

What were librarians doing while Otlet was inventing documentation? The modernization and professionalization of librarianship during the Belle Époque

Peter Johan Lor^(a)

a) University of Pretoria, <http://orcid.org/0000-0001-6307-9068>

Contact: Peter Johan Lor, peterjlor@gmail.com

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ABSTRACT

In the historiography of librarianship and information work, the development of librarianship during the Belle Époque (1871-1914) has been somewhat overshadowed by the heroic and ultimately unsuccessful projects of Otlet, the Royal Society, and others to bring about bibliographic control of the world's scholarly literature. In this article, an attempt is made to determine the issues which preoccupied an emerging Anglo-American library profession during this period. It is based on evidence provided by a selection of British and American documents and events from the 1850s onwards which were influential at that time, including Britain's Public Libraries Act of 1850; the first world's fairs in the early 1850s; Edward Edward's *Free town libraries* of 1869; the formative events surrounding the 1876 United States Centennial Exposition; Melvil Dewey's School of Library Economy (established 1887); and James Duff Brown's *Manual of library economy* of 1903. Librarians' concerns at the turn of the twentieth century are discussed in relation to societal trends affecting the modernization and professionalization of librarianship.

KEYWORDS

Librarianship; Anglo-American; Belle Époque; Professionalization; Modernization; USA; UK.

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Introduction

The Belle Époque, between the end of the Franco-Prussian War in 1871 and the outbreak of the First World War in 1914, was a period characterized by relative peace and rapid industrial and economic development.¹ It also saw a remarkable flowering of the arts and sciences (Rayward 2014). During this period various internationally minded scholars and other luminaries were working on the bibliographic organization of the world's scholarly literature and laying the foundations of what eventually emerged as information science. Here one thinks of initiatives such as those of the Royal Society of London (Murra 1951; Coblans 1974) and the Belgian visionary, Paul Otlet, to conceptualize and bring about international bibliographic control (Rayward 1981, 1993, 2014). The work of Otlet in particular has attracted renewed interest, with notable emphasis on his contribution to the theory of documentation (Rayward 1975, 1991, 2003; Ranfa 2013).

Otlet and his older associate, the Nobel Prize-winning Belgian senator, Henri La Fontaine (cf. Mogren 1999), were not librarians but lawyers. Other similarly engaged internationalists were scientists, physicians, architects, and politicians. What, then, were librarians doing during the Belle Époque? In the historiography of librarianship and information work, the development of librarianship during this period has been somewhat overshadowed by the heroic and ultimately unsuccessful projects of Otlet and others. In this article, an attempt is made to determine the issues which preoccupied an emerging library profession during this period, and to relate the circumstances and preoccupations evident in them to the modernization and professionalization of librarianship. Evidence is provided by a selection of British and American documents and events which were influential at that time. In view of significant milestones in library development from mid-century, this account commences in 1850 rather than 1871.

The 1850s: a decade of innovation

In Western librarianship the second half of the 19th Century was a period of significant development and change. Not only was it a period of growth in the number and holdings of libraries, but it was also one which arguably saw the birth of librarianship as a profession. The early 1850s in particular were pivotal in the history of Anglo-American librarianship. Following a study of libraries in certain other countries, in 1850 the British Parliament enacted legislation enabling local municipalities to raise taxes to support public libraries. In London, thanks to rapid growth of its collections, the British Museum was rapidly running out of space. In 1852, Antonio Panizzi, the Italian-born Keeper of the Printed Books, sketched out a plan for the famous circular reading room, construction of which started in 1854 (Miller 1979, 13).

On the other side of the Atlantic, libraries were less well developed. In 1851 a survey by Charles C. Jewett, Librarian of the Smithsonian Institution, showed that in the USA there were at that time only five libraries with collections of over 50.000 volumes (Whitehill 1956, 2). But this was about to change.

¹ This article is a revised and expanded version of the first part of a paper, "In the background: the development of international librarianship during the period 1850-1945", which was presented to the Conference on "The Science of Information, 1870-1945: The Universalization of Knowledge in a Utopian Age", Philadelphia, February 23-25, 2017.

Spurred on by a somewhat controversial French ventriloquist, Alexandre Vattemare, and supported by civic-minded patricians, a movement to found the first major free public library in the USA was gathering momentum (Whitehill 1956, 3–17). In 1852 the Trustees of the Boston Public Library issued an influential report, drafted by Edward Everett and George Ticknor. They argued for the establishment of a public library in Boston, and advocated for the public library as an essential agency for educating the citizenry of a democracy ('Report of the Trustees of the Public Library of the City of Boston' 1852). The Boston Public Library opened its doors in 1854. It was not the first public library in the USA, but it was the first free, tax-funded public library of more than local significance in that country (M. H. Harris 1999, 243–44).²

The early 1850s also saw the first moves to create state-funded agricultural colleges in the USA; in 1855 legislation was enacted for this purpose by the state of Michigan. Other states followed, enacting laws that were precursors to the Morrill Land Grant Act of 1862 (Huffman and Evenson 2006, 12–13). This laid the basis of the land grant colleges, a major factor in the nationwide extension of higher education – and of higher education libraries. During the same period, Americans who had studied at German universities brought back new ideas about curricula, the place of the natural and applied sciences, and the importance of research. This had obvious implications for university libraries during a period in which industrialization, economic growth, and philanthropy contributed to the vast expansion of higher education in the USA (M. H. Harris 1999, 249–50). In due course it led to significant growth, both quantitative and qualitative, in college and university libraries.

Internationally, the 1850s saw the advent of international expositions, also known as “universal expositions” or “world’s fairs”. The first of these was London’s “Great Exhibition of the Works of Industry of all Nations. It was held in 1851 in a venue specially built for it using what was then very innovative technology, the Crystal Palace. The Americans soon followed suit. In 1853 the second World’s Fair was held in New York. This was significant, as it provided the occasion for the first national convention of American librarians. It attracted eighty-two librarians and “bookmen” (all male), mainly from the north-eastern United States. There was also a sprinkling of foreigners, some of whom presented papers – although it is not clear from the reports whether the foreign participants attended in person, or submitted papers that were read for them (cf. Gambee 1968, 140). Vattemare was in attendance to promote his scheme for international exchanges of publications (Rudomino 1977, 66). Under the leadership of Charles Coffin Jewett, the Convention dealt with matters of principle, such as the role of the library in society, as well as with practical techniques and technology, such as Jewett’s invention for printing union catalogues and catalogue cards. Whilst a proposal to found a national association of librarians did not come to fruition, the meeting was significant in that it marked the beginning of a long association between world’s fairs and the emerging library profession. In the years that followed, these fairs were to provide opportunities for both national and international meetings of librarians, bibliophiles and bibliographers (Gambee 1968). More generally, because they were spectacular events attended by millions who “marvelled at the innovations and discoveries that heralded the appearance of a new kind of modern life” (Rayward 2014, 5), they also created an appetite for the modern.

² Rayward (1976, 210) has suggested that there is little evidence of mutual British and American influence on the founding of public libraries in the two countries.

1869: Edward Edwards and “Free town libraries”

Britain saw a milestone in 1869 with the publication of an ambitious report by Edward Edwards, *Free town libraries, their formation, management, and history in Britain, France, Germany, and America; together with brief notices of book-collectors, and of the respective places of deposit of their surviving collections* (Edwards [1869] 2010). This was an early comparative study of public libraries, intended primarily as a

[...] Handbook for Promoters and Managers of Free Town Libraries; especially of such Libraries as may hereafter be established under the 'Libraries Acts.' Its secondary purpose is to compare British experience in that matter with Foreign, and particularly with American, experience (Preface, p. v).

Edwards's report is divided into four books. Book 1, “Free town libraries, at home”, is a medley of chapters, including chapters on administrative and organizational aspects of public libraries as well as descriptions of individual libraries. Book 2, “Free town libraries, abroad”, covers mainly France and Germany. Book 3, “Free town libraries, in America”, is very substantial. In Book 4, “Notices of collectors”, the author gave rein to his fascination with collections and his love of miscellaneous facts. The longest of the four books, it contains 1.093 brief notices of significant book collections, arranged alphabetically by the names of the collectors. It reports what these collections were comprised of, and how and by which libraries they were acquired. It is not limited to acquisitions by “town libraries”, and its relevance to the rest of the work is unclear.

Generally, Edwards's text is crammed with historical details and statistics. There are descriptions of quite small and obscure libraries, with emphasis on benefactors, bequests, gifts, and the growth of collections. Everywhere, laws, and regulations are cited, and reading rooms and conditions of access are described. Throughout the text, the educational and civilizing influence of public libraries is assumed. Deconstructed, the text reveals an underlying divide between *us*, the educated and cultured elite, and *them*, those in need of being educated and civilized. This permeates much of the writing about public libraries during that period, as shown by M. H. Harris (1975).

1876: a pivotal year

The second national meeting of American librarians took place at the second World's Fair held in the United States, the Centennial Exposition in Philadelphia in 1876. There were 103 participants. One British librarian attended (Black 2016, 147) as well as some other foreign guests (Rudomino 1977, 67). On this occasion the American Library Association (ALA) was founded,

[...] for the purpose of promoting the library interests of the country and of increasing reciprocity of intelligence and good-will amongst librarians and all interested in library economy and bibliographical studies (cited by Olle 1977, 249).

Among the library notables who attended were Justin Winsor, then superintendent of the Boston Public Library and subsequently Librarian of Harvard University, William Frederick Poole, the initiator of the pioneering *Poole's index to periodical literature*, and first librarian of the Chicago Public

Library, and Charles Ammi Cutter, librarian of the Boston Athenaeum Library. A lesser-known participant was Melvil Dewey, librarian of Amherst College, who lost no time in moving into the limelight. He went on to become the first secretary of the American Library Association (ALA), the first editor of its organ, the *Library journal*, and the initiator of many other schemes and projects in and outside of librarianship.

Coinciding with the centennial celebrations, the United States Bureau of Education had published a report on the state of public libraries nationwide (*Public Libraries in the United States of America: Their History, Condition and Management. Special Report 1876*). This was not simply a descriptive survey. Part I was an impressive tome of some 1.187 pages which included contributions by many authors, including those mentioned above. They described all sorts of libraries, not only public libraries, and discussed “the various questions of library economy and management” (p. xiii) in such detail as to constitute a veritable manual of librarianship. Scattered throughout its pages are practical details of such matters as purchasing, cataloguing, shelf-marking, shelving, circulating and binding books, mostly based on practice in specific institutions. Among these contributions was a groundbreaking piece by Melvil Dewey. Included in Chapter XXVIII, “Catalogues and cataloguing”, was a section of twenty-five pages in which Dewey described the “decimal classification and subject index”, which he had developed for Amherst College (623–648). This, of course, was the *Dewey decimal classification*, which was subsequently adopted in libraries throughout the USA and the world, and which was later adapted by Paul Otlet as the basis of what became the *Universal decimal classification*. Part II of the report consisted of a second seminal work, the first edition of Cutter’s *Rules for a printed dictionary catalogue*, an important contribution to the theory of library cataloguing (Carpenter 1994, 114).³ Thus the report included two influential contributions to the standardization of what today is called knowledge organization.

Looking back from our own time, when the “I” in “LIS” (Library and Information Science/Services) often takes precedence over the “L”, it is interesting to note that no entry for “Information” occurs in the quite detailed index to Part I of the *Report*. There is an entry for “Indexing, periodical and miscellaneous literature”. It refers the reader to the similarly named Chapter XXIX (663–672), which is primarily concerned with indexing work in individual libraries. The author, Otis H. Robinson, devoted it mainly to the physical attributes of an updatable loose-leaf book catalogue which he had designed for his library, rather than to the intellectual labour of indexing.

For American librarianship the centennial celebrations of 1876 marked the appearance of two important attributes of a profession: a professional association and a professional journal. In addition, although manuals of library practice had been in existence for several centuries, 1876 also saw the publication of a foundational text setting out professional principles and practice, a contribution to what would later be called library science.

³ A later contribution by Cutter, his *Expansive classification*, laid the basis for the widely used Library of Congress Classification but was itself not widely adopted, except for his system of abbreviating the names of authors for purposes of marking the spines of books. This system, known as “Cutter numbers”, is still in general use today.

In the following year, British librarians followed the American example, when the Library Association of the United Kingdom⁴ was founded at the First International Congress of Librarians⁵ in London. It was intended

[...] to unite all persons engaged or interested in library work, for the purpose of promoting the best possible administration of existing libraries and the formation of new ones where desirable. It shall also aim at the encouragement of bibliographical research (cited by Olle 1977, 250).

It is worth noting that 1876 was also the year in which Alexander Graham Bell invented the telephone and in which Johns Hopkins University was founded. Johns Hopkins was America's first research-intensive university (Emard 1976); the first of a new type of university which would need a large, well-organized research library.

1887: Melvil Dewey's School of Library Economy

The preoccupation of nineteenth-century librarians with building institutions devoted to acquiring, cataloguing, accommodating, and providing access to, collections was accompanied by a notable emphasis on technical matters, such as those dealt with in the 1876 report discussed above. However, there was a growing realization that librarianship was becoming a profession. In 1883 Melvil Dewey was appointed as Librarian of Columbia College, New York. At the meeting of the College's Trustees which approved Dewey's appointment, the College's President, Frederick A.P. Barnard, also submitted a proposal for the creation of a school for the training of librarians. In his history of the School, Ray Trautman (1954, 7–8) suggested that Dewey had probably "sold" the idea to Barnard, and that the motivation for Barnard's proposal may well have come from Dewey. It included the following argument, which associated professionalism with a "modern library spirit":

In the past few years the work of a librarian has come to be regarded as a distinct profession, affording opportunities of usefulness in the educational field inferior to no other, and requiring superior abilities to discharge its duties well. The librarian is ceasing to be a mere jailer of the books, and is becoming an aggressive force in his community. There is a growing call for trained librarians animated by the modern library spirit (cited in Trautman 1954, 8).

The Columbia School of Library Economy enrolled its first students in 1887. Various obstacles had to be overcome, in particular, objections from the Trustees to the enrolment of women. Dewey had few scruples about circumventing the College's rules and structures if he thought this necessary to achieve his goals. Opposition to him grew, and he parted ways with Columbia in 1889. In that year he was appointed as Director of the State Library of New York, and the School was moved to Albany. Dewey resigned from the State Library in 1906, but not before another milestone had been reached. From 1902 only college graduates were admitted to the School's two-year course. This was a

⁴ In 1896 this was shortened to "Library Association" (Olle 1977, 249).

⁵ Also attended by Melvil Dewey (Black and Hoare 2006, 12).

significant step in establishing the expectation that professional education in librarianship should be at the graduate level (Trautman 1954, 9–25). Many of Dewey’s students subsequently played leadership roles in librarianship and also founded library schools (Lee 1979, 69–72).

Notwithstanding Barnard’s ringing statement and the frequent use of the word “professional” in connection with Dewey’s School, by today’s standards its curriculum was of a distinctly technical-vocational nature, which has been much criticized and even ridiculed.⁶ Dewey himself emphasized the practical nature of his curriculum. In an “information circular” (Columbia College Library 1885, 27)⁷ He described what was understood by “library economy”:

It [the School] interprets library economy in its broadest sense, as including all the special training needed to select, buy, arrange, catalogue, index, and administer in the best and most economical way any collection of books, pamphlets, or serials (p. 27).

Describing the “subjects of study”, Dewey assured prospective students that

the course will include the antiquarian or historical only where necessary to illustrate or enforce modern methods. Its aim is entirely practical; to give the best obtainable advice, with specific suggestions on each of the hundreds of questions that rise from the time a library is decided to be desirable till it is in perfect working order, including administration (p. 34).

The emphasis on the “modern” and the “practical” is worth noting. The list of thirty-eight subjects (with further subdivisions) that followed this statement included a hodgepodge of overwhelmingly practical matters. The School’s circular for 1887-8 offered a more systematic outline of the “subjects of study” (Columbia College Library 1887, 44–48) under the following headings, quoted here with my comments in brackets:

Library economy [the field in general]
Scope and usefulness of libraries [the library as the “people’s university”, etc.]
Founding and extension of libraries
Buildings [great detail]
Government and service [about governance and personnel administration; not services]
Regulations for readers
Administration. Departments [These were: Executive, Accession, Catalogue, Shelf, Reference, Loan, Binding and Repair, Duplicate, Building. Under Reference Dewey included “reference books, aids to readers, explanation of catalogues and method of assistance in difficulties, advice as to best authorities”.]
Libraries on special subjects
General libraries

⁶ A case in point is the practical instruction given in the “Library hand”, i.e. training students to develop a standardized, legible handwriting. Miksa (1988, n. 6) has pointed out that this made sense in a time before typewriters came into use in library procedures. Catalogue entries and other library records were handwritten.

⁷ A number of historical documents dealing with the School of Library Economy at Columbia University were reprinted as part of the School’s 50th anniversary in 1937 (*School of Library Economy of Columbia College, 1887-1889; Documents for a History* 1937). Included in this volume are two information circulars for 1884 and 1886-87, similar to the two cited here (for 1885 and 1887-88), which were not reprinted.

Libraries of special countries or sections

Reading and aids [this included some elements of what today might be called reader's advisory service]

Literary methods [covering a variety of techniques, such as scrap-books, clippings, indexing, shorthand and "brief long-hand", and preparing matter for printing]

Bibliography

Catalogues of general collections

No mention was made anywhere in this list of "information".

Francis Miksa (1986, 1988) has argued that a closer scrutiny of the schedule, teaching staff, and contents of the course shows that it was not without intellectual content. The curriculum reflected much improvisation and it evolved over time, as Dewey adapted it in response to practical constraints and ongoing experience.⁸ By 1888 it was divided into two main areas.

The first, "Library Economy", was concerned with the management and administration of libraries, library processes and routines (all covered in great detail as indicated above), and buildings and equipment. Many of the lectures in this area were contributed by guest lecturers, including eminent library managers and specialists, who not only discussed technical and administrative decisions but also touched on issues of principle underlying them, so that there was some "intellectual" as distinct from technical content (Miksa 1988, 254–59, 1986, 375–77). Dewey's conspicuous emphasis on technical detail should not be seen in isolation, but arose from his concern with efficiency. More specifically, he sought to achieve uniformity in the operations of libraries collectively in a time when librarians everywhere were improvising and doing things as they saw fit – a state of affairs which Dewey decried as wasteful (Miksa 1983, 59–62). Dewey was ahead of his time in looking not only at individual libraries, but at libraries as part of a greater national system. Hence his interest in standardization as the basis for efficiency (Miksa 1986, 363–64; Battles 2015, 138–44). It is no coincidence that Dewey also led (ultimately unsuccessful) movements for spelling reform and metrication (Lee 1979, chap. 4).

The second main area of the curriculum, "Bibliography", provided students with an overview of all the various fields of knowledge, the structure of each field, and its literature, including major works, reference tools, and bibliographic sources. This was intended to enable the course graduates to advise and educate library users. Many of the lectures in this area were presented by professors and specialists in their respective fields (Miksa 1988, 257–62).

Dewey's pioneering attempt to establish formal, college-based education for librarians, heralded a third defining trait of a profession, namely specialized training, while he also contributed significantly to creating a professional literature (Miksa 1986, 377). His School of Library Economy inevitably embodied the tension between the technical-vocational and theoretical-professional dimensions of education for librarianship that has persisted in one form or another to the present day.⁹

⁸ In a recent article Minter (2018) contends that Dewey's curriculum reflected late 19th Century German thinking on *Bibliothekswissenschaft* (library science).

⁹ For decades, Dewey was revered as the father of American librarianship. More recently, some disturbing aspects of Dewey's career, including sexual harassment of female colleagues and blatant racism, have received attention, e.g. Ford (2018).

Brown's Manual of library economy (1903)

For a final look at librarianship during the Belle Époque, I turn to the *Manual of library economy* of James Duff Brown (1862-1914), an influential figure in British librarianship at the turn of the 20th Century. He authored a number of books, of which his *Manual of library classification and shelf arrangement* (1898), his *Subject classification*, a classification scheme primarily for public libraries (1906 with revised editions in 1914 and 1939), and his *Manual of library economy* (1903 with seven later editions) are the best known. The *Manual* was particularly influential, being used for decades in the training of British librarians. It was intended as “an attempt to provide a text-book of advanced library practice” (p. iii). As such it purported to deal “mainly with broad principles” and Brown warned that he did not consider it “desirable to notice every detail of library routine work, nor to mention every appliance which has been introduced” (p. v). This is ironic, since his book, which covered all aspects of library work, was mainly concerned with procedures and techniques, notably including 169 figures and much minute technical detail. For example, there was an entire chapter (XXIII) on “Mechanical methods of displaying catalogues”, providing information, diagrams and photographs of different formats of card catalogues, with dimensions of cards and cabinets. In a later chapter there are four pages of illustrations of spine marking (336–339). The term ‘information’ is absent from the quite detailed index, although the word occurs some thirty times, mainly in relation to administrative procedures, record-keeping and catalogues. In Chapter XXXI on “Reference Libraries”, where the word “information” occurs three times, more emphasis is placed on the organization of, and access to, reference *collections* than on extracting *information* from them. Brown's *Manual* remains of historical interest as evidence of the strong practical emphasis which characterized British librarianship, and which was introduced into the British colonies as well (Black and Hoare 2006). It is also an unintentional contribution to international and comparative librarianship. Throughout the book, Brown offered comparative comments, mainly comparing British practice with that in the USA and to a lesser extent in the continent of Europe, especially France and Germany. Having visited the USA in 1893 (Black 2016, 148) he had both positive and negative comments on American librarianship. He was appreciative of the new American schemes for library classification (p. 251) and of American reference libraries (Chapter XXXI), where users were allowed access to shelves. But he detested the American innovation of children's libraries, and he was critical of the American trend towards the uniformity so dear to Dewey:

In the United States a much higher level of attainment has been reached [than in France], but here again the paralysing hand of uniformity has arrested progress after a certain standard of efficiency has become general. American libraries are conducted on lines which closely resemble those of ordinary commercial practice, in which everything is subordinated to the furtherance of profits and economy (p. iv).

He contrasted this with British libraries, where most methods had been “in a state of flux for fifty years” and where there was “little immediate danger of any process crystallising into a fixed and unalterable condition.” Here we find evidence of a growing divergence between British and American librarianship, which was later to be reflected in tensions between British and American models in British dominions such as Australia, New Zealand and South Africa (e.g. Carroll *et al.* 2013; Carroll and Reynolds 2014; Lor 2019, 633–34, 649–50).

Librarians' concerns at the turn of the 20th Century

In the second half of the 19th Century, massive growth had taken place in librarianship. Academic and research libraries had grown significantly in Europe, where by end of the 19th Century major universities in Europe had libraries totalling from a few hundred thousand to around one million volumes, including large heritage collections, and sizable holdings of manuscripts. Librarians were having to deal with increasingly complex organizational issues (M. H. Harris 1999, 140–47). Growth in the USA, prompted by the adoption of the research model and the growing number of colleges and universities, was even more remarkable. Librarians here were energetically expanding their collections, and seeking gifts from philanthropists as well as new, larger buildings to house their holdings. These had to be catalogued, shelved and made accessible. University library collections numbering into hundreds of thousands of volumes were no longer exceptional. The American library historian, Michael H. Harris (1999, 249–52) noted that there was a growing professionalism as librarians got to grips with increasing complexity and rapid growth.

The latter half of the 19th Century had also seen remarkable growth in national libraries on both sides of the Atlantic. The Copyright Act of 1870, which brought all US copyright deposits within the ambit of the Library of Congress, contributed significantly to the increase of that Library's collections from around 300,000 volumes in 1876 to 840,000 volumes in 1897. By the end of 1901 the Library of Congress became the first American library to reach one million volumes (Cole 1993, n.p.). In Europe the Russian Imperial Library, much augmented by war booty, was second in size only to the French Bibliothèque Nationale, which held more than three million printed volumes by 1908 (M. H. Harris 1999, 133–37). These huge institutions were symbols of national pride, and tools of imperialism (cf. Black and Schiller 2014, 649). Their management called for juggling the priorities of accessioning, cataloguing, organizing and housing the current legal deposit collections, caring for heritage collections, and adding to these as opportunities arose. Histories of national libraries are punctuated by accounts of acquisitions, titanic struggles to catalogue them (including the development of national cataloguing rules), and monumental building projects to house them.

In public librarianship as well, the number of libraries had grown significantly. In major urban libraries the acquisition of large collections remained a preoccupation, but librarians were taking a greater interest in library use and users. Questions had arisen concerning access and use: which categories of persons (by gender, age, special needs, etc.) might be allowed to visit the library and its various departments, to borrow, or to enjoy direct access to the collections. Brown (1903, 437) approved of the admission of women to the same reading rooms as men even as he deprecated children's libraries. Open access to library stacks (at least some of them) was gaining acceptance. In the USA attention was being paid to the role of public libraries in the assimilation of immigrants. Reference services were being developed, branch libraries established in cities, and opening hours extended. Attention was paid to the provision of services to the blind and to persons living in rural areas. From the 1890s, "itinerating" and travelling libraries, promoted notably by Dewey, proliferated in the USA (Passet 1994). New buildings were erected in many cities with grant funding from Andrew Carnegie. Efficient organization and administration became an important focus of attention (M. H. Harris 1999, 246–48).

Professionalization and modernization

By the end of the nineteenth century, librarianship had acquired many but not all of the characteristic traits of a profession (cf. Rubin 2004, 468–69). Collections, primarily of books, were important and were seen as a source of the librarian’s prestige, but use and users were becoming important. With the advent of professional associations and conferences, journals, and a growing specialist literature describing professional practice, there developed a body of technical knowledge (as exemplified by library classifications and cataloguing rules) such that specialized education and training was required to master it (cf. Tucker and Goedecken 2010, 2086). It is tempting to attribute the professionalization of librarianship to the growth of libraries’ collections, the expansion and diversification of their clientele, and the need to deal with the increasing technical and administrative complexity that this brought about. Certainly, these factors impelled librarians to rethink what they had been doing, to improve their procedures, techniques and technology, to learn from the experiences of colleagues elsewhere, to innovate, and to create channels for the communication of their expertise.

But it is too simplistic to attribute the professionalization of librarianship solely to growth and the resultant complexity. There were also other forces at work in society which influenced librarianship. The period under discussion saw the creation of today’s “system of cultural institutions” comprising not only libraries but also public school systems, universities, museums, and professional associations (cf. N. Harris 1981, 37). This development must in turn be seen against the background of a rapidly urbanizing, capitalist industrial society which faced multiple economic, cultural and political challenges. Discussing the modernization of American cultural institutions, Neil Harris (1981, 38) listed several characteristics which I suggest can also be recognized in the development of the library profession during the Belle Époque:

First, the increasing specialization of social and economic functions, the new professionalism with its lengthened training periods and modes of certification; second, the greater emphasis... upon mass consumption and the creation of hungry and manipulable consumers; third, a secularizing insistence upon rationality and bureaucratic efficiency rather than sentiment or religion [...] fourth, a bias toward national integration, economic, social, and cultural, and an increasing reliance upon planning [...]

The recognition of librarianship as a profession requiring specialized training (albeit not yet formally certificated), the extension of library services to a potentially unlimited clientele, the emphasis on efficient procedures, and the creation of national library associations, all fall within the pattern of modernization outlined by Neil Harris. This helps us understand where Dewey’s drive to modernize librarianship came from. It has been attributed to what Miksa called the “corporate ideal”: from the 1850s onward the management of large, geographically widespread, and complex corporations called for experimentation and innovation in management. These changes influenced perceptions in the wider society, so that “business organization became *the* model for organizing anything. Tackling any societal need meant doing it as business was discovering it should be done” (Miksa 1983, 54).

Dewey was evidently very much attuned to the spirit of the age. He was not alone in this, but his talents and drive made him a leader in a movement to modernize and professionalize librarianship, a movement impelled by pervasive factors in society.

Conclusion

What then, were librarians doing while Otlet was inventing documentation? The short answer is that they were concerned with books, buildings, and, increasingly, users. But as they were wrestling with the challenges these posed, they were building a profession – one dedicated to managing a cultural institution concerned with the acquisition, organization, utilization and preservation of books and related documents. Increasingly they strove for efficiency, using modern methods. But whilst there was a great deal of contact between European and American librarians (Rayward 1976), a comparison of the discourse of Dewey and Brown respectively suggests that a divide was opening up between American and British librarianship in terms of their acceptance and speed of modernization.

That was not the only divide in our field. Otlet and early documentalists had embarked on an ambitious project to extract bits of information from within books and other documents, isolating them from their intended contexts so that they could be juxtaposed and recombined in new ones (cf. Rayward 1997, 291, 295). Weller (2011, 5) has interpreted this as “a shift from pre-modern to modern understandings of information”. Documentalists were shifting their focus to *information* while librarians were still mainly concerned with the *books* in their collections as the basic entities of interest. Librarians have a long tradition of binding periodical issues as well as sets of pamphlets to form book-like volumes. Volumes were key. Admittedly, Poole’s *Index* (referred to above) had been well accepted by librarians, but information as such did not yet feature noticeably in librarians’ discourse. This is not to say that there was no communication or exchange of experiences between the two groups. In particular, there was a shared interest in standardization, as exemplified by Otlet’s adoption of the Dewey decimal classification and the 3x5 inch index card. Leading personalities in the library profession attended congresses of documentalists, and vice versa (cf. Ludington 1954, 115). Developments in librarianship and documentation were not taking place in complete isolation, but librarians, mainly concerned with books, and documentalists, focussing on information, were on parallel tracks.

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