

ESSAYS ON
INFORMATION
AND LIBRARIES

 a festschrift for Donald Urquhart

edited by Keith Barr & Maurice Line

*Essays
on information
and
libraries*

FESTSCHRIFT
FOR
DONALD URQUHART



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edited by

KEITH BARR & MAURICE LINE



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Foreword

Festschriften commonly have some excuse for appearing at a particular time. The excuse for this one – and excuse it is, because there is no need to give a reason – is that in 1974 Donald Urquhart retired as Director General of the British Library Lending Division, a post he held for a year as the climax to 15 or more years building up a national lending service unapproached anywhere and envied everywhere. His ‘retirement’ should be seen, as Donald thinks of it himself, as a change to new activities and outlets for his abundant ideas and energies.

Donald Urquhart’s interests in librarianship have been so diverse, his influence so pervasive, his acquaintance with librarians so extensive, that the problem of gathering contributors and suggesting topics for a *Festschrift* was mainly one of selection. It would not have been difficult to have made a collection of twice the number of papers included here, on twice as many subjects, written by librarians from many more countries. We hope that, in restricting our invitations to contribute, we have not offended or disappointed anyone; if so, there is always room for another *Festschrift*.

Inevitably, in making a rigid selection of contributors, we were bound to ask some of the busiest people around, and we are grateful to them all for accepting our invitation so readily.

The topics – chosen by the contributors themselves – reflect a reasonable range of Donald’s interests and activities – national library planning, library cooperation, education, research, rationalisation of library stocks, buildings – as well as covering the influence of Donald’s ideas and of the NLL itself on libraries of different kinds. No attempt has been made to ‘plan’ the volume in any sense other than this.

Tribute is paid to Donald, explicitly or implicitly, in all of the papers. We would like, as two of those who have been closest to him, to express here our personal regard and debt to a man who has influenced us both profoundly, if in different ways.

KEITH BARR MAURICE LINE September 1974

Honorary degree presentation addresses

In July 1974 Dr Urquhart received honorary doctorates from Heriot-Watt University, the University of Salford and the University of Sheffield. We are grateful for permission to print the addresses made on these occasions, and to Professor Saunders for suggesting that they would make a good aperitif to the main courses that follow.

Heriot-Watt University

The congregation at a graduation ceremony in 1974 may expect to hear the chancellor of a university tell the graduates to be flexible in their approach to a career and to be prepared to move into new fields even if seemingly remote from the subjects they have been studying. If the education has been successful, the graduates will be adaptable and may well thrive in the different environment. If similar opinions were expressed at the University of Sheffield some forty years ago then at least one of the graduates there took the message to heart.

Donald Urquhart read physics for his bachelor's degree and then took the degree of doctor of philosophy for research in metallurgy, but for over thirty years his work has been in librarianship. You may be intrigued to know, Chancellor, that despite this experience, Dr Urquhart nevertheless denies that he is a librarian. It may be said rather that he has brought the scientist's numeracy and quantitative thinking to the problems of information handling and especially to the development and operation of library systems. He was the designer, the builder and for many years, the director of the National Lending Library for Science and Technology. We in this university have especial reason to appreciate his work for we have relied heavily upon its services while struggling to acquire our own stocks. Since 1973 he has had the challenging task of instituting, as its director-general, the British Library Lending Division.

The honours which have been bestowed upon Dr Urquhart form in themselves a lengthy list — or should I say a catalogue? — and he will appreciate that it is in the best practice of information retrieval and selection that I mention in particular that he was president of the Library Association in 1972, and that for his work and achievements he is a Commander of the most excellent Order of the British Empire.

As a former convener of the library committee of our senate, I find it an especial pleasure to observe that, as dean of the faculty of science, it is for the honorary degree of doctor of science, and not of letters, that Dr Urquhart is presented today.

Chancellor, by the authority of the senate, and in recognition of his achievements and distinction in the application of science in librarianship, I ask you to confer on Donald John Urquhart the honorary degree of doctor of science.

University of Salford

It would be easy to welcome Donald John Urquhart here today as a librarian, and indeed a very distinguished one, but such a description would not only be an understatement but might also be one with which Dr Urquhart would emphatically disagree. After all, his early career seemed likely to lead in quite a different direction, for a degree in physics, followed by a doctorate from the University of Sheffield, and three years in the Research Department of the English Steel Corporation, have not constituted a route normally taken by librarians. In 1938, however, he applied for a job at the Science Museum, and they, somewhat to his surprise, said that there was work for a science graduate on their library staff. The war brought moves to the Admiralty and to the Ministry of Supply, with a return in 1945 to the Science Museum Library.

In 1948 Dr Urquhart joined the Department of Scientific and Industrial Research, where he took great interest in the use made of technical literature by industry and in November 1956 he was appointed to lead a unit set up to plan a national lending library. It was the formal beginning of a development of which we have not yet seen the ultimate consequences. One suspects that Dr Urquhart had a pretty clear idea of where he wanted to go, for his characteristic idea of planning was to provide a pilot loan service, working as it has always done, through other libraries. The accommodation in London, overlooking Regent's Park, was quite unsuitable, but, as Dr Urquhart has himself said, 'it is still necessary at times to make bricks without straw and then to argue that they would be better if straw were provided'.

Soon many knew that the National Lending Library for Science and Technology was in being, not only providing loans, but investigating the needs of users, the reading habits of research workers, the strange territories of scientific literature in Russian and of unpublished documents which everyone, except the poor librarian, knows about. In all this exploration there was reflected the approach of the man who became the library's first director.

In 1961 trainloads of literature began going north to the new home of the NLL, as we soon learned to call it, at Boston Spa in Yorkshire. Dr Urquhart, a native of Northumberland, having acquired academic and industrial experience in Yorkshire, had made his foray into the

University of Sheffield

Nineteenth century British librarianship produced in Sir Anthony Panizzi a man who towered over his contemporaries, the man to whom we are indebted for the British Museum Library as we know it today. The twentieth century, in Donald John Urquhart, has given us a librarian-innovator to match Panizzi; but whereas Panizzi's British Museum Library nourished the needs of the humanities, Urquhart's National Lending Library was to be a power house for research in science and technology. It is fitting indeed that these two great libraries should now have come together as the main components in our newly created British Library.

Urquhart's early years and young manhood gave few hints of the direction which his later career was to take. A north countryman, he came to Sheffield University in 1928 to read physics. He came resolved, it would appear, that work should not interfere with his education and for a time bridge and rugby football were in clear ascendancy over science. A reversal of priorities is said to have coincided with the arrival of Beatrice Parker, student of English literature, leading university athlete, and subsequently Mrs Donald Urquhart. With such motivation the path to a degree in physics was smoothed, and led quite naturally to the research department of English Steel and a Sheffield doctorate in metallurgy. A successful bid for a civil service post took him in 1938 to the Science Museum, where instead of gloriously technological days amongst the gadgetry, he found himself cataloguing books and journals in the Science Museum Library! War-time work in the Admiralty and the Ministry of Supply was followed by a return to the Science Museum, from whence he moved in 1948 to the Department of Scientific and Industrial Research.

It was in this least hide-bound of all Civil Service departments that his creative abilities were to flower to the full. His training as a scientist, his highly analytical approach to the literature of science and technology, and his wide experience of working scientists and their information needs combined to convince him that if scientific communication were to survive the explosion of information which scientists themselves were generating, then a radically different approach to the provision and control of the literature was called for. In one of his three papers to the 1948 Royal Society Conference on

*Special libraries in the UK in
recent years*

W ASHWORTH
Chief Librarian
Polytechnic of Central London

In a potted historical introduction to my paper* on the information scene in Britain, presented at the Darmstadt conference of Aslib in 1971, I showed how special librarianship and information work in Britain developed independent of the mainstream of librarianship. This was because the early industrial special libraries began as collections of books and essential periodicals housed in individual offices or laboratories of research staff who had seen the growing importance of information to their work and had assumed responsibility for its provision on a basis of personal initiative. When these collections became large enough to be unmanageable as part-time enterprises it was natural that an interested scientist or technologist should be found to organize them more formally. Conventional librarianship as taught in the early part of the twentieth century had little to offer to help with the detailed indexing which was found to be essential, or with the active role of dissemination which was a new concept alien to the classical librarian. Thus the development of industrial library and information work was necessarily empirical, and progress was made by way of shared experience between those who were learning by doing. Though a few of those in charge of industrial libraries were trained as librarians most were scientists who had discovered in themselves a natural aptitude for handling information and had become intrigued by its fascinating potential. This fascination took hold of a small number of enthusiasts who pioneered the development of special libraries with laudable missionary zeal and used their great inventive ability in the development of systems. Some of the pioneers had training or experience in public relations or administration and used this knowledge effectively to promote the importance of special libraries amongst management. They also saw to it that Aslib kept library promotion well in the forefront of its activities. Unfortunately, trained librarians saw these newcomers establishing libraries without a backing of librarianship qualifications, and regarded it as a threat to their own positions and profession, while on the other hand the science-based information officers believed their own success to be proof that librarianship qualifications were superfluous.

Thus there arose a stupid controversy, which at times reached the point of animosity, between the librarians and science-based information workers and they quarrelled about whether subject-knowledge or

*ASHWORTH, Wilfred: 'The information scene in Britain and Germany. 2. Information in Britain.' *Aslib proceedings* 23 (12) 635-644 1972.

Changing attitudes towards the NLL

K P BARR

Executive Director

British Library Lending Division

Dr Urquhart was given the task of planning a national lending library for science and technology in November 1956. The library world was given the first detailed information about this in a paper which was circulated for discussion at a meeting of the University and Research Section of the Library Association on 5 January 1957 and later published.¹ In it many of the basic considerations which governed the development of the NLL were mentioned for the first time.

The main points covered in this paper were that the library would form a central collection, since two or three copies in a central collection would provide a more efficient lending service than one copy in each of ten regional collections. All science and technology would be covered with some limitation in the field of medicine, and everything covered by guides to the literature, such as abstracting and indexing publications, would be obtained. Initially some build up of stocks of Russian material was planned. The new library would take over some of the stock of the Science Museum Library and would take over its lending service. The literature would be held in its original form, since it would be uneconomic to make microforms just to save storage space and most items would be lent; photocopying possibilities depended on copyright regulations. The library would not run a technical information service: it would supply specific items of literature on request. Binding problems might be overcome by binding individual parts in a simple plastic case. The library would be outside London, probably somewhere in the North of England for efficient postal distribution to all parts of UK. Scientists would be needed to help run the library. Dr Urquhart ended by saying the library would not be just a library of science but a scientific library.

Considerable comment and criticism resulted from this article. There was an article in the *Manchester guardian*² and an editorial in *Nature*.³ A sub-committee of the Library Association Council was set up to discuss with Dr Urquhart the plans for the NLL. Comment on this meeting and a review of the *Nature* editorial appeared in *Liaison* in April 1957.⁴ Letters to the *Library Association record* appeared variously criticising the plans for NLL. Some criticisms were irrelevant, the *Nature* editorial being mainly concerned with scientific *reference* library facilities, but the main points of contention at this time were, firstly, that the NLL collection should not aim at completeness. A lot of highly specialised material was held in university and special libraries and to duplicate it was unnecessary and wasteful. All the NLL needed was to record this material. As one letter said, 'It is evident that the

*The planning and execution of
new academic library buildings*

E B CEADEL
University Librarian
Cambridge University

The librarian or director of a national or university library who is faced with the necessity of planning and building either a new library or a library extension may well feel himself to be at a disadvantage. Nearly all the specialists and officials with whom he will deal, be they architects, buildings officers, administrators, or services consultants, will be professional people who regularly deal with buildings, and there is the danger that the librarian may fail to make his proper contribution because he lacks the interest or confidence to involve himself in the practical side of the planning and execution of the work sufficiently to be able to make that contribution.

The librarian cannot, of course, expect to understand minute technical details, but he should be practical enough to learn the main principles behind planning decisions. It should not take him much time to find out what planners mean by 'plot ratio', what architects mean by 'Flemish bond', what engineers mean by 'RSJ' or what services consultants mean by 'electrostatic precipitrons'. If he takes the trouble to work closely with the professional people engaged on the new building, he will be welcomed by them, and the building is likely to be a much better one than would otherwise have been the case. The professional people will be glad to have his informed opinion at all stages and will respect that opinion if he has shown that he can substantiate his views at a practical level throughout the planning process. If, on the other hand, the librarian stands aside from this process, offers merely a vague outline of what is needed in the new building and then retires from the scene, he has only himself to blame if the professional people, acting in partial ignorance of the library's needs, produce a building that he does not subsequently approve.

The planning of a new academic library is fortunately not such a 'shot in the dark' as it was liable to be twenty years ago, for several reasons. Twenty years ago there were few recently built major library buildings in Great Britain from which librarians and architects could learn lessons about what features were to be copied and what were to be avoided, but the large number of new university libraries which have been built in recent years have provided many examples of different styles and types. Another helpful factor has been the work of the Buildings Sub-Committee of the Standing Conference of National and University Libraries in holding seminars and 'critical visits' to newly completed libraries. These have concentrated the attention of both architects and librarians on both the good and the bad points in these libraries, and have undoubtedly helped in the avoidance of some of the

*BIBLIOCHLOTHANASIA** :
Library hygiene and the librarian

B J ENRIGHT
University Librarian
University of Newcastle upon Tyne

*Ochlothanasia: 'death from overcrowding'. Leading article on national parks. *The times*, 13 July 1974, p.16.

It is often difficult to pinpoint occasions and influences which have led to major changes of attitude during one's professional career. One such occasion which I vividly recall was provided by Dr Urquhart when he gave a paper with his customary panache at a one day seminar in 1967 on 'Research into library services in higher education' held at the University of London. His theme was 'The library user and his needs'.¹ After working at the libraries of the House of Commons and the BBC television service attempting to satisfy the equally demanding (and often equally unreasonable) requests of MPs and TV producers, I was then engaged in trying to set up a library service in a newly established technological university. I still cherished grandiose notions of what academic librarianship might achieve stemming from an eight year grounding at the Bodleian. Inevitably I was suffering from a growing awareness of the alarming gap between phantasy and reality.

Dr Urquhart started propounding his first law 'A library exists to meet the needs of its users as economically as possible', quickly following it by what amounted to a succinct, if iconoclastic, second law 'Research is no substitute for thinking' (or rather 'common sense' as I seem to recall he actually said). I began to realise that this was where myth might begin to be separated from fact, and that the paper's title should have been *The lore and laws of librarianship*. He went on to make a plea for a 'simple approach to library use' based on a presupposition that 'man is not wholly a rational animal'. He insisted that 'every organisation operating a service has a responsibility for measuring the efficiency of that service . . . Such data is necessary for the adequate administration of that service . . . We must collect facts, analyse facts, and act on facts and ignore opinions'. Dr Urquhart, with a characteristic humility for which he is notorious confessed to an unfair advantage — that of being a scientist in a world of alchemists. Once a scientific approach to meeting users' needs was adopted by librarians generally, the central problem would consist of determining the best way, considering the library systems of the country as a whole, of spending limited resources to meet users' needs most effectively.

He reminded his audience that the National Lending Library (as it was then called) was concerned with designing a service to supplement that of other libraries, including university libraries, and he foresaw that in the future, attention would be directed to the investigation of ways in which the service of the different elements of the library system, national, university and other, could be designed to complement each other, having regard for the need for economy and users' needs.

The image of information work

H T HOOKWAY
Chief Executive
The British Library

What is 'information work', and does it need an image? I propose to use the phrase to cover all those activities that aim to solve the problems of collecting and making available recorded information in whatever form it is produced. At the calculated risk of upsetting a few of my readers, I shall use this term, therefore, to cover the activities of people with such diverse titles as librarian, documentalist, information scientist, special librarian, archivist and many others in related kinds of employment. Although the titles are many and diverse, the ultimate objective of these information workers is the same. In somewhat oversimplified terms, it is to provide the right information, in the right form, to the right people, at the right time, in the right place. It is quite possible that the public image of these workers suffered in the past from the undue attention paid to the differences of detail that have justified the introduction of new descriptive titles, when intellect and energy could often have been best applied to emphasising the need to integrate the new specialities into a unified concept of information work.

For the past twenty to thirty years, information work has been in a state of flux, having constantly to readjust itself to new ideas, techniques and concepts. Before the second world war, and with increased emphasis during and after it, there were great pressures to collect and disseminate scientific and technical information effectively, often, to the eye of outside observers, at the apparent expense of other kinds of information. This was, and continues to be, a very necessary activity, since the resources put into and available from the results of scientific and technical research form a very important part of the total intellectual resources available to the country. There is no doubt, however, that this kind of work is ceasing to dominate the scene to quite the same extent as hitherto, and there is a move towards dealing more effectively with the information problems of other aspects of our culture. It is quite possible that in the years to come we shall see a greater emphasis on the provision of social sciences and humanities information and material — a change which will result in further perturbation in the field of information work.

Another factor which has caused a great change in attitudes, especially over the last ten years, has been the application of the computer to library and information processing. There have been obvious advantages, for the computer is a rapid and flexible processor ideally suited to the processing and recording of all forms of records. There is no doubt, however, that when work first started in this field there was a body of entrenched opinion that was strongly against the

*Tasks and duties of the
modern national library in
building up stocks of foreign literature
and documentation for the
country's library system*

MRS KALAJDZIEVA

Director

Cyril and Methodius National Library

Sofia, Bulgaria

Science in the 20th century is a powerful productive force in the hands of society, a dominant and all embracing field of action, and one of the most important factors in raising the efficiency of labour and promoting the progress of a country and nation.

This accounts for the great interest and active participation of the state in the organization and financial support of research work and introduction of new techniques and methods. More and more resources, both intellectual and material, are being employed to meet the needs of the rapid development of science and technology in every country.

Information in the field of science and technology is now a state problem and part of national science policy. The ever increasing amount of scientific research throughout the world and hence the increasing number of science publications, the risk of overlooking some important novelty, the impossibility of controlling bibliographically and keeping abreast of currently published literature, the increasing cost of library and information systems and other well-known factors have led to the coinage of the phrase 'information crisis' and to a search at a national and international level for ways and means to cope with that crisis.

Every country with developed economics and developed science and technology, which has an ambition to participate in the build up of the world's economics, science and culture, is compelled nowadays to establish a reliable and well-organized information system from which to draw information on the latest and most important developments throughout the world.

In this century of 'information explosion', characterized by an annual production of over half a million book titles (to say nothing of other categories of publications), with a tendency to reach one million book titles per annum at the end of the century, the modern state, as the sponsor of the progress of science, faces the problem of building up a rich collection of science, technology and culture in the world. In point of fact, a number of countries have felt the necessity to check existing library stocks, to provide for a systematic and sensible supplementation with new-published materials, and to ensure that the contents of library documents are fully disclosed to users so that a full and easy usage can be warranted. For it is obvious that if science is the key to universal progress, libraries on the other hand are the key to science.

Libraries should be regarded as a function of the extant tendencies in the development of modern science and publishing and, at the same

*Demystification in librarianship
and information science*

M B LINE
Director-General
British Library Lending Division

Librarianship has both mystery and mystique. 'Mystery' I find defined as 'something hard to understand; something secret or obscure; secret religious rites; revealed incomprehensible doctrine; guild of craftsmen'. 'Mystique' is defined as 'air of mystery surrounding some art, cult, occupation etc and deliberately maintained by its devotees; set of beliefs, customs, skills etc cherished by such devotees' (*Penguin English dictionary*).

To take 'mystery' first. There can be no doubt that both the practice and theory of librarianship are sometimes 'hard to understand'. Theory is fortunately confined mainly to library schools, where only students need to try and understand it, but the practice affects library users, who find it 'hard to understand' in two senses – they may find the cataloguing or classification used unintelligible, and even when things the library does *are* intelligible, users may find it hard to understand why the library does them. As for 'revealed incomprehensible doctrine', classification schemes and cataloguing rules perhaps qualify for this definition – they do not have to be comprehended, merely followed. Nor have they normally been accommodated to users – rather, users have to accommodate themselves to library systems, and the more enterprising libraries actually 'train' users to try and understand their systems. The idea that library systems could actually be built round the habits and needs of users is a relatively new one, which is heresy in some quarters, and unpractised in most quarters where it is not heresy.

The mystique of librarianship is possibly stronger than its mystery. All professions gather around themselves a mystique. One way of persuading the world that one's job is a profession is to require an initiation ceremony, often of considerable length and difficulty, and to surround the job with an impenetrable air of mystery. Manifestations of mystique are not hard to find. Examination papers in librarianship would quickly frighten off any non-librarian, if only by the terminology used. Professional conferences, where acronyms are commonly bandied about at a fearful rate, are another manifestation. One of the most pervasive mystifications is the misuse of 'information science', a perfectly good term for the theory and study of information, in the sense of 'practical information work in industry'. (Fortunately, librarians have not yet begun to call themselves 'bibliothecal scientists', nor are cleaners known as 'lustration scientists', though I did once hear a library janitor referred to as a 'fabrication officer'.)

The mysterious nature of librarianship is further enhanced by the shade seeking nature of some librarians. Most of the work in libraries is

*Information science research in the
United Kingdom*

B J PERRY

The British Library Research and Development Department

Since the debate on what exactly is information science still goes on, anyone writing about information science research must define what he considers this science to be. At least for the purposes of this article, I intend to treat it as the study of the properties and behaviour of information, especially with regard to information transfer, with a view to establishing principles and theories on which may be based the development and operation of library and information systems. Some readers will consider that this definition is unduly wide, many that it is unduly restrictive. Apart from any other factors, one of the major advantages of this definition is that it enables me to exclude from consideration any aspects of information research that are solely concerned with answering specific operational developmental problems — a serious consideration in these times, since interest in information research as such has grown so rapidly in the UK over the past ten years that even an attempt at a comprehensive survey would probably take up a major part of the volume. Even so, the selection of projects described here is fairly arbitrary.

Whatever aspect of the debate is emphasised, however, I think that it must be agreed that information science research is a complex area that requires the application of skills from many different disciplines, including mathematics, linguistics, psychology, sociology, logic and reprographics — to name but a few of the many that could be mentioned.

Because of my cavalier definition, what follows is bound to be incomplete since it touches not at all, for instance, upon the major research projects on mechanised information systems and on library automation which, after all, have been the main talking points in information work for the last ten years. This is deliberate, since however valuable has been the research and development that has been carried out in order to make these systems work and however valuable these systems are themselves, they have contributed little to our basic understanding of what information is and how we use it and how we should organise to use it even more efficiently. Their real value is that they have helped us to cope with the crisis caused by the accelerating production of more and more recorded material, and this they have done well, but not as well as they could have had we known more about the nature and processing of information.

I should, perhaps, add that any opinions that are stated in this paper very much reflect my personal views and I am certainly open to discussion on any or all of them, thus in some small way following

The British library and the universities

D T RICHNELL
Director-General
British Library Reference Division

In the days when the National Lending Library for Science and Technology came under the Department of Education and Science it used to be the habit of Dr Urquhart to preface any paper or address with the statement that the views he was expressing were not government policy – yet. Although the members of the British Library Board are not constrained by the conventions of the civil service, it is perhaps desirable that I should preface these remarks with the statement that the views expressed here are not necessarily the views of the Board yet – or of Dr Urquhart ever. I am reasonably sure that he will agree with some of them, but that he should agree with everything would be disappointing, since controversial discussion with him on library development problems has been one of the great pleasures of professional work over more than two decades.

The possible types of relationship between a national library and university libraries can be said to fall mainly into three categories. In the first a national library can develop from the outset as a university library as well, or, if not from the outset, by a deliberate act of merging. This type of relationship is most likely to be found in small countries, where total resources are scarce, and where perhaps the only, or the main, university of the country is situated in the capital city. In the second the national library develops in isolation from the university libraries of the country, with no administrative coordination with them, and with only informal links arising from the use of the national library by the academic community. In the third there is a close coordination between the national and university libraries, which may arise from a common financial, if not administrative control, or may be created as a concerted effort of rationalisation.

In England (and I use the word advisedly, since Scotland and Wales had a somewhat different development) the first beginnings of the development of a national library concept may be said to have fallen in the first category, since the privilege of copyright deposit was first given to the Universities of Oxford and Cambridge – the two centres of academic research in the country. True, the privilege was soon extended to a number of other institutions in England and Scotland, but the libraries of Oxford and Cambridge serving the needs of the universities were also the closest approach to national libraries for a considerable period.

Neither, of course, was in the capital city, but it was impossible to confer the copyright deposit privilege on a university in London, since for centuries there was none. This fact probably determined, and

*Professional education:
some challenges for the next decade*

W L SAUNDERS
Director
Postgraduate School of Librarianship
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A contribution to a Festschrift for D J Urquhart might more fittingly look to the future than dwell on the past, and this brief paper on professional education for library and information studies is primarily concerned with considering some of the challenges that lie ahead, rather than with demonstrating Urquhart's direct and indirect influence on the professional education scene of today.

In 1974 practically every sector of British librarianship can look back on a decade of unprecedented change, a decade which has produced an institutional and organisational structure upon which librarians and information workers should be able to build to good effect for the rest of this century. In *British librarianship and information science, 1966-1970*¹ I have described in some detail the nature of these changes so far as education and training are concerned, and to set the scene for this paper I propose to do no more than summarise the significant features of our present-day educational arrangements. First — and this is a matter of very considerable importance — professional education for library and information work is now organised on the assumption of full time study. Fifteen schools of librarianship (sixteen if City University, with its information science degree, is included) accommodate between them some two and a half thousand full time students, of whom between thirteen and fourteen hundred successfully complete their examinations each year. There are three routes to professional qualification which can be followed by such students: a three or four year bachelor's degree course of which the major elements are firmly in the field of library and information studies; a one year postgraduate course; or a two year, non-graduate course. The group following the last of these routes is declining fairly rapidly. The schools themselves are mostly in substantial institutions of higher education, either universities or polytechnics; they are usually well housed — increasingly in purpose built accommodation; they are nearly all of a viable size, both in terms of students and teaching staff; and two or three of them are active in research. Such a very satisfactory state of affairs is a measure of what has been achieved in this last decade of change and reorganisation, a decade which has brought the schools to a position of very substantial material strength. The challenge of the next decade will be one of consolidation rather than growth; and the educators themselves, their courses accepted and established, will, it is hoped, be free to give more time and thought to qualitative aspects of professional education than has been possible during these recent years of intensive entrepreneurial activity.

*Public library systems in transition;
their place in the national library
network*

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From April 1 1974, public libraries in England and Wales can no longer be thought of in terms of buildings, large or small, but only in terms of systems, big and bigger. The changes created by the Local Government Act of 1972 will make our public libraries quite different from almost any other in the world. For in most other countries where public libraries have been developed to any extent, it is still usual to think of a building from which a range of services is provided, and this would certainly seem to be the basic implication of the Unesco public library manifesto.

Until recently there were 314 English and Welsh local authorities responsible for a public library service. Many of these, particularly the old cities and the old counties, had 'central' libraries and branch libraries with well over 3,000 service points. Including the London boroughs, there are now only 117 library authorities in England and 8 in Wales; the number of libraries or service points is just the same, but, excluding London, they have been organised into 83 new groupings. This means that small authority libraries like Loughborough, Hinckley, Oadby and Melton Mowbray in Leicestershire or Arnold, Carlton, Mansfield, Worksop and Newark in Nottinghamshire have gone out of existence as individual units. The familiar terms 'county borough' and 'urban district' are also gone; the new library authorities will be either metropolitan districts or counties. The only exception to this disappearance of small authorities and their inclusion into new counties is the West Riding of Yorkshire, an old county council that disappears entirely as an authority, being split completely, some parts going to new metropolitan districts and others to new counties. It must be stressed that in most cases the new counties, even those with long established names, are quite different from any local authorities that existed previously. This is fairly obvious in the cases of Avon, Humberside or Cumbria, but it is equally applicable to Lancashire, Linconshire, Norfolk or Suffolk. In the light of these recent events it is strange to remember that only ten years ago, the Public Libraries and Museums Act of 1964 gave the Secretary of State of the Department of Education and Science power to enable a non-county borough or urban district with a population of over 40,000 to *become* a library authority, and although he could have made an order transferring library powers from small authorities of under 40,000 population to large county councils, he did not do so. Thus library authorities lacking adequate financial resources to give wide ranging services were allowed to continue to function. The new situation must be seen as a

*An enfant terrible of international
librarianship*

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I met Dr D J Urquhart for the first time -- if I remember correctly -- in Paris, in 1955, at a meeting of the International Advisory Committee on Bibliography and Libraries. I was placed, by an alphabetical sitting order, between him and another distinguished and lively colleague, Dr Ralph R Shaw. It could not serve any useful purpose to attempt a comparison between two such outstanding personalities as Urquhart and Shaw. They had a lot in common, but each of them had his own very typical traits. Shaw's mind was lightning quick, brimming over with the ideas which he let fly, toyed with, and called home, all in one dash. Urquhart was more deliberate and reserved, his outlook realistic and to the point. Among the things they had in common was the pleasure they took in sharply debating items of interest, while they became ostensibly bored when the discussions got stuck in endless professional mazes, an occupation which librarians seem to enjoy.

This was a long meeting and some items of the agenda were undoubtedly of the petty type. The two became more and more bored, to the point when they started to amuse themselves with a volley of witticism over my head. It dawned upon me that I was sitting between the two *enfants terribles* in international librarianship. While I was trying in vain to lead the discussion to some final proposals or worthwhile ideas, their lively and effective exchange of words taught me not to attach too much importance to my own problems. I must say it was a lesson.

Urquhart and I met often since that time, at big and small international meetings and congresses of various types. It was always stimulating to talk to him, because he felt strongly on a subject which is undoubtedly of great interest whether we look at it from the national or the international aspect, namely the inter-library lending problem. He was possessed of an almost missionary zeal in this respect which did not exactly endear him to all his colleagues. He became irritated over the endless talks on library cooperation. Library cooperation for him meant that books travelled from one library to the other as quickly and as easily as possible. He was opposed to the idea that books should be stacked in library cellars under lock and key waiting dismally till somebody came along and asked for them. Books should be used, and as it was easier and more economical, from the national point of view, to transport books to people than people to books, he advocated opening the big comprehensive reference libraries for external use. For many this was a revolutionary idea. Another one, due to his education and training in science, was to make use of the new reprographic

*The organisation of the distribution of
scientific and technical information*

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More than a quarter of a century ago, Donald Urquhart presented a paper,¹ of the same title as this, to that conference which initiated a surge of interest and activity in our field – the Royal Society Scientific Information Conference of 1948. In his paper, Urquhart diagrammed the UK organization of scientific and technical information as he saw it then, and proposed four new elements that should be added:

‘1 A national library should be named as the depository for unpublished non-confidential reports, 2 the same library should be responsible for feeding the primary abstracting services with literature they would not normally receive, 3 an abstracts coordination centre should be created, 4 a translations coordination centre should be created.’

The resulting proposed patterns he diagrammed as in Figure 1. It shows publications (including abstracts), reports and translations feeding into a national library, the latter feeding industry, research and education. The national library also links into a ‘coordinated library service’, which in turn feeds abstracting bureaux.

It is clear that in this paper we have the germ of many ideas that have subsequently been embodied in the activities of the British Library. Its lending and reference divisions now constitute the national library. Abstracts, reports and translations do indeed flow into Boston Spa. From there, loans and photocopies are issued in vast numbers. Not only are primary publications provided to abstracting bureaux, but actual abstracts are prepared for the US National Library of Medicine. Not only are translations collected, but the BLLD does much to stimulate and coordinate their production.

In those early days, Donald Urquhart sensed much of what was needed, divined the way that the world would or should go – and worked mightily to ensure that it went. Yet not all of the ideas in his 1948 paper have been fully implemented. Let us consider some of them.

What do we understand by a ‘coordinated library service’? Urquhart simply said ‘the national library should have a specific responsibility for organizing the library service for scientific and technical literature’, and left the details open. There was no explicit indication in his diagram of the coordinating (or at any rate, linking) roles played by regional interlending bureaux, the National Central Library, and local co-operative schemes, though perhaps this was implied by the box encircling ‘library service’. Today, in addition to these links, there is the group of large general and specialist ‘back-up’ libraries supplementing the BLLD service.

*Interlibrary loan service in the
United States*

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Interlibrary loan in the United States began to have a significant volume not too many years before 1917. It was in that year that the American Library Association promulgated its first interlibrary loan code. But that the practice antedates the code is made clear by the accompanying statement that the code is based on the practice of those libraries that were doing much lending. Some librarians had been proposing the practice at least since about the time that the ALA was organized, in 1875. These early proposals indicated that there was no, or only very little, interlibrary loan at that time. It probably began on an occasional and tentative basis some years after these first proposals.

Several factors appear to be responsible for the development of interlibrary loan around the beginning of the twentieth century, after several thousand years of library operation without it. One factor of some significance was purely external to libraries, and that was the availability of mail and transportation facilities that were sufficiently fast, widespread, and cheap to permit rapid and easy communication and the reliable shipment of books between libraries. But the chief factor in the United States was the widespread establishment of new universities in the last decades of the nineteenth century. Being new, their library collections were small and lacked many of the older and foreign publications that their few older colleagues in the United States had acquired over many decades, and that their colleagues in Europe had acquired over centuries. Despite their small libraries, the educational programmes of these new schools were ambitiously intended to be essentially the same as those of their older colleagues, both in depth and in extent. Indeed the educational aspirations of a growing population widely dispersed across a wide continent demanded that they be the same, rather than limiting the opportunity for the best education to the fortunate few able to afford, and to find places in, the scant handful of the older universities on the east coast. At the same time significant changes were beginning to take place in higher education. Science and technology began to get attention equal to that which the humanities had long known; emphasis was shifting from undergraduate to graduate education, and, related to these, there was increasing emphasis on research, both as a dominant interest of the faculty members and as an institutional requirement for promotion. All of these factors resulted in the need in every institution for access to many materials that the institution's library could not provide from its own collection, while the wide geographic dispersion of the universities made it impractical for the scholar to satisfy his need by reasonably short and inexpensive travel.

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