
Collection Management in a Period of Change

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LIBRARIANSHIP is beset by changes on a scale and of a kind as have not been experienced since the introduction of moveable types in the fifteenth century. Many factors lie behind these changes. In one sense they began with the Industrial Revolution. That brought in its train education for all, mass education, or at least education without precedent in its accessibility. This was facilitated in part by significant technical developments, first in hand printing, then in mechanised printing, finally passing through all those stages which have to-day rendered printers, as we used to know them, largely redundant. The combination of population growth, increased longevity, apparently exponential expansion of higher education and the powerful new technology is changing the nature and rôle of all libraries and of academic libraries in particular.

Among the many products of these developments, the essential corollary to them and certainly one of the most important for libraries, is the so-called information explosion. One of its consequences is that self-sufficiency can no longer be an option for any library. It never was realistically in terms of collecting literature world-wide but is now recognised that even in regard just to national output it cannot be left simply to the National Library. Cambridge University Library is one of five copyright deposit libraries in Great Britain and so numerous are the items eligible for copyright deposit, that none of the five, including the British Library, aims any longer to achieve or accept 100% of all the output. Instead the national archive of printed materials is becoming a shared responsibility between all five.

«Selection» and «retention» of stock have become new ingredients in the accessions philosophies of these libraries. The British Library's current strategic plan states: «While no library can aspire to being comprehensive in its coverage of the world's literature, the Library will nevertheless collect widely and in depth in its areas of traditional strength and quality.»¹ It refers to its «unique responsibility within the legal deposit system as the national printed archive. In co-operation with the UK copyright libraries, we shall seek to ensure comprehensive coverage, recording and preservation of UK and Irish publications in all subject fields.»² It is not simply that publications are so numerous, difficult to secure and expensive to house. There are acute problems of bibliographical control which have seriously distorted the British National Bibliography over the last decade by failure even to register the total published output. This led the Bibliographic Services Division of the British Library, responsible for the *British National Bibliography* since 1974, first to introduce its Cataloguing-in-Publication Programme in 1984 in the hope of creating a significant increase in records but then to publish in 1987 its highly controversial *Currency with Coverage*³ which virtually conceded that the total national output could no longer be recorded by the British Library. It will readily be understood that significant costs in processing so many titles and in purchase are also incurred but, difficult as these undoubtedly are, they do not constitute by any means the whole problem.

The new technology has obviously played a major part in promoting these record levels of published output, which seems set to be increased and complicated further by desk-top publishing, one of the more recent technological innovations. In this regard the omnipresent word processor confers the rtitle of publisher on virtually every author who can master a key-board. The as yet unquantifiable potential of the electronic journal can only complicate matters more. Whilst automation has enable libraries to contain and improve their «housekeeping» procedures — ordering, accessions, accounts, cataloguing, circulation — it has also fostered an equally dramatic revolution in the printing and publishing trade. It is not, however, simple weight in numbers which threatens to defeat libraries, serious though that may be. The price of books — whether monographs or periodicals — has outstripped the general inflation factor in Britain and the United States by a very considerable margin; it has inevitably outstripped the purchasing capacity of libraries by an even wider margin. Moreover, the burgeoning CD-ROMs and access to the increasingly numerous remote databases constitute major additional charges for libraries and at the same time promote demand for literature which may not be in the stock. These

factors have led to spiralling costs which have forced all libraries to reassess priorities and objectives, to reconsider their rôle.

«Collection management» and «collection development» seem largely to be displacing «collection building» in the literature reflecting the growing conviction that the latter somehow is no longer possible and the mistaken view that in the past it often amounted to collecting for collecting's sake in the context of virtually unlimited resources. This may have been true once in some American university libraries but it has never been the case in Britain. Nevertheless, the new emphasis on managing collections finds favour in the now greatly enlarged higher education sector where serious differences between universities are becoming apparent. In 1903 Britain had only 12 established universities. In 1993 it has no less than 113. It is rarely voiced but the differences between the older, well-established and the newly founded universities must have significant implications for their teaching and research. In recent time independent research evaluations of all universities in Britain have been carried out on behalf of the universities' funding agency and the results have been published. It can be no accident that in the first two of these national surveys so far completed Cambridge was placed in the highest position and Oxford in the second highest. In fact the level of scholarly attainment between those at the top and those at the bottom of these tables of research excellence is such that there can be little real comparison between them.

It can also be no accident that these two ancient universities have by far and away the largest libraries and spend proportionately much more on them than any of the other 111. Both are also Copyright Deposit libraries, quasi national libraries but with a prime commitment to their parent institutions. The main purpose of Cambridge University Library, to use current terminology, its «mission statement», is to serve the teaching and research of the University. Its stock, even in regard to the Copyright Deposit, reflects absolutely those teaching and research interests as do the main activities of all the staff. Although there are no elaborate formulae for allocating funds, the distribution of these confirms at every point the «mission statement». The same is true of its expenditure on new technology, whether for house-keeping or access to CD-ROMs and remote databases: this expenditure is now also high. Although so far not a serious competitor for funds with those for traditional acquisitions, the expenditure is proportionately higher than this kind of expenditure in most other institutions in the country.

The four Universities libraries in which have worked have all shared the same «mission» and sought to ensure that, within the limits of their budget, the library provision for the subjects taught and researched in their institu-

tion were as complete for their purposes as funds allowed. I am sure this has to be the prime objective of all university libraries. In consultation with academic staff the librarians aim to achieve within their institutions the very best levels of provision in all areas. This same consultation process applies equally to the acquisition of the products of the new technology where the same objectives must apply. It seems certain, perhaps inevitably so, that these objectives will be much more circumscribed in the new, less well resourced institutions and that a clear hierarchy of universities and their libraries must develop among British universities. The result must be the increased dependence of the smaller on the larger libraries which with their much greater purchasing power still aim to pursue collection building policies. The value of current, annual acquisitions in Cambridge, for example, will be more than ten times greater than that of those universities at the foot of the research tables. Moreover, given that vast quantities of information already available in the collections of such libraries as Cambridge are unlikely ever to be converted into machine readable form and that demand for this literature will continue for a very long time, such a development between the large and small libraries seems unavoidable. It is in the nature of this growing dependence on these large libraries that these too will develop those policies and facilities which the smaller libraries will need in order to secure access to information, if only in the interests of communication. There are in this relationship alone far-reaching implications for collection management of a totally new kind.

The development of the electronic journal and the future rôle of the printed book will be no less important in the collection management equation. The former must bring about fundamental changes in all libraries. Although it is still surrounded by uncertainty as to the time of arrival, scientific scholars in Britain do not doubt that it will eventually arrive and sooner rather than later. The sudden interest by publishers in this subject confirms that it has long since passed the stage of rumour and in the United Kingdom an increasing number of librarians are also taking it seriously. It does not spell the end of the book in any sense but it points firmly to a reduction in traditional published output. It could even result, in the best of all worlds, in the consignment of pure information to databanks and the restoration of the printed volume as a medium for knowledge.

These technological developments are already making an impact on library management in general but the potential for change is nowhere more far-reaching than in the field of collection management. One specific consequence of the developments already mentioned is that, even in some of those libraries with significant collections, «holding policies», *i.e.* collec-

tion building in the traditional sense, seem to be giving way to «access policies». These acknowledge that the majority of university libraries cannot any longer pursue their former holding policies and, thanks to the new technology, are making a virtue out of necessity by turning to «access policies». These fundamental changes in practice are widely discussed in the Anglo-American literature with the assumption that they are already in place. In *University libraries and scholarly communication*,⁴ a comprehensive study of the issues raised by six distinguished American scholars, Ann Okerson writes: «The rapid emergence and development of electronic information technologies make it possible to envision radically different ways of organising collections and services the library has traditionally provided [...] New electronic technologies allow the possibility of uncoupling ownership from access, the material object from its intellectual content.»

The situation in university librarianship in the UK as a consequence of the rapid development of technology over the last twenty years has caused so much concern that the Joint Funding Councils for Higher Education established a Libraries Review Group «to investigate the future national needs for the development of library and information resources including operational and study space requirements for teaching and research in higher education institutions.» Its report⁵ was published as recently as December 1993 and it represents the most up-to-date national view on these basic concerns. The problems and potential of the new technology are among the dominant themes in the *Report*. Like the American book just cited, it emphasises that «the traditional view of the «library» as the sole repository and supplier of information needed to support teaching, learning and research is no longer adequate. Those working in higher education, as elsewhere, are increasingly faced with multiple sources of information, and many different ways of gaining access to them. The precise location of information will depend on many factors, including history, geography and resources, but given the variety of ways of storing information even the notion of «location» will in many cases need to change. Everywhere, the emphasis will shift away from the library as a place, away from the books and periodicals it holds, and towards the information to which it can provide access. Information management will be directed towards giving access to information rather than storing it, and it will be possible to provide access to it in many different ways. In these circumstances, each institution's information provision will differ, depending on the nature of its activities, on its inherited provision, and on other factors. Some institutions will meet the needs of their users by providing access to information most of which is physically located elsewhere. This can be characterised as

moving from a «holdings» to an «access» strategy, with access provided in many different ways. To the user, the place where data is held will be relatively unimportant. Other institutions will be major suppliers of information which is located within the institution, and their position will be very different. Most institutions will fall between these extremes, combining internal and external sources of information to meet the particular needs of their staff and students.»

The implications of instant communications via networks, whether local, national or global, of the increasing in-house use of the new technology in automated procedures, and, perhaps most important, of the persistent shortfall in adequate funding, these are some of the important issues spelled out at some length in both these publications. They raise questions of immense significance for the future of libraries but stop short of the ultimate one. It is worth noting that to-day's access policies are new only in their current technological background but not as a concept. It is often remarked that the current revolution in information transfer is to be compared with the introduction of moveable type in the fifteenth century. That, in effect, brought the Middle Ages to an end. Its impact on medieval libraries was dramatic as holdings policies gave way to access policies, as the unique manuscript in the distant library was replaced by the printed book making the information available in many libraries. As a result libraries were reorganised to make the most of a technological change which must still rate as one of the greatest Europe has ever known. It is noteworthy, in the light of the current trend in the UK to incorporate university computer services into the library structure or *vice versa*, that there is no suggestion that librarians ever sought to bring printing into the library. Printing shops like computer services had other commitments beside libraries in the same way that to-day librarianship is only one of the areas served by the new technologies, in the context specifically of information. Apart from the disturbing fact that computer scientists are now the directors of a number of libraries in the UK it is clear from this that the impact of the new technology has far-reaching consequences for management and, in particular, for the management of collections. My own view is that such mergers in large universities will be in the long term as disadvantageous for computer services as for libraries.

The impact of these developments on library staff is rarely discussed except at a superficial level, under the impression, presumably, that the modest computing courses in Library and Information Schools provide all that is necessary. The largest group of staff in British university libraries, the library assistants, or non-academic staff, will not have been to such a

school. Moreover, many academic staff will also not necessarily have undertaken such professional training. Staff are the essential element in collection management and the new technology is influencing powerfully the rôle and professionalism of librarians themselves. For one thing, library assistant staff, generally considered non-professional in the UK, are adding new skills to meet new responsibilities which in the past were thought to be exclusively the province of the professionally qualified or academic librarian. For example, cataloguing and classification used to be carried out entirely by professional or academic staff and cataloguing rooms were predominantly staffed by such. Centralised cataloguing on-line has changed that. It is no longer necessary to have professional staff to carry all these duties. Down-loading records does not require graduate or professional expertise. One consequence is that certain types of bibliography, in the past compiled by such staff, are now frequently being produced by academic junior staff or by research students in the teaching departments outside the library.

At the same time, paradoxically, the rôle of the scholar-librarian, long in decline, is actually growing in university libraries. For many years eclipsed by the professionally qualified librarian as unnecessary in the context of an articulate, well informed readership, these highly educated staff, particularly in the large library, are increasingly in demand, responding to needs promoted by the new technology, by their understanding of readers' new needs and by being expert on library holdings. Not all such staff were concentrated in manuscript and rare books departments. In many university libraries they were frequently to be found in the cataloguing or accessions departments. It is also questionable whether high-speed, on-line catalogues are as educationally or intellectually valuable to users as were the manual catalogues, in card or guard book form. Serendipity, browsing in a catalogue is more difficult in computer screen presentations. In these days of high-speed, bibliographic and technological innovation, users by and large require more help on stock and even on basic understanding of the library so that the contribution of the scholar librarian increases whilst that of the professional librarian is being slowly displaced by technicians. As the Librarian of Birmingham University⁶ has pointed out: «Two major changes — the reduction of academic-related staff numbers in the course of the 1980s, and the recent accelerated growth of automation and information technology — have been and are working their way through university library systems, leaving traditional staffing structures in much disarray.»

Access policies raise old problems in a new form and they are no easier to resolve, rather they are worse. They assume that somewhere the items

required are accessible, that some other library will hold them and make them available. Interlibrary loans have long been a mainstay in information provision in many libraries and in some have actually competed with accessions funds. Thompson⁷ provides conclusive evidence about this in his survey of Birmingham University Library which stands in the top twenty of British university libraries: «In the Birmingham University Library case-study the steady rise in the use of the interlibrary loans service was very evident in the 30-year period. This rise, essentially, was proof that no one library could provide a comprehensive collection, whatever the aims and ambitions of contemporaneous librarians may have been. Following that same case-study to the present time, what has been remarkable has been the emergence of an aggravated form of this same reality. Since the introduction of CD-ROM facilities, literature searching for the user has become both easier and more efficient. As a consequence of more literature references being identified, interlibrary loan requests have escalated by some 20% in one year. The budget for interlibrary loans has gone into deficit, and expenditure on transaction costs is now the equivalent of one-quarter of the Library's book budget. It is hardly speculation to see this as a major signal for future redirection.»

In the developing situation access policies are likely to accentuate this form of expenditure. In this context it is important to remind ourselves of the well-known fact that the new technology is never likely to be cheap. If the hardware prices came down, software costs more than balance out any such gain. Subscriptions to various datasets, facilitated through CHEST, the Combined Higher Education Software Team, and the purchase of CD-ROMs are transforming library use but at a price. If the electronic journal falls into the hands of commercial interests, as it seems increasingly likely that it may, it will become as expensive to use and maintain as traditional publications are in current acquisition policies. Those libraries which are already committed to access policies, deliberately limiting their collection building, are seeking a greater degree of efficiency from their limited resources, so far with success. Unfortunately, real costs may not yet have been experienced. What is being experienced in these libraries so far, perhaps in an advanced form, are some of the consequences for staffing described earlier. In such libraries it will be legitimate to ask, as direct access becomes available to individual readers on the networks of their institution, the ultimate question, whether their library will be necessary at all.

This question is already being asked all too frequently from the librarian's point of view in the Sciences. Given that the Sciences are much further down the access road to remote databases and to the electronic journal, this

lend a distinct possibility of reality to this prospect. The rôle of the librarian as a mediator disappears once the information sources are located outside the library's control. The term «information broker» is no longer the sole province of to-day's librarian. The consequences of this will have to be faced much earlier than many university library staff expect. The question has to be asked what kind of curators will be required for staff in charge of collections weighted in favour of new media. Recruitment of staff, numbers and kind, academic and non-academic, is taking on new dimensions and it is inevitable that to-day's appointments will be crucially important in the years ahead. «Computer literate» takes on new meaning in this context: it will not be sufficient simply to know how to access databanks and use keyboards. The qualification of these staff will be increasingly more technical than bibliothecal or «academic». Computer literacy is by no means confined to librarians. In fact, their readers, especially in the sciences, are frequently far more skilled and experienced in the use of computers than librarians are. Science departments not only possess more expertise, they also have much more computer based equipment and the means to equip themselves with the more sophisticated equipment which will shortly supersede that used in university libraries for information purposes. This development could lead, in some universities at least, to a down-grading of library staff in the eyes of the university in which they serve, a reduction in academic status.

It will also be clear that university librarians are likely to be faced with collection management problems which will differ widely from one university to another, not only in regard to holdings or access policies but also in the context of their teaching and research rôles. Although seen primarily as relating to the research content in libraries at present, the impact which the new technology is already highly having on teaching undergraduates, for example already highly developed in medicine, cannot be ignored and the chances are that undergraduate library provision will also change drastically. For a majority of the many universities in the UK access policies will inevitably be in force, but in virtually every library a modest holdings policy will also obtain, perhaps in the context of local history or a special collection, however small, in their possession. It is unlikely to impinge much on its normal day-to-day routines which will be devoted to ensuring adequate provision, howsoever interpreted, for students and for the developing of rapid access facilities via networks for researchers. The changes will affect library planning, type of storage, reader places and provision of terminals as well as staffing and, in particular, budgeting. The *Follett Report* made no reference to teaching universities although it is difficult to avoid

the conclusion that that is what many of the new university institutions must be. The full-time student population rose between 1989 and 1993 from 517,000 to 811,000, an increase of 57 per cent, largely as a result of transforming polytechnics into universities. That puts enormous pressure on the teaching rôle of a large proportion of the universities.

For the large libraries, the providers, it will be no less important to employ staff with these skills, if only to work with those dependent upon them. They will continue to need «academics» probably more than before, but academics with a high degree of computer literacy. In Cambridge a move in this direction began twelve years ago. The growing importance of the computer led to the formation of an Automation Department staffed by computer scientists rather than librarians. They rapidly became familiar with library requirements and practices in a library where there was no shortage of computer literate library staff. Today there is not a single department in the Library which is not involved in and to some extent is not dependent on their expertise. When access to remote databases, introduction of CD-ROMS, widespread use of micro-computers became important, they were behind the necessary staff induction and they continue to act in a support rôle. They have organised an on-line union catalogue covering sixty-seven other libraries in the university, they provided the initial software used by the Consortium of University Research Libraries (CURL) and supplied much of the input into the computerisation of the Copyright Deposit Libraries Agency in London. There is much more which could be said about this important development. Its rôle in relation to the management of the Library's huge collections is of the greatest importance. It illustrates very clearly the complications which the new technology has brought and will increasingly bring into the management structure of libraries, particularly to the management of collections.

The Consortium of University Research Libraries was initiated by Cambridge and London University ten years ago. Its success has been such that the *Follett Report*⁸ recommends that «the funding councils should provide £0.5 million a year over three years to fund the combined development of the CURL database, its conversion to an Online Public Access Catalogue and its operation as a national public access catalogue service». The libraries involved are all «providers» and will all have holdings policies. The entire CURL operation has been above all else a remarkable exercise in co-operation. It is already apparent that the universities in CURL, the largest university libraries in the country, have developed expertise in addition to their traditional scholarship which goes beyond

anything previously envisaged and beyond that which other British university libraries can hope to produce. This is not only the result of the increasing co-operation among themselves and their pooling of resources, but also because of the expectations raised in other libraries and the growing emphasis on their use of CURL's resources. These large libraries still pursue collection building policies albeit reduced by current funding. Together, except in the field of newspapers, their collections are comparable with those of the British Library, which attends all the meetings of the CURL directors. Their collection building is becoming a collective exercise extending into databases and other new media. They have signed contracts with OCLC and RLG. They have developed the technological means to exploit their resources together and plan ahead in an information conscious world which grows ever more complicated and difficult to accommodate in the traditional university library. One consequence of this is that management is now a component of the work of any member of the library staff with responsibility. Previously, it was a matter for the administration of the Library alone.

This paper can only touch the surface to the problem which the new technology is raising for collection management. I have only mentioned briefly those retention and selection policies which are now practised in the UK among the copyright libraries and will be extended to the libraries of CURL. This has been of major importance in the British literature, particularly in the context of the British Library which includes reference to it in its Strategic plan⁹. However, it is not the main problem of collection management in these changing times. It seems certain that the quantity of scholarly information published in the traditional format will fall rapidly as the on-line database and full text retrieval find their true level in the publishing world. It seems equally certain that the book, in the format which we all know, will certainly not disappear: indeed, its standing may actually improve, as it becomes the vehicle for knowledge, rather than information, and for great literature. Cambridge University Library has recently completed a second stage in its building extension programme. Its building plans for the next fifty years envisage the necessity of much reduced storage for the printed book but considerable provision for the new technology and its products. Significantly, the *Follett Report* has recommended that the Funding Council continues to fund the cost of administering the Copyright Deposit material received by Cambridge and Oxford to the tune of £1.1 million per annum each, but for the first time it is «conditional on these institutions providing access to all bona fide research staff and students from within the UK without additional cost».¹⁰ This identifies clearly the

holdings policies of Cambridge and its rôle in facilitating access to its resources.

Perhaps the most difficult problem for British university librarians as they move into the twenty-first century will be not in coping with the stock, whether traditional or new technology products, but in determining what sort of staff will be needed. The need for the traditional academic in the holdings library will probably intensify but so too will the need to employ staff with technological skills. The new diversity in collections will bring new professional challenges in their management. Unless steps are taken to plan for this diversity now in the management of collections and play a major rôle in making librarians indispensable in the administrative information chain, the hard won gains made professionally by librarians in this century could well be lost in the next.

Notes

¹ The British Library. *For scholarship, research and innovation: strategic objectives for the year 2000*. London, BL, 1993, p. 21.

² *Op. cit.*

³ The British Library, *Consultative Paper: currency with coverage*. London, BL, 1987.

⁴ *University libraries and scholarly communication: a study prepared for the Andrew W. Mellon Foundation*. By Anthony M. Cummings, etc. Published by the Association of Research Library for the Andrew W. Mellon Foundation, 1992, pp. xv and 75.

⁵ *Joint Funding Councils' Libraries Review Group: Report*, Bristol, Funding Councils, 1993, p. 27. Referred to as the *Follett Report* in recognition of the Chairman of the Review Group, Sir Brian Follett.

⁶ J. Thompson, *Redirection in academic library management*, London, L.A. Publishing, 1991, p. 168.

⁷ *Idem*, p. 94.

⁸ *Op. cit.*, p. 74, recommendation 363.

⁹ *Op. cit.* p. 24.

¹⁰ *Op. cit.* p. 73, para. 349.

RESUMO A questão da gestão de coleções num período de explosão documental e informativo é abordado pelo autor com base na situação das bibliotecas universitárias do Reino Unido. Questões como a auto-suficiência, depósito legal, e controle bibliográfico são equacionadas na perspectiva das políticas de «gestão e desenvolvimento das coleções» nas bibliotecas universitárias.

ABSTRACT *Based in is knowledge of the British present situation of academic libraries, the author discusses the question of collection management in a period of documental and informational explosion.*

Questions such as self-sufficiency, legal deposit and bibliographical control are questioned as far as collection management and development are concerned.

ENDEREÇO Cambridge University Library

ADRESS Burrell's Walk — Cambridge, UK

Introdução

Os últimos dez anos, e em particular nesta primeira metade da década de 90, o crescimento do volume e da diversidade de informação disponíveis acessível em rede, e o constante aumento do número de pessoas que a utilizam, processaram-se a um ritmo que seria inimaginável há alguns anos atrás.

Em 1983, Wilbur Lancaster, um dos mais respeitáveis profissionais e investigadores de ciência de informação, apesar de admitir a possibilidade das bibliotecas, tal como nós as conhecemos, desaparecerem, afirmou que seria ainda preciso esperar muito tempo «before we can construct vast electronic networks that in response to a narrative request statement can select most appropriate information source and search it transparently to the user».

Hoje, os rudimentos desse tipo de rede estão já banalizados na Internet e pensamos que não serão necessários muitos mais anos para que os requisitos definidos por Lancaster estejam operacionais com um nível de desempenho aceitável.

O ritmo de crescimento da Internet e do número dos seus utilizadores — que hoje praticamente duplica todos os anos — a explosão da pro-

* Comunicação apresentada no âmbito de projectos conjuntos da Universidade e do Serviço Nacional de Informação em Rede.