This is prepublication draft of an article in the *Bowker Annual* 32nd ed., 1987, pp 279-282.. It summarizes a longer article "Education for librarianship in the next century,"published in *Library Trends* 34, no 4 (Spring 1986):777-788.

LIBRARY EDUCATION: A CENTENARY AND THE FUTURE

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In 1887 Melvil Dewey founded first library school in the United States at Columbia University. This important centenary has received suitable attention: *Library Trends* vol 34, no. 3, Winter 1986 is devoted entirely to historical topics in library education; *Library Trends* vol 34, no 4, Spring 1986 contains the papers, mainly on recent and current trends in library education, presented at the Library Education Centennial Symposium held at Columbia University on 27-28 June, 1986, except for an historical overview by Ed Holley, which will appear in the *ALA Yearbook of Library and Information Services* 1987. Other material appears in the *Journal of Education for Library and Information Science* vol 26, nos 3 and 4, Winter and Spring 1986 and in *Special Libraries* vol 77, no 4, Fall 1986.

If 1987 is a good year to look back it also seems a good year to look forward. How changeable are library services anyway? The pattern is clearly uneven: Online catalogs are new and different. Yet the collection development policies outlined by Gabriel Naude in 1627, three and a half centuries ago, are surprisingly contemporary. He advocated the inclusion of works by new, dissident writers, such as Copernicus, Galileo, and even those "thirty or forty writers of reputation [who] have declared themselves against Aristotle."[1] The professional literature of a century ago is still remarkably contemporary. The *Library Journal* of 1886 contains discussions of copyright, public access to government documents, education for librarianship, preservation and conservation, reduction of catalog costs through cooperative cataloging arrangements, improved subject access, lack of comparable pay for women, and a plea for more bibliographical instruction to balance the current emphasis on library technology.

This mixture of change and continuity suggests that different aspects of librarianship vary with respect to change:

(i) Library Values

Library values include social values as they influence library policy and professional issues: The mission of library service, the principles of selection, and the librarian's attitude towards readers. These values underlie day-to-day priorities and decisions, especially the use of labor, the largest budget item. One could reasonably recommend Naude's *principles* of book selection, but not his *techniques*. (He recommends searching bookshops for printed sheets not yet folded and bound).

Western library values have changed little in a century: They derive from stable cultural norms and, one hopes, will change little in the future. Yet library values are not fixed and universal: What would be acceptable in San Francisco today may not be tolerable in Peking or Teheran. Library provision acceptable now in Massachussetts might not have been acceptable in colonial times -- nor vice versa. Values can be change but with *cultural* forces rather than *time*.

(ii) Library Technology. Technology available for use in library services is concerned with the handling of physical things: paper, cardboard, microfilms, magnetic, optical, or other recording media. Technology is especially important for library service because libraries are concerned with *recorded* knowledge. Librarians and library users are concerned with ideas, assertions, and evidence represented in text, images, and sound. However, we can only do so through text-bearing, image-bearing, and sound-bearing objects, such as books made of paper, images on cathode ray tubes, sounds recorded on magnetic tape, and so on. Carbon paper, microfilm, and typewriter were available a century ago.

Telephone, copying machine, and computers have added to the options available. Information technology continues to develop additional media for bearing text and more powerful tools for handling text, a clear line of progress with time.

(iii) Library Science. A third category, distinguishable from library values and library technology, is "library *science*", in the sense of our understanding of librarianship:

1. Information retrieval theory, the description and representation of recorded knowledge: indexing, cataloging, classification;

2. Information gathering behavior: user studies, bibliometrics, social epistemology, and knowledge utilization;

3. Historical studies of books and of communication;

4. Understanding of the nature of libraries and related information services.[2]

These aspects of "library science" have made some progress in the past century, but not a lot. The central issues are rooted in truly obscure aspects of human behavior, so progress will continue to be slow and difficult. Scholarly explanation may lag behind the intuition of those with most practical experience. Much of the progress in the past century in these areas has been the refinement of earlier progress (e.g. cataloging principles) or concerned with relatively superficial symptoms of deeper phenomena (e.g. bibliometrics and citation studies).

In recent years librarianship has broadened in scope and extent. The scope is clearly extensive: libraries of all kinds, archives, databases, records management, and documentation in litigation, engineering, and bureaucracies. Whether or not called "librarianship", all are examples of retrieval-based information services with shared characteristics. At the least, library services can sensibly be viewed as part of a larger family of related activities and library schools can be expected to become, by expansion, merger, or coalition, colleges of broader scope, with the Master of Library Science degree as one important specialty within a range of programs.

The gradual maturing of library schools as academic departments in an academic environment also indicates a broader view of librarianship[3]. One conceptual, academic perspective would be to regard "information science" as having to do with representations of knowledge both abstractly ("texts") and concretely ("text-bearing objects"). Within it, librarianship has specialized in the handling (description, arrangement, access, and use) of text-bearing objects. For this, information retrieval central, but needs to be studied in relation to the texts, to the text-bearing objects, to knowledge, and, indeed, to people, their beliefs and their needs for knowledge. This broader view reinforces considerations of economies of scope and economies of scale in the schools. The present pattern of a "library school" primarily concerned with awarding a "library degree" can be seen as a case of arrested development.

So long as the mission of libraries is to bring information to people, the curriculum of library education will remain fairly stable, containing: the role of information in society and of library services; the needs, information-gathering behavior and institutional contexts of groups to be served; theory and practice of information retrieval (cataloging, bibliography, etc.); the managerial, political, and technological means most likely to be useful in developing and providing good library service. Areas that deal with library values will change the least and those dealing with library technology will change the most.

Meanwhile improved library technology provides new opportunities to grapple with some old problems. Catalogs, bibliographies, and texts all online are already beginning to overcome some of the constraints imposed by the technology of cardboard and paper. One such barrier is the historic, but unhelpful, separation of catalogs from bibliographies [4]; another is the physical separation of the catalog record from the text it represents; a third is the need for the reader to travel to the library to read. New information technology is beginning to remove these three familiar impediments to good service. The trend is to providing library services not only in libraries, but wherever people happen to be. Yet old

non-technological problems remain: of knowing what to look for, of comprehending it, of deciding whether to believe it, and of assuring that just those who should have access to information do have access to it. The liberating power of the new information technology can be expected to induce renewed attention to traditinal, nontechnological concerns -- so long as librarianship remains a service profession concerned with ideas as well as with records.[5] Education for librarianship in the next century will depend on what librarians make of library services in the nearer future.

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