over which of the two approaches is superior (inside and out-