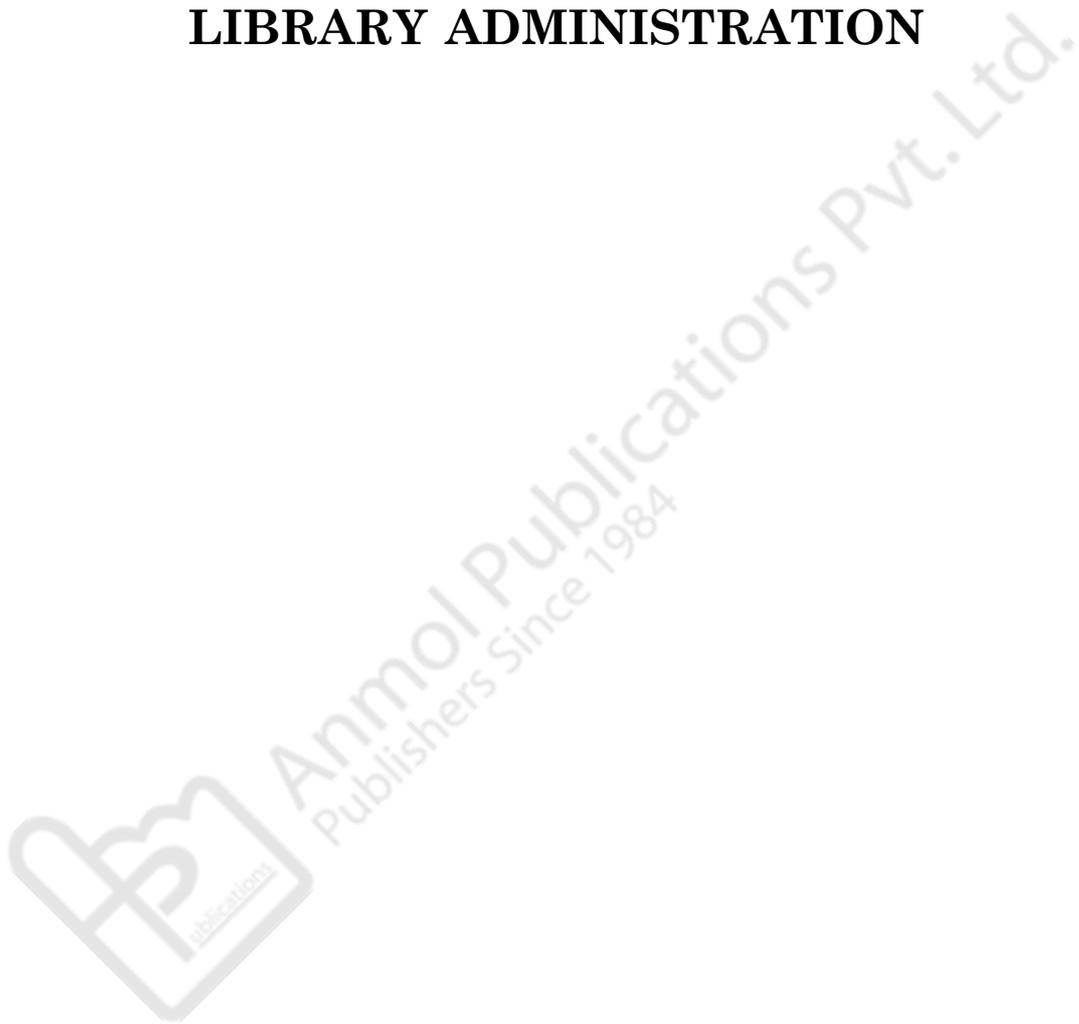


*Encyclopaedia of*  
**LIBRARY ADMINISTRATION**





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**LIBRARY  
ADMINISTRATION**

**Volume 2**

Mangani Prasad Singh



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# Contents

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*Preface* (vii)

## (Vol. 1)

1. Making of Libraries and Librarians 1
2. Management, Information and Development 25
3. Buildings, Furniture, Design and Planning 63
4. Library Personnel 155
5. Library Finances 211
6. Understanding of College Library Service 241
7. Library Cooperation and Interlibrary Loan 281

## (Vol. 2)

8. Distributors and Vendors 297
9. Legal Issues 341
10. Using Output Measures to Monitor Children's Use of Reference Services 389
11. Limitations on Library Management 423
12. Computer Science Education for Library Services 449
13. Collection and Library Administrators 479
14. A Strategy for Migration of Digital Information 553
- Bibliography* 585
- Index* 590



## Preface

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It would appear an obvious truism to declare the college librarian should have the qualities of a good administrator; yet so important are the librarian's instructional relations to the faculty that this requirement is not so generally nor so permanently borne in mind as it should be. Dr. Harvie Branscomb correctly states that the administrative problems of the university librarian are more complex, but it must be stressed that so far as the realities of college library work are concerned, one of the best services of the librarian is to be a good administrator and leader in the library. It is essential that the librarian assume a large measure of administrative responsibility, including the supervision of the staff, the proper budgeting and expenditure of library funds, and the oversight of the library building. These functions require frequent consultations and close relationships with the president, the business officers, and department heads, and the Librarian must impress them with his sound business judgement and innate ability to manage the library's affairs. He must also hold the confidence of the library staff by his ability to develop a systematic organization of library work, to conduct the many types of transactions involving the administration and faculty, and to administer personnel, budgets, and services in a satisfactory manner.

Mutual confidence is an important factor in satisfactory personnel management. If the Librarian is to have confidence in the staff, he must first have confidence in his own judgement. "Indecision is fatal to good administration," write Randall and Goodrich, but "self-confidence must not develop into obstinacy." Staff members are attracted by a librarian who will take responsibility; conversely they are likely to be wary of one who hesitates because of lack of confidence in his own judgement or who tries to "pass the buck." Mutual confidence implies also that the librarian should have full confidence in the staff. The best evidence of his trust is the degree to which he is willing and able to delegate authority in work to be done. To be given a particular job to do and to have the satisfaction of seeing its final accomplishment is a great motivator. On the other hand,

always to be doing something patently as a sub-ordinate and under constant supervision and checking and to see nothing of personal accomplishment in what is done has a very debilitating effect. The librarian is also responsible for cultivating and maintaining an *esprit de corps*.

In plain language this amounts to giving everyone on the staff a square deal in matters of promotion and salary, in providing for the physical comfort of workers, in showing appreciation of satisfactory performance, and in being fair and impartial in criticism. Sometimes grievances and friction will show up in the staff for reasons which have nothing to do with the librarian personal administration. It is then his job to determine the cause of the friction and to eliminate it firmly and openly. He cannot hope to do this unless he knows each staff member well and has the courage to deal firmly with older and experienced members of the staff as well as with the new members. One other factor, even in a brief summary, merits careful consideration. The attitude of the librarian in administration should be democratic. The greatest danger to satisfactory personnel relations and effective library service is represented by the librarian who is domineering, autocratic, and reprehensible in his attitude in handling people in subordinate positions.

It is hoped that his book will not only meet the requirements of students but will also be useful as a guide to the academic professionals.

—Author



# Making of Libraries and Librarians

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## Introduction

The information age is here with many challenges and risks for the information generator and the information disseminator. The challenges before libraries and information centres are manifold. The main challenge will emerge from the expected change in the very nature of future libraries and information centres.

## Library Scenario

The diversity of the Indian library scenario is an important aspect for consideration while speaking about a vision for the 3rd millennium, since different library sectors in India are in various stages of development and no single solution or approach will be relevant in the Indian situation.

Indian library and information sector can be divided into five major areas: the National Library sector; Academic library sector; the Special and Scientific library sector, Government library sector; and the Public library sector due to various factors the scientific and special library sector is much more developed and modernized than the other four sectors.

The challenges which Indian libraries and librarians will encounter in the 3rd millennium are manifold but the most important challenge will be the change in the very nature of libraries and librarians *i.e.*, the libraries must change from collection oriented institutions to service oriented organisations and librarians have to change from custodians of books and documents to information managers and disseminators. In this changing scenario IT will play the most important role. While taking advantage of the different components of information technology the libraries of each sector will have to ensure the following:

1. take stock of the actual need of the library and its users;

2. bring about change in the functions of the library to make it service oriented rather than collection oriented;
3. resource sharing and networking of libraries;
4. consider both preservation and access as vital components of library service;
5. marketing of information and library services;
6. development of library professionals to cope with the new environment;
7. utilization of management techniques for dealing with the new objectives.

At the decision-making level India will need a National Policy for libraries and information centres within the changed socioeconomic environment keeping in mind the new requirements of the different sectors within the field of librarianship. It will now be worthwhile to analyse the present Library and Information scenario before preparing a vision for the 3rd millennium in each sector of librarianship in India.

### **The National Library Sector**

The National Library sector in India can be divided into two types of libraries. The first one comprises the National Library, Calcutta and the recipient Public libraries under the Delivery of Books Act *i.e.*, Delhi Public Library (DPL), Connemara Public Library, Chennai and the State Central Library, Mumbai. These are the depositories of the printed cultural heritage of India under the Delivery of Books Act.

The depository libraries are a very important part of the National Library sector because India is a very vast and multilingual country with rich linguistic heritage. The 3rd millennium will have to see the cooperation between all these four libraries with the National Library at the apex. This can only be implemented if all these libraries are modernized at the same scale and have compatible systems to ensure resource sharing and networking. As these are financed by the Department of Culture (DoC) of the Government of India (GoI), the standards for modernization laid down by the DoC will be applicable to all these libraries.

The other part comprises the National level subject specific libraries such as National Science Library, National Medical Library, etc. In both these parts the National Library stands out as the largest single library which acts as the depository as well as the repository of all published material of India. The 20th century saw the development of all these national level libraries in isolation. The main challenge in the 3rd millennium in the national library sector would be to bring about close

coordination between all these national level subject libraries and the National Library of India.

### **Academic Library Sector**

The Academic library sector comprises school and college and the university libraries. While evolving a vision for university libraries for the millennium, the main focus should be on the role of the existing university library in addressing the national issues. Since most university libraries in India work in isolation some information need to be collected and collated before preparing such a perspective plan.

1. Data regarding the actual functioning of the library, its collection, user approach, library facilities, IT application status, library manpower status, etc.
2. A national agency may be identified for undertaking this work.

A major aspect of the new millennium will be cooperation at all levels starting from the local to the global level. Cooperation is a prerequisite for all types of networking for resource sharing. Therefore, the following must be ensured before preparing the plan for linkages between university libraries.

1. Institutional commitment to accept the given measures.
2. Fund and support resource sharing solution.
3. Attitudinal changes in library staff to undertake additional responsibility in resource sharing environment.
4. Training of library staff to understand and appreciate the changed situation.

If these prerequisites are made available the university libraries could plan for resource sharing programmes, apprenticeship in libraries for learning new skills and IT training programmes, consultancy in retro-conversion and in developing IT infrastructure. All these put together will be the basis of preparing a perspective plan and evolve a vision for university libraries in the country.

### **School and College Libraries**

Excepting very high brow private schools, most schools in India do not have a library per se in the present situation. This area of librarianship is very neglected and needs immediate and continuous attention. As regards college libraries, most colleges have libraries but other than very well known colleges in each state, the ordinary colleges do not run libraries of any consequence. Therefore, India faces the challenges of actually preparing a perspective plan from scratch *i.e.*, from collection development

to networking through IT solutions, and will need a complete blueprint to develop these two types of libraries during the coming centuries.

India has set up the Information and Library Network (INFLIBNET) under the University Grants Commission (UGC) as the inter-university agency on library modernization to take the initiative and address the issues required to implement the perspective plan for the Academic sector. Each university and its affiliated college libraries also should be part of the overall scheme of development.

### **Distance Education**

India has developed a well organized distance learning system through the Indira Gandhi National Open University (IGNOU) to achieve a high percentage of educated citizens as a prelude to an ultimate knowledge based society. The diversity and geographical distance of India need a strong, well-planned distance learning system for all citizens of the country. To make distance learning worthwhile the information base of the library sector will be equally responsible to be able to cater to the information need of Indians different societal levels. IGNOU has started some unique services for students with the help of IT but unless the rich collection of reading material available in different libraries in India are accessible to the younger generation the aim of distance learning gets nullified. Therefore, the academic sector has to be so interconnected that it will also cater to distance learners.

### **Public Library Sector**

The Public library system in India has developed over the years for more than a century, initially under the patronage of the aristocracy. However, the new independent India which developed a democratic society, recognised the need for public libraries which will work for the common good and will build a strong foundation for a democratic set up.

According to the Constitution of India, Public library development is a State responsibility. Therefore, all states are vested with the mandate to set up libraries within the state at different levels. But due to the diversity in the level of state-wise development, the Department of Culture, Government of India has set up Raja Rammohun Roy Library Foundation (RRRLF) to act as a nodal agency for development of public libraries in India.

Though library legislation is almost a prerequisite, all the Indian states have not yet passed the library legislation. Therefore, RRRLF is also working towards a model Public Library Bill which may be able to encompass all the facets needed for development of public libraries to suit the new

changing environment. Moreover, in the rural sector the local governments have been made responsible and accountable for the development of public library facilities through new constitutional amendments. Also, the Central Government is taking well-considered steps to make dissemination of information the main activity in all sectors which deal with rural and social development.

The 3rd millennium will see a drastic change which will ensure cooperation and collaborative efforts between the information generating agencies (whether government or NGOs) and the libraries and the information dissemination sector. The government is seriously considering to bring about conceptual change in the rural library sector by coordinating its activities along with the continuing education schemes of the National Literacy Mission (NLM).

The RRRLF has also been given the responsibility of resource mobilization for modernisation of the state and district central libraries, the development of infrastructure and training of personnel. The Department of Culture through the Central Secretariat Library (CSL) has laid down standards for library development software and networking as well as for bibliographic description to ensure standardization both in infrastructural development as well as retro-conversion of library catalogue in machine readable format.

### **Government Libraries**

Government libraries in India were developed mainly during the British period to cater to the needs of the decision-makers and the bureaucrats. These libraries have always been institutionalised within the departments of the government. All these departmental and ministerial libraries have collected government documents mainly of their respective department/ministry and have restricted their acquisition to the need of the departmental staff alone. The Central Secretariat Library (CSL) has, however, worked within a broader spectrum being the main library in the ministerial and bureaucratic set up.

During the last 50 years some of the government libraries have been developed into well-organised collections which can cater to an informed clientele. Since government information started being handled by the National Informatics Centre (NIC), the use of information technology became the key word in the government sector. The Department of Culture, which is the nodal agency for library development in India, has taken viable steps towards resource sharing and networking of the libraries under its supervision. This includes the National Library, Calcutta, Central Secretariat Library and National Archives of India library, libraries under

the Archaeological Survey of India and the Anthropological Survey of India, etc.

### **Special and Scientific Libraries**

The special libraries and the libraries under Science and Technology group are in a much better developmental stage compared to the other four sectors. A good number of these libraries use current IT products and systems like computers, email, CD-ROMs and on-line storing and retrieval. Libraries and information centres of research institutions such as those under Council of Scientific and Industrial Research (CSIR), Defence Research and Development Organisation (DRDO), Indian Council of Agricultural Research (ICAR), Indian Council of Medical Research (ICMR), Department of Atomic Energy (DAE), Indian Space and Research Organisation (ISRO), Department of Science & Technology (DST) and Institutes of higher learning like the Indian Institutes of Technology (IITs), Indian Institute of Science (IIS), Indian National Science Academy (INSA), Indian Institutes of Management (IIMs), are modernized and have been given the necessary resources for development.

### **Library Networks**

Other than INFLIBNET, there are a number of networks which have developed in the past decade. These are either city networks or activity subject specific networks. Developing Libraries Network (DELNET), Calcutta Library Network (CALIBNET), Madras Library Network (MALIBNET), Management Library Network, etc., are important and useful ventures for networking and resource sharing. Future of Library Development and the Challenges in the 3rd Millennium The details given above actually picturizes the latest situation encountered by Indian librarianship till the end of the last millennium.

The main challenge in the Indian situation is to visualise the present situation and bring about changes so as to nullify the observations made in the World Information Report, 1997-98, which are as follows:

- The bulk of the population is not information-dependent in day-to-day work and living.
- A large proportion of the population cannot consume information, especially if it is delivered in written form.
- The vast majority of the population does not have the means to access information.
- People in general are not accustomed to pay, cannot pay or are unwilling to pay for information. In fact, information does not even figure in their list of wants.

- The existing pattern of economic activities does not favour a growth in information consumption.
- The countries do not have sufficient capacity to invest in infrastructural development.

Therefore, the future of Indian librarianship lies in descending from its ivory tower of catering to only a select few and the literate minority and to create a system which will penetrate into the actual information need of the majority of Indian people. So, there has to be a major paradigm shift to deal with the information needs of the vast majority of the population who at present do not have means to access information. Specially, the public library system in the country needs to be rejuvenated and re-modeled to cope with the present situation and the future trends.

There will be need to change the following on a broad-based basis in all types of libraries:

- a. Library environment
- b. Fragmented and isolated services
- c. Organisational structure
- d. Library collection
- e. Information based infrastructure
- f. Information and knowledge management.

The first step towards this direction has been taken to a certain extent as the Report of the Working Group of the Planning Commission on Libraries and Informatics for the 9th Five Year Plan 1997-2002 addresses some of the challenges which confront Indian librarianship. The Challenges and Risks for Librarians and Information Specialists in the 3rd Millennium. The biggest challenge for Indian librarianship is to bring about attitudinal change among both library staff and users. Libraries and librarians are still the lowest priority in the decision making process and the librarians are the least visible persons. If this main challenge is confronted by librarians and libraries in real earnest it is only then that one can expect all the necessary changes within the system itself.

Libraries will also have to cope with the initiatives developed in the society in the changed IT environment. Libraries can no longer afford to remain institutionalized passive spectators. All the activities will now have to be tailored to give long distance and often home delivered information.

### ***Opportunities and Risks***

The new millennium will open up unprecedented opportunities for

information professionals. Employers will no longer look for the traditional career requirements but a flexible work force which can take on different roles and responsibilities as and when required. In this context the following changes are to be brought about in India:

1. Change the teaching curricula in the field of library and information science.
2. Utilize the traditional expertise and apply them effectively in the new situations by understanding the actual requirements and applying these skills.
3. Content generation to suit the new fields of study with the help of IT.
4. Play the role of information managers by utilizing the new technology to give access to the rich resources available in libraries.

Tomorrows information professionals will be knowledge navigators instead of information collectors. In the Indian situation the new generation of librarians will have to face these challenges and risks to remain in the information business in all the sectors. Inter-changeability and capabilities to adjust from one sector to the other will be the biggest challenge for Indian librarians.

### ***National Policy for the New Millennium***

To fructify all that has been stated above there is a felt need to frame a National Policy of Libraries and Information Systems and Services, suited to the new environment. The DoC had framed a National Policy on Library and Information System (NAPLIS) during the late 1980s which is a very good foundation for preparing a new policy which will encompass the futuristic viewpoints for the library sector as a whole. It has to spell out all relevant issues, challenges, threats and opportunities which are envisioned for the new millennium.

India is on the threshold of major changes which will be possible only if a worthwhile and modern information system is set up at the right time, with the help of right infrastructure and is administered by the right type of qualified people.

### **Design and Development of an Integrated University Library**

A library plays a pivotal role in ensuring the success of higher degree of research. The important activities of university libraries include the Collection Development, Reference Service circulation, Document Delivery, User Education, Access to Electronic Resources etc. University libraries are expected to provide cost effective and reliable access to information

using the state-of-the art information technology tools. Information technology has revolutionized the information handling activities in the academic libraries during the past few years.

The Information Society demands that all the relevant technologies; that are involved in information processing, consolidation, repackaging and retrieval be merged so as to evolve an integrated system; capable of providing diversified services. In this direction the automation of individual university libraries is a first step, rather a prerequisite for the development of such an integrated university library and information system. The promising trend in the development of information services with effective networking of these libraries will facilitate the optimum utilization of information resources.

Indian universities constitute one of the largest higher education systems in the world and today in our country there are more than 318 universities / institutions, 16,500 affiliated colleges, 10 million students with 5 lakhs teachers. This vast academic community needs a wide variety of information services in the changing academic environment. The electronic resources, which are available in libraries today is an outcome of the advances in both computer technologies, with powerful computers the information storage and delivery mechanisms, such as CD-ROMs and user-friendly interfaces.

In most of the academic libraries in the western countries, Online Public Access Catalogues (OPAC's) have almost replaced card catalogues, offering enhanced search capabilities for accessing the local collection and often expand coverage to include the holdings of other area or regional libraries. Many libraries also provide a web interface to their library and information system. The library and information system with a web interface often includes direct links to electronic journals, books and Internet resources.

Access to electronic journals and full-text data is another important component of an integrated library system providing access to full-text resources in an electronic library setting. The consortia models help to provide better access to scholarly literature. The access to electronic resources enable the researchers what they want, when they want it, where they want it. Full-text electronic resources offer access to resources unrestricted by either location or library hours.

### **Higher Education System**

Higher Education has undergone a radical transformation in the last few decades both in UK and the US. Education is one of the most crucial services in the economy. The quality of life of society at large and individuals

in the society largely depends upon the quality of education. Higher education institutions in the country especially the Universities have been producing the required quality manpower as per demands made in the social system. Since the dawn of independence in India, higher education system has grown enormously. It has expanded in an unprecedented manner not experienced by any other nation in the world in recent times. The advent of Information Technology products like computer and Internet have further made it possible to spread the higher education even in remote corners of the country (Kamal, 2002).

The higher education in India provides information on degree and diploma awarding universities, institutions of national importance, deemed universities, and colleges imparting general, technical and professional education. In the Indian system, higher education includes the education imparted after the 10 + 2 stage – ten years of primary and secondary education followed by two year higher secondary education. The first degree, the Bachelors degree, is obtained after three years in normal case for arts, science, commerce and four years in the case of professional degrees (four and half in case of medicine and five / six in case of law). The Master's programme is usually of two years duration. The postgraduate programmes except engineering involve 2 years of study after first degree, the M. Phil. Programme is of one-and-half year duration and is a preparatory programme for doctoral level studies. Ph. D programme is research study for 2 years, while D. Sc. and D. Litt are awarded by some universities after Ph. D for the original contributions. (Universities handbook, 2002). During the last 53 years we have very rapid expansion of Higher Education.

Over the last few years, large number of private and deemed institutions attained university status and India's higher education system has continued its growth and has reached more than 318 universities at present. Deemed-to-be-universities (also referred to as Deemed Universities) are institutions that are conferred status of a university by virtue of their long tradition of teaching or specialization and excellence in a particular area of knowledge. To cite an example Tata Institute of Social Science Mumbai, Deccan College of Post Graduate and Research Institute, Pune etc. The "Deemed to be University" status is granted by the University Grants Commission (UGC) with the approval of the Department of Education, Ministry of Human Resources Development (Educational Consultants India, Ltd. 2005).

### ***Status of Automation and Networking of Universities***

The main purpose of this research study was to understand the possible areas where the application of Information Technology (IT) is

made as a part of overall improvement in the university library services, and also to understand the pace of accepting the emerging IT particularly Internet in the university libraries. The study also focuses on implications arising out of IT applications, the strategies and future plans to formulate an integrated information system. The data is collected from various sources. The questionnaire was designed for this purpose. It is a tedious task to cover the entire set of universities all over India. Hence the study is restricted to approximately 25% of the total set of universities taking into consideration the regional, types and status of universities. However universities for the study are randomly selected and the details are given below.

A pilot study was conducted to test the suitability of the questionnaire. 16 libraries were covered for pilot study and the response received from 10(63%) libraries were analysed. Further the responses were critically viewed and certain ambiguities were resolved to draw the final questionnaire. 54 university libraries forming 81.8% of a total population covered are received. The statistical package for social science (SPSS) package was used to feed and tabulate the data. The analysis is done using the frequency distribution technique and the details are given in the following paragraphs.

**General Information:** It is an established fact that most of the Indian universities have not filled in the post of Librarian though the posts are sanctioned. The survey shows that 48(88.9%) of the libraries reveal that the libraries are headed by library science professionals and some of them are at Assistant Librarian level, where as 6 (11.1%) libraries were headed by the Library In-charge from other subjects.

**Qualification of the Librarians:** The data shows that 26(48.1%) libraries are having qualified librarian with Ph.D. in Library Science. Where as 17(31.5%) libraries have the professionals with Master's degree in library science. There are few librarians with M. Phil qualifications.

**Manpower:** The data regarding the manpower available in various universities was collected to know the strength of the competent staff to handle new information services. Since there is hardly any recruitment in number of universities the staff strength has reduced considerably. The data reveals that 22(40.7%) libraries have less than 10 qualified professionals. There are few libraries where even less than 5 staff members working to serve the users. The staff strength in 18(33.3%) university libraries ranges between 10-20. 12(22.2%) libraries have more than 20 qualified professionals. With the implementation of Information Technology the computer science professionals are recruited at various universities. The University Grants Commission-UGC, INFLIBNET supports the

appointment of Information scientist. It gives the financial assistance to recruit a person with computer science background or Library science with P G Diploma in computer applications.

**Availability of Infrastructure:** Many universities procured computer systems with Pentium – III when they received funds under Automation and networking facility of INFLIBNET and many have not been able to upgrade their computer systems due to financial limitations. However few major and small universities have upgraded the computers time to time and have latest computer systems.

**Software Used:** Generally the Softwares are used for database development and management of library house keeping operations and word processing activities. Many libraries initially started using CDS/ISIS for data creation etc. but later on they purchased library software. Few universities did not respond to this question however many universities were using SOUL software developed by INFLIBNET and equal number of universities were using commercial software *viz.*, LIBSYS, SLIM, LIBRIS, ALICE and few have developed their in-house software.

**Database Development:** Database development and maintenance are the most important activities to facilitate optimal resource sharing. Databases created by the libraries according to their requirements. However for this study data in respect of only books, serials, theses and reports are collected. The development of the databases in the libraries is not encouraging at many universities however few universities have made exceptional progress and automated all their activities. Different types of databases are created by these universities *viz.* books, serials, thesis, technical reports, standards, patents, manuscripts etc.

**Networking of Universities:** Libraries initially had network connectivity using data networks such as NICNET, VSNL, ERNET, and many other private ISPs. These universities had limitation of funds and the networking was not that effective. With the implementation of UGC-Infonet universities provided funds under UGC have received the Internet connectivity ranging from 256 Kbps to 2 Mbps depending the different criteria set up by Joint Technical Tariff Committee (JTTC) appointed by University Grants Commission. This has enabled universities across the country to have seamless access to Internet and electronic resources under UGC-Infonet E-Journals Consortium. The other universities *viz.* Technical and medical universities have also upgraded their infrastructure in terms of network connectivity and provide access to Internet and other resources.

**Future Plans of Universities:** The importance of activities and services in the libraries is based on its present services and future plans.

Few libraries already have some facilities *viz.* automation, Campus LAN, member to the network etc. However many other universities do not have these facilities and feel important in the present day context. The chart below shows the impact of different activities are found out and ranked.

### ***Need for an Integrated Information System***

Universities in India have fairly good libraries developed over the years. Due to the technological innovation, lot of changes occurred in day today activities of human being. Libraries are not an exception. Drastic cut in funding, devaluation of currency, user expectations, initiatives from government and other organizations are various reasons for libraries to embark on available information technology. These technological innovations lead to library automation, library cooperation, library networking, resource sharing, use of Internet in the libraries, electronic access to scholarly journals, access to other library catalogues through union catalogues etc.

Most of the libraries have traditionally tried to own resources as much as possible, because owning an item provides faster access to patrons than waiting to borrow or purchase on demand. However the increased cost of maintaining a collection of primary sources and the increased demand for information has resulted in a shift of emphasis from that of ownership to access.

In the present situation, as the academic libraries in India have been largely affected by financial constraints in which resource acquisition has been restricted. Most university libraries are ill-equipped to satisfy user needs within their resources with exponential rise in information.

Libraries are unable to continue subscription to many publications due to price escalation and high foreign exchange rates. At the same time there is a conscious duplication of costly library holdings in the absence of convenient sharing mechanism. Scholars in remote areas feel mentally isolated. It is also impossible to fund all libraries to make them self-sufficient to meet the resource requirement are some of the challenges facing the academic libraries. The need for establishing an integrated university library and information system is viewed in terms of the following points:

1. Establishment of Integrated system facilitates the enhancement of existing library facilities and also increase accessibility to all other citizens to library resources and services.
2. Can provide training to the library staff who does not currently possess the skills in the use of new information technologies by

organizing well-designed training programmes with mechanisms for follow-up technical assistance and support.

3. Promote collaboration and cooperation among libraries for sharing of holdings and technical ability to maximize scarce resources. Limited holdings, financial capacity, and human resources are major barriers to improving library services.
4. Develop recommended standards and guidelines for library services.
5. Increase access to electronic information sources..
6. The cooperative activities are centralized, and they obtain remarkable results in training, the improvement of library Inter-lending, and in publishing a CD-ROM of bibliographical records from participant libraries for effective use.
7. Cooperation is a way to accelerate the evolution of libraries, and to create new services, to facilitate changes, and to save expenses. The library networks are developed to connect libraries, which ensure the development of union catalogue with locations.
8. In the era of the Internet, electronic documents, and the virtual library, maintaining independent libraries is out of order. In addition, the efforts needed to face the challenges of the information society and the changes that society is demanding of universities are destined to become weaknesses more than strengths in those institutions that face them individually. There are many reasons why it is advisable for libraries to approach these challenges collaboratively.
9. The huge technological opportunities to share information.
10. The high cost of the e-journals.
11. Growing demands of library users.
12. The ultimate goal of cooperation is to join users and the documents with information they need.
13. Consortia represent the possibility to test alternatives to the traditional automated library. They represent the potential to offer the best library services to a wider number of users with all the resources they possess.
14. The successful operation of a library consortium clearly depends on good working relationships among members and between members and the consortium.
15. One of the significant challenges facing academic libraries during times of dynamic change is the ability to understand the needs and perspectives of their users.

### **Components of an Integrated Library and Information System**

Libraries are changing. The old concept of library as a store house of knowledge are giving way to concepts based on development of 'Intermediary' roles in hybrid environment in which the resources are either traditional or in electronic formats.

Librarians will need to be very clear about the purposes that their libraries serve, and will need to re-design the range of services they offer with those purposes in mind. All academic libraries virtually depend on the IT systems for their basic operations such as acquisitions, cataloguing, circulation, serials control etc.

The development of IT based systems by organizations with which the libraries deal and within the institution it self has meant that much closer attention has to be paid to the integration of the library's system with others. The functions that are required to provide effective delivery of information requirements need to be integrated. The integrated university library and information system can provide one-stop information services using the state of the art information technology tools. The system designed to serve as integrated university library and information system is expected to cover all the aspects required so that the integrated system can support technologies such as Internet, electronic publications etc. to provide integrated services.

In the context of new millennium, a university's position should be advanced as a leader among the colleges and universities in using the information technology and library services in providing an enriched learning environment.

There is a desperate need for a university to make information technology and library services a pervasive and transparent part of the lives of students, faculty and staff. (William Patterson, 2001) The information resources are pervasive when they are available to every one. Those resources are transparent when information, applications and services are available without any delay or limitation of hardware/ software etc. Users must experience information resources as seamlessly integrated into their activities. The integrated university library and information system can provide pervasive access to information resources; to have a greater return with the use of computer and communication tools to return meaningful results for the benefit of research and academic community. This model has to be developed with the following few objectives:

***Automate All Functions and Maintain Comprehensive Automated Library System:*** The library system will maintain an

automated library system which supports the internal automation of acquisitions with online ordering; serials control with online claiming; cataloguing with authority control and bibliographic utility interface; circulation with off-line backup, patron telephone and e-mail notification, and telephone renewal; and patron access catalogue etc. Campus networking for connecting all the departments with library and Maintain LAN/Campus LAN / and a wide area network.

Remote sites need to be connected to the central site for access not only to the automated library system, but also to other electronic sources such as a CD-ROM server, an Internet server, an image server, and possible other servers.

Because of the bandwidth needs will constantly be changing, a highly scalable technology is required. The WAN will incorporate a LAN in each library facility. Each will utilize Category 5 UTP (unshielded twisted pair) cabling. The topology will be Ethernet. Routers will connect the LANs to the central site via the WAN. Maintain contracts with two Internet Service Providers and regularly evaluate performance.

***Contracts can be Maintained with Two Internet Service Providers (ISPs) for Staff and Patron Access to the Internet:*** The reason for contracting with two ISPs is that it will make it possible to connect no more than half the staff and patrons to any single ISP-something, which is necessary because the service inevitably deteriorates due to the ever-increasing number of users which can outstrip the ISP's capacity. The library will monitor performance not only by soliciting patron feedback, but also by having public service staff log on during known peak periods of activity. The ISP must offer the library rates, which are lower than those extended to individuals.

***Seek to Conform to All Relevant Standards:*** Conformity to all relevant standards is a high priority. All cataloguing will conform to the Anglo-American Cataloguing Code, Second Edition (AACR-2). The database of the automated library system will be developed and maintained in full-MARC format, including bibliographic, authority, holdings, and patron records. UNICODE compliance to be sought to facilitate multilingual user interfaces.

***Create all Library Records in Machine Readable form Using Standards:*** Creation of library database is one of the prerequisites for success of automated systems. Using the relevant standards such as MARC 21 and AACR2 formats the library records are to be created and provide access to library resources. The records so created using the set standards will facilitate easy exchange of records from one library to other

library at local, regional, national and international level sharing of resources.

Provide online public catalogue access to within & to campus users and provide access to other library catalogues The access to library catalogue and its resources is done through the user friendly online public access catalogue within the campus or to the outside users.

This facility ensure that the users gets an access to information such as the holdings of different type of material in the library of their interest and its availability, shows the status of an item, facilitates the reservation etc. The OPAC will also provide access to information relating to due items with due date etc.

OPAC user can also see the status of receipt of latest issues of a scholarly journal in the library. The access to other library catalogue is equally important when the item required by the user is not within the campus or library, he/she may try to access the availability of such items in the nearby libraries where from one can borrow for a limited period using the inter library loan etc.

***Provide one or More “Electronic Access Centres” in each Library:*** The electronic access Centres play an important role in the university system as the end users expect the central library to provide such facility even at nominal cost.

The library will provide one or more “electronic access centres”—clusters of PCs which provide access to a variety of electronic publications. The resources accessible through such centres will complement the library’s print collection, rather than replacing it. While the most widely consulted electronic publications today are indexes and abstracts, an increasing number of reference publications and full-text/image files of journal articles are becoming available. Each electronic access centre may be configured to also support multimedia access.

***Maintain a Web site of its Own:*** Rather than limiting what is available to remote patrons to the patron access catalogue, the library will maintain a Web site of its own and links to its automated library system, products on its CD-ROM server. The Web server will be configured with a “proxy server” firewall so that those accessing the libraries’ automated library system or other servers will not have direct access, but will interact with the firewall, and it in turn will interact with the target system.

***Negotiate for Online Reference Services:*** The library cannot afford to purchase all electronic publications, which may be of interest to its

patrons, nor would it want to purchase those not used frequently enough to justify the subscription price. The library will continue to provide access to full text electronic journals, which is less expensive compare to the print archives. The availability of UGC-Infonet Facility is boon for universities.

Provide Document Delivery Service including electronic document delivery Providing document supply and full-text access to online databases plays significant role in the shift from “ownership” to “access”. The escalating costs of science and technology journals, budgetary constraints, and availability of science and technology literature via non-traditional sources, such as commercial document supply and full-text online databases, are reshaping academic libraries’ science and technology collections, as well as the modes of accessing and delivering scientific information. (Bandyopadhyay, 1999)

ARIEL is a high-speed, high-quality, cost-effective document delivery system that runs on the Internet. Journal articles can be sent from one place to another by scanning the article directly from the journal. Text and graphics are digested into the computer, transmitted over the Internet, and printed on a laser printer at the receiving end. Provide access to academic information *viz.*

admission procedure, examination system, evaluation, scholarships, etc. The university library and information system works as model for access to information including the administrative matters etc. The end user should be able to find out the details of the admission procedures in the university system with criteria for selection of students, number of seats in each subject, online application, online results, scholarship details, hostel facilities etc.

Though these databases are individually maintained at different places in the university, the integrated system is expected to provide access to such information and updated time to time.

Upgrade skills of the staff by training and orientation time to time on implementation of latest IT tools. Staff must be trained to handle their new responsibilities. As systems become more complex, staff training increases in importance. Training can be limited to small groups to provide both hands-on experience and close monitoring by the trainer. This core group will then train others in the library.

**Designate a Full-time Systems Manager:** The library will designate a full-time system manager who has responsibility for acting as liaison between the staff and the vendor. Appointment of the system manager

ideally occurs before the vendor is selected. The person selected as system manager need not be knowledgeable about electronic data processing but should understand the functions of all of the library's departments and have good interpersonal skills. The system manager will have to reconcile the library's needs with the capabilities of the vendor, coordinate standards development, implement new system features, oversee vendor compliance with the contract, etc.

***Phase in Implementation over a Period:*** The components of the plan can be implemented over a period of time. Reasonable amount of time is required not only for financial reasons, but also because library staff cannot be expected to do everything at once. It also is not practical to develop a plan, which looks further into the future because the rate of change is too rapid. The plan has to be updated each year and a detailed schedule of activities may be drafted. It will include updated specifications and cost figures.

Libraries are changing. The old concept of library as a store house of knowledge are giving way to concepts based on development of 'Intermediary' roles in hybrid environment in which the resources are either traditional or in electronic formats. Librarians will need to be very clear about the purposes that their libraries serve, and will need to re-design the range of services they offer with those purposes in mind. Libraries exist to serve their users, but the user population is increasingly heterogeneous. All academic libraries virtually depend on the IT systems for their basic operations such as acquisitions, cataloguing, circulation, serials control etc.

The functions that are required to provide effective delivery of information requirements need to be integrated. The integrated university library and information system can provide one-stop information services using the state of the art information technology tools. The system designed to serve as integrated university library and information system is expected to cover all the aspects required so that the integrated system can support technologies such as Internet, electronic publications etc. to provide integrated services.

The vast information sources which the library gives access to are not only the item held by or owned by the library but also given access to remote information sources and handling the resultant requirements to authenticate and authorize users. These are the key challenges for the modern academic librarian. (Wendi, Arant, 2001) In the context of new millennium, a university's position should be advanced as a leader among the colleges and universities in using the information technology and

library services in providing an enriched learning environment. There is a desperate need for a university to make information technology and library services a pervasive and transparent part of the lives of students, faculty and staff. (William Patterson, 2001)

Academic libraries in India have long desired one-stop shopping for their customers and in this electronic age their customers are demanding it to search from a single point at any physical location, and retrieve information from the library catalogue, citations from journal indexes and full text information from electronic resources. University libraries must provide reliable, cost efficient access to information whether print or multimedia and whether held locally or remotely.

The need to provide information services that remove the barriers of distance and time become even more important. In earlier times libraries have always acquired and organized material so that the information is accessible more easily. Libraries are an integral part of the academic mission of a university. Libraries can enhance a university's reputation by providing access to World class information resources and services and can stimulate research by promoting collections and services widely.

### **General Library Rules and Code of Conduct**

1. To become a member, an applicant must fill out the registration form and submit it through proper channel to the University Librarian.
2. The Library is primarily for the use of students, faculty, officers, non-teaching employees and technical staff of the University.
3. Teachers of affiliated colleges of NEHU can also become members under "Other Categories" subject to fulfilment of enrolment procedure.
4. On special request, Students, Research Scholars and Faculty of other Universities/Institutions can also avail the Library facilities for a shorter period for academic purposes with written permission of the University Librarian. An endorsement from the concerned Head of Institution/Department or Supervisor on letterhead will be acceptable.
5. The privilege of borrowing books from the Library is restricted to registered library members only.
6. Research scholars from other universities/institutes can avail the Library facilities with the approval of the University Librarian.

Such temporary membership is for consultation, reference, and photocopying services only.

7. A fine of Rs. 2.00 per day will be collected for a general book kept beyond the due date. A fine of Rs.5/-per day will be realised for a Course Book kept beyond the due date.
8. Loose issues and bound volumes of periodicals are not for issue.
9. A book will only be issued to a Library member against production of Library Passbook/Borrower's Card(s) issued by the Library.
10. The Borrower's Cards of Students/Research Scholars will remain valid for the period mentioned on the Borrower's Cards and must be renewed in time.
11. The University Librarian reserves the right to recall any book from any Library member at any time.
12. The loan period may be shortened by the University Librarian if the books are on special demand.
13. A book borrowed from the Library may be renewed for a further period provided no other reader has reserved the same.
14. Library members are responsible for the safe custody of the Library Passbooks/Borrower's Cards issued to them.
15. Tampering with the entries/records on the Library Passbooks/Borrower's Cards can render library membership liable to suspension.
16. Library members must not cause any disturbance or engage in any behaviour which interferes with Library activities. Proscribed behaviour includes (but is not limited to) verbal abuse, threats of violence, sexual harassment, or use of aggressive words to harass any person.
17. Library members must not carry lethal weapons or other potentially dangerous items inside the Library.
18. Stern action will be initiated against Library members found vandalizing or defacing the Library building, furniture or equipment.
19. Loss of Library Passbook/Borrower's Card(s) should be reported to the Circulation Section and Course-Books Section immediately.
20. Duplicate Library Passbook/Borrower's Cards will be issued after one week from the date of application on payment of Rs. 25/-.
21. Members shall be held responsible for any loss which the Library may suffer through the loss or misuse of their Library Passbooks/Borrower's Card(s).

22. In case of loss of a book by the borrower he/she shall either replace the book or bear its cost. If the book is out of print, it may be replaced with a bound photocopy as per library specifications. If the book of a multi volume set is damaged or lost the member concerned shall be liable to replace the whole set or pay four times the cost of the same.
23. Library Passbooks/Borrower's Cards are not transferable.
24. Library members must not remove or attempt to take library materials, equipment or property without proper checkout or other official Library authorization.
25. Library members must not conceal library materials in the Library for the exclusive use of an individual or group.
26. Library members must not mutilate library materials by marking, underlining, removing pages or portions of pages, removing binding or in any other way damage or deface library materials.
27. Library members must not enter unauthorized areas of the Library, remain in the Library after closing or refuse to leave the Library when requested to leave during emergency situations.
28. Library members shall be required to pay the penalty imposed upon them by the University Librarian for any damage caused by them to the books or any other property belonging to the Library.
29. Any damage or missing pages detected in a book must be reported to the staff before borrowing the same, failing which the borrower shall be held responsible for the damage/mutilation.
30. Members leaving the library should stop at the exit so that the books borrowed or materials taken out of the library by them may be checked by the Library Gate-Keepers/Security Staff.
31. Upon any infringement of the library rules members shall forfeit the privileges of admission to and membership of the library.
32. The University Librarian reserves the right to suspend the membership of any member found misbehaving, abusing the library staff or disrupting the peaceful Library atmosphere.
33. The Library membership of any member found tearing pages or caught while attempting to steal books will be suspended forthwith from using the library facilities and further disciplinary action will be initiated by the University.
34. Members are instructed not to bring casual visitors/friends or outsiders for using the library facilities without the prior permission of the University Librarian.

### **Guidelines for Internet Services**

1. Internet facility is restricted to the registered members of the NEHU Library only. No outsiders are allowed to use this facility. Prior permission of the University Librarian must be obtained by visitors or research scholars from other institutions availing consultation facilities.
2. Library members who need to use the Internet services must produce valid proof of identity.
3. Library members must record their names and other details in the Users' Register before and after using the Internet services. Maximum time allowed per session of browsing is 1 hour under normal accessibility conditions.
4. Library members must make use of the Internet facility only to support their academic and research activities.
5. Library members are requested to help in identifying the unauthorized users since the Library's Internet facility is only for registered library members.
6. Library members are requested to bring to the notice of the University Librarian any misuse of the computer systems.
7. Library members must not intentionally read other users' computer screens, unless invited to do so, as such inappropriate behaviour amounts to breach of privacy.
8. Library members must not monopolize the computer resources, *i.e.*, using more than one computer at a time or spending an inordinate amount of time on a computer. When other library members are waiting, Internet service users are expected to observe the posted time limit.
9. Library members must not install any software not specifically approved by the Library. Word-processing and other application software considered indispensable for academic activities are preloaded on all the computers in the Cyber Room.
10. Library members must not attempt to bypass system restrictions or tamper with system files or applications. Unauthorized access to system files and/or attempting to disrupt the integrity of the system(s) tantamount to violation of Library Rules and Regulations.
11. Library members found transmitting, disseminating, printing or downloading sexually explicit images or sound recordings will be deemed to voluntarily invoke suspension of their library membership.

12. Library members behaving in an abusive or harassing manner in the use of the Internet facilities provided by the Library will not be allowed further use of the Internet services.
13. Library members must not indulge in unauthorized copying of copyright-protected materials. Library members are expected to observe relevant copyright laws and regulations.
14. Library members must not deliberately waste or overload the computer resources.
15. Stern action will be taken against Library members maliciously accessing, altering, deleting, damaging or destroying any computer system, network computer programme or data.



## Management, Information and Development

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### On the Librarianship of Poverty

This chapter attempts to outline the main characteristics of Librarianship under the conditions of *poverty*. To the best of my knowledge and conviction, this is the base on which any meaningful discussion of Information Work in underdeveloped countries should be firmly anchored. The goal of my paper is to set up and elaborate on four principles that, in my view, determine the social relevance of Information Work in developing countries. This is a personal testament, and I hasten to add that the views expressed hereafter do not necessarily represent the official position of my employers-the Tanzania Library Service. Similarly, criticism is not directed at any particular institution or person. Should it appear so, I offer my sincere apologies. If their work is to be relevant to society, Information Workers must formulate terms of reference that are consistent with the needs of underdeveloped societies. At the moment, it seems to me that such terms of reference are largely nonexistent, and where they do exist they are vague and frequently irrelevant. Given below are the principles that I believe can help in formulating the appropriate terms of reference (and justify the sweeping statements above).

The principles, which are not mutually exclusive, are:

1. That the chief factor determining Information work in developing countries should be poverty rather than affluence.
2. That Information work in developing countries differs markedly from Information work in developed countries.
3. That it is possible to gather a body of knowledge on how best to meet this challenge.

4. That Information workers must play an active role in the process of socioeconomic development.

### **Information Work and Poverty**

In Stating that Information work in underdeveloped countries should be based on poverty, I am saying something that could well be embarrassingly self-evident. The division of the world into a rich North, and a poor South, is not only reflected in different levels of income, and the sharp difference in most things that make life bearable, but it divides the provision of Information with equal clarity.

In underdeveloped countries the common man is poor, illiterate and concerned with the basics of survival; more than four-fifths of his income is spent on food alone. He is hungry, undernourished, and diseases such as malaria, sleeping sickness, and cholera are his constant companions. Children suffer more than adults; kwashiakor and parasitic diseases claim many of their lives before they reach the age of ten. Only about 40% of the children complete primary school.

More than 90% of the people live in rural areas where transport and communication are very difficult. Within the urban areas, outside the enclaves inhabited by the elite, the majority of people live in slums, the so-called, "Shanty towns". The dwellings are overcrowded, and the level of housing is hopeless by any standards, human or otherwise.

Under-employment and unemployment is widespread, and it is not National Income that grows steadily year by year, but human deprivation and suffering. Another growth area concerns the birth rate, at 3% per year it is the "best" in the world.

This anatomy of poverty and social reality must surely determine the nature, objectives and philosophy of Librarianship in underdeveloped countries. Poverty dictates, for example, the pattern of Information services where the amount of money available per head is less than 1 shilling (10 pence). Such poverty is responsible for a lack of trained staff, a weak publishing industry, and half-empty shelves-in short this is a distinct and different world, one ruled by poverty, ignorance and disease. The factors outlined above are a formidable challenge to the Information Worker in underdeveloped countries and give *Information Work* a very different quality.

At this point there are three questions that need to be asked; what fundamental knowledge and skills does an Information worker need to work efficiently in such a situation? How can this knowledge be applied to the maximum benefit of the underdeveloped society? Is it possible to

gather a body of knowledge on how best to meet this challenge? I cannot pretend to have ready-made answers. Obviously, a considerable amount of interdisciplinary research to these questions is needed to provide the answers required. However, a number of observations can be made.

Conferences and journals such as the present one, create in my view, the right environment in which strategies can be developed for best meeting these problems and assembling the required knowledge and skills of optimum use to Information workers in developing countries.

A body of knowledge to meet such challenges: My firm belief that it is quite possible to gather together a body of knowledge on how this challenge is best met was stated implicitly above. Such a task requires, primarily, a particular attitude of mind, and secondarily, a suitable methodology that will give the desired results.

The attitude required is one of open-mindedness and objectivity. We must be prepared to subject every aspect of Librarianship to vigorous criticism and evaluation because, like it or not, we have to start from the known before moving on to the unknown. Through this selective adaptation, it is possible to produce a considerable body of knowledge suitable for the needs of underdeveloped countries. The rest of the knowledge needed will, however, have to be derived from the existing situation and unique problems.

This will be a classic case of theories evolving from practice, rather than of theories being borrowed from abroad and applied misguidedly in a very different context. I dare to suggest that it is possible to produce a distinct body of knowledge suited to the needs of underdeveloped countries using these two methods.

At first, such knowledge will lack form; clearly defined limits and the harmony between one area and another may not always be apparent. Its strong potential will, however, lie in the fact that it is theoretical knowledge that has developed out of existing social problems. It will not be knowledge imported wholesale that is abstract and frequently irrelevant. Such knowledge could well be closer to sociology and the economics of underdevelopment than to traditional librarianship, as understood and practiced in the majority of underdeveloped countries today.

The critical part of this exercise is establishing what is relevant to a particular situation at a particular moment. It is this situational relevance that will shape the new theory of the Librarianship of poverty. Using this approach it could be possible to develop a theoretical framework regarding the following fields:

1. The pattern of Information services.
2. The role of information workers.

3. Existing social factors and their implications for Information workers.
4. Relationship between information work and socioeconomic development.

Before proceeding to explore these four fields, I feel it should be emphasized that our colleagues the Economists, sociologists, political scientists and educators have done much work aimed at developing a theoretical base for their professions that is relevant to underdeveloped countries. With careful interdisciplinary comparative studies, we could learn a lot that would be of great value in this undertaking-if only we could for a moment think beyond our hallowed DDC's, Sears Lists, and cataloguing rules.

### ***The Pattern of Information Services must Reflect the Resources of the Country***

This statement may be thought to be self-evident if it is realised that Information infrastructure depends on an economic base for financial support. In practice, however, most "planners" of Information units are not free of preconceived notions imported from the developed countries in which they did their training. The standards suggested for libraries in underdeveloped areas are often faithfully copied from British, American or Australian handbooks.

I suggest that an objective attitude may force it upon us that a fresh set of standards more closely related to the actual situation is needed. A start must be made from the basic position that the limited resources must be stretched to provide maximum social benefit. However, social benefit is a concept not easy to measure. It is very easy to confuse means with ends. Very often we take pride in giving "Statistics" covering library buildings constructed within the past five years, the number of motor vehicles purchased, and the librarians and technicians sent for training. This emphasis is sadly misplaced. It is like a motor-car manufacturer who tries to maximise not his output of cars but the number of his workers and the size of his factory.

Given a sum of money, say four million shillings (£ 200,000), we should be able to find out which alternative programme of expenditure would be of greatest benefit. *Using costbenefit, and cost-effectiveness methods, we could establish the cheapest path to our goal. We could focus on the end product rather than the means.*

These conditions of poverty mean that the need to make the most of limited resources in the provision of Information services is a basic strategy.

The construction of libraries, the training of *e.g.*, librarians, and the purchase of motor-vehicles are merely means to an end—they are not the goal of an Information unit in itself. The key question is: how many more people can we serve as a result of a certain item of expenditure?

Considering the majority of information units, we find that the wage bill is around 60% and the capital costs are very high. These two items of expenditure have hampered considerably the development of Information services in most underdeveloped countries. The ridiculous situation where there are cataloguers who are without incoming documents is all too common.

High capital expenditure is the outcome of trying to construct premises modelled on those existing in Europe and North America. The buildings are splendid, but because resources are severely limited, it means that only one or two of these imposing monuments can be erected in a decade. The process of spreading an Information Infrastructure throughout a country is considerably delayed by the adoption of this expensive policy. If we use cost-benefit methods, we may yet discover that it is the cheap, small, well-maintained buildings made of inexpensive building materials that are an important key to the faster growth of our Information services.

All this leads to the conclusion that the *standards of Information services must be tailored to the economic ability of a country*. If the pattern of Information services is pushed ahead of general economic development, standards will be set that can only be maintained in small pockets of the country. The lucky few may have a very good service, but most people will have no service at all, or a service that is inadequate and at prohibitive distances.

The planning of Information services in developing countries needs to be deliberately related to a particular time and place. The temptation to upgrade standards, complexity, and sophistication before extending coverage needs to be checked, for this “keeping up with the Jones” results in prestige programmes that do little to extend the coverage of Information services while absorbing large sums of money and pools of skill.

There is yet another reason why plans having a low capital output ratio are to be preferred. Most developing countries have a constantly fluctuating economy because this depends on the export of a few main crops or products—so that as world prices fluctuate the economy alternates from slump to boom and back again in bewildering succession. Government revenues that depend on such earnings reflect these cycles—expensive plans initiated during boom periods act as a painful drain on funds during periods of slump.

### **The Role of Information Workers**

Most of the staff holding senior positions in underdeveloped countries have been trained on a background of Information work as practiced in industrialised countries. Not unexpectedly, the prevailing attitude is that this is the way in which users should behave, and the way in which Information services operate. My belief, already stated, is that this is an erroneous view of things because the lavish standards of service that exist in a typical developed country are impossible to maintain in a poor country, unless the objective is to provide an Information service for the fortunate few rather than the majority of mankind in developing societies.

Indeed, this does, sadly, appear to be the unstated objective of many an Information service in developing countries. After more than 15 years of existence, and expenditure of millions of shillings, many public Library systems have not yet succeeded in serving more than 1% of the population of their areas.

In most underdeveloped countries, the number of documents per head is low, the average sum spent annually per head of the population is low, and trained staff per head of population is low. Despite these facts, a few favoured areas enjoy a standard of service shaped to European standards. If it took 15 years to reach 1% of the population, how long will it take to reach the remaining 99%? Will it take  $99 \times 15$  years to serve the whole population? If the present trend continues, I am afraid this could be the case. We could unwittingly provide a service such as that characterised by Bill (1962):

*“-a service supposedly for all, used by only a smallish minority, and found wanting by most.”*

In the area of manpower planning, care must be taken that the staff required are produced in sufficient quantities to keep pace with the development of the service. Because of the scarcity of resources, greater emphasis may have to be placed on technicians rather than on librarians.

In underdeveloped countries technicians play a different and more important role because of the shortage of librarians, and this situation will continue for the coming decade. The work done by technicians includes tasks such as cataloguing, indexing, readers' advisory work, bibliographic and literature searches-this is work of a more skilled nature than that done by their counterparts in developed countries-because there is no one else to do it.

The shortage of staff can be alleviated if all trained staff are made aware of their obligation to train those working under them. This approach will ensure a snowball effect, because the trained staff will themselves

carry out training activities in their own Information units. The scarcity of everything would seem to indicate that cooperation between Information units should result in economising on resources and overall benefits. Yet, as found in most underdeveloped countries, it is one thing to agree on the importance of cooperation, but a very different thing to practice it. There are some psychological barriers to cooperation that need to be overcome if libraries are to co-operate in our countries.

As already pointed out above, underdeveloped countries have very limited job and career opportunities. Attempts at initiating cooperative ventures are regarded with suspicion because the individuals concerned regard each other as potential rivals. Those with similar qualifications, working in the same field, regard anything achieved by someone else as a threat to their own position in this imaginary but fierce struggle for survival. It is very rare indeed to come across anyone prepared to subordinate his own interests to some broader social goal.

Furthermore, an exchange of fruitful ideas is sometimes very difficult because a senior person will not risk a loss of face by being seen to act on the advice or recommendation of anyone else—especially a junior—as this would seem to indicate that he acknowledges the superiority of someone else.

The conspicuous absence of union catalogues, union lists of serials and centralized cataloguing schemes, more than testifies to this psychological problem. Unless information workers come to realise that it is only by working as a group rather than against one another, that they can achieve their objectives and demonstrate to society what they are capable of doing—continued isolation and “one-up-manship” is a source of weakness and leads to overall ineffectiveness.

### ***The Existing Social Factors and their Implications for Information Workers***

A number of existing social factors—lack of resources, plans based on Washington and London Standards, and psychological insecurity of information workers making cooperation impossible, etc.—were considered in the previous sections of this paper. A further area not yet explored is education and the contradictory attitude of society towards this subject.

It has been pointed out by many a good writer that education is the main correlate of reading and library use, hence the greater the level of education, the greater the likelihood for utilising Library services. However, seen in the light of the experience of underdeveloped countries, this generalisation is not always true. The decisive factor, is not just “education” alone; the *kind* of education that a person receives also determines the

likelihood of his continued use of Libraries and information services in the community. To a very large extent, formal education in underdeveloped societies is dominated by cultural attitudes towards authority-be it parental, religious or political. The readily accepted attitude is to obey these sources of authority without question. The classroom is a microcosm of the larger society outside; education is largely an unquestioning acceptance of the teaching authority. Books and any reading matter play only a very minor part in the process. Lecture notes and a single textbook can see a student through his academic career. There is very little opportunity for innovation, experimentation, and objective analysis-even at university level.

It is quite plain that every aspect of our education system tends to discourage the formation of wide reading habits. Out of class, reading tasks are seldom assigned, or assigned as a mere formality. Should a student be bold enough to read widely and formulate his own ideas, or ideas in conflict with his class lectures, then he may well fail his examinations.

This narrow-mindedness is considerably reinforced by the examination system in most underdeveloped countries. Because of the limited opportunities available in secondary and high education, the purpose of examinations has now become not a test of a student's mastery of his subject, but primarily to serve as an obstacle to reduce drastically the number of those who go on to higher studies.

Having surmounted this hurdle, through fair means or foul, this tiny group assume the mental attitude of an elite-that they possess particular natural qualifications that are lacking in others. This pseudo-intellectual arrogance has often been articulated by the statement; "After graduation, the only thing I will ever read is the sports page of the daily newspapers".

This specific educational context has resulted in library services in underdeveloped countries having very limited demands-most of the stock is left permanently idle on the shelves to collect dust and mould. The social pressure to expand library services is minimal-to the majority libraries have very little social relevance. Not unexpectedly, the role of library services is still a limited one, and the status of this profession comparatively low.

Many librarians and government officials have failed to discern these underlying factors. Attempts to solve the problems have included the hiring of experts to advise on how to start information units and systems; the formulation of standards copied from Western countries, or requested for foreign aid. To date, most such efforts have not lived up to expectations. The foreign nationals leave the country and their model libraries speedily

deteriorate to their former shambles, their textbook reports being filed away out of sight.

The standards formulated fail to elicit any action other than temporary curiosity. Foreign aid continues to pour dollars, pounds kroner and Deutsche marks into the country. The slight impact that this aid has had proves that it is only of secondary importance in the development of Information services; money alone does not create an Information system that involves readers, premises, documents and staff. What is of primary importance for such services is local desire and initiative. Foreign aid can help but will never be decisive in the development of Information services in underdeveloped countries. In fact, its periodic availability may deceive planners into indulging in expensive plans left half finished when such aid comes to an end; or acquiring expensive gadgets for which no spare parts or software are forthcoming when the donors leave.

### ***Relationship between Information Work and Socioeconomic Development***

Socioeconomic development concerns every organisation in underdeveloped societies. Information units cannot continue to isolate themselves from this social struggle aimed at giving people a better life. Every worker in an Information unit must study this historical process so as to determine what is expected of him. Anyone who shirks this task risks redundancy because, in the distribution of scarce resources, only those who can demonstrate that they are capable of producing a favourable cost-benefit balance will deserve the funds required. We have no right to expect anything else.

I suggest that having the right attitude is the most important factor in determining how actively Information Services will be involved in this struggle for survival. There is a need to be seen to provide Information geared to development in the fields of agriculture, industry, commerce, education and health. Unfortunately, the majority of Information workers in underdeveloped societies are timid in their approach and have a very limited vision of activities and ways in which Information services can participate in this social struggle.

I strongly believe, that an Information worker devoted to national development, having a sense of mission and being committed to this social struggle, and understanding the importance and urgency of modernisation is likely to play an active and fully involved role. It is perhaps quite plain, too, that an Information Worker conditioned to view his job from European standards may come to consider his environment as backward and hopeless, and become a disillusioned misfit. On the other hand, an Information

Worker who treats his environment as a positive challenge to be met and finally altered for the better, can become an involved agent of change.

It is only through such involvement in the struggle against the social enemies of poverty, ignorance, and diseases that the relevance of Information services can be firmly established. It takes hard thinking, hard work and patience.

This chapter attempts to examine how Information services can be developed under conditions of poverty. Information workers must formulate terms of reference for their work consistent with the needs of underdeveloped countries. As this work has to be carried out under conditions of extreme poverty-scant resources must be stretched to provide maximum benefit. Means must not be confused with ends: buildings, motor vehicles, and wages are not the objective, hence expenditure on these items can only be justified if it results in an increased number of users.

In order to develop a body of knowledge on how best to meet these challenges, an open-minded and objective attitude is needed. The methods that can be used to gather this body of knowledge include adaptation and experimentation relating to practical problems. The scarcity of resources must be reflected by: the pattern of Information services; the role of Information Workers; the way that Information Services are adapted to the locality concerned and the active participation of Information Workers in national development.

The pattern of Information services must reflect the economic ability of the country concerned rather than follow standards copied blindly from developed countries. The cost-benefit concept is vital in ensuring the optimum use of scant resources and that the cheapest alternative is followed. The pattern of Information services needs to be approached from the bottom upwards rather than from the top downwards. Small, cheap units, located close to where people actually live must come before large, sophisticated libraries.

Information workers need to develop an aggressive attitude and to participate fully in the social struggle for national development. There is also a need for cooperation in order to economise on scant resources. To achieve this, the present psychological problems must be rationalised and overcome. These are the result of the limited career opportunities available that lead people to regard others as rivals, and consider the accomplishments of others as a threat to their own positions. Another problem is a retrogressive education system that depends wholly on the teaching authority, and on a single text-book. Such a system does not lead to the formation of wide reading habits.

The conclusion is that Information Workers must look for solutions to their problems within their own societies rather than depending on foreign aid.

### **Infrastructure for the Development of an Information Policy**

The developing countries are lagging behind in the establishment of national information systems because they lack the necessary infrastructures. Some countries, however-Brazil and Mexico, among others-are already making efforts to overcome this problem. A plan for the development of an information policy may prove to be of considerable importance here. It serves to channel general efforts towards priority sectors and also becomes an instrument for the integration of information units so as to make them more effective and functional in the future.

The situation prevailing in a given country is described by means of indicators whose preparation enables conclusions to be drawn concerning the transformations that must be made if the deadlock is to be broken and attainable development levels reached.

This strategy must be geared to relatively precise goals, and, more especially, goals that are capable of being achieved.

There is a better chance of attaining such targets with proper planning and monitoring, and this is an approach that has accordingly been adopted by the authorities in recent years.

The process of integration of the developing countries should be focused on the enhanced use of knowledge for the production of goods and services; this means that a more pragmatic approach should be adopted in appraising the course of scientific and technological development in these countries.

All of this involves a reordering of the different factors involved in the processes of creating, disseminating and using knowledge, and they should be evaluated on the basis of their contribution to technical changes in the production sector.

It is here that technical information emerges as an essential input of the innovatory process. Information constitutes a body of conceptual knowledge or data which may be transmitted and/or utilized. The search for information, its processing, and its application constitute a type of assistance which is offered to the user.

But this is frequently not sufficient, especially when technological problems have to be identified and overcome. Supporting services accordingly come into play in order to cover the stages of the design, launching and implementation of projects.

**Information Policy**

Information activities-as prerequisites for research-are essential in decision-making relating to science and technology policy and development. The transfer of information may stop certain bodies from keeping to their own narrow spheres; it may prevent the erroneous interpretation of research findings and their use in strengthening specific, elitist, technocratic positions.

The growing importance of information, in conjunction with technical assistance, constitutes an important change as a new ingredient in production; whatever divergencies there may be in economic forecasts for the coming years, the common denominator to be found in all is the fact that the service industries will probably show the highest growth rates.

Since it is the service industries, of all the economic sectors, which depend to the greatest extent on the transfer of information, it is to be hoped that there will be a parallel expansion in information as well as in the advisory services of specialists in the various branches of knowledge.

Ultimately all organizations seek gain; information services and technical assistance represent a form of investment and whoever is responsible for them is entitled to expect something in return.

The value of information and its growing cost are recognized and a market is being developed for this new consumer article with subscriptions for different types of services. Automatic communication with any part of the world is a reality today and its use is being rapidly extended. It is only a question of time and planning for these facilities to be included among the economic possibilities of information systems.

Information in conjunction with technical assistance, constitutes the basis for the progress of society, and many countries have, for this reason, studied the need for the more systematic planning of their present information infrastructures so as to enable them to make full use of the resources built up at the national level and to participate in the world information systems which exist already or which may come into being in the future.

It may be deduced from the above that planning is essential in all human activities and that information policy is no exception to this rule.

In every historical period, priority is assigned to the attainment of a certain order of things and the planning of information policies should therefore be flexible.

Planning means forecasting. In planning information policy, the form in which knowledge is growing and being systematized by culture must

be borne in mind, as well as the ways and means required to transmit it to the users.

Plans should, therefore, be assessed and revised at frequent intervals.

It is also important, if an information policy plan is to have maximum effectiveness, to stress the following points:

- its specific objectives should be defined and practical results evaluated;
- goals and corresponding stages should be established;
- the resources available (human, material, financial and technological) should be ascertained;
- resources which are to make up the information system should be analysed, coordinated and integrated;
- meetings at the national level on the transfer of information should be promoted;
- an inventory of institutions should be carried out so as to identify the legal framework and the scientific and technological resources available to the country;
- information channels should be developed.

### ***Objectives of the Information Policy and Evaluation of its Practical Results***

Objectives should be rank-ordered and an appropriate framework defined within which information needs will emerge and develop. For this purpose:

- measures should be taken to bring out the vital importance of obtaining, organizing, disseminating and utilizing information with a view to encouraging national development and integration, in the context of the production and evaluation of knowledge;
- there should be participation in the country's economic and social progress as a means of enhancing existing national resources so that information policy may be on a par with that of the developed countries;
- a legal framework should be established with provisions covering the theoretical basis of the national information system and technical assistance and also the component parts, including all the specialized units in specific areas;
- the importance of enhancing the interrelations existing between the various areas of information and their respective groups of users should be clearly established, having regard to the social

danger represented by excessive fragmentation of knowledge and any monopoly over access to information;

- there should be awareness of the effectiveness of the policy being introduced, attention being given to the receptive capacity of those for whom the information is intended;
- the rapid progress of civilization should be reflected in the training of personnel on the basis of the most sophisticated techniques so that they may play a useful part in the implementation of national information policy;
- the appropriate infrastructure should be created for the purpose of introducing changes; it should be built up with a view to ensuring the full use of national resources and participation in existing information systems or those which may come into being in the future; the infrastructure should be developed in order to provide support for the functioning and continuity of the national system, consolidating theoretical bases, relations with the competent authorities and the technical and professional personnel, the aim being to ensure that the activities undertaken will produce constructive results.

All countries have political components which are bound to affect the system; efforts should accordingly be made, through appropriate strategies, to seek results in line with the objectives set, which will naturally differ from one country to another.

The methodologies, criteria and techniques of evaluation are essentially dynamic and should be geared to the strategic and technical modifications that may be involved in the development process.

A methodology applicable at all times and all places is inadvisable; on the contrary, it should be geared to the pace of the country's development in order to ensure its greater effectiveness.

The task of reconciling the micro-economic interests of the user with the macroeconomic and social interests of the country constitutes, to a certain extent, the key to the forms of selection and the methodologies of evaluation of information and technical assistance. Evaluation for what purpose? What should be evaluated? How should it be evaluated? When should it be evaluated?

Once the context has been ascertained, then the guidelines and criteria which may be used to set up an evaluation structure fall into place.

Evaluation is a rational and political process. It should be carried out at both the micro-and the macroeconomic levels. At the micro-economic

level, the factor of cost-effectiveness and the question of the utilization of information might be used as evaluation criteria. At the macroeconomic level, the basis for evaluation is the use of information as an instrument of change in regard to the country's social and economic conditions which would subsequently enable the community to draw closer to its chosen goal.

The general features of the plan or the national programme have to be sought so as to obtain specific and practical criteria for use in evaluation. The establishment of criteria is of value only in providing a specific framework on the basis of which the evaluation itself might be made.

What is essential is to avoid a theoretical, general approach and to make the analysis as objective, feasible and practical as possible.

The cost of overall evaluation may turn out to be so expensive that it is no longer feasible. It is therefore important to evaluate services that are centralized by areas and are essential for the development of the country or for the strategy that it has established.

It is necessary to select leading sectors in which the operational bases of the nationally-organized mechanisms involved in development may be established.

Integrated evaluation should, from the initial stage of planning information policy seek to determine: the effects of the system as regards the benefits to be gained by those who will be using it; the basis for improving, justifying or giving up the system.

It is then, important to concentrate the use of the evaluation techniques, taking into account the following points:

1. formulation of national policies;
2. design of national information systems;
3. implementation of systems, considering:
  - feasibility of the service,
  - identification of the market,
  - organization and strategy of development by stages.

The effectiveness of the evaluation of the practical results of the information policy may be gauged from:

- the quantity and quality of the activities being undertaken;
- the results of the efforts made;
- the extent to which the results obtained match up to the full needs of the service;

- the results obtained by comparing the efforts made with the means of attaining the objectives;
- research into the causes determining the desired results.

### **Goals and Stages**

The conceptual and philosophical framework described above constitutes the starting-point for the appropriate systematization of the stages to be covered.

The system is designed to be developed at the national level in successive stages, with distinct goals for the different periods.

In the stage to be planned first, the field of application will be confined to priorities established in national development plans. In subsequent stages the necessary steps will be taken to extend it to other sectors within the national territory. The following points should be taken into account in implementing the system:

- identification and dissemination of its objectives;
- preparation of instruments such as will attain the objectives set;
- listing of existing information units and ensuring their coordination with a view to integration;
- analysing, describing, specifying and classifying their components;
- initiating the normal functioning of the system and making it operational;
- gearing it to the needs arising from its practical application;
- adjusting and adopting, on an experimental basis, the results of evaluation, with a view to the creation of a new model;
- making the competent authorities aware of the need for the system, and of its policy and characteristics;
- providing training, as far as possible, at the operational levels of the sectors assigned priority in the country's development plan;
- drawing up the profile of users;
- listing the needs of each specialized area;
- planning and providing for redistribution where imbalances exist, according to the list drawn up;
- preparing an appropriate policy to remedy weaknesses in information and ensure its steady growth;
- classifying the different variables which affect the problem, and designing the instruments required to establish the appropriate parameters;

- studying and putting into effect the channelling mechanisms that will lead to centralization;
- providing advice to the component units and improving the information and analysis services.

The following methods will be employed in working towards the objectives set:

- field studies;
- meetings with technicians in the specialized areas;
- organization of seminars and training courses in specialized subjects and skills;
- use of techniques in line with the economic possibilities of the country involved.

### **Structural Aspects**

The strategy for developing structural aspects includes, as its first stage, the generation of a process of 'outward' growth so as to provide the foreign currency required to finance investments.

Various methods may be used, individually or jointly, in drawing up the strategy:

- increasing the number of components in the system;
- changing the techniques used, replacing traditional methods by more advanced techniques for data processing and retrieval;
- increasing effectiveness.

Use of the first two methods requires general agreement concerning their application.

In the case of the second, it should be pointed out that it has the advantage of being the development strategy which leads to the most rapid growth in information processing.

The third method, that of increasing effectiveness, should remain the fundamental basis of the strategy for developing the system.

Countries should make considerable efforts to step up the process of introducing technology and modernizing the whole of their resources.

Once all the data have been compiled, a reply can be given to all the queries concerning the technological level (use of inputs, current practices, information processing, outputs, human resources, etc.). This, in turn, calls for the effective interrelating of the various capacities so as to ensure that the technological progress achieved is turned to full account. As a result, there should be a focal point or central unit-whose purpose is to

carry out all the necessary studies and research, formulate policies and coordinate programme implementation-which will work with the information units in each specialized area, namely those units responsible for putting into effect the methods approved. This whole process will be carried out under the technical guidance of the central unit.

The success of the system calls for:

- institutional consolidation (central unit and units in areas of specialized information);
- official support from the highest authorities;
- active assistance of the library specialist who will be responsible for translating the goals proposed into reality;
- the replacement of manual techniques by an appropriate form, in both qualitative and quantitative terms, of advanced data processing;
- the channelling of information to the data preparation and processing centres.

In anticipation of these operations, the countries concerned should strengthen and improve:

- the master plan for computerization and its implementation aspects;
- the structure of the computer centres;
- the training of programmers, operators, systems analysts and administrators for the main computer centre;
- the training of information science specialists.

### **Professional Training**

This aspect should not be neglected in librarianship studies. The institutes which provide such training should come under a university or have university support, and they should also be recognized by the competent authorities.

The important thing is for the librarian to be an information specialist, trained to participate in the preparation of new structures in the developing countries, responsible for all aspects of research concerning the design, supervision and development of information systems at a high level, capable of taking decisions regarding operational, executive, technological, organizational and administrative matters in libraries and archives.

He should also be able to operate at the following levels:

- the hierarchical level-management of information systems of a high level, with responsibility for methodology and organization of information;

- the research level-documentation and information sciences;
- the technical level-implementation of systems-based operations;
- the technical auxiliary level-for routine operations in support of the higher levels.

There will be a potential for development at each level, providing bases and points of growth that will enable new practices to be implemented in order to further national development. The decade of the 1970s took the developing countries-which were going through transitional stages-by surprise in regard to the use of new methods for information handling. Traditional methods were abandoned and replaced by more sophisticated procedures regarded as semi-automatic, including the system of coordinate indexing known as the uniterm method.

Since programmes should contribute to national understanding, curricula should cover two main sectors:

- studies based on traditional systems;
- studies in which emphasis is given to the information sciences and the automatization of libraries.

In the teaching of library science, the fact has to be faced that we have entered a period in which libraries are abandoning current structures and are becoming part of national systems, with a view to integration at the international level, involving mastery of advanced techniques. As the number of libraries using traditional methods decreases, so studies should be directed towards support for national information policy.

Information policy is bound to make steady progress over the next five years and the developing countries will require more efficient systems involving the use of the necessary data-processing technology. They must therefore establish appropriate forward plans so as to be able to cope with the changes that will take place.

The plan submitted must satisfy the acutely felt need for the efficient dissemination of the knowledge built up in the country and abroad; it should increase the total sum of knowledge and improve the individual capacities of each country. It is impossible to move from a complete absence of activities to full operational level in one stride. Since implementation will certainly involve considerable effort and outlay, it seems appropriate to consider the real possibilities of putting such a plan into effect. From the point of view of implementation capacity, it has to be recognized that this is one of the variables to be considered in the short term. On this basis it should be possible to attain the growth rates required, and this accordingly means that there is a greater possibility of being able to reach the goals

fixed. The financing of the plan should be ensured more especially by the generation of resources through public or private enterprises, as appropriate. This would be the best way of guaranteeing the achievement of the planned targets.

*The use of archive material of the countries of the socialist community for national economic purposes.*

Retrospective documentary information is important because virtually no sector of the national economy, science or culture can advance without scrutinizing and drawing upon the lessons of the past. Such information is particularly timely at the present stage of the development of society, when the gathering pace of scientific and technological progress has become a decisive factor in raising the effectiveness of social production.

Meeting society's needs in regard to retrospective documentary information is one of the basic functions of the State archive services of the countries of the socialist community. It was therefore highly relevant to discuss, at the meeting of archivists of the countries of the socialist community, the problem of organizing the utilization of archive material for national economic purposes.

General. For the archive institutions of the countries of the socialist community, the notion of utilization of material to serve national economic interests includes primarily full utilization of the information contained in the material for the purpose of tackling present-day economic development tasks.

The utilization of material for national economic purposes is understood by archivists in the Union of Soviet Socialist Republics to cover reference to the documentary information of ministries and departments, research and design institutions, enterprises and other organizations in forecasting and planning the country's economic development, improving management and accounting, executing planning and experimental design work and applied research, optimizing production and technological processes, and so on.

Archive material—chiefly scientific, technological and cartographic documentation—is used in the planning, construction and reconstruction of water-management works, communications infrastructures, industrial enterprises and public buildings, in geological prospection and mining, in the restoration of historical and cultural monuments and in the further development of agricultural production, forestry and environmental protection.

Extensive use of retrospective information is made in all countries of the socialist community when preparing plans for irrigation works,

constructing reservoirs and conducting operations in connection with river regulation, protecting banks from overflowing and flooding, and so on. In the Socialist Republic of Viet Nam, for example, material presented by archivists was drawn upon for planning major hydraulic works on the Song Koi and projecting the exploitation of the Mekong Delta. Geographical, geological and hydrological material has been used by Vietnamese specialists in connection with the establishment of hydrological improvement schemes and the construction of hydroelectric power plants, including that on the Da Dung (the largest in South-East Asia).

Soviet archive material was used in the reconstruction of the cascade of hydrosystems on the Dnieper, in the elaboration of comprehensive water-management plans for the Zeya and Selenga, Kura and Naryn and northern rivers, in the designing of a dyke to protect Leningrad from flooding, and in other schemes.

The archives of a number of socialist countries (Bulgaria, the German Democratic Republic, Poland, Romania, the USSR and Viet Nam) make their material available to organizations concerned with the planning, construction and reconstruction of roads, railways and bridges. In particular, archive material was used in connection with the strengthening of bridges over the Osum in Bulgaria, the reconstruction of the 'Unity' railway line between Hanoi and Ho Chi Minh City in Viet Nam, railway electrification, construction and reconstruction of motorways and the routing of new highways in the German Democratic Republic, the rebuilding of a railway bridge over the Warta in Poland, the construction of railway lines in Slovakia, and the planning of the Baikal-Amur line in the USSR.

The study by specialists of maps, plans and other material from geological prospectings of earlier years and of information on the occurrence of mineral resources has assisted the extension and intensification of their mining, renewed industrial exploitation of previously abandoned pits and mines and the reconstruction and modernization of mining and other industrial enterprises in Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the USSR.

In all countries of the socialist community active recourse is had to archive material in connection with the restoration of historical and cultural monuments and the reconstruction and repair of residential and public buildings and urban communications. Some instances of this have been the reconstruction of the Higher Medical Institute building in Bulgaria; the construction of the 'Poznan' hotel and the repairing of the swimming pool at the Olympic stadium in Wroclaw and the reconstruction of a number of parks, including Srebrna Góra, in Poland; and the rehabilitation of historic centres in Bratislava, Kremze, Levoca and elsewhere in

Czechoslovakia. Material from the State archives of the USSR has been made available to organizations working on the restoration of the structural complex of the Moscow Kremlin, architectural monuments in old Russian cities forming part of the 'Golden Ring', parts of the suburbs of Leningrad, the main street of Kiev-the Kreshchatik-and much else.

In recent years specialists engaged in agriculture and forestry in all the countries of the socialist community have been making increasingly frequent use of archive material. On the basis of such material, Vietnamese agronomists carried out work on such crops as tea, rice, coffee and rubber; Hungarian specialists investigated archives in order to determine the influence of Lake Balaton on agriculture; study by German scientists of data regarding the composition of forest stands in former years assisted preparation of a long-term plan for national forestry development; in Poland, information on ponds and reservoirs was of assistance in measures to develop fishing in the Dolny Slazk region; and representatives of the Higher Agricultural School of Slovakia made use of archive material in work on the improvement of agricultural crops and livestock species.

Considerable work is done by Soviet archives on organizing the utilization of material in the interests of agricultural development. In pursuance of the decision of the March 1965 Plenum of the Central Committee of the Communist Party of the Soviet Union (CC/CPSU) 'on urgent measures to secure the further development of agriculture in the USSR', the 1974 decision of the CC/CPSU and the Council of Ministers of the USSR 'on measures to secure the further development of agriculture outside the Black-Earth Zone of the RSFSR', the decisions of the 1982 May and November Plenums of the CC/CPSU and the tasks set in his speech to the November 1982 Plenum by Y.V. Andropov, General Secretary of the CC/CPSU, State archives make available to interested organizations material throwing light on the development of agriculture: on the zoning and structure of sown areas, crop pest control, the breeding of various species of livestock, the growing of experimental cereal and feed crops, irrigation and field-protection works, the utilization of reservoirs for fish breeding, and so on.

Retrospective documentary information is also used in the USSR in the preparation of State instruments and government decisions. For instance, when preparing the Land Act and the Cadastral Survey specialists studied sets of material on arable and pasture lands and soil maps; in the preparation of a number of decisions on environmental protection, use was made of control regulation documents specifying nature protection measures. Archive material is extensively drawn upon by scientists and specialists for forecasting and forward planning of the socioeconomic

development of the USSR, of particular branches of the national economy and of individual regions of the country.

A variable amount of working time is spent on organizing the utilization of archive material in the countries of the Socialist community for national economic purposes. While Czechoslovak archivists spend on such documentary work about 4 per cent of the time allotted to scientific information activity, the corresponding proportions in Hungary and Romania are as much as 20 per cent. Such activity accounts for over 50 per cent in the case of Vietnamese archivists, and in Bulgaria, the German Democratic Republic, Poland and the USSR it averages 10 per cent.

Communist parties and governments of countries of the socialist community attach great importance to State archives as sources of information on national economic matters. Many legal instruments and guidance documents contain provisions encouraging the use of archive information. For instance, a number of decisions of the Party and Government of the Socialist Republic of Viet Nam point to the need to have recourse to archive material when organizing 'specialized works'. A circular signed by President do Chi Minh on 3 January 1946, the first standard-setting instrument of the Socialist Republic of Viet Nam on archive administration, contains recommendations on the use of archive material in development work aiding the national economy.

A Hungarian extraordinary decree of 1969, in a section concerning the regulation of clerical work, emphasizes the need to devise such a system of organizing departmental records as will serve the interests of the national economy.

A 1976 decision of the Government of the German Democratic Republic on State archives makes it their main duty to supply information to State and national economic bodies and institutions. Legislation on specific branches of the national economy also indicates the need to make use of archive material.

The 1971 Decree on National Archives of the Socialist Republic of Romania provides for a number of measures intended to stimulate the information activity of archive institutions for national economic needs.

In the USSR, work on the utilization of material in the interests of the national economy began in the earliest years of Soviet archive construction. Lenin's decree of 1 June 1918 'on the reorganization and centralization of archives in the RSFSR', which is a basic instrument of archivists, emphasizes that archive material is centralized 'for purposes of optimum scientific utilization'. The tasks of archives in aiding the national economy have been reflected in a number of legislative instruments

of the Soviet Government on archive management. In particular, the 1980 Statute concerning the State Archives of the USSR singles out the utilization of archive material for national economic purposes as one of the main policy lines for State archives.

Work on arranging for the utilization of documentary resources for national economic purposes is organized by the archives of all countries of the socialist community, on the basis of socioeconomic development targets set by Communist Party Congresses.

In the matter of utilization of archive material Soviet archivists are primarily guided by the decisions of the CPSU Congresses and the decisions of the Party and Government regarding economic, scientific and cultural development. At the present-day stage, such programme-setting material is provided by the decisions of the 26th CPSU Congress, which approved the 'Basic lines of economic and social development of the USSR for 1981-1985 and in the period to 1990', and the decisions of the May and November 1982 Plenums of the CPSU Central Committee.

Drawing upon such material, the State archives make documentary information available to ministries, departments and organizations for working out the country's practical socioeconomic development tasks, thereby helping to establish the material and technical base of communism. Special impetus was given to the utilization of archive material, for national economic ends included, in the jubilee year of 1982, which was celebrated by all the peoples of the Soviet Union in commemoration of the triumph of Lenin's national policy.

Organizational bases. In all countries of the socialist community archive bodies fulfil a coordinating and directing role in organizing the utilization of State records for national economic purposes. This work is provided for in long-term and annual plans of archive institutions and conducted in close contact with interested establishments and organizations.

In planning scientific information activity, a particularly important factor is knowledge of the requirements of the national economy regarding retrospective information. Archives therefore study State and regional economic plans, organize joint discussions with potential users of archive material on matters of information activity and investigate the subject-matter of research conducted via reading rooms. It has become a firmly established practice for many archives in the USSR to harmonize and clarify the subject matter of record disclosure concerning national economic problems with users of documentary information.

Archives conduct theoretical elaboration of the problem of studying social requirements regarding retrospective documentary information. Great

interest, for example, is aroused by the work of Bulgarian archivists on 'user demand for documentary information in agriculture', 'user demand for documentary information for social management purposes' and other themes.

In the Soviet Union, in accordance with the 1981-1985 five-year plan for the development of archive administration, a study is made of society's need for retrospective information, and the intensity of record utilization, for national economic purposes included, is investigated.

In the archives of all countries of the socialist community the provision of archival information for the national economy is free of charge. Alongside this, in order to satisfy the maximum number of applications for disclosure of requisite material, inclusive of that serving national economic needs, a number of central State archives of the USSR have established special subdivisions fulfilling the orders of institutions, organizations and enterprises on a contractual basis (for payment according to approved tariffs).

The utilization of material for national economic purposes is, as a rule, organized by trained personnel in close contact with specialists in the various branches of the national economy. For example, such cooperation is effected in connection with the disclosure of material concerning mining (Czechoslovakia and the German Democratic Republic).

The utilization of material for national economic needs in archives of all the countries of the socialist community is recorded by means of an established in-house statistical system, usually on index cards by subject of disclosed material.

Forms of information. In order to provide interested ministries, departments, institutions and organizations with retrospective documentary information, archive establishments adopt a variety of working procedures, including the preparation on their own initiative of information material (letters, reviews, lists, information sheets, etc.); the utilization of surveys on national economic topics; the issuing of material to specialists in reading rooms; the preparation of copies of material or provision of the originals for temporary use; the mounting of documentary exhibitions; the holding of meetings of archive personnel with representatives of interested organizations; and the release of information to the press, radio and television about archive material.

In view of the great importance of the utilization of archive material for national economic development, archivists of all countries of the socialist community take the initiative in providing unsolicited information to interested institutions regarding the availability of material on particular

subjects to which recourse may be had when studying specific problems or tackling practical assignments in connection with national economic development.

Many examples can be cited of such exceedingly useful information prepared by archives of the countries of the socialist community. Bulgarian archivists, for instance, provided interested institutions with lists of documents on 'tobacco-growing in the Blagoevgrad area, 1934-1944', 'socialist reorganization of agriculture in the Lovech area, 1944-1958', 'industrial development in the Pleven area, 1900-1947' and other themes.

In the Socialist Republic of Viet Nam information letters were prepared on material concerning investigations of marine currents at the Hamrong Rapids and prevention of silting of the rapids, construction of a deep-water port in Along Bay, the hydrographic regime of rivers, a river-dam system and work on protection against flooding and hurricanes.

Soviet archivists regard the provision of anticipatory information as one of the most important and forward-looking forms of their work. The USSR Central State Archive of the National Economy (CGANH) has informed ministries and departments, research establishments, industrial combines, enterprises and branch scientific and technological information centres about sets of documentary material describing the development of the various branches of the national economy (power engineering, machine-building, the chemical industry, transport, agriculture, etc.).

The Central State Archives of Scientific and Technological Documentation of the Byelorussian SSR made available to planners a list of documents on items located along the route of the metropolitan railway under construction. The Central State Archive of Scientific, Technological and Medical Documentation of the Azerbaidjan SSR sent the appropriate organizations information about material on the history of the oil industry, extraction of oil from the sea-bed, the development of deep drilling for oil, and the construction of oil and gas pipelines. Uzbek and Kazakh archivists have provided interested organizations with material containing information about the water resources and irrigation works of those republics.

It should be noted that in most archives of the socialist countries a system exists for the selective distribution of information prepared on the initiative of the archives. In some cases a subscription system operates whereby users can be informed of the availability in the archives of material on a particular topic. Under this system, institutions receiving such information are required to report back to the archives on how it is used. Archivists in a number of countries (Bulgaria, Czechoslovakia, Hungary, Poland, Romania and the USSR) prepare synoptic reports

containing both information on existing material and an assessment of its importance to the user. In the Slovak Socialist Republic, for example, such reports are prepared at the request of ministries, government departments and working groups of symposia, seminars, conferences and meetings.

Romanian archives have compiled consolidated reports on 'mining maps of the eighteenth and nineteenth centuries', 'prospection for and extraction of ores and other mineral resources', 'works on the study and analysis of mineral deposits', 'land-reclamation projects and plans; and other themes.

Experience has been amassed in the USSR of the preparation of analytical summaries of documents on the development of individual branches of industry that are of assistance to interested organizations in their practical work.

To provide greater opportunities for the utilization of material, archives issue various reference works containing information about material touching upon national economic problems. An example of such a publication is the directory of the holdings of the USSR Central State Archives of the National Economy concerning the history of building organizations between 1917 and 1957. Hungarian archivists have drawn up international consolidated information, the year 1980 seeing the publication of the guide 'Capitals of Europe. Sources for the history of architecture', which contains valuable information on material concerning the history of the cities and the architectural monuments of European capitals. In Bulgaria, brief information publications are brought out on individual archives providing particulars of the largest and most informative archive holdings.

In organizing information activity, archivists of the countries of the socialist community attach great importance to studying and applying the most effective methods of making archival information available to interested institutions. Thus, the Polish research collective 'Informatics and archives' concerns itself with elaborating methods of information work, and also determining advance subject-matter for the disclosure of material of national economic significance. Hungarian archivists are working on a programme for the use of computer technology in keeping a record of holdings and content of archive material, which makes for fuller satisfaction of national economic requirements. Computers are also being used to elaborate a forward-looking programme for the development of Hungarian archives up to the year 2000, one of whose basic tasks is to raise the effectiveness of archive utilization for national economic purposes.

A considerable part of the work of archive institutions is represented by organization of the consultation of material in reading rooms, where

national economic specialists are given every opportunity of obtaining exhaustive information on a given subject. In all archives researchers are able to obtain photocopies and microfilms of material. Essential technical documentation, particularly when it comes in large format, is lent to institutions.

One way in which interested institutions and enterprises are notified of material on national economic subjects is the holding of meetings between archivists and national economic specialists. Archivists now deliver reports more frequently at meetings in scientific institutions and establishments and in enterprises.

Supplying society with the necessary documentary information nowadays requires the devising of new methods of information retrieval for archives, based on modern technology. For this purpose, an automated scientific and technological information system is being established in the Soviet Union, based on the central holdings catalogue of the principle archive of the USSR, together with an automated information retrieval system for the thematic entity 'Architecture and urban development of Moscow, Leningrad and their suburbs'. Plans for the establishment of automated information retrieval are being actively worked out by Romanian archivists.

Study of the effectiveness of utilization of material. In making documentary information available, archival institutions take great interest in how the information is used and how effective it is. In this connection, account is taken of the interest shown by users in information material as reflected by orders for subsequent thematic amplification of holdings and for copies of material, the sending of specialists for work in archive reading rooms, and the utilization of archive material for preparing national economic plans, scientific studies, and so on. Furthermore, Romanian archivists include among the criteria of effective utilization of material the growing attention given by institutions using archive material to the organization of their own departmental records.

Archive institutions of all countries of the socialist community regard study of the effectiveness of information work as an important link in the overall system of utilization of material. To this end, they conduct a periodical collection of information from institutions regarding the economic benefit derived from using documentary information in preparing projects for the reconstruction of communication infrastructures, hydrotechnological constructions and urban communication networks, and in the restoration of monuments of history and architecture, and so forth. Interesting work in this direction has been conducted by archivists in the German Democratic Republic, who have gathered data on the effectiveness of utilization of

archive material by ministries, departments and other national institutions over a number of years. In the case of the Freiberg branch of the Dresden State Archive, it has been confirmed on documentary evidence that the annual economic benefit accruing from the utilization of material from that archive alone averages 1.2 million ostmarks.

Archives in Bulgaria and the USSR send out to institutions, together with information documents, specially prepared questionnaires-with a request to complete and return them. On the basis of the information so obtained, Bulgarian archivists prepared scientific studies on the themes: 'The economic effect of utilization of technical documents in the practical work of institutions' and 'Assessing the effectiveness of utilization of archive material'.

Work on the utilization of material in the interests of the national economy occupies a considerable place in the activity of all archival institutions of the countries of the socialist community. Archives provide party, State and economic organs and scientific institutions with retrospective information, which is of assistance in tackling a great many important practical tasks. The problem of organizing retrospective information in the interests of economic, cultural and scientific development is nowadays becoming an all important matter for archival institutions. When organizing the utilization of archive material in the interests of the economy-for the purposes of planning, improving organizational structure and management methods and carrying out design and restoration work-archivists make their contribution to the socioeconomic development of the socialist countries.

The work of archival institutions in meeting the requirements of the national economy regarding essential retrospective information has been recognized by party and government organs and by ministries, departments, institutions and enterprises. An ongoing task of archivists is to raise the scientific standard of information work, extend anticipatory information for institutions in the economic sector and put this work on a planned footing. The efficacy of scientific information activity depends to a great extent on knowing retrospective information requirements, which makes it possible to meet not only existing but also potential demand. An important task therefore is to extend contacts and cooperation between archives and ministries and departments, research institutions and industry, chiefly at the work planning stage.

A by no means insignificant aspect is the establishment of feedback from users such as will enable archives to obtain advice in their investigation work concerning requisite retrospective information, and also in turn to provide systematic instruction for representatives of institutions in the economic sector in methods of utilizing archive material.

Questions of improving the work of archives are in a number of countries bound up also with the establishment in State archives of special sections or groups of personnel required to deal solely with the preparation of material to be used for economic purposes, this being the case in Bulgaria and Slovakia. Vietnamese archivists are proposing to discuss the desirability of upgrading archive workers by instructing them in a specific range of skills concerned with major branches of the economy or of involving specialists from economic branches in the work and familiarizing them with archive administration methods. Of great importance for improving the information work of archives is research connected with elaborating new forward-looking forms and trends in the utilization of material, methods for studying the formation of society's requirements regarding archival information and the trends and patterns of their development.

Archival institutions are faced with a number of tasks concerning improvement of reference arrangements in regard to holdings and the establishment of new information retrieval systems. The successful completion of all these tasks will serve the further advancement of archive administration in the countries of the socialist community, in keeping with the present-day demands made of State archive services.

### **Integrating Knowledge Management Technologies in Organizational Business Processes**

Technologists never evangelize without a disclaimer: "Technology is just an enabler." True enough-and the disclaimer discloses part of the problem: enabling what? One flaw in knowledge management is that it often neglects to ask what knowledge to manage and toward what end.

Knowledge management activities are all over the map: building databases, measuring intellectual capital, establishing corporate libraries, building intranets, sharing best practices, installing groupware, leading training programmes, leading cultural change, fostering collaboration, creating virtual organizations-all of these are knowledge management, and every functional and staff leader can lay claim to it. But no one claims the big question: why? (Tom Stewart in *The Case Against Knowledge Management, Business 2.0*, February 2002).

The recent summit on knowledge management (KM) at the pre-eminent ASIST conference opened on a rather upbeat note. The preface noted that KM has evolved into a mature reality from what was merely a blip on the "good idea" radar only a few years ago. Growing pervasiveness of KM in worldwide industries, organizations, and institutions marks a watershed event for what was called a fad just a few years ago. KM has become embedded in the policy, strategy, and implementation processes of worldwide

corporations, governments, and institutions. Doubling in size from 2001, the global KM market has been projected to reach US\$8.8 billion during this year. Likewise, the market for KM business application capabilities such as CRM (Malhotra, 2004a) is expected to grow to \$148 billion by the next year. KM is also expected to help save \$31 billion in annual re-invention costs at *Fortune* 500 companies. The broader application context of KM, which includes learning, education, and training industries, offers similarly sanguine forecasts. Annual public K-12 education is estimated at \$373 billion dollars in US alone, with higher education accounting for \$247 billion dollars. In addition, the annual corporate and government training expenditures in the US alone are projected at over \$70 billion dollars.

One can see the impact of knowledge management everywhere but in the KM technology-performance statistics (Malhotra, 2003). This seems like a contradiction of sorts given the pervasive role of information and communication technologies in most KM applications. Some industry estimates have pegged the failure rate of technology implementations for business process reengineering efforts at 70 percent. Recent industry data suggest a similar failure rate of KM related technology implementations and related applications (Darrell *et al.*, 2002). Significant failure rates persist despite tremendous improvements in sophistication of technologies and major gains in related price-performance ratios.

At the time of writing, technology executives are facing a renewed credibility crisis resulting from cost overruns and performance problems for major implementations (Anthes and Hoffman, 2003). In a recent survey by Hackett Group, 45 percent CIOs attribute these problems to technology implementations being too slow and too expensive. Interestingly, just a few months ago, some research studies had found negative correlation between tech investments and business performance (Alinean, 2002; Hoffman, 2002). Financial performance analysis of 7,500 companies relative to their IT spending and individual surveys of more than 200 companies had revealed that:

- Companies with best-performing IT investments are often most frugal IT spenders;
- Top 25 performers invested 0.8 percent of their revenues on IT in contrast to overall average of 3.7 percent; and
- Highest IT spenders typically under-performed by up to 50 percent compared with best-in-class peers.

Based upon multi-year macroeconomic analysis of hundreds of corporations, Strassmann (1997) had emphasized that it is not computers but what people do with them that matters. He had further emphasized

the role of users' motivation and commitment in IT performance. Relatively recent research on implementation of enterprise level KMS (Malhotra, 1998a; Malhotra and Galletta, 1999; Malhotra and Galletta, 2003; Malhotra and Galletta, n.d. a; Malhotra and Galletta, n.d. b) has found empirical support for such socio-psychological factors in determining IT and KMS performance.

An earlier study by Forrester Research had similarly determined that the top-performing companies in terms of revenue, return on assets, and cash-flow growth spend less on IT on average than other companies. Surprisingly, some of these high performance "benchmark" companies have the lowest tech investments and are recognized laggards in adoption of leading-edge technologies. Research on best performing US companies over the last 30 years (Collins, 2001) has discovered similar "findings". The above findings may seem contrarian given persistent and long-term depiction of technology as enabler of business productivity (cf. Brynjolfsson, 1993; Brynjolfsson and Hitt, 1996; Brynjolfsson and Hitt, 1998; Kraemer, 2001). Despite increasing sophistication of KM technologies, we are observing increasing failures of KM technology implementations (Malhotra, 2004b). The following sections discuss how such failures result from the knowledge gaps between technology inputs, knowledge processes, and business performance. Drawing upon theory, prior research, and industry case studies, we also explain why some companies that spend less on technology and are not leaders in adoption of most hyped RTE technologies succeed where others fail.

The specific focus of our analyses is on the application of KM technologies in organizational business processes for enabling real time enterprise business models. The RTE enterprise is considered the epitome of the agile adaptive and responsive enterprise capable of anticipating surprise; hence our attempt to reconcile its sense making and information processing capabilities is all the more interesting. However, our theoretical generalizations and their practical implications are relevant to IT and KM systems in most enterprises traversing through changing business environments.

### **Disconnects between Disruptive Information Technologies and Relevant Knowledge**

Organizations have managed knowledge for centuries. However, the popular interest in digitizing business enterprises and knowledge embedded in business processes dates back to 1993. Around this time, the *Business Week* cover story on virtual corporations (Byrne, 1993) heralded the emergence of the new model of the business enterprise. The new enterprise business model was expected to make it possible to deliver anything,

anytime, and, anywhere to potential customers. It would be realized by digitally connecting distributed capabilities across organizational and geographical boundaries. Subsequently, the vision of the virtual, distributed, and digitized business enterprise became a pragmatic reality with the mainstream adoption of the internet and web.

Incidentally, the distribution and digitization of enterprise business processes was expedited by the evolution of technology architectures beyond mainframe to client-server to the internet and the web and more recently to web services. Simultaneously, the software and hardware paradigms have evolved to integrated hosted services and more recently to utility computing and on demand computing (Greenemeier, 2003a, b; Hapgood, 2003; Sawhney, 2003; Thickins, 2003) models. Organizations with legacy enterprise business applications trying to catch up with the business technology shifts have ended up with disparate islands of diverse technologies.

### **Decreasing Utility of the Technology-push Model**

Management and coordination of diverse technology architectures, data architectures, and system architectures poses obvious knowledge management challenges (Malhotra, 1996; Malhotra, 2001a; Malhotra, 2004b). Such challenges result from the need for integrating diverse technologies, computer programmes, and data sources across internal business processes. These challenges are compounded manifold by the concurrent need for simultaneously adapting enterprise architectures to keep up with changes in the external business environment. Often such adaptation requires upgrades and changes in existing technologies or their replacement with newer technologies.

Going business enterprises often have too much (unprocessed) data and (processed) information and too many technologies. However, for most high-risk and high-return strategic decisions, timely information is often unavailable as more and more of such information is external in nature (Drucker, 1994; Malhotra, 1993; Terreberry, 1968; Emery and Trist, 1965). Also, internal information may often be hopelessly out of date with respect to evolving strategic needs. Cycles of re-structuring and downsizing often leave little time or attention to ensure that the dominant business logic is kept in tune with changing competitive and strategic needs.

As a result, most organizations of any size and scope are caught in a double whammy of sorts. They do not know what they know. In simple terms, they have incomplete knowledge of explicit and tacit data, information, and decision models available within the enterprise. Also, their very survival may sometimes hinge on obsolescing what they know.

In other words, often they may not know if the available data, information, and decision models are indeed up to speed with the radical discontinuous changes in the business environment (Arthur, 1996; Malhotra, 2000a; Nadler and Shaw, 1995). In this model, incomplete and often outdated data, information, and decision models drive the realization of the strategic execution, but with diminishing effectiveness. The model may include reactive and corrective feedback loops.

The logic for processing specific information and respective responses are all preprogrammed, pre-configured, and predetermined. The mechanistic information-processing orientation of the model generally does not encourage diverse interpretations of information or possibility of multiple responses to same information. This model of KM is often driven by technological systems that are out-of-alignment with strategic execution and may be characterized as the technology-push model. This model has served the needs of business performance given more manageable volumes of information and lesser variety of systems within relatively certain business environment. However, with recent unprecedented growth in volumes of data and information, the continuously evolving variety of technology architectures, and the radically changing business environment, this model has outlasted its utility. The limitations of the technology-push model are evident in the following depiction of IT architectures as described in *Information Week* by LeClaire and Cooper (2000): The infrastructure issue is affecting all businesses... E-business is forcing companies to rearchitect all or part of their IT infrastructures-and to do it quickly. For better or worse, the classic timeline of total business-process reengineering-where consultants are brought in, models are drawn up, and plans are implemented gradually over months or years-just isn't fast enough to give companies the e-commerce-ready IT infrastructures they need... Many companies can't afford to go back to the drawing board and completely rearchitect critical systems such as order fulfilment and product databases from the bottom up because they greatly depend on existing infrastructure.

More often, business-process reengineering is done reactively. Beyond its disruptive effect on business operations, most IT managers and executives don't feel there's enough time to take a holistic approach to the problem, so they attack tactical issues one-by-one. Many companies tackle a specific problem with a definitive solution rather than completely overhaul the workflow that spans from a customer query to online catalogues to order processing.

### **Strategic Execution: The Real Driver of Business Performance**

The gap between IT and business performance has grown with the shifting focus of business technology strategists and executives. Over the

past two decades, their emphasis has shifted from IT (Porter and Millar, 1985; Hammer 1990) to information (Evans and Wurster, 2002; Rayport and Sviokla, 1995; Hopper, 1990; Huber, 1993; Malhotra, 1995) to knowledge (Holsapple and Singh, 2001; Holsapple, 2002; Koenig and Srikantaiah, 2000a; Malhotra, 2004b; Malhotra, 2000b; Malhotra, 1998c) as the lever of competitive advantage. At the time of the writing, technology sales forecasts are gloomy because of the distrust of business executives who were previously oversold on the capabilities of technologies to address real business threats and opportunities.

This follows on the heels of the on-and-off love-hate relationship of the old economy enterprises and media analysts with the new economy business models over the past decade. We first saw unwarranted wholesale adulation and subsequently wholesale decimation of technology stocks. All the while, many industry executives and most analysts have incorrectly presumed or pitched technology as the primary enabler of business performance (Collins, 2001; Schrage, 2002).

The findings from the research (Collins, 2001) on best performing companies over the last three decades are summarized in Table I. These findings are presented in terms of the inputs-processing-outcomes framework used for contrasting the technology-push model with the strategy-pull model of KM implementation. Subsequent discussion will further explain the relative advantages of the latter in terms of strategic execution and business performance. Given latest advances in web services, the strategic framework of KM discussed here presents a viable alternative for delivering business performance as well as enterprise agility and adaptability (Strassmann, 2003).

### **Will the Real Knowledge Management Please Stand-up?**

The technology evangelists, criticized by Stewart (2000), have endowed the KM technologies with intrinsic and infallible capability of getting the right information to the right person at the right time. Similar critiques (cf. Malhotra, 2000a; Hildebrand, 1999) have further unraveled and explained the “myths” associated such proclamations made by the technology evangelists. Specifically, it has been underscored that in wicked business environments (Churchman, 1971; Malhotra, 1997) characterized by radical discontinuous change (Malhotra, 2000a; Malhotra, 2002b), the deterministic and reductionist logic (Odom and Starns, 2003) of the evangelists does not hold. Incidentally, most high potential business opportunities and threats are often embedded within such environments (Arthur, 1996; Malhotra, 2000c; Malhotra, 2000d).

Such environments are characterized by fundamental and ongoing changes in technologies as well as the strategic composition of market

forces. Increasing failure rates of KM technologies often result from their rapid obsolescence given changing business needs and technology architectures.

Popular re-labelling by vendors of many information technologies as KM technologies has not helped the situation. Skeptics of technology have observed that real knowledge is created and applied in the processes of socialization, externalization, combination, and internalization (Nonaka and Takeuchi, 1995) and outside the realm of KM technologies.

Practitioners' inability to harness relevant knowledge despite KM technologies and offices of the CKOs caused the backlash and KM was temporarily branded as a fad. Scholarly research on latest information systems and technologies, or lack thereof, has further contributed to the confusion between data management, information management, and knowledge management.

Recent reviews of theory and research on information systems and KM (Alavi and Leidner, 2001; Schultze and Leidner, 2002) seem to confirm Stewart's (2000) observation about the key flaw of knowledge management:

***Knowledge Management Activities are All over the Map... But no one Claims the Big Question: Why?***

Hence, it is critical that a robust distinction between technology management and knowledge management should be based on theoretical arguments that have been tested empirically in the "real world messes" (Ackoff, 1979) and the "world of re-everything" (Arthur, 1996). We are observing diminishing credibility of information technologists (Anthes and Hoffman, 2003; Hoffman, 2003; Carr, 2003).

A key reason for this is an urgent need for understanding how technologies, people, and processes together influence business performance (Murphy, 2003). Explicit focus on strategic execution as the driver of technology configurations in the strategy-pull KM framework reconciles many of the above problems.

The evolving paradigm of technology architectures to on demand plug-and-play inter-enterprise business process networks (Levitt, 2001) is expected to facilitate future realization of KM value networks. Growing popularity of the web services architecture (based upon XML, UDDI, SOAP, WSDL) is expected to support the realization of real-time deployment of business performance driven systems based upon the proposed model (Kirkpatrick, 2003; Zetie, 2003; Murphy, 2003).

The technology-push model is attributable for the inputs-and-processing-driven KM implementations with emphasis on pushing data, information, and decisions. In contrast, the strategy-pull model recognizes

that getting preprogrammed information to predetermined persons at the pre-specified time may not by itself ensure business performance.

Even if preprogrammed information does not become outdated, the recipient's attention and engagement with that information is at least equally important. Equally important is the reflective capability of the recipient to determine if novel interpretation of the information is necessary or if consideration of novel responses is in order given external changes in the business environment.

The technology-push model relies upon single-loop automated and unquestioned automatic and preprogrammed response to received stimulus. In contrast, the strategy-pull model has built in double-loop process that can enable a true sense-and-respond paradigm of KM. The focus of the technology-push model is on mechanistic information processing while the strategy-pull model facilitates organic sense making (Malhotra, 2001b).

The distinctive models of knowledge management have been embedded in KM implementations of most organizations since KM became fashionable. For instance, the contrast between the models can be illustrated by comparing the fundamental paradigm of KM guiding the two organizations, a US global communications company and a US global pharmaceutical firm. The telecommunications company adopted the mechanistic information-and processing-driven paradigm of KM (Stewart and Kaufman, 1995):

*What's important is to find useful knowledge, bottle it, and pass it around.*

*In contrast, given their emphasis on insights, innovation, and creativity, the pharmaceutical company adopted the organic sense-making model of KM (Dragoon, 1995, p. 52):*

*There's a great big river of data out there. Rather than building dams to try and bottle it all up into discrete little entities, we just give people canoes and compasses.*

The former model enforces top-down compliance and control through delivery of institutionalized information and decision models. In contrast, the latter model encourages discovery and exploration for questioning given assumptions and surfacing new insights (Nonaka and Takeuchi, 1995).

### **Real Time Strategic Execution: the Real Enabler of the RTE**

The issues of technology deployment, technology utilization, and business performance need to be addressed together to ensure that technology can deliver upon the promise of business performance.

Interestingly, most implementations of KM systems motivated by the technology-push model have inadvertently treated business performance as a residual: what remains after issues of technology deployment and utilization are addressed. This perhaps explains the current malaise of IT executives and IT management in not being able to connect with business performance needs (Hoffman, 2003). A sense-and-respond KM system that can respond in real time would need to consider the holistic and collective effect of:

- real-time deployment in terms of tech and human infrastructure (inputs);
- real-time utilization in terms of what is done about or with information (processing); and
- real-time performance in terms of how it delivers business performance (outcomes).

Deployment of intranets, extranets, or, groupware cannot of itself deliver business performance. These technologies would need to be adopted and appropriated by the human users, integrated within their respective work-contexts, and effectively utilized while being driven by the performance outcomes of the enterprise.

To deliver real-time response, business performance would need to drive the information needs and technology deployment needs. This is in congruence with the knowledge management logic of the top performing companies discussed earlier. These enterprises may not have created the buzz about the latest technologies.

However, it is unquestionable that these best performing organizations harnessed organizational and inter-organizational knowledge embedded in business processes most effectively to deliver top-of-the-line results. The old model of technology deployment spanning months or often years often resulted in increasing misalignment with changing business needs. Interestingly, the proposed model turns the technology-push model on its head. The strategy-pull model illustrated in figure treats business performance not as the residual but as the prime driver of information utilization as well as IT-deployment.

The contrast between the inputs-processing-output paradigms of KM implementations is further explained in the following section to bridge the existing gaps in KM research and practice.

## Buildings, Furniture, Design and Planning

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### **The Architectural and Interior Design Planning Process-Library Finance: New Needs, New Models**

*An Overview:* Libraries are object-intensive facilities. Their resources, services, and programmes depend on the installation of certain types of furniture and equipment. Without shelving to house hard copy, there would be no place to put books, journals, documents, and other artifacts of the print world. Without microcomputers or terminals, CD-ROM players, printers, microfilm readers/printers, and photocopiers, it would be difficult to provide online services, CD-ROM information, or hard copies of micro media. Staff need service desks, workstations, and work areas to perform their jobs. Patrons perusing hard-copy resources also need places to sit.

Of course, where patrons sit depends on their personalities and how in-depth their browsing will be. Some people prefer to read or study in an attractive area and others couldn't care less. In any event, lounge chairs and sofas and chairs at tables or carrels are important library items. Few people are willing to stand for more than a few minutes while leafing through a periodical, studying a reference book, or researching a specific topic. Chairs have also become essential aspects of a large percentage of the online public access stations being installed today.

When OPACs first appeared on the library market, library planners believed that patrons would stand while performing quick searches. Although many patrons do not mind standing, many more prefer to sit. Besides, today's terminals are constantly being loaded with host databases. Browsing through these takes such a long time that sitdown stations are showing up everywhere. It is not uncommon, for example, to find a large

academic library's reference area outfitted with four stand-up and twenty-six sitdown OPAC stations.

The problem is that each additional chair costs money, and construction budgets tend to disregard this fact. Funds are often encumbered for construction only, and monies for "loose" furniture must be garnered elsewhere. The same is true for electronic equipment (*e.g.*, microcomputers and CD-ROM players) and general supplies (*e.g.*, wastepaper baskets, pencils, paper, and desk sets). The construction budget ignores these completely.

Where plans for construction of new facilities are concerned, knowledge of the architectural contract and the resulting contract documents (blueprints and specifications) is essential. It is imperative to know exactly what these do contain. In some instances, all "millwork" or custom built woodworking is to be designed and constructed under the architectural contract. Millwork of ten includes custom built service desks, built-in display cases, and similar aspects of interior design. On the same project, shelving may also be considered part of the architecture. This is often the case on very large installations; for medium to small installations it is not. Funding for shelving falls into the loose furniture category, which also includes all library technical furniture and office workstations and chairs. Surprisingly, carpeting is nearly always part of the architectural contract because it provides the finished floor.

Sometimes the budget contains all the items necessary to build and operate the facility—construction, loose furniture, supplies, and electronic equipment. The library administration and staff are informed that a certain amount of money is available, and it is up to them to divide the sum logically. If the renovation/new addition comes in over budget, there is less money to spend for other items.

Having enough money to spend on the proper furniture, supplies, and equipment is not enough, however. The idea is to be cost effective and maintain a low overhead once the project is complete. The building must be able to operate relatively efficiently. Here, the design of the interior architecture is extremely important. That is one of the reasons why library consultants are kept on projects beyond the programming stages. They critique the interior architecture and, later, the interior design space plan.

For example, a proliferation of dividing walls promises operational inefficiencies and thus more staff. Walls impede traffic flow which, in turn, forces employees to waste considerable time getting from place to place. Additional floors or more than one entrance also demand more staff. Too many libraries have had to add more service desks/control points—and

employees-to prevent security problems. It is logical to assume that the interior architecture affects any building's space layout possibilities. An old school converted into a library may have long corridors and a variety of cinderblock walls that once delineated classrooms. An award-winning public or academic library building may feature a vast central atrium, "flying" staircases, and many attractive but unusual areas. In both cases, interior architecture is rather inflexible and limits layouts. The spaces that are created within the envelope are usually characterized as fixed function; these tend to resist logical rearrangement.

For example, if a school was designed as a classroom facility, only activities that fit into 400 square feet segments will function properly. Few library collections have logical breaks which enable them to fit neatly into spaces that are just that size. An award-winning building's central atrium can be an important aesthetic. Its primary function is to bring a sense of grandeur to the interior. One can look up and see through to the next story or look down and view the floor below. Unfortunately, a central atrium creates a "ring around the rosey" effect. Patrons and staff must walk in circles to get from here to there.

For the budget conscious, it is important to note that atriums are also nearly as expensive to heat, ventilate, or air condition as the full floors they replace. Furthermore, buildings with atriums are very difficult to balance mechanically. Service calls that require fixing such gadgets as malfunctioning vents, fans, circulators, pumps, and blowers become a constant fact of life.

Filling in a central atrium is always a solution, but it is one thing to tear down the interior walls of a 1950s school building and another to deck over the glorious atrium of an award-winning building. In both situations, the expense may cause a public furor, but the protests are bound to rise to untenable heights whenever political forces believe that bureaucrats are about to destroy a precious work of art. Similarly, if the school building was erected at the turn of the century, it immediately becomes a historic structure. Should it be replete with special details and fine appointments, resistance to any architectural changes could be defended by an equally ferocious political battle.

Old school buildings are not the only historic structures. Libraries with historical significance seem to be everywhere. There are any number of seventy, eighty, and ninety year old structures still functioning, and they house a variety of libraries-public, academic, governmental, and private. These buildings evoke great affection, even those that have not been well maintained and, thus, have deteriorated. Communities may have ignored their existence, but once one of these structures enters the

spotlight, it is amazing how many people profess kinship. The populace tends to view the structures as examples of a gentler age and something they wish to return to-even if they were never there.

Indeed, some of these structures feature architectural details that are either too expensive to fund today or literally against the law. For example, old buildings tend to have impressive exterior stairs that were built without regard to barrier-free environments and, of course, do not comply with Americans With Disabilities Act (ADA) guidelines. Sometimes a stair leads to a very handsome entrance flanked by difficult to open heavy wooden doors. Not only are these doors phenomenally expensive to replace, they also are incompatible with ADA guidelines.

Once inside one of these old buildings, the interior architecture and related interior design all too often limit the ability to conduct state-of-the-art library services. An imposing but inflexible teak and granite circulation desk may take up far too much room. In order to add terminals and other details of automated circulation services, makeshift work areas have been created behind and to the side of it. In close proximity to the desk are one or two wood panelled reading rooms whose floors were not constructed to bear the 150 pound per square foot live loads that library bookstacks presently require. Since the majority of the collection was not expected to be open to the public, it was placed in a once closed and now open access metal self-supporting stack whose small entrance is located to the back of the facility. Within the stack, the only access to the second and third tiers is via a narrow metal stair.

The inflexibility of this building's design implies that there is only one way to perform library service-and, at the time it was erected, that probably was the case. Its architect wanted to create an important work of art that could support processes that were clearly defined.

Of course, library services have changed dramatically over the ensuing years. Now their facilities are expected to house a wide variety of activities, some which came into existence just recently, perhaps only yesterday. Indeed, radical changes in library missions and goals are occurring daily, but the buildings that are expected to support these activities are still being designed with century old rules in mind. The result? A host of new structures that are quickly becoming outdated. The situation is so common that library consultants often receive urgent telephone calls late into the night from harried librarians administering inflexible, barely relevant, buildings that are less than five years old.

Until ADA went into effect, any number of new buildings were constructed with the older models in mind. Too many buildings were

designed with requisite impressive exterior stairs that led to equally impressive but hard to open front doors. Administrators now find that they must scurry to find places to add exterior ramps or elevators as well as inexpensive ways to install automatic doors. Beyond inappropriate exterior access, another difficulty concerns the all too common confusing internal pathways. First time patrons complain that they cannot find the interior elevators or stairs. It is not uncommon to find disabled users being forced to traverse long distances before they reach the ramp that will lead them up or down a two step level. Of course the most universal inadequacies relate to insufficient collection and user spaces; nearly nonexistent electrical and telecommunications wiring; too few places to install equipment-dedicated seating; and inappropriate meeting, conference, or training rooms.

Because new construction or reorganization/renovation can be costly, it is not surprising that, in an era of tight money, academic, public, corporate, or governmental financial officers resist making any changes at all. Although librarians take it for granted that we are living in a global information economy, arguments may be forthcoming that it is not necessary to upgrade the building. In five years the book will disappear. With dial-in capabilities, everyone will have access to the virtual library. Or conversely, adding substantial electronics to a building is an expensive and unnecessary use of space. Spending money on hardware and software will diminish the book budget.

When money is tight, allocating resources does tend to be a zero sum game. Furthermore, whether books or electronic equipment are more attractive tends to be in the eye of the beholder. While too many funding authorities are finding it increasingly difficult to believe that hard-copy collections are still growing, in this age of high speed data, librarians still find ways to relegate microforms and microcomputers to small enclosed rooms in dreary basements or other dismal places.

The irony is that, while electronics are threatening to chase print-on-paper out of some facilities, hard-copy publications are still proliferating. Everyone thinks there will come a day when hard-copy collecting will come to an abrupt stop, but more than likely that event will occur far into the future. An increasing number of books and periodicals are being published in third world and developing countries, especially in the far east. Scientific subjects are multiplying and diversifying. New medical practices and innovative drugs command individual subclassifications. International law is becoming of interest to the ordinary person in the street. That is why few buildings are being erected without some place to install compact shelving. Depending on the method of construction, the difference between a floor that has the loading capacity of 150 pounds per square foot live

load or one with 300 pounds may only be a dollar or two more for each square foot erected. To minimize this cost on the upper floors, only one floor may be designated for compact shelving. In other situations, a quadrant slicing through the building's floors may have its columns and floors reinforced. In many cases, the most inexpensive method is to place compact shelving on the ground floor. This tactic usually requires only a thicker floor slab-provided, of course, the subsoil can support the weight of fully loaded compact stacks. The rails upon which these units slide can either be a part of the floor slab construction or added later. If the latter is the case, then the floor to ceiling height should be sufficiently high to take the addition that the track assemblies require.

At an overwhelming majority of libraries, an installation of compact shelving appears to go hand in hand with increasing reliance on electronic services. No one wants to stop collecting hard copy, but space must be created in the public service areas for online searching and CD-ROM workstations. After all, online services and local area networks promise to overcome the limits of architecture and, at the same time, put a cap on the number of renovations to be made. Within the telecommunications cabling, there will be streams of data that must be able to pierce ceilings, walls, and floors.

Here, a major consideration concerns the amount of electrical and telecommunications power that is brought to the building from the various utilities in the planning stage. It is important not to be too conservative. In the near future more is bound to be required.

A rough rule of thumb is that each piece of electric/electronic equipment requires five amps. For example, five times sixty pieces of initial equipment amounts to 300 amps, where those sixty include microcomputers, terminal printers, copiers, microform machines, and electric pencil sharpeners-and coffee pots, microwave ovens, toasters, and so on. Do not forget the substantial amount of electricity required to run all the mechanical and electrical building equipment-heating, ventilating and air conditioning (HVAC), and lighting.

In a moderately-sized building, the HVAC and lighting needs may add up to more than three times the amount needed by information systems and workstation equipment. Although the former's requirements may stay static, the latter's will not. The number of electric/electronic devices is bound to keep on growing. It is only a small increase in cost to bring more electricity to the building in the initial planning. Larger cables may be all that is required. Once construction has been completed, bringing more power may require a large addition of money. Stringing cables is a labour-intensive process.

Another consideration revolves around the availability of cableways, ducts, and other aspects of wire management within the facility. Future retrofits can be expensive if horizontal and vertical power distribution has not been planned carefully. It is not necessary to run substantially more wiring than initially needed. Rather, it is wise to plan building details that will allow wiring and cabling to be added sometime in the future. Most people will think twice before they drill into a marble wall or through good oak molding. They will go to lengths (no pun intended) to avoid unsightly wires from being draped from one end of the room to another.

Knowledge of local codes is also important. Some codes restrict how wiring is run in the plenum above the suspended ceiling; ducts must be provided for that purpose. To bring the wiring down, channels may have to be cut in the plasterboard around columns or in walls. To run wiring along the floor, attractive and newly installed broadloom may have to be cut and spliced and the cement beneath chiselled to create trenches.

If the library designer chooses broadloom, then the option of using undercarpet cabling (flat wiring) closes. The fire code allows carpet tile but prohibits broadloom from hiding this form of wiring. Undercarpet cabling is an excellent retrofit device.

Obviously, the best suggestion is to prevent major wiring problems in the planning stage. During the planning process, ground rules should be created that minimize inflexibilities and thus future expenses. Architectural solutions should come first and interior design solutions second. An architectural solution may be a cellular floor and cable trays along upper walls, while interior design solutions may consist of furniture containing wire management. It is essential that these ground rules be followed during the design phases and not jettisoned the first time a schematic is displayed or opposition is voiced.

For example, since carpet tile costs about 20 percent more than broadloom, it is often hard to sell it to the powers that be. It is clearly the better choice, however. Not only can it act as a future retrofitting device, it is also easier to maintain. One can simply lift up a dirty tile and exchange it with a clean one—perhaps from attic stock or underneath a desk. Tiles in very active walkways can be replaced on a regular basis, perhaps every few years, without affecting any other areas.

Other suggestions to minimize inflexibilities concern the shape of the building's interior. Simply shaped spaces lend themselves to rearrangement whereas complicated ones do not. Whenever the spaces are simple, the resulting areas can be used in any number of ways. Complicated spaces, on the other hand, tend to define the activities that can and cannot be

performed. For example, a large open area can house books, seating areas, service points, or instructional facilities, of ten by simple rearrangement, but an interior "street" that threads through alternately narrow and wide spaces may force the adjacent square footage to be used only as originally intended-as offices, group study rooms, storage areas, etc.

Another example of important guidelines concerns the roof and the suspended ceiling. Under no circumstances should either be dropped over the main stacks to minimize construction costs. This is a tactic used by many architects. In a single story building, initial costs can be somewhat lessened by reducing the total cubic area to be erected. In a multistory building, by dropping the suspended ceiling and letting the ducts run just above it, less interior space has to be finished which, in turn, minimizes costs. At first glance these tactics appear to have a second benefit-the possible reduction of utility costs as well. There is less space to heat, air condition, or light. Unfortunately, by dropping the roof or the suspended ceiling, spaces meant for human habitation in the public service area are created that are only seven and one half feet tall.

Although this is tall enough to accommodate nearly everyone-except perhaps one or two of this nation's basketball players-it can cause the feeling of claustrophobia. Most of us live in homes with finished ceilings about eight feet high, and we are conditioned to like public spaces with ceilings that are even higher. In a place of public accommodation, seven and one half feet is just too low.

Designers agree but argue that few people stay in the stacks for hours on end and reading areas with taller ceilings tend to be only steps away. But what will happen in the future is the primary concern. More than likely, in five, ten, or fifteen years a percentage of bookstacks will no longer be needed. The materials-perhaps bound indexes or periodical backfiles-will be removed and access to the resources will be substituted with online services or CD-ROM networks or some other form of networked micromedia. How can a library recycle public service space that is only seven and one half feet high?

The same question relates to self-supporting stacks. During the open access heyday, from the early 1950s through the late 1980s, purchases of hard copy grew geometrically decade after decade. To squeeze all this material into buildings with insufficient floor space, self-supporting stacks were installed in libraries all over the country.

The height of three tiers amounted to about twenty-three feet. From slab to slab, even the lowest ceilinged building had two floors with about twenty-four feet. Thus, self-supporting stacks can be found in any number

of “modern” buildings as well as those that are nearly a century old. Typically, these structures depend on uprights that pierce each deck and support the stacks above. To demount even one stack, it is essential to start at the top; to do otherwise would cause the whole structure to fall down. Unfortunately, the space on the first floor is what everyone covets the most. The only way to make that space available but leave the upper tiers of the self-supporting stack intact, is to remove shelves and leave the uprights right where they are. The result is an unattractive area studded with posts every three feet. Because the problem is so endemic, there are any number of libraries that contain at least one such area. Witness seating in an academic library with three foot wide student carrels shoved between the uprights. At more than one major public library, workstations have been installed in the decks, and the staff forced to work in them often complain about the conditions vociferously.

The gist of the foregoing discussion is to avoid creating unpleasant spaces in public service areas. They will affect the library’s future ability to function effectively. For small libraries or libraries with very long runs of bookstacks, for example, the floor to finished ceiling height should be a minimum of nine feet, while a better guideline is eleven and a half feet. It not only is less claustrophobic, it also enables better air circulation and light distribution-provided lighting runs either perpendicular to the stacks or is set in a nondirectional pattern on the ceiling. Further, the fire code requires eighteen inches from the top of an obstruction to the bottom of the sprinkler head. Although one can install sprinkler heads that are flush to the ceiling, in the less expensive installations they tend to protrude an inch or two below. This diminishes the required clear space above the stack canopies. In several well-publicized incidents, top shelves had to be removed by order of the local fire marshall. At one famous law school, the library had to move one-seventh of the collection elsewhere. Everyone knows that off-site storage is an expense they would rather not incur.

**Lighting:** Another suggestion to hold down capital and operating costs concerns the lighting system. Today, there are any number of wonderful modular systems on the market. Fluorescents come in a wide variety of shapes and sizes, some of which are high output and last for six years or more. Electronic ballasts, which do not drip or buzz and provide dimming and features heretofore unheard of, are widely available. Metal halide high intensity discharge lamps are perfect for very high ceilings or for indirect lighting. These can even be installed in fixtures that appear to be antiques.

Incandescent lighting, on the other hand, is to be avoided except for some exhibit areas. This form of lighting tends to be quite inefficient. In ordinary, approximately 90 percent of the electrical energy results in heat.

One person described an incandescent bulb as a heating device that just happens to create light. Not only is the energy wasted, but it puts a load on the air conditioning system during its season of operation and thus escalates costs.

**Planning Facilities:** Designing lighting systems is in the purview of an electrical engineer, while designing mechanical systems falls under the jurisdiction of the mechanical engineer. An architect must work with civil, electrical, mechanical, and structural engineers, landscape architects, and cost estimators as consultants unless they are members of the same firm. Those companies employing both architects and engineers are known as A/E firms. Other specialists involved might be acoustical, audio/video, or computers/networking consultants. Somewhere between 40 and 45 percent of the architectural fee is paid to these consultants.

Regardless of whether the project is a renovation, renovation/ addition, or new construction, the various phases of design are known as schematics, design development, construction documents, and contract administration. During the schematic phase, the architect presents the design concept for the project. Elevations-two-dimensional representational drawings of the exterior and interior-is usually provided as are block layouts of the interior. A model or three-dimensional drawings may be created, but this depends upon whether or not the project is large and/or they are specifically required by the contract. Drawings provided by the architect during schematics are typically used for fund-raising purposes. A rendering-a representational drawing of the exterior or interior-is usually considered a separate item. Since it is a very desirable item, it should be budgeted.

Although many people believe to the contrary, cost overruns may be no fault of the architect. Rather, they may relate to the client's requirements or unexpected difficulties encountered during construction. The client may believe that the architect's cost estimates are not in line with local conditions, or may demand an addition-such as a mezzanine-to the design. When the bids arrive, to the client's chagrin, costs per square foot are much higher than thought. Other unexpected expenses may arise. For example, although test borings were made, an underground stream may be found flowing right in the middle of the site once excavation begins. Extra funds must be quickly found to divert it. An underground stream may also cause the design to be substantially changed even though some construction has already occurred. Redrawing at such a late date will expand the scope of work and cause extras to be paid to the architects, engineers, and contractors.

Extras are to be expected on most projects. For smaller buildings, it is hoped, those that occur are limited in scope. For larger buildings, there

is always something-perhaps minor-that requires additional money. For example, people in systems management make a decision to purchase a new library information system and it needs to be wired according to the equipment manufacturer's specifications. Unfortunately, those specifications vary from those detailed on the electrical engineer's drawings. Or the new building inspector refuses to let the compact shelving operate unless additional security devices are installed. Professionals in the built environment design field nearly always attempt to build in contingency monies into their cost estimates. A contingency of 10 percent is considered reasonable, but people interested in the bottom line try to reduce this. Some, unfortunately, try to eliminate it entirely.

Extra expenses also occur when the process is slowed by the arcane methods of bureaucracies and ferocious battles-sometimes over personality problems-that often occur in the political arena. For a new building, from genesis in the mind of the librarian to actual opening day may be as short as two and one half years. The average is five years. Some projects have taken fifteen years to be completed. A minor renovation may take a year to a year and a half, while a major renovation will take as long as constructing a new building.

During the predesign phase, long before the architect is hired, a library consultant may be retained to perform site selection or write the building programme. Here, a request for proposal (RFP) must be sent, consultants interviewed, and the work performed. From beginning to end, the time span for this aspect of the process is at least six months. For a new addition or brand new building, test borings must be performed, or the land surveyed, and so on and so forth, which requires other professionals to send in proposals, be interviewed, and then selected and retained. Before an architect is hired, it usually takes at least three months to advertise, interview a sufficient number of firms, choose one, and then sign the contract. Unless fast tracked, the entire design process takes a minimum of nine months to a year. Often it takes longer because approvals must make the rounds. Unless also fast tracked, construction can take a minimum of another year. If problems occur or the building is sufficiently large, it obviously will take longer.

Once the architect begins to work, an interior design firm may need to be retained. Many architectural firms can provide interior design, and some clients prefer to use them because it allows the librarian to deal with only one set of people. Other clients believe that it is better to use interior design firms because they are more knowledgeable about furniture, colours, and textures. After all, they concentrate their efforts in the field. Just as architects have professional societies, such as the American Institute of

Architects (AIA), so do interior designers. Their most well-known society is called the American Society of Interior Designers (ASID) and, similar to the AIA, it confers certification. ASID members know how to interface their work with that of the architect so that lighting falls over tables and carrels in the reading areas and hanging cabinets mount on walls that can bear their weight.

One of the first tasks any interiors person should perform is to test the building programme within the building envelope-even if this task has already been performed by the architect or library consultant. All major pieces of furniture should be placed in the plan to make certain they fit. The test acts as a reality check. Does the programme call for more shelving than the building can hold? Is there enough room for the workstations specified for the work areas? Once this is done, the designer can go about the business of space planning all the areas, designating which furniture requires lighting and telephones, electric receptacles, and data utility jacks; visiting the showrooms with the client; choosing the furniture-colours and textures-and ultimately creating a set of interior design contract documents.

For a library, the documents are typically divided into three-library technical furniture, shelving, and office furniture. Sometimes the first two are combined, but this limits the number of bidders. There are times, however, that furniture is not procured by bid but rather by state contract. Occasionally, one vendor will be given the entire job on a cost plus profit basis.

The foregoing price list does not indicate the time spent detailing furniture specifications: height, sizes, surface finishes, upholstery, edging, wire management, drawers, cabinets, and so on. Because the bidding process tends to be inexact and similar products of one manufacturer differ from another, the installation phase is fraught with a variety of potential problems. The winning bid's double face shelving may be outfitted with end panels that protrude an inch too far into each aisle. One range is lost for every six installed.

This is the type of field condition that causes librarians stress. Where similar problems eventually solved by the architects or their engineers generally pass unnoticed, they occur with great fanfare here. Librarians understand the nuances of furniture, and it is just this understanding that can cause the greatest difficulties. The designer has several ways to deal with the situation. An obvious one is to reject the end panels and withhold payment. Another, perhaps more judicious, tactic is to see if the interior designer can redesign the area so that the dimensions are not critical.

Here the point to be made concerns letting professionals do their jobs. A wise librarian should keep tabs on the entire process—from architectural design through furniture installation once the ribbon is cut and the doors open wide. It is up to the library staff to operate efficiently and maintain a job well done.

### **Library Finance: New Needs, New Models**

Turning and turning in the widening gyre  
The falcon cannot hear the falconer;  
Things fall apart; the centre cannot hold;  
Mere anarchy is loosed upon the world. (Yeats, 1952)

This article will describe a new budget model for libraries. What follows, however, is not just a budget, for a budget is the expression of some organizational reality. This discussion will be an effort to propose both an organization and the budget that flows from, and sustains, it.

At the outset of writing this article, this author was wary of some large pitfalls surrounding the idea of creating a new budget model for libraries. When the present model began to emerge about a century ago, the process for the distribution of knowledge by means of print-on-paper was established and understood. Today, however, the future of the distribution of knowledge is unresolved. The trend is toward electronic distribution but certain aspects remain to be settled including setting standards and solving copyright/licensing problems. Meanwhile, print-on-paper appears to be unconcerned about its new competition as large numbers of books and journals continue to be produced. The dimensions of the new information environment, therefore, are not yet clear, and proposing a model for the library of the future still requires a great deal of guesswork. In other words, it is too soon to present a full-blown new model of library organization and finances.

Another pitfall concerned the stakes of the game. Talk of new models and new paradigms is easy. It pervades our generation. It is intellectually stimulating and exciting to contemplate radically new ways of approaching our work, especially if there is little or no likelihood that these contemplations will actually have an impact on our libraries. But suggesting a new financial model that might be taken seriously seemed a different matter. This author could just as easily—perhaps more easily—construct a flawed model that would, if taken seriously, unleash a calamity upon the library world.

To be sure, libraries are not prone to respond quickly to any stimulus, so it was decided that risk of calamity was modest. In addition, it was decided that tweaking a budget here and there does not constitute a

paradigm change, and most of our efforts at new models fall within the parameters of tweaking. It is not certain where the dividing line falls between merely adjusting one paradigm and actually introducing another. Allocating more money to collections and less to staff does not constitute a paradigm shift. Selling the library to a commercial agency and buying back library services does constitute such a shift. Whether the model suggested later constitutes a paradigm shift is doubtful. But it is certain that it requires fundamental shifts in our priorities and in our approach to librarianship, and such shifts are needed today.

As an academic librarian, my efforts here may inadvertently be more directly applicable to academic libraries than to others. Some of the themes that appear are common to all libraries, and it is hoped that the model will be of interest beyond the academic library community.

**Why a New Model?:** Pitfalls notwithstanding, the invitation to propose a new budget model was accepted because this author is convinced that such a model is a necessity if libraries are to thrive in these last years of the twentieth century. This necessity arises from an inter-related set of circumstances familiar to every librarian. The most prominent of these is the paradoxically terrible and wonderful assault of computer technology on the information world (for the best recent and comprehensive assessment of technology and libraries). Everywhere within libraries appears the signs of this ongoing assault. From public access catalogues to paperless cataloguing, little remains unaffected. The signs of computer technology also saturate our professional world, pervading the programmes of our professional associations as well as the library literature. It is simply clear that libraries and librarians are undergoing a transformation. The degree to which they will eventually be changed is often debated, but the fact that they are in the process of transformation is beyond question.

While the positive implications of this technological transformation for the dissemination of knowledge are truly monumental, to libraries under financial duress the costs appear monumental as well. In the first generation of library automation, libraries were generally successful at finding incremental support for the cost of technology, including new staffing capabilities. Now, however, as the technological remaking of libraries proceeds, it is increasingly difficult to secure new support. Thus the costs of new technology compete with existing budgetary obligations, requiring the reallocation of funds. Such reallocation within most library budgets is a difficult process that often damages the morale of staff and reduces services to users.

The challenge of incorporating computer technology into libraries and reallocating dollars to pay for it is exacerbated by a second circumstance-

the inflexibility of existing library organizational structures. Our present organizational structures evolved from, and are adapted to, the requirements of a print-on-paper environment. Not surprisingly, as librarianship became increasingly professionalized and marked by specialization, the internal boundaries that characterized our organizations became more rigid. Often we quarreled among ourselves, artificially creating great gulfs between the interests of public and technical services. It became difficult and remains difficult to overcome or cross these internal boundaries. Such inflexibility is not conducive to rapid adaptation of new technologies but instead fosters the continuation of old methods and procedures. In a time of rapid change, the organizational model, therefore, fails in its role of facilitating efforts to keep pace.

The problem with such inflexibility is magnified because electronic information does not conform to the parameters and requirements of the print-on-paper environment. Indeed, it ignores and crosses these long-standing boundaries as if they were not there. Networked databases, for instance, do not remain in the confines of any department nor do they respect our specializations. Thus, being organized to manage paper, it is often found to be difficult or impossible to respond to technological opportunities gracefully. This is a serious deficiency during an age in which technological change is constant, pervasive, and rapid and in which we are confronted with laying the foundations for the library of the twenty-first century. It is the worst of times for us to allow old models to hamper creativity and responsiveness.

The technological assault combines with this organizational rigidity to produce one additional circumstance that necessitates changing the model, namely, an unproductive anxiety. On the one hand, change seems inevitable. Technology is a large train, and libraries are stalled on its track. Something has to give. On the other hand, change within libraries seems impossible. Given the trauma associated with major changes in libraries, few librarians, including library administrators, have the necessary courage to risk it. To do so is to invite a barrage of criticism and defensiveness. At its worst, the result can be a frustrating environment where the timid are threatened and the bold are held back, where conflict is incubated, and self interest is encouraged. In such an environment, individual librarians may feel that their professional destiny is out of control and that, ironically, none of the structures either within libraries or professional associations can do anything to help. This anxiety-induced inertia is particularly lamentable because, as a group, librarians are easily capable of meeting the technology challenge that distinguishes this time of transition.

***Describing a Transitional Library Model***

What is called for in these circumstances is a budget model designed to accommodate libraries in transition. Since it is too soon to propose a model for the library of the future, perhaps we can establish a model that is particularly helpful during a period of change, a transitional library model (TLM). Such a model does not have to possess a timeless quality but rather must be designed for flexibility, adaptability, and responsiveness to opportunity. The goals of such a TLM include the following:

- \* Providing sufficient continuity for ongoing print-on-paper functions while recognizing and accommodating the requirements of the emerging electronic information environment,
- \* achieving organizational stability without developing structural rigidity,
- \* underwriting a new working environment for the library staff and providing for perpetual upgrading of their skills,
- \* restoring the reality of and sense of control and self-value to librarians.

To achieve these goals, the TLM would have to reorganize priorities and place emphasis on some new features.

***Emphasis on Education and Training***

The existing model for continuing education and training (E&T) for those who work in libraries has largely featured learning opportunities outside the library connected with professional and membership organizations. While this model has provided many benefits to the profession, it has focused almost solely upon professional librarians and provided little uniformity or continuity within individual libraries. In addition, it is at best difficult for individual libraries to develop a consistent E&T programme using this model.

But consistent and ongoing E&T programmes are just what we need for libraries in transition. The need for keeping technologically current is perhaps the most visible challenge but is by no means the only one. Almost every other new priority outlined later carries with it an E&T requirement. And these E&T challenges can no longer be focused primarily on professional librarians. Support staff-level personnel are valuable and vital partners in creating the library of the future. Their skill levels, too, must keep pace with the demands of a changing environment if they are to serve the library well in this time of change.

In the transitional library model, each library should provide the opportunity for every staff member to receive education and training

annually. While some common themes will characterize such E&T programmes, they should, to the degree possible, be customized to the individual library in order to match and support its vision, goals, and objectives. Except for very small libraries, efforts to establish regular ongoing E&T programmes should take the form of in-house training using a faculty of both internal experts and external consultants. In a short time, such an E&T programme will reap manifold benefits since a work force aware of trends and which is up to date on skills will be more capable and confident in meeting the challenges of the changing environment.

A new emphasis on education and training will not be inexpensive. Some businesses spend hundreds-some thousands-of dollars per staff member each year and require as much as two weeks of E&T annually for each individual on training. They would not long continue to do so, of course, unless the benefits were sufficiently valuable to justify it. Fiscal realities may prohibit libraries from jumping rapidly to a programme of such magnitude, but it is urgent that they begin. Counting the value of staff time spent in the E&T programme, the transitional library model proposes that at least 2 percent of the existing salary budget be allocated to E&T.

### ***Emphasis on New Service Opportunities***

Since the existing library model is focused on carrying out well-known and well-defined operations, it is usually no one's specific responsibility to pay attention to new service opportunities or to inquire after new means, methods, and technologies. The result is that libraries as often discover new possibilities accidentally as they do through consistent ongoing efforts. In addition, most libraries also find it difficult, both financially and structurally, to take advantage of new discoveries quickly even when their value is compelling. In this regard, libraries typically submit the best ideas for innovation to federal, state, or private funding agencies and wait for them to complete the, relatively slow funding cycles. Only then, usually a year later, do those hot new ideas receive attention.

The transitional library model proposes that a spirit of investigation and experimentation be fostered in libraries and embodied in their budgets. In industry, this would be equivalent to establishing a research and development capacity. Because technology is sufficiently mature, however, for libraries it is more likely a matter of finding and applying existing technologies than developing new ones. The manner in which this spirit of investigation and experimentation is embodied in libraries may vary, but this author favours dispersing it throughout the library leadership. Library leadership is anyone who leads any size unit in the library. It is

important that all individuals with leadership responsibilities be made accountable for investigation and experimentation within their spheres of responsibility.

In addition, it is essential that some operating budget resources be allocated to support their efforts. While support for experimentation will continue to be a major focus for fund-raising, it is too important not to receive some small level of funding from the operating budget. For this important period of change when so many new opportunities rapidly appear and just as rapidly disappear, the TLM proposes that a minimum of 3 percent of the operating budget (inclusive of salaries and capital expenditures) be devoted to this library version of research and development.

### ***Emphasis on User Responsiveness***

Perhaps because both librarians and library users were bound to certain limitations surrounding the use of books and journals, our interaction and attention to the interests and needs of user have been attenuated. As the new knowledge environment emerges, however, there is an Opportunity to design a system that accords much better with the desires of users. This opportunity exists primarily because information in electronic form offers many more options for distribution and access than do books and journals. With this new medium of recorded knowledge, we are no longer tied to the limits of location and physical handling that were foundations of the paper-centred library.

The argument to put user concerns at the centre of creating the new knowledge environment may seem obvious. After all, attention to customers has been one of the key themes of the U.S. business world for the past decade. Whether the source was the quintessentially American management advice of Tom Peters or the system developed by W. Edwards Deming that revolutionized post World War II Japan, we were admonished on every side to recognize the importance of attentiveness and responsiveness to customers. It has not been so obvious within libraries, however, until recently, and libraries have a long way to go before user concerns take precedence over our own opinions as experts.

In order for libraries to emphasize user concerns and satisfaction, the transitional library model proposes that user analysis must become a regular part of what librarians do. Elsewhere this author has suggested that user analysis should become an integral part of the work of reorganized reference departments, but wherever an individual library may choose to lodge the responsibility, it must be given emphasis during this time of change. Fortunately, its cost will be modest compared to its benefits. User analysis requires a small level of ongoing support for communication with

users through studies, surveys, and focus groups. Staffing costs can, for the most part, be built into existing staff time, though some consulting may be required initially. The total costs for user analysis may be as little as two tenths of 1 percent of the operating budget.

A library in transition must find a way to escape the rigidity and inflexibility of the divisions within the existing library model. The transitional library model proposes that the best way to accomplish this is to redesign the library on the basis of a team approach. There are several reasons that the team approach is a preferable alternative for libraries. First, it may offer the most gentle means of initiating organizational change. If desirable, an initial configuration of teams may be fashioned from existing units, departments, and branches. For libraries that are more advanced in organizational skills, less traditional and more forward looking teams may be established. In any case, evolving a library into a team-based operation can be tailored to the style and organizational prowess of each individual library, thus reducing staff resistance and organizational shock. More than any other organizational principle, teams provide for stability without rigidity.

The second reason for preferring a team-based arrangement is that it diminishes the Perception of boundaries and divisions and allows the library to adjust rapidly to new challenges. It achieves this, in part, by reducing the management layers of the organization. This often eliminates entire layers of managers who, for career reasons, must be concerned about protecting their "territories." As a result, it becomes easier to establish new teams that reach across old boundaries. Such teams are often called cross-functional teams. The easy ability to form and reform teams is a distinct organizational advantage in a time when a host of new problems and opportunities arise that do not fit existing organizational units.

A third reason that a team-based approach is preferable is that teamwork can result in higher productivity, better quality, and greater staff morale. It does so through better use of the talents of individuals and through better synergism within the workplace through the reduction of individual isolation. It also provides these benefits because it allows and encourages everyone to take responsibility for the success of the operation. The team approach empowers individual staff members at all levels to contribute to the destiny of the organization as never before, and in so doing, reduces the number of those who come and go like zombies without interest, joy, or enthusiasm for the work. Thus the team environment offers a means to put an end to the anxiety-induced inertia referred to earlier by restoring to librarians and support staff alike the ability to get directly involved in working out their professional destinies.

The costs of developing a team environment are limited to the price of education and training and the effort necessary to make the mental conversion from the vertically authoritarian workplace to the team environment. Most of us have known nothing other than the authoritarian environment, so the conversion will require patience, education, and practice. Since the recommendation for funding in the above section on E&T includes the cost of team training, the good news is that moving to a team environment places no additional drain on the budget.

If empowering the library staff through redesigning libraries into team-based organizations is to be most effective, then the teams must also be empowered to manage their own budgets. While there are examples of libraries that practice some degree of decentralized budget management, the predominant model is for library administrators to retain fiscal control. Our present environment, therefore, is vertically authoritarian both in terms of decision making and in determining the use of financial resources. The result is an organizational climate that militates against budgetary change even for good reasons. When administrators propose financial change, there is little or no ownership of, or support for, the proposal by the staff. Indeed, staff are typically uninformed about the budget and threatened by suggestions for change. At the same time, when staff wish to recommend a change, there is little likelihood that they will understand the budget process well enough to make their case persuasively or have it taken seriously. The result is that most library budgets remain virtually unchanged from year to year. Thus, it is not sufficient to empower staff through redesigning libraries into team-based organizations; they must also be given financial empowerment in the team context.

The transitional library model, therefore, proposes that the library's budget be allocated to the teams as appropriate, and that the teams be granted both the responsibility and authority to determine and manage the expenditure of the funds. This will allow teams to make and implement choices to cope with a changing environment. If new challenges lie beyond the financial resources of individual teams, as they often will, teams may choose to pool resources in ways never imaginable within the present model. They may also choose to create new teams, staffing and funding them with human and financial resources reallocated from existing teams.

Paying both for maintaining key traditional library functions and for beginning new functions is a large order. Indeed, just paying for ongoing traditional functions is often impossible in the current financial climate. So achieving a financial environment that can to some degree do both seems more like magic than modelling. Yet it can be done if the new model provides the necessary means and incentives to help library staffs stretch

library financial resources further than ever before. What is required is a financial commitment to developing new ways of doing library business, and these new ways must create much greater efficiency and cost effectiveness.

Incorporating the new emphases described earlier also requires new ways of doing business. Signs of these new ways are already appearing in some libraries. One such sign is the movement of some libraries toward management techniques usually identified as Total Quality Management (TQM). TQM is a complex system that comes in several varieties but at its core is an effort to base decision making on hard data, to improve quality continuously, to place user concerns at the centre of things, and to create a team-working environment. Adopting a comprehensive organizational strategy such as TQM offers the advantage and convenience of providing a single system that can incorporate the emphases of this transitional library model. But whether libraries adopt an existing system or develop one of their own, tight budgets in this time of new opportunities make it imperative that libraries change old management habits.

### **The Transitional Library Budget**

It would be helpful if libraries would discontinue comparing budgetary ratios and statistics for awhile. Like the rigidity of our present organizational model, comparative statistics help hold our budgets in an unfortunate stasis. Since quality is typically measured and claimed on the basis of such comparisons, it is difficult, if not dangerous, to abandon competitive, comparative statistics as the justification for setting and defending library budgets. In practice, statistical standings are far more important in our current budgeting practices than is user satisfaction. If we could discontinue keeping the comparative statistics and allow libraries to construct budgets for better reasons, perhaps we would see positive and exciting results.

For this reason, the transitional library budget should have as few standard ratios as possible. It should, rather, encourage libraries to make whatever creative changes are necessary to serve their users with the best services, resources, and technologies possible. Its goal is to facilitate the search for the twenty-first century library. The heart of the transitional library budget, therefore, is its lack of prescriptions for "appropriate" levels of expenditures for any of the major budget areas. In the foregoing description of the emphases of the transitional library model (TLM), it has been suggested: for education and training, 2 percent of the salary budget should be allocated; for new service opportunities, 3 percent of the operating budget; for user responsiveness, 2 tenths of 1 percent of the operating budget; for teamwork, only the education and training costs; for fiscal

empowerment, no additional costs; and for more effective management systems, only the E&T costs.

These are the only prescribed costs contained in the TLM. This model proposes, therefore, to transform libraries into flexible organizations adept at coping with change for an annual investment of less than 5 percent of their operating budgets.

There will, of course, be other costs each year, but the transitional library model resists projecting them. Indeed, if the model serves its purpose, the internal budget ratios among salaries, collections, access, computer technologies, and other expenditures, will change proportions each year. If teams, for instance, are empowered to choose between filling vacancies or converting salary dollars to technology support, they will make the necessary choices, and changes will begin to take place.

It is the premise of this transitional library model that the changes which will take place among the major budget ratios in the next few years will favour a reduction in expenditures for personnel and a corresponding increase in expenditures for technology, a reduction in expenditures for print-on-paper, and a corresponding increase in expenditures for the electronic distribution of information. The TLM, however, does not attempt to prescribe movement in these directions. Rather, it seeks to establish an environment in which libraries will have the organizational and budgetary flexibility to rearrange their internal finances as necessary to best serve their users during this generation of change.

It is my hope that the organizational emphases of the transitional library model and the approach to budgeting that supports it will provide libraries with the means to prosper under the technology assault and to develop the ability to adapt to change easily. It is also hoped that consistent programmes of continuing education and training combined with empowerment through the team-based approach will improve the sense of confidence and control among library staffs.

Perhaps libraries that adopt the TLM will cease to look like mirror images of one another and, instead, take new shapes that uniquely serve the differing needs of their users. And perhaps in an environment where differences are permissible and experimentation is common, some library will find the perfect budgetary ratios for the library of the future. Until that time, a transitional library model will serve us well.

### **The Design of Library and Archive Buildings**

*Definition of an Archive Service:* Before embarking on a study of the construction and equipping of an archive repository, it may be useful

to begin with some definitions. Whilst the definition of *archives* is almost everywhere the same—the whole of the documents produced by an organisation, administrative unit, firm, establishment, even a family or a person, in the course of the exercise of their activities and preserved for reference purposes—the same cannot be said of the definition of an *archive repository*.

In some countries, the public archives are organised under a separate and independent administrative body, with its own buildings, staff and regulations; whilst in others they are, to greater or lesser degree, linked to libraries, museums or documentation services. Sometimes they are closely tied to the bodies producing them (as, for example, in England where some major administrative units retain responsibility for their own archives); more frequently they come under a separate and independent administration once they cease to be in current use (as in France, where the Directorate of the Archives of France is responsible for the whole of the public archives with rare exceptions).

There is yet another difference. Some countries recognise two types of archive repository: repositories solely concerned with preservation (“historical archives”), intended solely for documents of historical interest, marked for permanent preservation; and intermediate repositories, where documents destined to be destroyed after shorter or longer periods are housed. This distinction does not exist everywhere, and indeed it is not always necessary when the archive repository is closely linked to the body where the archives originated.

All these differences in ideas, organisation and operation are reflected in the differences between archival buildings. For example, a building intended to house exclusively the archives of a province will be different in many particulars from one in which are gathered together, under one direction, the archives, library, museum and headquarters of the learned society of this province. Equally the small building housing the archives of some local administration will have little in common with the enormous one housing the central archives of a modern state with all its ancillary services.

The differences in ideas about the role of an archive service also have a bearing on the construction and equipment of repositories. Some countries still adhere, more or less, to the traditional idea of a complete separation between “historical archives” and “current administration”. Here, the archive service only has contact with historians and, to a much lesser degree, with the general public by way of historical exhibitions. Elsewhere, there will be a close connection between the archive service and archive-producing departments, which may result in the transformation of the

repository into an administrative documentation service. The budding will then reflect this function by the different evolution of some of the working areas. Whatever the type and size of an archive service, every repository must meet certain basic requirements, which are the same in each case and are well known. They are: a) preservation of documents in complete security, hence the need for safe storage areas, protected against fire, humidity, excessive sunlight, insects, rodents, burglars, etc.; b) production of documents to those requiring them, hence the need for space for listing, packing, labelling, catalogues and inventories, search room; c) repair of damaged documents; d) documentary reproduction-microfilm, photocopying, etc.

To these basic needs will be added, in varying degrees, secondary needs: public exhibition of documents; production of documents for educational purposes; moulding and repair of seals-, administrative documentation, etc.

Thus, it will be seen how pointless it would be to speak of budding and equipping an archive repository without first of all defining the kind of archive service it is intended to house; in other words, without drawing up a brief for the architect.

**Drawing up the Brief:** Whether the question is one of planning a new budding or of adapting an existing budding, nothing useful will be achieved without a precise brief. It would be wrong for the archivist to expect the architect to draw up the brief: it is essentially the user's job to do this. If the brief has been well thought out and set down, any errors in its execution will be the architect's fault and it will be a simple matter to compare his results with the brief which was before him when he drew up his plans. If on the other hand, the brief has been negligently or imprecisely drawn up, the architect cannot be blamed for imperfections for which he was not responsible.

The care with which this essential document should be drawn up is, therefore, self-evident. The role of this *Manual* is to help archivists in this task but not to take their place. Only the head of an archive service knows exactly its needs (quantitative importance of the documents in his care, importance of future transfers, number of searchers, etc.). Many factors enter into the reckoning. First among these is the amount of money at the architect's disposal for carrying out the job. There would be little point in drawing up an ideal brief including all the most up to date technical improvements-unfortunately always the most expensive-if the budget for construction is a modest one. The first mark of good sense is to know how to equate the brief with the real possibilities of carrying it out. The

archivist's theoretical brief must be set against the practical facts of the problem. It is then for the architect to say what is and what is not practicable. Once he has advised on and agreed to the draft brief which has been submitted to him, the document is finalised and will serve as a basis for drawing up plans.

**Archivist and Architect:** Everyone to his own job. The archivist knows the needs of his service; the architect knows the solutions which will satisfy these needs. It would be as presumptuous for the archivist to claim the right to draw up the plans for his future repository as it would be for the architect to ignore the suggestions and the possible criticisms of his client. Ideally then, close collaboration between architect and archivist is indispensable for the satisfactory completion of an archival building.

However, in practice things do not always fall out this way: sometimes the archivist has requirements which cannot be met, or, has only vague ideas about the equipment he wants; the architect, for his part, sometimes has set ideas which he seeks to impose despite the archivist's advice, or, through excess of work on hand neglects to keep in touch with the archivist and draws up his plans without consultation.

What should one do in such circumstances? It is clear that the archivist cannot force his way into the architect's office and make a scene. On the other hand, the architect cannot seek the archivist's advice every five minutes. In cases of sharp conflict, recourse can be had to arbitration by higher authority, usually whoever is financing the work. But such extreme measures, happily, are rare. More usually, in these matters, good manners win the day, the more so since both sides recognise that, in their different spheres, each is equally competent.

Whether it is a question of building or adapting, once the preliminary consultations have taken place the matter is now one for the architect. He knows the latest technical developments and is responsible for the actual works. He is in a position to suggest new solutions and draw the archivist's attention to difficulties created by the brief. Only for the most weighty reasons, connected with the proper functioning of an archive service, should the archivist oppose the adoption of the architect's plans, although necessary modifications and improvements may be incorporated as they are being drawn up by mutual agreement.

Later on another problem, often a source of conflict may arise, that of supervision of the work. It is essential for the archivist to follow the course of the work closely, since at this point he may detect minor errors or omissions which can easily be remedied as they occur, but which become irremediable once the job is finished. Unfortunately, the architect rarely

voluntarily invites the archivist to inspect progress and the archivist must take the initiative in visiting the site, where his welcome may not always be as friendly as he could wish. However, he must persevere: an archivist who has not closely and minutely followed the course of the work will have forfeited the right of blaming the architect if anything goes wrong once the job is finished. A weekly visit should be part of the archivist's professional duty.

***The Basic Choice: A New Building or the Adaptation of an Existing One?:*** For at least fifty years there has been much argument as to whether it is better to build new premises or adapt existing ones to house archives.

A brief summary of the arguments in favour of each point of view follows:

- (a) *In Favour of Old Buildings* : The cost is usually lower since there are normally no major works to be carried out on the main structure of the building. The advances of the last thirty years in the internal renovation of buildings have made it possible to re-use old repositories by modernising their interiors. There may also be an opportunity of saving ancient monuments (palaces, monasteries, churches...) threatened with destruction by converting them into archive repositories. Lastly, an argument of a sentimental kind, not without its value when it is a question of preserving part of a cultural heritage, the atmosphere of an historic building may seem to be more attuned to the nature of archives than a new, impersonal, characterless building.

Against these arguments, it can always be argued that, with rare exceptions, buildings erected for purposes other than the preservation of archives only lend themselves to the necessary functional adaptation with difficulty and imperfectly. Also, if, as is almost always the case, the whole interior must be re-adapted and fitted out as a preliminary, then the cost is often the same as, if not more than, that of a new building.

- (b) *In Favour of New Buildings*: The obvious advantage is the greater convenience and flexibility: all the requirements of the brief to the architect can be transferred more easily on to the plans for a new building than to those for an adaptation of an old building. The architect will also have the advantage of the choice of building materials, etc.

As to the sentimental argument, as with all such arguments, it can neither be countered nor supported by logical argument. It is true that,

in certain cases, the use of an historic building in which to preserve archives may be desirable from a psychological viewpoint: the prestige of the building may reflect on the archive service (as is the case in Paris, for example, where the beauty of the Palais Soubise and the Palais Rohan has contributed notably in bringing the National Archives to the attention of the general public). On the other hand, such a solution is frequently chosen solely on the more or less valid grounds of economy, with all the drawbacks this brings to the functioning and future of the service.

Indeed, the types of building which lend themselves to adaptation as an archive repository without costly and complicated internal work are rare. Usually, adaptations of this kind are inconvenient and defective (the experience of the National Archives in Paris, referred to above, is instructive in this respect).

A compromise solution, which may prove satisfactory when sufficient space is available, is to put the working areas of an archive service in an old building and to build a new repository block immediately next to it; or to convert the nave of an old church into strongrooms and to build a new aisle for the working areas.

To return to the psychological arguments, it should be added that the use of an old building conveys little prestige on an archive service unless it is a stately building of character and artistic merit; this is not the case of old factories or warehouses, or even prisons, which are too often offered for conversion into archive repositories.

The argument against conversion does not apply to records centres for which, contrary to archive repositories properly called, accommodation which is both economical and improvised will suffice.

Finally, one decisive argument in favour of a new building should not be ignored: in the world of today, it is in the archivist's best interests not to turn his back on his own times. The general public and administrators are only too ready to regard archives as a collection of dirty, useless old papers. A new and attractive building can greatly contribute to overcoming such prejudices. To insist too strongly on the occupation of an old building, however "historical" it may be, will only give firmer roots to the notion that archivists are incurably wedded to the past. The consequences of such an opinion on the future of an archive service are only too obvious.

***Second Choice: Single Building or Multiple Buildings?:*** In most countries, it is usual to concentrate all the archives under the control of one archivist in one single building. The advantages of this are self-evident: economies in construction, equipment, staff and time, since everything is in the same place and thus fetching and carrying is reduced

to a minimum. However, there are drawbacks especially if the archives are important: there is a risk that the building will become excessively big, occupying a large surface area, which is expensive if it is in the centre of a town. On the other hand, in case of disaster all the documents will be destroyed together.

For this reason, some countries have adopted the system of splitting their archives between several buildings, separated to a greater or lesser extent one from the other. Thus the risks arising from a disaster can be spread and too great a concentration in one place, with its effect on site costs, avoided. But one immediately runs up against other drawbacks: increases in staff needed for running these dispersed repositories; complications in internal relations; a growing risk of disorder and bad administration. We have also to consider the question whether "historical archives" and "intermediate records" should be kept in the same building or in distinct buildings (archive repositories versus records centres), a question which has already been alluded to above.

While no strict rule can be defined for all cases, it is nevertheless clear that it would be absurd to disperse archives throughout several buildings when their total bulk is of a moderate size. If, taken together, the whole of archives and intermediate records do not exceed 15,000 to 20,000 linear metres (for the meaning of this expression), one single building should suffice to hold them. But once the figure of about 25,000 lin.m. is reached, it is almost invariably better to separate archives and intermediate records.

Of course this discussion about the advisability of a single building or multiple buildings for archives is entirely independent of the fact that, in important archive buildings, the strongrooms often have to be divided into two or more blocks; and also that working areas often are in a distinct block from the strongrooms.

**Third Choice: Choice of Site:** Whether it is a case of a new building or an old one, of a single repository building or multiple buildings, the proper choice of site is vital. Many mistakes can subsequently be corrected, but not the choice of a bad site: the whole future of an archive service can be jeopardised by such a mistake.

Unfortunately, the "ideal site" is very difficult to define. Many factors enter into the reckoning, some of them contradicting others.

- a) *Sites to be Avoided:* at least it is possible to define without any hesitation sites which should be completely avoided:
  - i. sites with intrinsic dangers: land liable to flooding; unstable sites (*e.g.* hillsides, where the sub-soil is of clay and liable to

land slides); damp, swampy sites; land liable to the effects of heavy seas; land subject to termite infestation, etc.

- ii. sites with dangerous surroundings: sites near factories with a high degree of air pollution, or near installations of high fire or explosive risk (gasometers, petrol tanks, explosive depots, etc.), or near possible strategic targets (airfields, major railway centres, etc.). Such sites should be rigorously avoided. Under no circumstances should an archivist agree to build a repository on a site with these major disadvantages.

There are other types of site which should as far as possible be avoided, but to which the same categorical prohibitions do not apply: sites near sources of noise (busy main road, railway station, factory); sites which would preclude future extensions to the repository either by reason of their limited area or because of town planning restrictions on the height of buildings. Sites which are difficult of access by reason of steep slopes or bad roads should, as far as possible, be avoided.

In any case, before deciding on any site whatsoever, the soil should be carefully surveyed and trial bored so as to avoid unpleasant surprises when digging of the foundations begins.

- b) *Definition of the Best Sites.* If a repository principally intended for the preservation of historical archives is being built, it will be desirable to site it in the university quarter of the town; even more so if libraries and museums are intended to be near the archives, as is the practice in many countries.

If, on the other hand, the repository is for departmental records, it will be preferable to keep them near the centre of administration, which is usually in the heart of a town. Such a site is a prime essential if an administrative documentation centre is linked with the archives, to which officials of the administration must have easy access at all times.

This all seems very straightforward. Unfortunately, it most often happens that:

- i. the same building must house both historical archives and departmental records;
- ii. available sites in town centres are scarce, very expensive and thus unsuitable for large archive repositories;
- iii. university quarters are situated well away from city centres. To these considerations should be added the facts that students studying in different university departments, colleges and secondary schools must be able to attend the sessions of the educational

service in the repository with ease; and that the frequent handling arising from the transfer and destruction of departmental records in administrative archive repositories is hardly practicable in the centre of a town.

The "ideal solution" then seems to vary, depending on whether one is talking of a small archive service or one on a vastly bigger scale.

In the first case, (repositories of between 15,000 and 20,000 linear metres run) every endeavour should be made to find a site in or reasonably near a town centre, easily accessible but sufficiently isolated to allow vans carrying records to turn round on the site with ease. A surface area of 800-1000 sq.m. should suffice for this size of building and it should not be hard to find a suitably located site of this kind.

If, however, it is a question of a large and important archive service, it would be wisest-as has been said before-to distinguish clearly between:

- i. current or very recent departmental records, which will either remain in the offices where they were produced or very near them;
- ii. "intermediate" records, for which a records centre would be built or fitted out with fumigating facilities, large accession and weeding rooms etc. on the outskirts of a town;
- iii. archive repositories properly so called, or "historical archives", situated near other buildings devoted to cultural activities (such as libraries, museums, universities, etc.) in a well equipped building, where the headquarters of the service are located.

It is extremely important that if buildings to which the public has access are situated away from the centre of a town, they should be easily accessible by public transport; this should be a prime consideration in the choice of a site.

*Is it Satisfactory to House Archives Outside Towns?* Since, in the opinion of many people, archives are dead things, it is often suggested that they can be kept in the country, e.g. in an old castle or ecclesiastical building, far from a town, where land is cheap. The supporters of this point of view add that maximum isolation is thus ensured and as a result archives are protected, especially from wartime dangers.

Such a solution should be rigorously avoided. It can only end in the suffocation of the archive service, which will be cut off from contact with administration, historians and the learned public. Except in the case of services of the greatest importance (such as the Spanish national historical archive, whose presence in Simancas alone justifies the existence of a hostel in this small country town lost amid the plain of Old Castille),

archives, in general, tend to be under-utilised if they are situated outside a town.

Of course, the establishment of “security” repositories in isolated places far from centres of population, intended solely for the storage of archives in wartime, may be envisaged. But such repositories should not be confused with permanent peacetime repositories; no one would think of exiling the Mona Lisa to the heart of the Auvergne mountains, or the pictures of the Metropolitan Museum in New York to the Rocky Mountains, or Tutenkamen’s treasures to the middle of the Nubian Desert, under pretext of safety or security. Archives, like paintings, sculptures, and books are a part of a living culture; their place is amongst the people who create and use them.

It is always possible to leave the heart of an archive service in a town centre (offices, search rooms, catalogue rooms, etc., *i.e.* those parts of direct service to the public) and to spread the storage accommodation which is the most cumbersome part, out around the edges of the town. Such a solution is both practicable and acceptable, subject always to two essential conditions:

- a. that very regular and rapid communication between the various buildings is ensured by a service vehicle;
- b. that in the strongroom block, along with accession, weeding and listing rooms and various workshops, there is an officer exclusively concerned with producing documents required in the other budding. It must be stressed that the division of the service between two widely separated buildings raises delicate operational problems and requires numerous staff.

Finally, specialised types of repositories, *e.g.* for security microfilm, are normally found on isolated sites, offering the maximum guarantee of safety against all foreseeable means of destruction.

*Orientation of the Buildings:* Once the site has been chosen, thought must be given to the possible orientation of the budding (in so far as a choice is possible, which will depend on the shape and layout of the site).

Because of the dangers to documents from excessive sunlight, it is better to avoid giving strongrooms a direct southern aspect in the northern hemisphere or a direct northern aspect in the southern hemisphere.

In areas exposed to winds from the sea carrying humidity and salt or to hot, dry winds, it is undesirable to site strongrooms facing these winds, although their damaging effects can be lessened by good insulation against heat and humidity.

For search rooms and other working areas in general, that orientation which gives the best natural light should be sought.

***Fourth Choice: A Building above or Below Ground?:*** The principal attribute of an archive repository is security, and it is tempting to ensure this to the maximum by burying the strongrooms below ground. Moreover, this solution has another attraction in that it is an economical use of a site, especially in a large town. Finally, protection against the hazards of war is inseparable from the idea of underground shelters.

These various reasons explain why, over the past three decades, many countries have either excavated new or adapted existing underground repositories. This solution merits close attention but it is only fair to point out that, despite the advantages mentioned above, there are two very considerable disadvantages:

- i. the safe storage of archives underground requires constant ventilation and air-conditioning, which may very well be extremely expensive unless the land is dry, because of the danger of the infiltration of water and stagnation of air in subterranean areas;
- ii. the possible dangers of electricity failures, negligible in the case of a repository above ground, are likely to be serious in an underground repository.

Again, unless an existing underground tunnel is used, the cost of an underground budding with the extensive excavations, lining and digging which will be involved, may well be greater than that for budding on the surface of the ground: economies in site costs will be largely counterbalanced by this expenditure.

If the primary consideration is to provide protection against the hazards of conventional warfare, normal underground construction will suffice (beginning some 3-4 in. under the surface, provided there is a satisfactory protective ceiling); if, however, protection against nuclear weapons is what is wanted, then, all available evidence suggests that extremely deep tunnels will be needed, well away from military targets; consequently, the problem here is very different.

In practice, such underground installations as tunnels excavated as wartime air-raid shelters, disused railway tunnels, mine galleries driven into the rock may be considered for use as archive stores, provided that all the necessary air-conditioning, emergency pumps, ventilation etc., have been installed and are in continuous operation: but such installations are usually at some distance from a town and their use will have the undesirable result of separating the archives from their users, which, as has previously been mentioned, should be avoided.

The location of archive repositories below ground, With a few exceptions, therefore, tends to be unsatisfactory, both from an operational and a financial point of view.

It is quite usual, however, even desirable for an archive budding to have two or three underground floors, fitted out as strongrooms or areas of special security. Mobile shelving can be used here. In practically all modern office buildings (*e.g.* banks, headquarters of large undertakings, etc.) archives are stored underground in a perfectly satisfactory manner; but it should always be remembered that if this solution is to work properly, an air-conditioning plant is essential and this is expensive.

As to wartime security repositories, which have been alluded to earlier, they fall rather outside the scope of this present Manual. Every important archive service must have access to one of these in case of serious danger, situated well away from centres of population and military targets and built-or better excavated-to withstand modern weapons of war. The construction of such repositories should be gone into in conjunction with civil defence services in the general context of the protection of cultural property in time of war. Here the matter can be but briefly referred to.

***Fifth Choice: A Horizontal or Vertical Building?:*** It has, for a long time, been traditional to build archive repositories at ground level. This is obviously the simplest solution with the fewest constructional problems. However, the size to which major archive services have grown means that the surface area required is now considerable. To take an example: a repository with some 20,000 lin.m. of shelving of the conventional (non-mobile) type will have some 2,600 m. of gangways and passageways, a figure corresponding to the shelving of a medium sized repository. For a larger service, the figure would soon be 6,000 m., 8,000 m. or more.

It can thus be seen that it will be in the interests of the service to reduce gangways, and thereby surface area as much as possible, thus ensuring economical use of the site, which will almost always be costly in a town.

For these reasons, one is led more and more to think of constructing high-rise buildings. With modern architectural techniques these no longer present any difficulties and repositories of 20, 30 and even 40 stories are perfectly feasible. Here, most internal traffic is vertical, by way of lifts, thus eliminating the difficulties of manoeuvring trolleys along apparently interminable gangways.

It should, however, be noted that high-rise buildings need special foundations, which are generally very expensive. There is, therefore, no point in building “archive towers” as a matter of course; the solution to the problem depends on the price of land, the importance of the archives to be stored, the nature of the soil (a tower costs less to erect on rocky ground than on soft), etc.

The working of the lifts should also be borne in mind: in the event of power cuts or break downs, the situation can become catastrophic; and it is by no means easy, outside a big town, to maintain and repair such sensitive lifts as those in a 20 or 30 storey building.

***Sixth Choice—Traditional Framework or Framework Incorporating the Load Bearing Uprights of the Shelving as an Integral Part of the Structure?:*** The use of metal shelving makes it possible for the architect to link together closely the framework of the shelving and that of the building itself, by using a building structure suitable for load bearing shelving.

The respective advantages of a traditional framework and one able to accommodate load bearing shelving are studied below. But it should be emphasised that it is at the stage of drawing up the plans that this choice will have to be made.

In effect, a framework to accommodate load bearing shelving requires, at all levels, a network of metal uprights in more or less close-set ranks, which governs the whole internal arrangement of the building. If working areas and strongrooms are placed one above the other, these uprights can cause serious functional problems, and, as a result, the whole plan of the building requires careful thought.

***General Plan of the Building:*** A multipurpose archive building is composed of three (or four) basic elements:

1. Storage areas (strongrooms);
2. working areas for the staff;
3. areas open to the public (the offices of the director and his assistants fall between these two categories);
4. (possibly) official residence.

There is one fundamental principle to be observed in linking these different elements and drawing up the plan of the buildings: the strongrooms must be isolated from the rest of the building to ensure their protection against fire. This can be achieved either horizontally or vertically; put another way, the strongrooms can be built either physically separated from the other areas or separated from them by thick walls or placed above

or below each other with fire resisting floors and ceilings. The problems posed by such walls, floors and fireproof doors will be seen below. Here we need only consider the effects of this necessary isolation on the plan and general idea of the buildings. The most simple way to ensure the separation of strongrooms from other areas is of course to build the strongrooms block on one side and on the other the administrative and technical block, connected only by corridors with fire resisting doors.

However, this solution is not always practical if only because of the large surface area it requires. The isolation of strongrooms can be equally well achieved by means of fire resisting walls within the same block of buildings. It can also be achieved in vertical buildings by the use of fire resisting floors or ceilings.

Should strongrooms occupy upper or lower floors? It seems logical to place the heavier elements (strongrooms) in the lower parts of a building; provided the lifts are adequate, working areas can then be on upper stories. This solution has the added advantage, in larger towns, of ensuring that offices, search rooms, etc. are furthest removed from street noises and polluted atmosphere. At street level or below would be areas for the reception and weeding of documents and certain workshops.

The other solution, which puts strongrooms above working areas, is technically feasible through the use of thick reinforced concrete floors supported by stout pillars. This allows working areas to remain at street level and avoids constant use of lifts.

The overall plan of the building, then, depends on the shape and dimensions of the site and on the method adopted to separate the strongrooms from the other areas.

A traditional layout is L-shaped, with the strongroom block perpendicular or at right angles to the administrative and technical block. It is very satisfactory, as is the T-shaped layout which is similar.

Using fire resisting walls where necessary, concentric, square or rectangular layouts can also be adopted, the centre or one side or one angle of a quadrilateral being occupied by strongrooms.

If the building consists of two blocks of strongrooms the most rational layout is either H-shaped or in the shape of a square U in which the median bar will represent the working areas.

If there are to be several strongroom blocks, a star shaped building will ensure the best operation of the service (plate 10b).

***Provision for the Future:*** No archivist can claim to have done his job properly, when building or adapting a building for his service, if he

has not provided for extensions sufficient for the foreseeable future. It is impossible to forecast the need for such extensions in the abstract; it obviously depends on the rate and extent of accessions, Careful statistics should be kept, to ascertain:

1. volume of transfers received during the decade preceding construction or adaptation;
2. size of transfers refused in recent years through lack of space;
3. yearly rate of population growth of the town or province (this rate, more or less, will have its repercussions on the number of files dealt with by offices);
4. approximate quantity of documents to be destroyed each year.

Ideally, an archive building should, from the time of its construction or adaptation be designed to meet the needs of at least the next 10 years; in addition to the racking needed to store holdings at the time of building or adaptation, enough for the foreseeable transfers of the next 20 years should be installed, allowance being made for the corresponding destruction.

But twenty years is a short time in the future of an archive service; one must think even further ahead.

Failing the initial construction of a building large enough to meet the needs of the next 50 to 100 years (and this would be excessively ambitious), provision for possible enlargement of both strongrooms and working areas should be made. This enlargement can be at ground level or vertically; in the latter case, provision should be made when the foundations are dug for future extra floors and weight to be placed on them.

In the absence of precise and detailed figures (a risky business anyway), it would be agreed, as a rule of thumb, that the potentiality of doubling the capacity of a repository would be looked upon as satisfactory.

### ***The Open Plan and Flexibility***

Flexibility is one of the qualities in the requirements of a library building which has high priority in the hierarchy of its desiderata. Library planning requirements and qualities have changed during this century, slowly at first but more rapidly recently with the changing needs of libraries and library users.

Although internal arrangements and library services vary from place to place, and from one type of library to another, recent libraries of all sizes have many common factors, which have been crystalised into the following ten desirable qualities-Faulkner-Brown's ten commandments. A library should be:

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<i>flexible</i>	with a layout, structure and services which are easy to adapt;
<i>compact</i>	for ease of movement of readers, staff and books;
<i>accessible</i>	from the exterior into the building and from the entrance to all parts of the building, with an easy comprehensible plan needing minimum supplementary directions;
<i>extendible</i>	to permit future growth with minimum disruption;
<i>varied</i>	in its provision of book accommodation and of reader services to give wide freedom of choice;
<i>organised</i>	to impose appropriate confrontation between books and readers;
<i>comfortable</i>	to promote efficiency of use;
<i>constant in environment</i>	for the preservation of library materials;
<i>secure</i>	to control user behaviour and loss of books;
<i>economic</i>	to be built and maintained with minimum resources both in finance and staff.

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These are the broad outlines of ten important qualities. Irrespective of size, these qualities can be applied in varying degrees. It is worth examining them in more detail.

**Flexible:** Flexibility of course does not mean that the structure is flexible and will bend or move under stress (that is reserved for the librarian). A flexible library building is one which permits flexibility in the layout of its planning arrangements, with structure, heating, ventilation and lighting arranged to facilitate adaptability. By arranging columns at regular spacing, or reducing the number of columns with long span beams, and by designing the floors to carry a superimposed live load of 150 lbs/ft<sup>2</sup> or 7.2 Kn/m<sup>2</sup> for bookshelf loading, it is easy to move departments, issue desks, bookshelves, reader places or other library functions to any part of the building. Better flexibility is achieved when floors are level, without steps, and when the heating, ventilation and lighting allow rearrangement without the need for any alterations and yet maintain an adequate environment.

The planning arrangements can also be seen to be much more flexible if the number of walls in the building are reduced to a minimum, with the permanent walls concentrated in certain areas to form 'cores', containing the permanent features-stairs, lifts, toilets and ducts. Other walls, where security and privacy are absolutely essential, are not structural, and are designed to be demounted and erected elsewhere. The building and its components are designed to facilitate this. All other areas can be left open and by applying the well tried (but not universally accepted) experience

of offices designed on 'burolandschaft' principles, visual and aural privacy are achieved very simply, with the bonus of much improved communications and supervision.

The necessary visual privacy is achieved by varied furniture arrangements with bookshelves providing indigenous screening, and movable indoor planting additionally providing colour, a variety of forms and life to the interior.

Surprisingly, aural privacy is achieved by acoustic material on both the floors and ceiling, plus the introduction of an even level of ambient noise in the ventilation system. These factors ensure that noise levels of normal conversations are absorbed in a satisfactory manner, and are not distinguishable at distances of beyond 4 metres from source.

In an open-planned building designed flexible to cater to adaptations, relocation of departments and activities are achieved without having to resort to expensive contractual alterations, and the librarian is not inhibited from making changes or instituting experiments—they are achieved merely by moving furniture and bookshelves. If however the furniture is fixed or is built-in or built of brick, steel or reinforced concrete then it does present a more difficult problem. The furniture is immovable for all time, which assumes that needs will not change.

Furthermore it can be demonstrated that the open-plan flexible library can be economical in staff resources, since overseeing and informal control are facilitated by the openness rather than by dividing up the building into rooms or halls, thereby requiring less staff.

It has been demonstrated in many libraries that when shortage of recurring finance has resulted in severe inadequacies in staff numbers, whole departments of some libraries are unable to open because of lack of funds to employ staff (music departments are sometimes victims).

In the case of open plan libraries, real economies in staff numbers can be made, without substantial reduction in library service. If the layout is planned so that staff are beneficially located to supervise and service more than one department, then the distressing conclusion to perhaps close, or in the case of a new library, not to open a particular department can be avoided. This will be assisted in an open plan library if, depending on size, the departments can be arranged contiguous with each other on the same level floor.

It can be seen therefore that the open plan has many advantages, that enclosed rooms disappear, or are drastically reduced in number, and that departments are in loosely defined areas, informally arranged in relationship to each other.

**Compact:** A compact building will assist the librarian in many ways. Theoretically travel distances will be reduced to a minimum if the building is a cube and on entry users are brought to the centre of gravity. Books, staff and readers will need to move shorter distances in a cubic building than in a linear building or one extended by moving away from a deep plan. There is also a bonus in economy of consumption of fuel and energy. This diagram compares deep and linear buildings of large floor area to demonstrate the difference in travel distance.

**Accessible:** The quality of lease of access' to the building and to the books is one to which much attention needs to be paid. An easy and inviting route to the entrance should also be unambiguously defined. Once inside, the user should be aware of the location of the principal elements of the building-enquiries, the circulation desk, catalogues, tools for information retrieval, stairs, etc. and the routes should be strongly stated without an over-proliferation of signs and direction.

**Extendible:** Until recently all librarians and some architects have maintained that library buildings, especially academic libraries, are not finite. They should be capable of extension and land should be reserved for future expansion. A most significant development in British academic libraries is the recent report of a working party on Capital Provision for University Libraries-the Atkinson Report. Among other things it recommends the adoption of the principle of a 'self renewing library of limited growth', and establishes new norms. This means that academic library buildings are to be finite with no provision for extension.

It is a commonly held view that every library building should be capable of extension, that the construction of the building will facilitate extension, and that at each stage of development the building should appear to be a complete entity. Naturally the choice of exterior materials and construction will be heavily influenced by this latter factor. The exterior wall of a library building can consist of a series of simple repetitive units which can be removed from the facade and re-used in an extended building. If the library is not extended it can stand in its present state as a finite, and apparently complete building. If the needs of the library change, the building can be changed reasonably easily. Some of the ten commandments can be bent, some diluted, but this one should not be abandoned.

**Varied:** The variety of book and of user accommodation in a library adds interest to the interior but also provides for the many needs and preferences of the users. This will vary considerably depending on size, function and location.

**Organised:** A principal quality or function of a library building is to organise the display of its library materials so that they are accessible and easily available. Simplicity in layout, arranged in an easily understood and inviting way is vital in both small and large libraries.

**Comfortable:** Before beginning the design of a library, the librarian and the architect together should visit a large number of libraries of all types. It is important to observe how libraries are actually used. Photographs and notes should diligently record this, and will probably include many cherished photographs of sleeping users. Almost without exception they will have occurred in large libraries with antiquated or inadequate ventilation without air-conditioning. A fresh, constant temperature and humidity not only promote efficiency of use, it encourages use. In some climates discomfort is caused if windows in a large library are opened-heat, cold, dirt and noise are offered 'open-access' from the external environment.

In other climates, to achieve the desirable comfort conditions it is important and economic to use the free facility nature offers from the external environment and induce it into the building with controls to regulate it according to need. Generally speaking this applies to large library buildings, especially those with a deep plan, and to those where study conditions can be offered with a secure aural environment. In smaller library buildings and in those without a critical acoustic need or a book preservation problem, the normal local custom of building can produce acceptable comfort conditions. Nevertheless, in all libraries a good standard of lighting is necessary-there is a lot to be said for an evenly maintained level of about 400 lux at the working plane throughout the public areas. This will be adequate for most needs, including the illumination of the book title on the lowest shelf.

**Constant in Environment:** Research into the preservation of library materials indicates that a constant environment is necessary, and when this requirement is linked to the former-comfort of the users, an unvarying level of illumination, heating, cooling, ventilation and acoustics will give the type of environment needed in a library. The wall should be considered to be an environmental filter or regulator. It should reduce heat loss in winter and solar gain in summer. It should keep out intrusive external noises yet provide windows for prospect.

**Secure:** Security of the collections has always been of prime importance in libraries. The reduction of public access and egress to a single point well controlled by electronic or other means, the openness of planning to assist automatic overseeing of most areas goes some way to reduce the loss of books and to control the behaviour of users in many instances.

**Economic:** The energy crisis has hit all of us. Libraries can be expensive buildings to build and they can be expensive to run; in fact running costs have become a major financial consideration to librarians. In large libraries the deep compact plan requires long hours of artificial illumination and air-conditioning to create an even and constant environment. Every acceptable method must be examined to minimise cost without impairing service. In the first instance, when designing a building, economy in running costs can be effected by reducing the surface of the exterior skin of the building (walls and roof) as much as possible, so that the ratio of wall area to floor area is low. A building form with a cube shape is the ideal, but may not suit the library planning needs. However it is important that the building shape is as close to a cube as possible.

Secondly, windows allow heat to pass out of the building in winter and to pass into the building in summer from solar penetration. Window openings should be as small as possible and as a guide the recommended total area of window should not exceed 25% of the total wall area. Shaping the exterior of the building to provide shading for the windows can keep out solar penetration at the hottest part of the year, thereby reducing the cooling load in summer. There is no need to stress the importance of wall and roof thermal insulation.

Contrary to widely held belief, the great consumer of energy in a deep plan building in temperate climates is not the heating requirement in cold weather. Well insulated walls of minimum area are the only substantial source of heat loss. The centre part of the deep plan is not losing heat, since it is surrounded by a cocoon of warm air in the perimeter bay. In addition to the lighting the major consumers of energy are the fans to circulate air through the building and the refrigeration equipment to reduce the temperature in warm weather. The period when maximum energy is required is in hot weather with a full library, when the air-conditioning plant has to deal with high outside temperature, and with permanent artificial lighting to a high even standard.

If real economies in running cost are sought, then I suggest that a much closer look needs to be taken at the way in which our libraries are used. Some investigations on use carried out in three British University Libraries-Edinburgh, Newcastle and Nottingham-show the total weekly exit numbers recorded at the check-out points and give some indication of the intensity of use. The pre-examination revision period is highlighted in November and particularly in May. The most noteworthy factor is the understandable similarity of low use from June to October. This is the period when the air-conditioning has to work hardest to cope with high outside air temperature and solar gains on and through the building

fabric. The first question to ask librarians to consider is-when briefing the architect it is possible roughly to quantify the anticipated average occupation of the building during the hottest part of the year. If the occupancy is low the size of the refrigeration plant in most libraries can be modest.

The second question is-in a deep plan building do all the lights throughout the building have to be left on during the summer, or can there be some logical means of switching arranged so that maximum economy can be effected?

The third is that if librarians can arrange most of the reading space near the perimeter might it be possible to depend on daylight, and therefore, in open plan flexible buildings, could seating be rearranged accordingly?

In conclusion, it can be seen that many of the advantages of an open plan library building, designed to give a high degree of flexibility, is a requirement of modern library planning and needs no justification. This strong requirement should be balanced with the other requirements and qualities of a library building.

It is hoped that economies in initial capital and recurring annual running costs resulting from open plan library buildings will be an additional beneficial factor.

### ***What Space for the Library? A Discussion on the Library Building***

From now on, one can fairly say to all those wishing to be involved in library construction, 'Don't forget your Bisbrouck and Gascuel!' Two handbooks by these authors, published in spring 1984, have filled what had in recent years been a notable gap on the bookshelf.

The Bulletin des Bibliothèques de France (BBF) asked authors Jacqueline Gascuel and Marie-Françoise Bisbrouck to go further and compare their viewpoints on the problems of library construction. For example, how are free access and activities in the library actually organized? How should a library network be constructed? At a more general level, what makes up the service of which the building must be the embodiment? Questions of viewpoint will play as large a part in the discussion as questions of construction. And if a number of questions are left open at the end, this is because the debate over what a public library should be has not reached any final conclusion.

**BBF:** Today's debate has been occasioned by the publication of two books on public library construction.

There had been virtually no literature available on the subject for years, and now two books have been published within a few weeks of each other! They are two very different books: *Un espace pour le livre* is

presented as a handbook and as a stimulus for debate on the question while *La Bibliothèque dans la Ville*, published by the Direction du Livre et de la Lecture, is a coffee-table edition (large format, glossy laminated cover, with a wealth of very varied illustrations). Why two such different contributions? Could you explain your respective approaches? What kind of book was each of you trying to produce?

Marie-Françoise Bisbrouck: The origins of *La Bibliothèque dans la Ville* go back a long way, to discussions in the working group on municipal library construction which the national public library service set up in 1973-1974. One of the first results of the working group was the publication of guideline standards in 1975. A further factor was that over the past 12 years, 400,000 m<sup>2</sup> of municipal library space has been brought into use, three quarters of it in new buildings.

It was important to take stock of these recent developments. It was the intention of the Direction du Livre for the book to be of interest to librarians, architects and local councillors alike, these, indeed, being the three groups you encounter in working meetings. We therefore wanted to produce a technical book which would provide them with a certain number of ideas we were constantly having to repeat, but without the book being too dry. We have therefore tried to make it an attractive book as well as a work of reference, and we have thus taken particular care over the general presentation and the indexes.

One part of the book is more 'political' and is aimed mainly at local government representatives. This is a statement of what a library is, how it works, who uses it, the necessity of providing adequate numbers of adequately qualified staff, etc. Another part of the book is aimed more directly at architects and provides technical information on such problems as lighting, floor coverings, working loads on floors, etc. We have also provided a certain number of reference points, giving complete data on 20 recent central and branch libraries which can be compared with each other in terms of completion time, building costs, etc. For each project we have listed the initial schedule, the technical solutions chosen, staff numbers and their respective qualifications; and of course we have included all the plans. Finally, all the factors that may have a part to play both prior to and after any library building scheme have been examined, *viz.* technical factors (furniture; mobile library), administrative factors (building regulations, grants), political factors (guideline standards and programmes per population group).

We were particularly keen to make this book a genuine instrument for library planning. Planning here means detailed consideration of the function of a library within the town and what one hopes to do, not merely

to keep in line with official standards but also to mould the library as closely as possible to local conditions, as they are now and as they may develop in the future.

I must say that on this point I have often been very disappointed. Tripartite teams (local councillors, librarians and architects) rarely manage to think up original projects taking account of each situation's specific features, and they hardly stray from the schemes suggested by the Direction du Livre. But libraries have changed over the past ten years and they will continue to change considerably in coming years.

Our book is, of course, a stocktaking of the present state of library development and it will one day be outdated. In view of current decentralization, in particular, I think it will need updating every three or four years; and other material should also be published which will show how the buildings have evolved, how the users have made the buildings their own and how and why, over time, they have changed the interiors.

Jacqueline Gascuel: It is no accident that our two books came out at the same time. Both are the result of joint discussion by the 1973-1974 working group, of which I too was a member. When I saw nothing had been published I set to work; I made a plan and submitted it to Jean-Pierre Vivet and Françoise Bony, who gave my project immediate encouragement and agreed to publish the book.

In fact the book had been brewing for a long time, ever since the opening of Massy public library in 1971. At the time, this was one of the first purpose-built public libraries. It represented a particular view of reading by the general public and it was much visited by local councillors, librarians and architects. It was from these conversations in 1972-1974 that the book was born. The actual writing was done much later, and was spread over several years. Writing this kind of book on your own is like ploughing a field-you plough half a furrow a day, and then three years later when the last furrow is ploughed, you can see the weeds growing again in the first one!

The book is aimed at a many-sided type of readership. Firstly it is aimed at local councillors and all those involved with them in library building. But above all I was writing for librarians and architects. For librarians, the approach is more subtle.

I have tried to make the book educational. It's a guide for librarians faced with a building problem and it also pleads a cause. It may constitute an argument that will make local authorities decide to build. That is why the tone of the book is in parts somewhat impassioned. Given the practical objectives adopted, it was hard for me to do much with the presentation.

There are photos, obviously, and there are also diagrams and drawings that say more than lots of words. I have staked most on readability and humour, with eye-catching chapter titles and headings and an amusing choice of illustrations.

### **New and Different**

**BBF:** In a word then, one book is a work of reference and the other a guide. But despite this difference, both have been equally successful and their first editions will soon be out of print. What we find particularly interesting is the 'new look' that comes out of both books-free-access layout, organized activities, a children's service and record libraries. These all make up a fairly original pattern of organization. In most cases they are departments which are compartmentalized and sharply differentiated. Can one speak of French library design as being different from design in Scandinavia or the English-speaking countries, where all these different parts are generally brought together in one area?

**JG:** I wouldn't put the question in those terms. What counts first of all is the size of the library-you do not treat 500 m<sup>2</sup> of floor space in the same way as 5,000 m<sup>2</sup>. The first stage in arranging the departments is obvious. You begin by separating the child and the adult reader. The next step is to divide according to the type of material-a record library for example or, more and more often, an audiovisual library. This is basically for ease of management. I know, of course, that some people argue for a multimedia classification, but let's not deceive ourselves all the same.

In the Pompidou Centre library, records are classified under 780, which is music. There may be a few in other places-records of birdsong under Zoology for instance-but there are very few like that. But we shouldn't be talking about the Pompidou Centre library. It doesn't lend and is really more of a documentation centre than a library. At Cambrai, which is organized along similar lines, I don't think the multimedia classification has fundamentally changed things.

**MFB:** I agree absolutely. I'd like to add one thing, though. In the guideline programmes proposed by the Direction du Livre there are indeed these three sections, but no-one has ever said they should be separated or compartmentalized. In point of fact in most cases they are, but this has never been a point of doctrine or in any way compulsory. On the contrary, I have often put up a fight on the problem of the adults' section, to get rid of this paralysing separation between lending and reading.

But while there is no doctrine, there is a certain logic. To bring the adults' library, the children's library and the record library together in the same area, you have to spend a lot on the acoustics and sound absorption

devices (ceilings, flooring and wall coverings). If you just slap on a coat of paint, you create a vast echo-chamber and you head straight for disaster. Personally, rather than have all three sections in a single area I think you should create a visual unity between them. You should create a building that is very easy to interpret and consider the signposting question in detail. This is because the different readers have their own different ways of using the library.

### **Free Access vs. Reserve Stacks**

**BBF:** What is clear from your two books is that free access is now the key concept where public libraries are concerned. Could you give us your views on what type of organization of free access follows logically from your approach? To begin with, do you think there is a quantitative limit to free access?

**JG:** I am sure there is. It isn't possible to have free access to everything. You have to watch how many books and how much other material you offer the public, how relevant they are and how you can help the readers to find their way. That, incidentally, is why I am not against setting up young people's sections which would have lively easily-accessible books certain to attract them.

When you provide free access to your collections you have to provide a certain number of reference-points. And once free access reaches a certain scale, it becomes necessary to distinguish different levels of accessibility. At the Pompidou Centre, new publications are all together in a separate 'Salle d'actualité'; the Part-Dieu library in Lyon does the same, though its selection is different. Big English libraries I have visited are often split up into departments given over to one subject or a group of related subjects. I have also seen paperback corners there, and what are called the near stacks-a storeroom open to the public where less frequently-consulted books are kept. Different levels of access, then, and not an undifferentiated mass of books, which some readers would find baffling.

**MFB:** I am not sure there is an upper limit to the amount of reading matter you can have freely available. I think it is more a question of architecture and interior layout and design. Within the free-access area there must be varied zones and areas and they must be clearly signposted. I have always been struck by the poor presentation of the collections in English libraries I have visited. They have an enormous amount of material, but they really are like walk-in warehouses-miserable places.

**BBF:** So how do you see periodicals and information services being handled?

**JG:** No magazine room! I'm against that.

**MFB:** So am I. I've never seen them as necessary.

**BBF:** What do you do with periodicals then?

Newspapers, journals, magazines, etc.?

**JG:** To put it simply, let's say there are three categories of periodicals. There are the dailies, which are a way of bringing people into a library. Then there are the magazines, which I would include under the lending section, and then you have the scientific journals, etc. Not to mention the children's comics. This doesn't all necessarily have to be in the same place.

**MFB:** Yes, that's true. You have to look carefully at the different kinds of periodicals. The daily press and light magazines I would tend to put at the library entrance. The more serious periodicals, on the other hand, can be kept with the books under the same subject. In my view, the information service ought also to be near the entrance, but that said, I think a distinction must be made between quick-reference material—telephone directories, railway timetables, etc.—and access to reference books like bibliographies, dictionaries of all kinds, catalogues, etc. An appropriate location also has to be found for old stock and specialized reference material.

**JG:** I think in fact you have to make an assessment of the different kinds of reading matter and find a point of balance where they intersect. Documentary research requires a modicum of quiet, the information service is by definition noisier and more animated, and the reserve stacks where press files and a variety of instalment publications are kept are different again.

In fact there is an increasing tendency for libraries to become documentation centres which search periodicals and build up files. This was an aspect that was barely taken into account at all before the early 1970s. In my opinion, it is no coincidence that in 1975, the Direction du Livre had to re-assess the amount of room allotted to the stacks in its suggested library plans, and that amount will have to be increased again!

**BBF:** In a word, what is happening is a rehabilitation of the stacks?

**JG:** Yes, of course. That's how history works! In the 1970s we started off with such a catastrophic situation for the public libraries that we had to proclaim the free-access principle loud and clear. Many of the libraries opened at that time had no reserve stacks, or only very small ones. Since then they have increased their collections and filled all the shelves in their public-access areas. It's only now that the question of bringing the free-access stacks up to date is becoming acute—hence the resurgence of interest in reserve stacks. For my own part, I think there is a future for intermediate-

access 'near stacks'-even if very few have been scheduled to date-and for reserve stacks in general!

**MBF:** Yes. In the 1970s it was essential to change the image of the library and you have to remember that in the preceding period it was not unusual to schedule a stack capacity of 400,000 books, not including old stock, for a town with a population of 50,000! Obviously, there has been quite an abrupt change of course!

Taking the long view, a library clearly cannot be geared purely to consumption, like the Pompidou Centre where the collections are disposed of after five or six years. On the other hand, so long as there is no concerted national or regional policy on disposal and conservation, the libraries at the bottom of the system still have to face the problem in its entirety. It must not be forgotten that their tasks nevertheless include conservation.

**BBF:** The corollary to free access is often theft. Do you think anti-theft arrangements must be provided for right from the planning stage of a new library?

**MBF:** We never make it compulsory. We inform the decision-makers-the local authorities-and they are the ones who decide. This type of decision does have to be taken very early on. A surveillance system affects the whole organization of the areas open to the public and means they have to converge on one point near the entrance.

One thing must be said. When detection systems began to be discussed a few years ago, librarians were quite against the idea. They thought the introduction of these systems could only tarnish the image of their libraries, which was based on attractiveness, openness and the welcome extended to the public. Now, with anti-theft systems a commonplace in many shops and stores, I think these objections only come up occasionally. You can mention the idea of installing these systems now without the idea being rejected.

**JG:** Personally I don't think anti-theft systems are very effective, although I have at times recommended them. I think they only have a limited effect, on a few irresponsible people. I doubt if they ever stopped any real thief.

**MFB:** That's a bit sweeping! These systems must be effective to some extent; the best proof of that is how widespread they are. And after all there are fewer determined thieves than you think!

**JG:** They exist, though... and for them there are a thousand and one ways of getting round these systems! Personally I have great faith in the compulsory cloakroom on the way in, where bags must be left. There are

other possible dissuasive measures, it seems to me, such as having a photocopier available to the public; having the toilets accessible only from the entrance hall and not from the reading rooms—a position which can make it easier to cut books up. In any case, with or without a detection system, theft prevention is quite a complex issue and must be considered right from the planning stage. In addition, that is the stage at which it could get subsidies!

The shift towards a variety of purposes.

**BBF:** Along with free access, the other feature that has come out on top is organized activities, with a whole range of areas given over to them: multipurpose rooms, rooms for group work, auditoriums, children's areas, entrance halls, etc. But this multiplicity of areas perhaps hides a degree of uncertainty as to their use, especially where the multipurpose rooms are concerned, which are far less multipurpose than their name suggests if we are to believe Jacqueline Gascuel.

**JG:** The organization of areas for wider activities depends first and foremost on the size of the building. That said, I don't have much faith trying to house a varied range of activities such as lectures, film shows, exhibitions, music and drama in the same area. They all have different technical requirements in terms of natural or artificial lighting, acoustics and equipment, not to mention arrangements to allow for movements of the public. Furthermore, when there is a lecture and an exhibition, they often happen at the same time on the same topic.

They can hardly be accommodated in the same area, however multipurpose it may be. Whenever I discuss variety of purpose with a colleague I am aware of the problems it raises. The outcome is that multipurpose rooms are under-used or else converted to one specific use. This applies to the group-work rooms as well. They are included in the plans because they are in the *Direction du Livre* programmes, but once the building is up, nobody knows what to do with them. I know of a number of cases where rooms have been converted to other uses.

**MBF:** Converted from what to what?

**JG:** In one case a group-work room was converted into an office, in another into a periodicals storeroom, although that meant using the storeroom for group work! I have also seen children's workshops turned into offices. Many changes occur which we do not know about. There really ought to be some surveys carried out to assess the use of new library buildings after five years.

**BBF:** One thing is striking there. The conversions you describe were to meet the library's internal needs. Is that symbolic in some way?

**MBF:** Of course these changes of use should be studied more closely, but I'd like to stress one obvious but little-noticed basic point. Given the time lag between the planning of a building and its public opening-four or five years at least-it is rare for the same team to follow the operation through from start to finish.

Only too often there is no librarian at all involved in the first phase, the planning and design. Hence the hesitations, misunderstandings and inadequate discussion and dialogue at this stage. In the final stage, the team then in place assesses what has been done. Inevitably, it has different ideas as regards organization of work, office layout, activities policy. And imagine how things are when there's a change of team at the town hall!

**JG:** That observation has far-reaching implications. When a new team takes over a building, it wants to make its mark. Every change in management means a change in use patterns.

**MBF:** A partial change, I hope! But there is another point I would like to emphasize. Libraries are often planned by local authorities with completely unrealistic estimates of the staff numbers required to run them. Completely unrealistic. To mention just one example. One day I was told that things had been done on too big a scale in building an 850 m<sup>2</sup> branch library for a district of 20,000 people.

I then discovered, however, that there were only three people to run the branch whereas at least twice that number were really needed. In cases like that, even if there was no planning error at the outset, assessment errors can only lead to poor functioning-especially in those departments the local authority has least understood: record library, multipurpose rooms, children's activity rooms, etc.

**JG:** I am even more pessimistic. I think that of all local authority amenities, the library is the one the most acutely understaffed. I often notice that small communes manage by some miracle to find the money for community activities organizers, but never for librarians!

**BBF:** Perhaps that's symbolic too...

**JG:** Yes, no doubt it is. It has to be admitted that the librarian is a distributor first, an activities organizer only second. We generally have no training in organizing collective activities. We do not have the time and we are not always attracted by it. This is certainly another reason for the under-use of areas allocated for activities.

The first thing to do is to organize activities jointly with other teams in the cultural field, break out of the isolation of the library and create integrated cultural centres.

## **Library Furniture**

Home library, Children's library, School library, Brodart library and Texwood library furniture.

### **Home Library Furniture**

**Mexican Rustic Four-Door Bookcase:** This is produced by a combination of new, kiln-dried ponderosa pine and genuine wormwood accent planks. The finishing is done with a rich, honey-coloured finish. All iron and hardware is hand-forged and has a distressed, rust-coloured finish. Every piece is 100% solid wood.

**Carlton Manor Bookcase:** This is decorated with an ogee-molded cornice and classic fluted pilasters. The design has sliding and framed glass doors. The interior has three adjustable shelves and is lighted. Two deep drawers have panelled fronts and bail handles. The solid wood and birch veneer construction has an ebony-colour finish.

**Rolling custom wood book shelves:** They are in maple, oak, natural or walnut-stained. There are 3-inch heavy duty ball-bearing swivel casters. Additionally, there is 60 inches of shelf storage.

**Fruitwood mission style bookcase:** There is medium density fibreboard construction and durable fruitwood laminate finish. There are 3 adjustable shelves. The back panel has cord access.

**Library stand:** It is made of finger joint teak and completed in mahogany and features three glass shelves. It has an adjustable book stand.

**Child craft horizontal bookcase in matte white:** Solid wood with a matte white finish. There are two deep shelves. The dimensions are 30.25" height, 50.25" width and 13.25" depth.

**Library Book Truck with two 9 1/2" deep shelves, 2 slanted LX-MT2:** There is a heavy gauge steel construction with baked-on powder coat paint finish. The weight is 29 lbs. These are 28" wide, 13" deep and 27" high.

### **Children's Library Furniture**

4000 Series activity table with standard legs:

- Heavy gauge tubular steel legs with 1 1/4" nylon base swivel glide.
- There is a charcoal black banding for Grey and medium oak tables.
- Heavy gauge tubular steel legs with 1 1/4" nylon base swivel glide.
- Standard legs adjust from 22 to 30" in 1" increments.
- The dimensions are 22 – 30" height, 24" width and 36-48" length.

6800 Series Multipurpose table:

- All welded 17 gauge steel apron and 1 1/4" tubular legs.
- 1 9/32" nylon based glides.
- High-pressure particleboard laminate work surface.
- Charcoal black frame with powder coat finish.
- Underside sealed with back-sheet to prevent warping.

4000 Series Activity table with fully chrome legs:

- 1 1/8" thick tops having a durable high-pressure laminate
- Grey and Medium Oak tables have charcoal black banding
- Charcoal black frame with fully chrome legs
- table edges cushioned with protective T-mold banding
- heavy gauge tubular steel legs with 1 1/4" nylon base swivel glide.

### **School Library Furniture**

Sloping Shelf Trucks:

- All welded steel rolling book carts having 400 lb capacity
- 4" dual-wheel casters with soft tread.

Flat Shelf Trucks: There are 4" dual wheel casters and two-or three-shelf classroom carts.

Gorilla book trucks:

- There are 13 different hues to choose from.
- It has a multi-functionality and super strength.
- It is possible to load these trucks with 600 lbs of books.
- The fixed middle casters allot the truck to pivot on an axis.

**Nomads:** Flat-shelf has movable shelving with laminate tops. The Browser bin is an ideal utility cart for moving oversize school materials and large quantities of supplies. Multi-shelf nomad is a versatile classroom cart and library cart as it transports a large quantity of items.

### **Brodart Library Furniture**

This qualifies for LEED points under the Materials and Resources category. All the Brodart wood suppliers harvest from the Forest Stewardship Council Lands.

Forest Lands serve an essential function in providing renewable raw materials and energy. Lumber is used to construct Brodart furniture is replenished by planting new trees. Brodart provides furniture made of formaldehyde-free plywood.

### **Texwood Library Furniture**

There are rift cut veneers on the front panels of all Circulation desk modules. There is heavy-duty table leg plates on tables. The table legs are formed from one solid piece of oak. These are connected to table tops with bolts passing through an 5/6" thick X 6' X 6' of solid steel into metal threaded insets for a more stable connection.

### **Space Management and Furniture Arrangement**

Modern homes do not permit ample space to display the beautiful furniture items that one possesses. In this scenario, it becomes important to manage the available space optimally. Read on to learn more.

With the housing prices touching sky high and the available area falling consistently, the notion of a dream home for the buyers has undergone a radical change. With a collection of decoration and household items at their disposal, people are having second thoughts about their worth.

People seem to be at a loss when it comes to adjusting their prized possessions in the limited space they now possess. Under such trying circumstances, it becomes vital to manage the limited space well and optimally utilize all the area in your home. This article aims at stressing about the need for space management in your home and gives some useful tips on how to arrange your furniture in the limited space options.

Firstly, assess the available space before seeking out storage solutions. It may be possible to de-clutter the space that is occupied by unimportant or obsolete or misfit things or they are simply not properly arranged. The 'dumping' of shelves and drawers should be undone and instead, small boxes can be used within the drawers to organize different things. The shelves should not be used as another 'dumping ground'. Remove all the items that look worn away or not in tune with the times.

Any hidden space in the home must be utilized to dump the unwanted furniture items for the time being. If you are planning to buy new furniture, the old ones should be disposed off as early as possible to make way for the new one.

The size and style of furniture must be balanced so as to make the home more presentable. Amish furniture can be an ideal choice if you want variety and compatibility. Amish made furniture come in all shapes and sizes to fit the bill perfectly. For genuine and varied options, it is pertinent to buy it from wholesale Amish furniture dealers who also provide requisite guarantees and warranties.

For proper space management, it is vital to arrange and re-arrange the furniture thoughtfully. You have to balance occupied space and the

free space in order to give out a comfy feeling to the visitors and the residents. You can also make some intelligent alterations to the colour of paint on walls and ceilings. Bright colours are often recommended to create illusion of more space.

The cornered spaces should be utilized optimally. Try to make slim cabinets around the corners that'll cover less space and gives a lot more to your furniture and decoration items.

The space around the beds can be decreased (if feasible) to make way for an extra chair in the room. The space under the beds, sofas etc. can also be very handy in storing the things required less frequently.

Some decoration items make things appear bigger. For instance, a large hanging picture of beautiful landscape would obviously make your room appear like an open space. Folding furniture can also be given a try if it suits your tastes and requirements. Always remember to fold it when not required. Space is available at a premium and it just makes sense to manage the limited space optimally.

## **Establishing and Management of Navodaya Vidyalayas**

### **Opening of Navodaya Vidyalayas**

In order to provide good quality modern education including a strong component of culture, inculcation of values, awareness of the environment, adventure activities and physical education to the talented children predominantly from the rural areas, without regard to their family socioeconomic conditions, the Government of India have launched a scheme to establish Navodaya Vidyalayas, on an average, one in each district of the country during the 7th Five Year Plan period. 83 Navodaya Vidyalayas were opened up to 86-87. 126 Navodaya Vidyalayas were opened during 87-88. Whenever State Governments have been able to provide land and other physical facilities that would meet our minimum requirements for opening Navodaya Vidyalayas.

### **Recruitment**

- (i) *Headquarters and regional offices:* One post of Director, nine posts of Dy. Directors (3 at the Headquarters and 6 in the Regional Offices) and 4 posts of Asstt. Directors and 1 post of the Internal Audit Officer have already been filled. Out of 12 Asstt Directors appointed for Regional Offices 10 have already joined. Recruitment for the post of joint Director is under process. Two Consultants have been appointed to look after specific problems of Academic and Administration respectively.

- (ii) *Teaching and non-teaching staff for the Vidyalayas:* Recruitment of Principals and teaching staff for the Navodaya Vidyalayas was made with the help of a Committee constituted for this purpose at the Headquarters and the Regional Offices of the Assistant Commissioners of the Kendriya Vidyalaya Sangathan. Principals and teachers out of the select panels received from the Interview Committee have been posted to all 126 newly established Navodaya Vidyalayas. Similarly, the vacancies of the teaching staff of 83 Vidyalayas already functioning have been filled. Where selected teachers do not join, Principals have been authorized to fill the vacancies on ad-hoc basis. The non-teaching staff is recruited at the district level only with the assistance of the District Magistrate who is the ex-officio Chairman of the Vidyalaya.

Posts of 150 Principals and about 1500 Teachers of various categories were advertised in the leading news papers all over the country. Recruitment for the posts of Principals/Teachers to be appointed during 1988-89 has been taken up and panels of selected candidates will be finalised by May, 1988.

#### ***Admissions of Students for 1987-88***

Admissions to Navodaya Vidyalayas are made at the level of class VI. The basis of admission is a test conducted in the concerned districts in which all children who have studied in and passed class V from any of the recognised schools of any Tehsil/Block in the district are eligible to appear. The tests are designed by NCERT and they have been given the task of conducting the examination and its evaluation. This examination was conducted this year in August and November, 1987 in all the States/UTs where Navodaya Vidyalayas have been sanctioned. Results have since become available and regular classes have started almost in all Vidyalayas except snow bound areas. Applications for admission test for 1988-89 have been invited and the test is proposed to be held on 15.5.88.

#### ***Purchase of Furniture and Equipment, Library Books, Text Books etc. in Navodaya Vidyalayas for 1987-88***

The Samiti has released funds to the Vidyalayas for purchase of furniture and equipment. The quantity and specification of furniture required for each Vidyalaya have also been laid down for, the guidance of the Principals. NCERT has already supplied text books to all the Navodaya Vidyalayas as per list sent to them. Principals of Navodaya Vidyalayas in non-Hindi speaking States have been asked to procure text books from the State Boards of Secondary Education and other sources from next years onwards, The Regional officers have been asked to

supervise the supply of furniture to all the vidyalayas functioning in their respective regions.

### **Construction of Navodaya Vidyalayas Buildings**

Central Building Research Institute, Roorkee has been designated as the nodal agency for implementing the work of Construction of Navodaya Vidyalayas. They are responsible for conducting site surveys and soil investigation and preparation of architectural working plans etc. The design of the Navodaya Vidyalaya buildings prepared by the CBRI have been finalised.

For implementing the programme of construction work, a Construction Coordination Committee has been set up in the Samiti.

26 Construction Agencies have been identified and schools allotted to them. They have also been asked to execute agreements with the Samiti to undertake the work. The draft agreement was finalised in consultation with CPWD and Ministry of Law. So far 175 agreements have been signed with construction agencies other than the State Public Works Departments and the CPWD and funds are being released to them. Funds are being released to the construction agencies towards construction of first phase of Navodaya Vidyalaya Complexes after approving the Estimates in the Construction coordinating Committee.

### **Setting up Samiti's Office & its Regional Offices**

The Navodaya Vidyalaya Samiti has established its headquarters at Palika Place, R.K. Ashram Marg, New Delhi-110001. The Samiti is headed by a Director who is assisted by Dy. Directors, Asstt. Directors and other supporting staff. The Samiti has also established its Regional Offices at Pune, Lucknow, Shillong, Hyderabad, Chandigarh and Bhopal and these are headed by a Dy. Director.

### **Improving the Academic Content in Vidyalayas**

In order to give guidance on academic matters, the Samiti has set up an Academic Advisory Committee.

Several meetings of experts from NCERT have been convened for designing syllabus for class VI to VIII for the Navodaya Vidyalaya as envisaged in the scheme. At present, books in Hindi and English are being supplied by the NCERT. For social studies, arithmetic and the regional language, text books prescribed by State Government are being used in the NVs in non-Hindi states. In Hindi speaking States, NCERT books are being used. NCERT has been requested to supply science kits for use in NVs.

A conference of Principals of NVs was held on 12/13th September, 1987 at Kendriya Vidyalaya, ONGC, Dehradun. Similarly two orientation courses for the Principals appointed during 1987-88 pa were conducted during Oct./Nov., 1987 through NCERT. A separate orientation course for the Principals of Navodaya Vidyalayas in North East Region was conducted on 30-31 January, 1988. For intensive teaching in Hindi and English, teachers in NVs have been given in-service training by the NCERT. Orientation courses have also been organized for science and mathematics teachers. For the purposes of organizing suitable programme for academic improvement in the NVs, two meetings of the Academic Advisory Committee were convened and its decisions are being implemented.

One Consultant (Academic) has been appointed to advise the Samiti for improving the academic standard in the Vidyalayas.

Funds to the extent of Rs. 69.00 Crores provided in the budget for 1987-88, are likely to be utilized fully.

### **Choosing Solid Wood Library Furniture**

There are a few steps in the design of a room that are truly considered important above all others. The first of these steps is the process of deciding what sort of atmosphere you would like your room to have. The second of these steps is picking out the colour you want your room will be. The third step is, of course, choosing your furniture. This can be one of the most difficult, or one of the easiest, depending entirely on what you have in mind for your space. In the case of library furniture, this can be particularly difficult at times. Solid wood library furniture, however, is often a good choice for a number of reasons. For instance, solid wood library furniture goes with nearly any décor choice, or at least nearly any which is likely to be made in a library.

Another reason to go with solid wood library furniture over other styles and materials is its flexibility. In short, you can almost certainly find the pieces you need, whether you are looking for desk space, table pace, or just some nice chairs, there will be something which is just right for you. If you need something that will fit into a particular style of décor or even architecture, then there is almost certainly solid wood furniture that will suit your needs. This means that when you are setting out to find your furniture, you will need to keep a few things in mind.

Firstly, you should always be sure you have enough space. The last thing you need is to buy a truckload of solid wood library furniture only to realize later that it will not fit into your space, or that your space is too cramped feeling once you have all of your new furniture in place. Do

not trust your visual estimations when it comes to this, as wood furniture has a way of being a different size than it might look at first glance. As such, it is probably a good idea to take some measurements of your space, and pay attention to the dimensions of your furniture as you choose. These measurements certainly do not have to be hyper accurate, but it would be much better to be more detailed than necessary than to be not detailed enough in this case.

Another aspect of measurement that might come into play when you are looking at solid wood library furniture is surface space. You may think this is just a repetition of the last point, but it is, in fact, quite different. Just as the furniture may seem to take up less space in a room that is not set up like your library, it may also seem to have more surface space when it is empty. Once you start to actually use it, though, you may find that it is not as spacious as you had thought. Now, this problem probably cannot be solved through the use of measurements as easily as the last one, but it is still something you should keep in mind when buying *solid wood library furniture*.

### **Agati Library Furniture Designs**

Every field has a few names that are seen as the top members of their field. In sports, these are the superstars who rule their respective games. Tiger Woods is the name that everyone thinks of when one mentions golf. When someone thinks of basketball, Michael Jordan quickly springs to mind. Other fields have their own superstars. The computer software industry has the great dueling titans of Microsoft and Macintosh. The fast food industry has McDonalds. Even in the world of library furniture, there is a name that is easily one of the super stars of the field.

Agati library furniture designs are respected throughout the industry as being one of, if not the singular, king of the hill. While it may not be quite as widely known to the public as the leaders of some other industries, there can be little reasonable doubt presented that Agati library furniture designs are a driving force in the ways libraries are furnished.

Agati library furniture designs are featured in libraries across the country. These libraries are of all sizes, which just goes to show that the people at Agati have products available which are suitable for nearly any situation possible.

However, Agati was not always working with library furniture. The first pieces of furniture by Joe Agati, who founded the company, were designed in the 1970's, and were widely acclaimed. However, it was not until the 1980's that Agati began to make furniture specifically intended

for libraries. Of course, much like the other aspects of Agati's furniture endeavours, his library furniture was a resounding success.

Since then, the success of the Agati library furniture designs has been phenomenal. In fact, one might say that they have built a veritable empire in the library furniture market. This comes as no surprise, as these designs can go toe to toe with any furniture designs around.

However, the excellent designs and unparalleled quality of the construction of these pieces is not the only cause for their consistent success. They also have the benefit of a reputation for extremely good service overall. In fact, the designers at Agati are willing and able to go well beyond the levels that would be considered normal in order to help their customers. They tailor each project specifically to the needs of their clients in ways that most designers cannot even claim to approach.

That is, truly, the thing that sets Agati library furniture designs apart from all others. If the layout or design of your library requires a special adjustment to be made, the Agati designers are happy to make the necessary changes. If your budget is tighter than perhaps you might have expected, then they are ready and willing to cut a few corners in their designs to make the project come in within budget.

Even if you just think a little change here or there would make the furniture work better for you, they are eager to help. This is the kind of attention that has truly earned *Agati library furniture designs* its rightful spot at the top of the library furniture industry.

### **Planning Your Library Computer Furniture**

The nature of libraries has changed over the past few decades. In previous eras, a library was a central point where one could go to find all sorts of knowledge on all manners of subjects. This much is still true today, for the most part. However, unlike in those previous eras, a library is no longer the only place where one can find such information. In fact, it would not be too much of a stretch to say that the average person has access to just about any information that they might hope to find in a library from the comfort of their own home. This is, of course, due to the invention of the Internet. So, how can a library keep up? By adapting, of course! It is for this reason that the question of what makes good library computer furniture has become more prevalent in recent years. As library after library upgrades to join in on the digital age, more and more library computer furniture is needed.

The great question, then, is how ones goes about determining what does and does not work well as library computer furniture. Well, in its

most basic form, one could easily make an argument that nearly anything could be used to fill this void. To a point, this is true. Any given flat surface upon which you can fit a computer monitor and hopefully the computer itself could, in theory, be used in a library as a place to put their computers. By the same token, someone who is trying to build a building might be able to hammer in nails with a tin can, but that does not mean it is the best method.

There are a number of specially designed pieces of furniture on the market that would be much better choices for use as library computer furniture. This goes for both public and private, personal libraries. In both cases, there are several types of desks which are designed to be able to hold as much computer equipment as possible in a limited amount of space. For instance, many have special cupboards built in underneath which can hold the case of your computer, and additional accessories such as printers and other peripherals. Similarly, many pieces have special compartments designed to hold CD cases and such, so you can easily organize any software and such you might need to have quick access to.

Other features that might prove useful in pieces that you intend to use as *library computer furniture* include specially drilled holes which are designed to have cords run through them. This keeps cords from becoming tangled, crushed, or generally becoming a nuisance. Some sorts of desks may also have special features for accommodating surge protector strips and such. In fact, you may be able to find some which have power strips built directly into them. The specific choices you make in regards to library computer furniture will be dependant on how much space you have and how many computers you need to fit into that space, of course.

### **The Advantages of Used Library Furniture**

Used furniture can sometimes be a bit of a gamble. This is particularly the case with things you buy used from with whom you are not particularly familiar. After all, it is entirely possible for furniture to have significant flaws that one might not notice at a glance. These sorts of problems could easily become very troublesome down the road. However, some types of furniture are much easier to buy used than others without having to worry (at least to the same degree) about finding yourself on the losing end of a hidden problem. Take used library furniture for instance. The nature of used library furniture makes it quite a bit easier than in many cases for one to evaluate any given piece's condition, and all without having to go to the trouble of performing an in-depth inspection.

What makes used library furniture any different from your average used furniture? Well, for starters, library furniture is usually pretty

straightforward, as furniture goes. This means that there are usually not much in the way of complex design elements which might make it difficult to see damage or flaws in a piece's structure. That said, it is still important to take a good look at any given piece, no matter how simple it might seem. As the old saying goes, it is better to be safe than to be sorry, particularly when it comes to the subject of used furniture.

Another advantage used library furniture has over your average every day sort of furniture is its serviceability. That is to say that some superficial damage to the surface of a piece is not necessarily a terrible problem. Any minor damage can easily be repaired, and while you may not be able to restore the piece to perfect aesthetic condition, you will not likely be able to get it close enough to perfect that it will be usable in a library setting. This is particularly true in the case of a personal library, where your furniture choices are probably very much based upon function rather than upon the form of a piece. Even for a public library, or a school library, though, you do not really have to be particularly concerned about the aesthetic beauty of your furniture so much as the functionality of it.

In the case of a school library, used library furniture is, in fact, an even better idea. You see, no matter how you look at it, children will be children. Even the most well-behaved and polite children will occasionally have an accident (or a lapse in judgment) that can lead to damage to your furniture. This is a particularly good reason to stick to *used library furniture* when it comes to a school library, as your initial investment will be quite a bit lower. As such, should something happen to a piece of your furniture (which, as noted before, is fairly well inevitable with the involvement of children,) you will not be losing anywhere near as much money in the value of the furniture, even if you have to replace the piece entirely.

### **The Key to Home Library Design**

Home library design is something of a difficult subject to approach. On one hand, everyone has a rather set notion of what a private library is supposed to look like. If you are like most people, you probably envision the stately study with dark wood panelling and trophies of hunting expeditions and sagely volumes that are old enough to be your great grandfather.

This is a place where rich, aging men sit in smoking jackets, puffing away at pipes while they contemplate whatever deep truths might strike their fancy. This is, most certainly, the generally accepted image of a home library. However, on the other hand, this is not the kind of home library design that most people want to have. And it is no surprise that people want something different, as the stately study concept feels stale and rigid

to most people. However, the home library can be so much more! The key to a successful and lively home library design is to redefine that image in your mind of how a home library should look. If you cannot make yourself think differently about what your library should look like, then you will most assuredly be unable to succeed in making it look like anything other than your preconceived image. So, how do you learn to think about your home library differently? Well, first of all, you must realize that it is simply a room, just like any other. It may have a very different purpose from your average room, but it is still just a room. As such, it is subject to all the rules and tricks of décor that any other room is subject to.

So, how can you apply this fact to your home library design? Simple: approach it from a décor standpoint by using a theme. And, particularly in the case of a library, there are some cultural themes that can work quite well as a source of inspiration in your designs. For instance, if you want to keep a elegant and classical feel to your library without necessarily following all of the preset design rules, you might try basing your design on an old world European theme, such as the Victorian-era Spanish style, or the renaissance French look.

This may seem like a complex sort of a plan, but in practice it is actually fairly simple. All you have to do is keep an open mind and be willing to experiment a bit when you are working out your home library design. Try working a bit further, if the European look does not suit you. Perhaps you might experiment in basing your *home library design* on an Asian culture, or even break away from the cultural basis altogether and work from an entirely different theme.

Any of these options are equally valid, and are open for your experimentation. If, for instance, you have a particular theme that strikes your fancy, then see if you can work it into your designs. As with any décor attempt, though, you may want to line up some of your ideas in sketches or colour swatches and such before you actually execute them, to make sure they will work as you intend them to.

### **Contemporary Library Furniture**

Libraries have a remarkable number of stereotypes associated with them. In the realm of public libraries, there is the universal image of aging single women hushing people and giving out stern looks to all those who step out of line. Private libraries carry the image of aging married men with a great deal of money and nothing left to do but read books they are not actually very interested at all. As with all stereotypes, though, these are by no means the end all facts of the matter. And, as many people are

finding, the best ways to defeat these stereotypes is by the use of modern designs and contemporary library furniture. The cause of the stereotypes surrounding libraries is that people have made the assumption that the interior decor of a library could not evolve, which contemporary library furniture can prove to be very wrong.

Contemporary library furniture is, at its core, a term which simply means library furniture that is modern, and keeping up with current styles. As such, it can be seen as an extremely broad field. This means that you have a great deal of room for customization, to allow you to make your library fit you perfectly. However, it also means that you will have to make a relatively wide range of choices, and choices can be rather difficult. However, there are a few specific style tips within the overall umbrella of 'contemporary' which do an excellent job of dispelling the images of stuffy old men and bitter old spinsters once and for all.

In order to really see what you have to do to break the stereotypes with your contemporary library furniture, you must first really look at what the stereotypes consist of. One of the most notable features of the 'classic' library is that it is not a particularly bright place. In fact, they are often seen as dim and stuffy. So, to counteract that stereotype, the obvious thing is to bring more light into your library. This can be done through lighting fixtures, particularly ones which have a more modern flair to them. Probably a better option, though, would be to use windows to allow natural light into your room, while also giving your library an airy, open feeling to keep the stuffy old atmosphere from invading.

Another way to make your library feel more open with *contemporary library furniture* is to take things away from the walls a bit. In the average private library, the bookshelves are almost always lining the walls, which can create a boxed in feeling. However, if you put the bookshelves more toward the middle of the room, leaving space around them, you can create a much more relaxed and open atmosphere for your room. Another important thing to remember in choosing your contemporary library furniture is colour. If you want to make your library appear brighter, then use light colours. However, you may also want to bring in a few pieces which are darker colours, or even black, to give the room some more contrast.

### **Library Furniture Manufacturers: What You Should Know**

The operation of a library is a remarkably complex thing. To those outside of the process, it may seem like it would not be all that difficult to, essentially, keep a pile of books organized. However, anyone who has seen the inner workings of a library knows that the processes and routines needed to keep everything running smoothly are a good deal more

complicated than that. Similarly, one might think that the production and selection of the library's furniture is a quick and easy matter. But, of course, this too would be incorrect. In fact, there is a great deal that goes into each product made by library furniture manufacturers, and there is just as much thought put into the choice a library makes as to which library furniture manufacturers to buy their furniture from.

You see, there are several different sorts of library furniture manufacturers out there, each one having their own specific set of advantages and disadvantages. For instance, there is the full service library supply company. This sort of company will sell the library whatever different products it may need, from stationary and labels all the way to, of course, library furniture.

The obvious advantage a library might gain by using this sort of company over a dedicated furniture maker is that they can find the answers to all of their needs in a single place. This amount of simplicity can prove to be a huge advantage in the busy lives that librarians lead, where anything that helps to make things easier can be miraculous in the long run. However, there are a few significant disadvantages as well. First of all, these companies are unfocused, meaning their selection is probably not up to the level of dedicated furniture makers.

The second type of library furniture manufacturers that a library might consider are the large furniture companies which produce just about every sort of furniture imaginable. These companies will most likely have a very wide selection of pieces available for a library to choose from, which is certainly a great advantage, and their prices tend to be quite reasonable as they can expect to sell in large volumes. However, this size also means that you will probably not be able to get much in the way of customization, and you may find yourself lost amidst the complications of big business from time to time.

The last type is the dedicated library furniture manufacturers. These are the companies who really know their furniture inside and out, the specialists of the field. On the up side, you can expect top notch workmanship from a good specialist company, as well as a much higher chance that you can get customized pieces if necessary.

However, the lower volume that is caused by a niche market may cause these companies to be a bit steeper on the price end. In short, if you are looking for convenience, choose the all in one solution. If you are looking to save money, go with a general furniture maker. If you are looking for quality and custom work, look for dedicated *library furniture manufacturers*.

### Finding an Antique Library Ladder

Every room has a single piece that is its focal point. In many cases, this is not something that is intentional. You simply design your room, and gather your various elements together. In these cases, the focal point simply emerges on its own, almost as though it were some hidden feature of your design. This can make the process of designing a room somewhat more fun, in a way, as you will never know quite how the elements will turn out in the end.

However, there are many times in which you really just want to know what you can expect when you are setting out in designing a room. This is when you need to find objects that naturally take on the role of focal point. Take an antique library ladder, for instance. Like many antiques, this will be a piece which will set the tone for the rest of your décor, and an antique library ladder will give your library a very distinct old-world feel.

Now, an antique library ladder may make an excellent focal piece for your home library, but like most antiques, it can be something that is difficult and often expensive to get your hands on. As such, many people may see the prospect of an antique ladder, being pricey and difficult proposition, as not worth the effort. However, if you take a bit of care, you may find that achieving the goal of finding just the right piece to be the focus of your own personal library can be easier and less expensive than you may think. There are, however, a few catches, depending on the method you use.

One method that can make the part of finding your antique library ladder easier is to use the tools available to you on the Internet. This will almost certainly cut down on the time and effort you put into finding your piece, as all you have to do is use a search engine or browse a few auction sites and you are on your way. Now, this may seem like a quick fix to all of the problems that are involved in the process. And in some cases this is true. In fact, it may even allow you to easily find a piece that is within your price range. However, it is not without problems of its own, such as less than perfect descriptions of what you are buying. There is nothing that can give you a sense of your item as well as actually looking at and touching it.

Another method which can cut down on your cost significantly is to find an *antique library ladder* which is not in perfect condition and do a little bit of restorative work on it yourself. The work you do does not by any means have to be perfect, and with a little bit of creativity you can actually hide some of the evidence of an amateur restoration job by

disguising it as part of the antique look. However, this means that you will have to put significant work into your antique library ladder after buying it, which may or may not balance out or supercede the money you would save.

### **Why to Choose a Ralph Lauren Furniture Library Table?**

Ralph Lauren is a man whose name has become synonymous with classic, timeless style. His start in the 1970's was in a rather niche corner of the fashion world, namely in men's neckties. However, since then he has expanded into many new markets, starting with men's wear in general, and then into women's wear and household accessories. In fact, he has even gone into the realm of furniture.

Although he is best known for his work in the world of fashion, his work in the furniture industry has been just as revolutionary. Ralph Lauren furniture can add style to just about any room. Take, for instance, a Ralph Lauren Furniture library table. It may not seem like a singular table would make much of a difference in the overall look of a room, particularly one such as a library. However, when it comes to a Ralph Lauren Furniture library table, it is most certainly possible.

The thing that sets a Ralph Lauren Furniture library table apart from just your average table is the same thing which sets apart everything that Ralph Lauren designs. It has an unexplainable but also undeniable presence. It works on a purely aesthetic level, catching your eye in a moment's time, in the same way a certain person might light up any room they walk into, or that one dress just seems to stand out, even in a crowd full of people with dresses that should seem just as nice. It is that undeniable response, triggering someone's perceptions on a basic, almost instinctual level, which truly draws people toward a person, an object, or in this case a table.

Beyond simply the responses you can expect to get from a Ralph Lauren Furniture library table, there are a few other things that, in essence, come along with the Ralph Lauren name. The first of these is the quality of the piece. If it is designed by Ralph Lauren, then you can bet that it will be a top of the line piece of furniture, with quality which very few other furniture lines can match and none can claim to surpass. This means you can buy with confidence in your purchase. Similarly, you can expect to get some level of recognition. Ralph Lauren is a name that is quite well known, among many circles, so simply mentioning the designer of your table is very likely to get a reaction on its own.

*A Ralph Lauren Furniture library table* is by no means a small purchase. In fact, like most designer furniture, it can be quite expensive

indeed. However, if you have the desire to have a table which will leave a true impact on people, and you have the resources necessary to buy a Ralph Lauren Furniture library table, then it is an opportunity which you should most certainly take advantage of. It will change the look and feel of your library, and may even change the way you view furniture and how it interacts in a room.

### **Home Library Shelving Considerations**

There are a number of differences between a home library and a public library. Obviously, there is the difference of ownership, which is to say that a public library is, well, public, while your home library (assumedly) is not. However, there is another difference that may seem obvious, but has deeper intricacies that one may not see at first. That difference is space.

The average public library is, obviously, quite a bit larger than your average private library. Now, the most obvious reaction to this problem is to simply have less material to store. That is a valid method, to a point, but there is something else to consider as well: the efficiency of your home library shelving. Your home library shelving is, quite literally, the lynchpin of your entire space. It will be the behind the scenes dictator of every other decision you make for the room.

Home library shelving has to make the most of the space you have. This means fitting as many books as possible into as little space as possible. Of course, there is a problem with efficiency when it comes to books. That problem, of course, is that not all books are the same size. In fact, the sizes vary greatly, from small paperback volumes to great tomes that can be quite large. Now, the first answer is to make your shelving to hold any size, by making all shelves able to handle said massive volumes. The other answer, though, is to vary the sizes of books that your shelves can hold. One side of the room might, for instance, have shelves that hold smaller books, while the other holds the larger books.

The problem there is in organization. If you make your home library shelving all manners of different sizes, then you will be forced to put books wherever they fit, which is obviously not the best of methods from an organizational standpoint. If, for instance, you have a number of small books on a given subject, and only one or two larger books on the subject, well then you may just find yourself up a creek without a proverbial paddle. Your large books will end up on a different shelf from your smaller ones.

There are two ways to combat this problem. The first is to arrange your home library shelving in such a way that your subjects are divided

among each of the sizes. For instance, each wall has shelves of a different size, and the books on each subject are in the same relative place on each of the walls. So, if you want a large book on geography, you know it will be around the same place in the large bookshelves as the geography books are on the smaller bookshelves. The other is to make a few exceptions. While larger books do not fit in smaller areas of your *home library shelving*, the same is not true in reverse. If you have only a few smaller books and a number of larger books on a subject, simply move the smaller books to the larger shelves.

### **The Uses of a Neoclassical Revolving Bookcase Table**

In pretty much every area one can think of, there is a device or innovation that really strikes a perfect balance. These are the concepts which are so perfectly innovative that they are obviously the work of a true genius and yet so perfectly obvious that everyone is left to wonder why they were not the one to come up with the idea. The perfect example of this sort of item is the neoclassical revolving bookcase table. It is, to the library, what the cup holder is to the car, something that just seems to fit in perfectly. This conclusion, however, leads one to ask a very important question: just what exactly is a neoclassical revolving bookcase table?

For something with such a complex sounding name, a neoclassical revolving bookcase table is really exactly what it sounds like. It is a (generally round) table top which has shelving placed underneath it. This shelving area is designed to hold books, as the name suggests, and the entire unit is placed on a rotating base, which allows it to, well, revolve. Seems pretty simple, huh? Well, in truth, it is simple, but in its simplicity it is remarkably effective. You see, there are a few things that a library absolutely needs in order to function with any efficiency. The highest two items on that list of things are shelf space and table space. The need for shelf space is, obviously, due to the necessity of having somewhere to store your books. The need for table space is due to the many things which people may want to set down or work with in a library setting, such as extra books, notepads, or even drinks and such.

Obviously, the neoclassical revolving bookcase table is the perfect answer to both of these basic needs. In fact, it is a remarkably efficient design, possible even more so than the average bookcase one would expect to find in a library. You see, a normal book case lays books out in straight, horizontal lines. Meanwhile, the bookcase table arranges them in a circle, which you simply turn in order to find the book you want. Geometrically, a circle is a much more efficient shape than a straight line, which means

that you can store a significantly greater number of books in a circular bookcase table than you could in a standard layout bookcase of the same size.

Now, obviously, a *neoclassical revolving bookcase table* is not the sole answer to the storage needs of your library. For one thing, while these tables are quite stylish and elegant in appearance, having such a large number of them that you would be able to store that many books would quite honestly look rather silly. A neoclassical revolving bookcase table, you see, is generally fairly low to the ground and, as such, is able to be used as a table) which means that, unless you stack them atop each other, they would take up too much space for large scale use. However, they are excellent for keeping your most used books close at hand, while providing extra table space.

### **The Advantages of Custom Designed Library Furniture**

Custom designed library furniture may seem like something of a frivolous concept at first glance. Indeed, libraries are not necessarily the most aesthetically centric of all spaces, which means that the cost and trouble that one might go to in order to have custom designed library furniture made seems overbearing and unnecessary. Even worse, it may even seem downright wasteful in most situations. And, in some cases, this may be true. However, that is most certainly not the case in all situations. There are a number of very distinct and relevant advantages to having your library furniture custom designed and produced. In these cases, the cost of the design and production of your custom pieces will be well worth the trouble for the end results.

The first situation in which custom designed library furniture would find its place is also most likely the most obvious situation that merits custom work. That, of course, is in the case of an awkwardly shaped room. In any room design, you will have to work with the measurements and angles of a room, and in some cases, this can be quite challenging. However, in the case of a library, this can present much greater problems. A library, after all, has a number of things which are not exactly made to be put into odd spaces. Most notable of these things are the bookshelves for which libraries are known. After all, bookshelves are large, straight objects, at least by default, which means that they require large, straight, and most importantly normally spaced walls. If your room is too narrow, you will not be able to fit normal bookshelves in. If it is too wide, you will be wasting some of your space.

That is where custom designed library furniture comes in. By designing and producing your bookshelves specifically to the measurements of your

library, you can make sure that they will fit perfectly and not waste any space unnecessarily. This is extremely important in a library setting, as space is one of the most valuable resources to be managed in a library scenario. Bookshelves can also be given odd shapes, in the case of walls which are at odd angles or have other abnormal features which might prove to be an obstacle for your average set of bookshelves.

Similarly, *custom designed library furniture* can come in handy in situations where you are trying to achieve a specific look with your furniture. Now, this may seem to contradict the statement that libraries are not a place where aesthetics are prioritized, but that does not mean that they should be ignored either. This is particularly true if you need a new piece of custom designed library furniture in order to match a set of furniture you had previously. This scenario can be very difficult or even entirely impossible to resolve without the use of custom design services, as you may be unable to find anything which matches your other furniture. If this is the case, then avoiding the aesthetic chaos that the alternative would cause is well worth the cost.

### **School Library Furniture: What to Look For**

Library furniture is generally seen as a category that has a few very specific characteristics. It tends to be elegant and refined, comfortable and rich, and altogether upper class. This is particularly true of the sort of furniture that tends to be used in the context of a private, home library. Even so, public libraries as well often provide shining examples of classic, elegant furniture. However, there is one specific type of library furniture that most certainly does not often follow this trend: school library furniture. School library furniture is, like just about everything which finds its way into schools, rather different from the equivalents which are used in normal, every day life.

So, why is it that school library furniture is any different from the furniture you might find in your basic, every day sort of public library? Well, to put it simply, it is a matter of necessity. When you are planning on putting something in the midst of hundreds, and perhaps even thousands of children all day every day for the better part of every year, then you have to expect it to be able to handle certain stresses that simply are not present under the circumstances you would normally find in your average public library. This is simply something you must come to expect as an environmental hazard, so to speak.

As such when you are looking for school library furniture, your first concern should be durability. Now, the degree to which this should be your focus will vary based on a few different factors. Primary among these

factors is what age range of children you will expect to be making use of this furniture. For instance, a library table you are going to be using in the school library at an elementary school will have to be a fair deal more durable than one you are planning to put in the library of, say, a high school.

The reason for this, of course is that high school students will (one would hope) be more mature and thusly know how to treat the furniture a bit better than elementary school kids might. This means that you probably want to get something with a sturdy construction for elementary school kids, and with a good, durable surface to avoid scratching and such. Most importantly, in the elementary school setting in particular, your surfaces need to be easily washable, as you never quite know what will end up on them in a school.

With this in mind, there is one pit fall you should be careful to avoid when shopping for *school library furniture*. As much as you tailor the durability of your furniture to your age group, also tailor the style of your furniture to your age group. If you buy school library furniture that looks too childish and then use it in a high school library, you are probably going to run into some trouble. Students in that situation are likely to be rather upset by the choice of style, as it could be perceived as condescending.

### **Contemporary Library Furniture : Breaking Down Stereotypes**

Libraries have a remarkable number of stereotypes associated with them. In the realm of public libraries, there is the universal image of aging single women hushing people and giving out stern looks to all those who step out of line. Private libraries carry the image of aging married men with a great deal of money and nothing left to do but read books they are not actually very interested at all.

As with all stereotypes, though, these are by no means the end all facts of the matter. And, as many people are finding, the best ways to defeat these stereotypes is by the use of modern designs and contemporary library furniture. The cause of the stereotypes surrounding libraries is that people have made the assumption that the interior decor of a library could not evolve, which contemporary library furniture can prove to be very wrong.

Contemporary library furniture is, at its core, a term which simply means library furniture that is modern, and keeping up with current styles. As such, it can be seen as an extremely broad field. This means that you have a great deal of room for customization, to allow you to make your library fit you perfectly. However, it also means that you will have

to make a relatively wide range of choices, and choices can be rather difficult. However, there are a few specific style tips within the overall umbrella of 'contemporary' which do an excellent job of dispelling the images of stuffy old men and bitter old spinsters once and for all.

In order to really see what you have to do to break the stereotypes with your contemporary library furniture, you must first really look at what the stereotypes consist of. One of the most notable features of the 'classic' library is that it is not a particularly bright place.

In fact, they are often seen as dim and stuffy. So, to counteract that stereotype, the obvious thing is to bring more light into your library. This can be done through lighting fixtures, particularly ones which have a more modern flair to them. Probably a better option, though, would be to use windows to allow natural light into your room, while also giving your library an airy, open feeling to keep the stuffy old atmosphere from invading.

Another way to make your library feel more open with *contemporary library furniture* is to take things away from the walls a bit. In the average private library, the bookshelves are almost always lining the walls, which can create a boxed in feeling. However, if you put the bookshelves more toward the middle of the room, leaving space around them, you can create a much more relaxed and open atmosphere for your room. Another important thing to remember in choosing your contemporary library furniture is colour. If you want to make your library appear brighter, then use light colours. However, you may also want to bring in a few pieces which are darker colours, or even black, to give the room some more contrast.

### **Shopping for Wholesale Library Furniture**

Shopping wisely is a skill that many wish to possess, and few have in as great a quantity as they might like. The fact is, being able to find the things you need for the best price possible is something which would help just about anyone. The good news is that it is not always as difficult as it may seem to find and take advantage of the best deals possible. This is particularly true of things such as furniture. The bad news, however, is that it can sometimes be a bit more difficult if you are looking for something which is in a niche market. Take, for instance, wholesale library furniture. Wholesale furniture in general is not particularly difficult to find, but wholesale library furniture specifically can present much more of a challenge.

The first thing you will have to do if you want to take full advantage of the savings available by buying wholesale library furniture is to have a great deal of patience. You will most likely need to look around if you

really want to find the best deals on your furniture. The trick, of course, is finding anywhere that will sell you library furniture at wholesale prices, as the type of furniture that one generally uses in a library is not really the most widely used style in other rooms. Thusly, wholesale stores in particular tend to shy away from it a bit, as they make their money by selling in volume. However, if you are diligent, you should be able to find somewhere that will suit your needs.

If you cannot find a physical location that will give you the wholesale library furniture you need, then you can always try looking over the Internet, as the sheer size of the Internet means that you should be able to find something at the right price.

In fact, you may want to take a look on the internet even if you intend to buy your furniture from an actual store, as it will give you a good idea of the price ranges to look for, and you may even stumble upon information of a store in your area. The disadvantage of buying over the Internet is, of course, that you will have to pay shipping costs, which can be substantial in the case of things such as furniture.

You should also keep an open mind in some areas and be ready to adapt a bit. You may have to bend your design a bit in order to find good wholesale library furniture. This does not by any means imply that you should not stick with your original ideas for how your room should look, just that you should be ready and willing to make a few changes and adaptation in case you cannot find something that fits your ideas. Also, you may be able to find some pieces that will work for you in places other than the places you would normally look for *wholesale library furniture*. For instance, you might find good chairs in a dining room or even living room section.

### **Why you Should Use Wood Library Furniture?**

Wood is a remarkable thing. For thousands of years, mankind has used wood for many purposes: as fuel for fires, as material to make tools, and most notably as the material used in building just about everything. The most interesting thing about wood as a building material is that it is still in wide use, in a time when there are better materials widely available. This is true in all forms of building, but most notably in furniture, particularly in the case of wood library furniture, as there are a number of easily accessible materials that would be just as good if not better. So what is it that makes wood library furniture so popular?

Well, first of all, there is the price. But, you might say, there are other materials that are much cheaper! And you would be correct. However, for

its price, there are few materials that can match the durability of wood library furniture. The materials that would be cheaper to use in the production of your library furniture would, as a rule, be nowhere near as durable as your furniture would be if you just had it made from wood.

There are a number of plastics which can be used, but the ones which will be cheaper will be much more fragile, and the ones which will be durable will also be more expensive. This, of course, is not a universal truth, as there are a few cases in which another material can match wood in durability and still manage to undercut the price by a significant margin.

However, it would be quite difficult for any other material to give your furniture the same look and feel that wood can. Even in the cases in which other things would be cheaper, those other materials will usually feel cold, artificial and generally unwelcoming. Wood library furniture has a remarkable warmth and depth to it that other materials simply can not compare to. Plastics generally either look too sterile or too childish, and overall have a rather shoddy look and feel to them. Metals are too cold, hard, and even if you can manage to make your metal furniture look less disconcerting, you will still most likely have an extremely difficult time making it comfortable to actually use.

Perhaps the most important argument for the use of *wood library furniture*, though, is that it is, for lack of a better term, classic. The fact that wood has been in use by mankind for many thousands of years means that it has been engrained into human culture that wood is the material of choice when building things. While this is not necessarily the end-all reason to do something, it is definitely a reason that is worth considering. If you use wood library furniture over other materials, your furniture will just resonate with people on a basic level. Humans naturally like to be around things that are made out of wood. It is an instinct that has been honed in human society and, perhaps, even human genes for millennia.

### **The Roles of Library Furniture**

Libraries serve a number of roles in society. Most notably, they are centres of knowledge and enlightenment. Most great minds owe at least some of their development to time they have spent within a library, whether it is a public library or a private one, studying the wisdom of great minds before them. They are also places where one can find entertainment, in the form of works of fiction and the like. For this reason, there are a number of qualities that should be present in library furniture. These qualities are, for in many ways, similar to the things which define effective office furniture, or even the qualities which make furniture useful in a

school setting. So, what makes good library furniture so similar to these other types of furniture?

Answering that question will also go a long way to clarify the qualities that are important in your library furniture. The quality which furniture that is useful in a library shares with furniture that one might use in an office or a school is efficiency. While a library is hardly a place that should be run with extreme rigidity, it is a place that has to have a certain amount of efficiency in all of its various parts in order to perform as it should. For instance, furniture that takes up a great deal of wasted space is probably not the best type of furniture to use in a library. This is particularly true of public libraries and school libraries, as the number of people that must make use of that limited space will be higher than in the case of a private library (at least in most cases.)

It is this efficiency that makes library furniture effective at saving space. However, there is something else which is also required for the furniture that you might find in a library to be up to par, so to speak. That is flexibility. Now, as many people know, it is difficult in many cases to find something that is both efficient and flexible. Efficiency is usually the result of something being very specific in scope, and flexibility often requires something to be so broad in its abilities that it is not all that effective at doing any given thing. However, that does not have to be the case with furniture.

For instance, library furniture can be both efficient and flexible by being simple. The table is one of the most efficient and flexible creations in the history of mankind. There is no wasted space, and one can, in theory, perform a nearly endless variety of tasks with the help of a table. Simplicity is also quite conducive to the last quality that should be present in library furniture: comfort. After all, if one is uncomfortable, it will almost certainly become a source of great distraction. This can hinder their ability to work effectively, or even cause their work. Thankfully, comfort is easily achieved without sacrificing much in the way of efficiency or flexibility.

### **Digital Library**

The recent advances in computer, storage and communication technologies are so stunning that it prompted one of the authors of this paper (Raj Reddy) to envision and explore the possibility of storing in digital form all the knowledge ever produced by the human race and making this content available free of charge to be browsed and searched by anyone, anywhere and at anytime. This vision is the goal of the Universal Digital Library Project (UDL). In addition, Reddy envisions a future where almost all information will be readable by humans as well as machines.

The trend would be such that any information that is not on-line and accessible to search engines may become unusable. In a thousand years, only a few of the paper documents we have today will survive the ravages of deterioration, loss, and outright destruction. Hence there is an urgent need to preserve our knowledge and heritage in digital form.

As a part of Raj Reddy's grand vision, a mission to digitize one million books was embarked upon as a collaborative project involving many countries, especially India, the United States and China. In this paper, we present the approach taken and the technological challenges associated with the Million Books to the Web Project (MBP).

An interesting offshoot of our efforts to make knowledge available free of charge to everyone is the opening up of research opportunities in language technologies – particularly for Indian languages – in order to make sure the language in which that knowledge exists does not become a barrier to information access. Language technologies research in Indian languages has so far been impaired by the lack of resources pertaining to Indian languages in the form of text or speech corpora. Compared to the corpora in English and other European languages, or in Chinese, the resources available for Indian languages have been very limited. This situation is being changed by the Digital Library of India (DLI) initiative, which is the Indian part of the UDL and MBP.

DLI today has scanned over 289,000 books composed of approximately 105 million pages in the Indian and English languages. Digital representation and storage mechanisms have been developed for Indian languages, and a large number of applications are being built to store, process, retrieve and present the Indian language content.

The Digital Library of India fosters a large number of research activities pertaining to language technologies for Indian languages, and acts as a testbed for developments made in areas such as text summarization, information retrieval, machine translation and transliteration, optical character recognition, handwriting recognition, and natural language parsing and morphological analyses. We present here an overview of the activities of DLI in these areas and show how DLI is acting as a multilingual resource, even without the availability of manually curated data.

### ***Vision: Digitization of all Guman Knowledge***

For the first time in history, technology seems to favour the possibility of digital preservation of all the significant literary, artistic, and scientific works of mankind, as well as the potential of free access to them from every corner of the world. A Universal Digital Library (UDL) has the potential of improving the global society in ways beyond measurement. The Internet

can house a Universal Library that is freely accessible to everyone. This would revolutionize education for all our future generations. There were about 10 million unique book and document editions before the year 1900, and about 100 million since the beginning of recorded history.

An average-sized book is around 250 pages and would require about 50 MB of disk storage if the book were stored as compressed images. Thus, all the books and documents ever produced by the human race would require 5 peta byte of storage. Even if we multiply this by a factor of 200 for all other forms of knowledge, such as music, images, audio and video, the total of that information could be stored in a zeta byte server. With the storage capacity of digital disks increasing by a factor of 1,000 in ten years, it looks technically feasible and financially affordable to articulate the vision to store on the computer all forms of knowledge ever produced by the human race. With new digital technology, though, this task is within the reach of a single concerted effort for the public good, and this effort can be distributed to libraries, museums, and other groups in every country. This formed the motivation for the grand vision of the Universal Digital Library Project.

### ***Mission: A Million Books on the Web by 2008***

It is believed by some that the goal of creating a Universal Digital Library is impossible and that attempting to create it could take hundreds of years and still may never be completed. Nevertheless, as a first step toward realizing this grand vision, a project was proposed that would create a Universal Library starting with a free-to-read, searchable collection of one million books available to everyone over the Internet by the year 2008. This first major project toward building a Universal Library is named the Million Book Digital Library Project (MBP). Within 10 years, it is expected that the collection will grow to 10 Million books. The result will be a unique resource accessible to anyone in the world, 24x7, without regard to nationality or socioeconomic background. Typical large high school libraries house fewer than 30,000 volumes. Most libraries in the world have fewer than a million volumes. The total number of different titles indexed in OCLC's WorldCat is about 55 million. A library of one million books, therefore, contains more than the holdings of most high schools, and is equivalent in number of volumes to the number in the libraries at many universities, representing a useful fraction of all available books.

The MBP is a multi-country project, and that part of the project being performed in India is called the Digital Library of India (DLI). A secondary objective of the MBP project, and hence the country-specific Digital Library

exercises such as DLI, will be to provide a testbed that will support other researchers who are working on improving the technology required for scanning and indexing. The corpus the MBP project creates will be one to three orders of magnitude larger than any existing free resource. It is expected that when DLI matures, more than 10,000 books will be available in each of the major Indian Languages. Such an immense and unequalled volume of data would also provide an excellent resource for language processing research in areas such as optical character recognition (OCR), machine translation, summarization, intelligent indexing, and information retrieval.

### **Collaboration**

Accessing, scanning and web hosting a million books is a major logistical challenge. A million books can be expected to comprise approximately 250 million pages. Throughput of a scanner used in the project (Minolta PS7000) is about 6,000 to 10,000 pages per day, based on three-shift operation. Using 100 scanners, and a 1,000-person workforce, the task of scanning a million books could be completed in about 420 working days, or roughly two years of three-shift operation. However, given the uncertainties of having skilled workers available at all times, and experiencing equipment failures and power outages, it is more reasonable to expect that the scanning would be completed in around four years.

The United States of America, India and China are currently the major collaborators in the MBP project with regard to technology development, operations and management. Collaboration among these countries has been a factor in the project's success so far, because these three countries provide access to a number of large academic libraries, of which over 700 are OCLC members from India and China. Also, since the scanning centres can be established anywhere, UDL has chosen to establish them close to these academic libraries so that the books can be transported with minimal difficulty.

The collaboration so far has been quite fruitful, with more than a few thousand books digitized every month from all the various scanning points established in India and the US. Currently, we have more than 200,000 books scanned and ready for use.

### **The Approach: Digital Library**

The Indian Institute of Science (IISc), Carnegie Mellon University (CMU), the International Institute of Information Technology, Hyderabad (IIITH) and many other academic, religious and government organizations, totaling about 21 "Content Creation Centres", have become partners in the Digital Library of India (DLI) initiative for the digitization and

preservation of Indian heritage present in the form of books, manuscripts, art and music. Each centre brings its own unique collection of literature into the digital library. Many authors have cooperated by contributing their books to the digital library and making them available free of charge to anyone. This digital library is also intended to be a testbed for Indian language Research.

DLI is intended to be a leading and contributing partner in worldwide efforts toward making knowledge free. A pilot project to scan around 10,000 books was initiated at CMU and then followed up at IISc, IIITH and other organizations; all the processes involved have been perfected. The vision is to use the disruptive technologies like the ICT to preserve all the knowledge of the human race in digital form and make that content searchable, independent of language and location, and to ensure that the rich cultural heritage of countries like India is not lost during the transition from paper to bits and bytes, as they were lost during a former transition of cultural content from palm leaves to paper.

Today, most of the works created by humans – be they in the form of books or music or movies – are “born digital”. Hence if we build the digital library with a proper framework and architecture, it should become possible to bring the library up to date more easily than it was to digitize physical formats. But for the time being, we are concentrating on digitizing these physical formats.

For the digitization of old books, we have developed a complete process comprised of scanning with planetary scanners, cropping, cleaning up images, and using software for the OCR conversion of English documents, format conversions and search engines. With available technologies, a 500-page paper book can be digitized and made available on the web in about two hours without having to unbind the book. So far, more than 289,000 books have been scanned, of which nearly 170,000 are in Indian languages. More than 84,000 books (25 million pages) are available on the DLI web site hosted by the Indian Institute of Science, and more than 149,000 books (43 million pages) are available on the DLI web site, which is hosted by the International Institute of Information Technology.

The link to other partner sites are also provided through (<http://www.new.dli.ernet.in>). Contents between the two sites overlap in order to ensure fail safe availability. The books can be accessed from either of these web sites. With the success of the joint efforts of the IISc-CMU collaboration, many other nations including China and Egypt have shown interest in participating in this effort, making it truly a global effort in knowledge sharing. China has made significant progress and has taken the Million Books to the Web as a National Initiative.

## **Technological Challenges**

### **Quality Management**

In large digitization projects, with collaborative work and distributed efforts of various parties involved in the process, we often find a compromise of quality, which enables errors to creep in. As is the case in any digitization project, DLI work is performed by humans and machines. Hence, occasional errors are possible, and these can be broadly classified into two categories: human errors and machine errors, both of which we discuss below.

#### **Human Errors**

Human errors in the digitization process are perhaps the costliest of the errors; they arise most often due to miscommunication between project staff or to staff incompetence or non-adherence to process and standards. Most of the books scanned in the DLI project are procured from sources like libraries and government archives, and the records for these books contain metadata entered by knowledgeable personnel. Although, in general, the metadata can be relied upon, the quality of that metadata are nevertheless subject to individual biases. In addition, for a major portion of books scanned in the project, accompanying metadata exists only in non-digital formats, and these have to be entered manually. For the data entry of metadata of a book, we largely rely on librarians to assess the accuracy and credibility of that metadata. But this situation is not foolproof. For example, a particular librarian might not be well advised about the hierarchy and ontology of book classification and so might classify a book as belonging to the category of “Art” when it really belongs in the category of “Music”. Consequently, the misclassified book would not show up in search results for the end-user who is interested in and searches for “Art”, and instead would show up as a non-relevant search result to a person searching for “Music”. An even worse situation would arise if the book were erroneously assigned to a completely irrelevant category.

Similarly, the process of scanning and producing digital content needs to be done with proficiency and care. An improper scanning operation made without following the standards set, may result in a digital collection that is not useful or suitable for an end-user. These problems manifest in various forms like the page of a book slipping while being scanning or an incomplete scan of a page. Manual errors can incur significant costs to the project, as firstly there is no satisfactory way to identify such errors when data is generated on such a massive scale, and secondly the erroneous data generated will not be useful to end-users, thus undermining the purpose of the project.

### **Machine Errors**

Machine errors are those that creep in due to the understandable limitations of the software being used or from improper configurations of the machines and software. Data generation, which is done during the scanning, is the key phase of the digitization process as we obtain digital images from the books. Once these images are obtained, the book is sent back to the library from which it came, and hence any problems that require that the book be re-obtained and re-scanned are costly errors. For example, an image processing algorithm that checks for the 'skew' aspect in images may have certain limitations for detecting it and could classify a non-skew image as containing skew. Such a problem could be rectified with better versions of the software whenever available. However errors due to improper configuration of scanners during the scanning phase are more serious, as the data generated becomes less useful due to its low quality.

Optical Character Recognition (OCR) is the software module that reads an image, understands the textual content in the image and outputs the text. Text is the appropriate means for storing data, occupies less storage than images do, is easily editable, and helps in the indexing and searching of the documents. OCR is thus a very crucial aspect of the process of creating the digital library. However, OCR is not 100% accurate, due to the various limitations imposed by the underlying recognizer. Let us assume that a page consists of 30 lines, each containing 30 words, and that a word, on average, consists of 4 characters. In that case, a typical page would contain 3600 characters. If the OCR is 99% accurate, it will result in 36 erroneously converted characters per page, and therefore for a book of 500 pages there would be about 18,000 errors in the OCR-generated text. Such a situation would be unacceptable to the end-user, although it does not significantly affect the efficiency of indexing and searching.

### **Data Management**

*Scalable and Sustainable Architecture:* Assembling the data and making it available for easy access is one of the most important phases of any digitization project. Each Mega scanning centre is responsible for gathering the metadata and the scanned content from the contractors operating at the scanning locations. This data is to be enabled on the web and also preserved for future. Enabling many tera-bytes of data for access to everyone in a highly reliable manner is needed for the success of the efforts put into the digitization process. Also data synchronization and management across centres needs to be done to reduce duplication and

ensure reliable high availability and immediate recovery in the event of storage media failures and server failures. Finally, digital preservation of the collections for a long time into the future remains a very significant problem faced by any digital library.

**Preservation Management:** The books scanned for the DLI project are for the use of everyone for the foreseeable future. Hence preserving the content of these books is important. In addition, the data being frequently commuted between the centres needs to be preserved uniquely to ensure easy workflow management. Every book that is scanned and stored is associated with a unique barcode and descriptive metadata for identification, search and retrieval.

**Synchronization Across Different Centres:** Because the books to be scanned come from various sources – like libraries, government organizations, institutions and personal collections – that are distributed across the country, there could be duplicates among scanning locations maintained by a Regional Mega Scanning Centre (RMSC) and also across different RMSCs. However, the project cannot afford the extra cost of scanning these duplicate books, processing their images, and performing quality assurance on them. Thus, communicating metadata across centres and within scanning locations is important. The duplicate books can be identified only by using metadata of a book like the title, author, publishing year, edition, etc. However, if the metadata is incorrect, missing or incomplete, as discussed in the previous section, it makes the duplicate detection all the more difficult.

**Rich Metadata:** The metadata formats that are traditionally used for physical books, though comprehensive, are not sufficient for handling digital objects. Hence, we have had several discussions in the UDL and DLI projects about identifying the metadata that should be preserved along with the digital objects, and we finally narrowed down our requirements to the following three sub-categories of metadata:

1. **Regular Metadata:** Regular metadata contains information about the book like title, author, date of publication, publisher, ISBN, keywords, subject, language etc. We follow the widely understood and accepted Dublin Core metadata format, extended with a few fields like edition information of the book, and the use of OM transliteration for Indian language texts developed for DLI.
2. **Administrative Metadata:** Administrative details of the book, like the location where the book was scanned, the original source of the book, scanning details, etc., may not be of interest to the end-users of the book but are useful to the operational organization. These

details can be used to trace the progress of the project, generate reports and identify bottlenecks in the scanning process. For example, it would enable us to trace the scanner that was producing low quality scans.

3. *Structural Metadata:* We have adapted the structural metadata concept for a book object in our digital library. This metadata contains information pertaining to each page, like the size of each page and whether that page is blank or has an important context attached to it – such as the beginning of chapter, end of chapter, index, preface, table of contents, etc. Such information enables us to improve the navigation of the book for the end-user and also improves search and retrieval systems.

**Replication of Storage:** Preservation of digital data is known to be a hard problem to solve. We attempt to address this problem to the best possible extent, by replicating the resources. All the books scanned in the DLI project are replicated and preserved in different locations across the world. We also store the content in two different formats – DVD/CD and hard drives. We are currently planning to have 3 different locations across the world (CMU, IISc and IIITH) where all the data scanned and digitized has been preserved in the above mentioned formats.

### **Architecture of the ULIB Project**

In this section we describe the architecture that supports the process and workflow discussed in earlier sections of this paper. The architecture of the DLI project is motivated by factors like scalability, ease of maintenance, dependability and economy. All the tools and technologies used by DLI are open source. Many issues related to interoperability and collaboration arise due to the huge number of books in different languages that are scanned at the various scanning locations, and the differences in the infrastructures used to preserve these digital objects. We solve these issues by deploying a distributed, decentralized architecture for the DLI project and by modularizing the tasks, using technologies like XML, databases, web services, etc. Below, we first describe the architecture of the DLI portal hosted at each Mega centre (DLI-RMSC), and we then propose an architecture for organizing these individual portals in a decentralized and service-oriented manner to ensure a highly available and dependable DLI system.

### **Architecture of Mini UDL and DLI Hosted at Mega Centre**

Each centre hosts the books that are scanned in the locations maintained by it. Currently there are three operational mega centres. The digital objects produced by the scanning are preserved on Terabyte servers,

which are clustered as a data farm. Each server in the data cluster hosts all the digital objects preserved on it, through an Apache web server. The cluster is powered by Linux and enhanced by LTSP3, an add-on package for Linux that supports diskless network booting. This option of diskless network booting helps us boot a server without having to devote any space for storing the system-specific and operating system files. This set up is economical and also easy to manage, such that we can add or replace data nodes in the cluster instantaneously without the need for operating system installations and configurations. We have customized the kernel in LTSP to support hard disk recognition and usb hotplug, and to run a lightweight Apache web server.

The 'Linux Loader' machine runs a copy of this distribution of the Linux with LTSP. Each data server in the data cluster downloads the kernel over the private intranet and boots from it. The servers implement a hardware based RAID to contain disk failures, which adds to the reliability of the system. In addition, for data restoration in the event of an irrecoverable crash, a redundant copy of the complete data is present on external storage media. The 'metadata server' is a repository of the complete metadata, which is in XML. XML has been chosen for its important role in enabling interoperability. Metadata is passed on constantly between contractors and the RMSC, and it also acts as an identifier of the book that is to be scanned.

Using XML as the format modularizes the work by decoupling the RMSC and contractors, and it also ensures smooth interoperability. Wrappers present on the metadata server automatically populate the database from the XML metadata. Along with the metadata of the book, the database also contains pointers to the location of the book in the data cluster.

The portal has a front end user interface that a user can log onto, use to query the metadata, and retrieve books he or she wishes to read online. A caching mechanism deployed on the metadata server helps us cache similar queries posed to the database and return the results promptly. When a user requests viewing the complete content of the book, the location of the book in the data cluster is gathered from the database, the content is retrieved over http requests from the particular server in the cluster and then is broadcast to the user. The 'proxy servers layer' between the Data cluster and the DLI-RMSC portal also has a caching mechanism enabled that handles repeated requests for the book pages, and this ensures quick response times.

Like the metadata, books are preserved in text format, which makes them searchable. Currently, search is limited only to books in the English

language, due to unavailability of optical character recognizers for other languages. The search is supported by Lucene.

### ***Distributed Architecture of DLI Projects***

The scanning operations of DLI take place at different locations in which the RMSC operates, and the digital data from its region is accumulated to be hosted online. DLI as such follows a distributed and decentralized architecture with each RMSC as an independently operating node. Decentralized architectures by definition avoid having central points, as they are candidate single points of failure and a performance bottleneck.

However, since the digitization process is a cumbersome process, the data that is the end product of the process is very sacred. Hence, redundancy is always advised in a data centric project like DLI, and therefore every RMSC that is a node in the decentralized architecture of DLI hosts the complete data from the other nodes. Currently, synchronization of complete book content between nodes is by physical transfer of Terabytes of information between the RMSCs.

We propose a Service-Orientated Architecture (SOA) for smooth interaction between the nodes in the DLA decentralized architecture. The following are a few advantages of the decentralized SOA of the DLI:

- Web services address issues of interoperability that arise due to varying media, databases, languages, middleware and operating systems across RMSCs.
- Metadata of books is synchronized between RMSCs via web services, on a periodic basis. This also helps in duplication verification across RMSCs.
- Other specific features like copyright information verification, statistical reports, etc. can also be exposed by the RMSCs and can be utilized across the DLI project via web services.

A user can log into the central site and request reading books online, at which point he is redirected to one of the closest RMSCs and will be served from that RMSC. This ensures quick response times for the user and also reduces, to some extent, load on any one set of servers.

### ***Indian Language Technology Research under the DLI Project***

The Million Books to the Web Project (MBP) acts today as a catalyst for research in Indian Languages. The primary goal of the DLI project, apart from making the books available online, is to make them available in fully functional form. The DLI is not simply a static repository of books—it has made possible bringing home the language and information processing technologies for Indian languages. In the rest of the paper we describe

some of the research activities progressing under the umbrella of DLI.

Major impact contributions of the Digital Library of India to the Indian language information technologies are:

1. OCR for Indian languages
2. OM transliteration, which is an integral component of all the other systems
3. a text editor for Indian languages that is available for everyone
4. the book-reader interface that extends the availability of the Digital Library from “*anyone, anytime, anywhere*” to “*any-language*”
5. a machine translation system that we call *Good-Enough Translation* (GET-across) and
6. a search engine for Indian language texts.

These are briefly described below.

### **OCR in Indian Languages**

Designing an accurate OCR in the Indian languages is one of the greatest challenges in computer science. Unlike European languages, Indian languages have more than 300 characters to distinguish, a task that is an order of magnitude greater than distinguishing 26 characters. This also means that the training set needed is significantly larger for Indian languages.

It is estimated that at least a ten million-word corpus would be needed in any font to recognize Indian languages with an acceptable level of accuracy. DLI is expected to provide such a phenomenally large amount of data for training and testing of OCRs in Indian Languages. Many of the contents, besides scanned images, have been manually entered for this purpose. Using this extremely large repertoire of data, a Kannada OCR has been developed.

*Optical character recognition for Kannada:* The first block of the OCR is the segmentation algorithm that segments lines, characters and, within the character, a 32 X 32 block to identify the different key strokes that make up the character.

These take care of the morphological dilation, base character, vowel modifiers and consonant conjuncts. Base characters are then normalized to 32 X 32, and the consonant conjuncts, as well as modifiers, are resized to a 16 X 16 matrix. Through a series of signal processing algorithms using DCT and KLT, the features are extracted. Structural features include aspect ratio, stroke at different orientations, and height of the segment, in the top zone, and the width of the character in the middle zone.

A neural network-based classifier is then used for training with the extracted feature vectors and testing. The current level of accuracy that we get is around 96-97% on clean documents scanned at 400 dots per inch. This accuracy falls to 40-50% if the image is of bad quality. Efforts are underway to further improve the accuracy of the OCR with better segmentation, faster speeds and enhanced training. This OCR is currently being extended to other Indian languages, including Tamil.

### **Om Transliteration: Unified Representation for Indian Languages**

India is fast becoming a software superpower; however, PC penetration is merely 1.4% compared to that of television (17%) and telephone (5%). One of the limiting factors in low PC usage is the unavailability of the operational software in native Indian languages, and the language barriers between people. While the development of an operating system in a native language is one solution, this solution is likely to be limited to only a few languages. If the Indian language texts were instead available in parsable English-like texts, they would benefit from the advances in the language processing of other international languages. Isolated development of digital representations for the different Indian languages may further widen the language barrier in the country.

Thus there is a need for the development of a digital representation that lays a common foundation for all Indian languages. For seamless adaptation of algorithms in language technologies, this representation must also be parsable by universal language processing tools and algorithms, such as for machine translation, information retrieval, text summarization and statistical language modelling. The representation must exploit the similarity in the alphabet of the various Indian languages. A large number of Indians are bilingual; while they can freely read and write in the one Indian language that is their mother tongue, and English, they can understand many other Indian languages as well due to the similarity of the origin of words. With this backdrop, we first developed a representation scheme for Indian languages, called *OM transliteration*, which formed the basis for all other work in Indian language research at DLI.

Om uses the same representation for keyboard input and formation, and digital storage. It is similar to ITRANS in that it uses combinations of letters from the English alphabet to represent Indian language syllables. ITRANS is a representation of the Indian language alphabet in terms of ASCII. (<http://www.aczoom.com/itrans/>). However, the OM transliteration developed under DLI is case-independent, and avoids excessive use of non-alphabetic characters; where used, they are consistent. Furthermore, the English alphabet combinations are designed such that they are easy to

remember at the time of input using a standard keyboard, and they are also natural to read like English. The case-independent representation allows the use of sentence and title case writing in a natural fashion; in addition, the texts are more highly readable than their ITRANS counterparts. It may be noted from any ITRANS text that the large mixture of capital and small letters and non-alphabetic characters leaves ITRANS text highly difficult to read.

Om's features enhance usability and readability; it has been designed on the following principles:

1. easy readability,
2. case-insensitive mapping (While preserving readability, this feature allows the use of standard natural language processing tools for parsing and information retrieval to be directly applied to the Indian language text.), and
3. phonetic mapping, as much as is possible. (This makes it easier for the user to remember the key combinations for different Indian characters.)

ASCII representation may be used simply as a means of typing the text with a standard keyboard. For transliteration to Indian languages, OM representation is mapped to the Indian language fonts for display or converted to any other format, such as Unicode, where required. When a user is not interested in installing language components, or when the user cannot read native language script, the text may be read in the English transliteration itself.

Because India is a multilingual country with an inter-mixed population, often the Indian people can speak and understand more than one Indian language as well as English. Hence even in the absence of OM to native font converters, people around the globe can type and publish texts in the OM scheme that can be read and understood by many others, even when they cannot read native script.

The readability criterion that has benefited from the case-insensitive phonetic mapping thus proves very useful. The major contribution of OM is to separate storing and rendering, which makes it language-independent across the Indian languages.

### **Om Text Editor**

An integrated transliteration package that accepts OM ASCII keystrokes as input and maps them to native fonts has been developed. The script in any one of the supported true type fonts is sent to MS Winword for further formatting and layout options. Since the OM scheme

is common to all the Indian languages, the display of the text can be converted between the supported languages by choosing it on the menu. The tool also integrates with email clients on the windows platform. A web interface with similar functionality has also been developed.

The text may be saved as OM (ASCII) text, native-font text or in Unicode. The tools have been used extensively for data entry for texts that feed into applications such as machine translation and optical character recognition. It has also been used purely for content creation by the outside community.

The integrated editor will be provided for hosting or use at any website free of cost, such as has been done at <<http://www.telugumn.org>>. The integrated editor is available for both windows and linux platforms. For those who wish to create content using a web interface, without the need to install the package, a java-based web interface is also available.

### **Multilingual Book Reader Interface**

The books on the digital library of India are available to *anyone, anytime, anywhere*. The goal of this work was to add to it the dimension of *any-language*. While OM transliteration helps one to read the text of one language with a script of another, it does not provide any translation. Due to the grammatical and etymological similarity amongst Indian languages, and their phonetic similarity, OM takes things a step beyond mere transliteration. The understanding can be improved further by the simple technique of merely translating some of the frequently occurring words from corpora. This has been the motivation behind the development of a multilingual book reader that supports *automatic transliteration* and *word to word translation* between Indian languages and between an Indian language and English. A Universal Dictionary, with the objective of providing the digital library user with a “good enough comprehension” of the content of the books in languages other than his own, has been built.

This Universal Dictionary, which is cross-lingual, currently contains six Indian Languages (Hindi, Telugu, Assamese, Tamil, Kannada and Malyalam) besides most of the European languages.

When presented with electronic text in any Indian language, the book-reader allows text to be transliterated into any one of the many Indian languages. This is made possible with the OM transliteration scheme discussed above. This allows the user to read, for example, Hindi text in Telugu font.

With the help of the Universal Dictionary, a word-to-word look-up table translation is made on the Indian language text between any pair

of the many Indian languages supported by the Universal Dictionary. When a word is not found in look-up table, only its transliteration is displayed. While Indian languages are phonetic languages, English is not phonetic. In order to display English words in native language where required, a pronunciation dictionary is used.

These features provided by the interface are desirable not only to the readers who can understand but not read their own language, but also to those who desire to obtain at least a crude translation of a book to their desired language. The book-reader performs the functions involving transliteration independently while also connecting to the example-based machine translation system on the backend for full-text translation.

The reader, while especially suited to a multilingual country like India, is also extendable to any other digital library where the resources of translation and transliteration are available at large. The multilingual book-reader presents novel features that improve the usability and reach of any digital library.

### ***Indian Language Search Engine-Tamil Search Engine (OmSe)***

Technology for the deployment of information retrieval in Indian languages has been demonstrated by the development of the OmSe search engine using the off-the-shelf open source software *Greenstone search engine*. The use of the OM transliteration scheme makes it possible to store any Indian language information in ASCII and to use any conventional search engine for information search and retrieval. For illustrative purposes, Tamil documents stored in the ASCII representation of OM have been built and are directly available for indexing, search and retrieval without any modifications to the text-handling modules of the search engine.

At the time of display, the retrieved text, in addition being made available in readable English transliteration, is also converted to native Tamil script and displayed. Currently commercial quality optical recognition software is not yet available for Tamil and other Indian languages. Hence to demonstrate the technology, the Tamil search engine is built over a collection of born-digital newspaper articles, crawled from the web. The basic architecture of the Tamil search engine includes a server that contains a database, a web crawler that crawls and downloads Tamil-language web content from various Tamil web portals, and the OM transliterator that converts true type font ASCII to OM transliteration format.

The front-end of the search engine is the client side, which has a graphical user interface that prompts the user to type in the search query in OM transliteration format. The query typed by the user is also displayed in Tamil font to enable the user to make corrections, if required, while

entering the keyword in OM Transliteration format. The interface between the client side and the server side consists of matching the user query with the entries in the database and retrieving the matched web pages to the user's machine.

The search engine takes the query to the database and looks at the matches as per ranking. The search engine then sorts these database entries using a ranking algorithm. Greenstone's ranking algorithm determines the relevancy of a retrieved webpage to the user query. The retrieved sites are then displayed along with links to these sites in text format.

### **Machine Translation**

Example Based Machine Translation (EBMT) is basically translation by analogy. An EBMT system requires a set of sentences in the source language and their corresponding translation in the target language. A bilingual dictionary comprising of Sentence Dictionary, Phrases Dictionary, Words Dictionary and Phonetic Dictionary is used for the machine translation. Each of the above dictionaries contains parallel corpora of sentence, phrases and words, and phonetic mappings of words in their respective files. These files would form the database for the machine translation system.

The basic premise is that, if a previously translated sentence occurs again, the same translation is likely to occur again. However, it is not possible to store the database as a set of a huge number of sentences. Instead, we can store the frequently occurring phrases and their translations and use these translations to translate a complex sentence. A sentence can be seen as a combination of phrases. Each sentence can be divided into a set of phrases and words. Instead of storing the entire sentence translation in the database, it would be more efficient to store phrase translations and word translations. This would optimize the database required for translations.

The EBMT has a set of 75,000 of the most commonly spoken sentences originally available in English. These sentences have been manually translated into three of the target Indian languages – namely Hindi, Kannada and Tamil. Bilingual word and phrase dictionaries between these target languages and English of over 25,000 and 18,000 entries respectively, were also created manually.

The artificial intelligence engine learns from these examples and provides a good enough translation by looking for the longest match at the sentence, phrase and word levels. An even better way of storing the database is to store the rules related to the language pair. This has been

observed to improve results dramatically. Though we would say that it is EBMT, the rules database would drastically reduce the size of the database and would actually improve the translation results. Thus the phrase translations and phrase rules play a significant role in machine translation. The advantage of this simple “good enough translation” system is that its performance can be improved almost linearly with the increasing corpus and rule base.

The EBMT also has an interface for learning rules from its users. User feedback is stored separately and used later, after a verification for correctness, so that the main data base, and hence the performance of the machine translation system, is constantly improving.

### **Conclusion**

The Digital Library of India (DLI), besides providing an opportunity to create freely browsable and searchable documents of value to all of humanity, has become a testbed for Indian language research. DLI has developed search engines, and clusters for data base storage and retrieval. It has also helped in creating a tight bond for those doing research in India within 21 centres, spanning academia, government and religious institutions. It is heartening to see that in India the Government, policy makers, religious institutions and scientists have put India on the world map of digital libraries and have done so as a national project under the Ministry of Information and Communication Technology. Many organizations are waiting to join this national initiative.



## Library Personnel

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The effective participation of the college library in the instruction of students in the use of library tools and bibliography, in defining and carrying out the objectives of the college in collaboration with the faculty, and in extending the use of library materials in education requires a well-qualified and numerically adequate staff of trained librarians. The position of the staff in library service is pivotal. The student body, faculty, and public using the library are peculiarly sensitive to its oversight, judgment, and enterprise.

### Classification of Duties: Professional and Clerical

In addition to the head of the college library, the typical library staff consists of professional and clerical assistants, with considerable student help. The A.L.A. *Classification and pay plans* sets up two types of services only, omitting sub-professional employees who are included in the public library classification plans and combining student service with clerical. In the prefatory statement of standards of education in the pay plans, the two types of services are defined as follows:

1. Positions in the *professional service* usually fall into one of three groupings : executive, bibliographical and those requiring contact of a professional nature with the public. Thus a knowledge of library work is taught in a library school is considered essential. When certain position require *unusual* subjects or language background, it may, on rare occasions be very difficult or impossible to find someone who has this required basic ground plus library school education. In such instances the subject back-ground may be deemed more essential to the specific position and the person possessing it be chosen for the position with the understanding he complete his library education within a specific period.

2. Positions in the library's *clerical service* are similar to clerical positions in the business and other offices of the institution. To hold a position in this service the incumbent is not required to have had prior library education or experience.

To be classed in the professional service, the person must have these minimum qualifications for the lowest grade :

*Graduation from a college or university approved by an accrediting association of more than state-wide standing including one year of training in a library school accredited by the A.L.A.; or equivalent qualifications.*

To be classed in the clerical service, the person must have these minimum qualifications for the lowest grade :

Graduation from an accredited high school; or equivalent qualifications.

A great deal of the work in any college library is of a clerical or routine nature. If the professional staff is to provide the services needed in carrying out the instructional work of the faculty it must be relieved as much as possible from work of a purely routine or clerical nature. It must have the time and opportunity to become acquainted with the students, to become familiar with their problems and needs, as well as to know the materials which are available for aiding their study. While it is impossible to separate these tasks completely, there are good reasons why each library could attempt to outline and analyse the professional and clerical duties in its own service. They may be stated briefly as follows :

1. A clear distinction between professional and clerical duties enables to professional staff to give more time to work of an instructional character and a reclassification of duties in which many tasks of a routine nature are transferred to competent, clerical assistants. As a consequence, it helps to the professional standing the prestige of the staff in the eyes of the policy.
2. If there are certain duties which are clearly set apart as clerical, and the librarian can demonstrate the need for help to perform these duties, chances of securing this help are greatly increased even though college personnel funds are limited. The business-minded college president is impressed by the possible economics; the president who measures costs in terms the educational value received will readily recognize that a librarian who has been freed from such requirements as typing and filing will have more are to study the instructional needs of the individual student and to give direction and guidance in the use of books. This fact cannot be stressed too strongly. College libraries are perhaps more seriously

handicapped by the lack of sufficient full-time clerical assistants than by any other single factor.

3. A classification of duties provides a basis for clarifying and improving organization, for placing responsibility, and for the intelligent treatment of salary problems.

It is recognized, of course, that in practice there are serious difficulties in separating completely professional and clerical tasks. The time during which a college library is open is long, and it is generally impossible to provide professional assistants at the loan and reference desks at all hours of the day and evening. As a consequence, there are clerical and student assistants doing professional work and professional staff members doing clerical tasks.

Moreover, the varying nature of duties at the loan desk does not easily permit a hard and fast distinction between professional and clerical duties. In the technical processes, where the distinction is more readily made, the professional staff is often obliged to do a great deal of routine work in order to keep abreast of individual duties.

In spite of these obstacles, and others, however, the attempt to distinguish between professional and clerical activities in the college library is strongly recommended as vital to effective service and recognized academic status. Obviously there are types of work in the college library which are purely clerical and to which full-time clerical and part time student help can be assigned. Unless a clear distinction is made in these positions, there is danger that all library assistants will be classified as clerks by the administrative officers.

### **Qualifications of the Librarian**

In discussing the role of the library in higher education, Dr. Louis R. Wilson has this to say about the Librarian :

*The modern college exacts higher qualifications of its librarian than formerly. It no longer considers the possession of an A. B. degree and the completion of one year of training in a library school sufficient equipment for the librarian who is to become a successful administrator, a wise counselor in the use of books, and a force in shaping college instructional policies. It insists that the librarian must be a person of imagination and initiative that he must have a sound understanding of library administration and some subject field, and that he must know how to relate the use of the library to the educational programme of the college.*

The emphasis in this quotation is on the training, progressiveness, and mental attainments of the college librarian. One might add that if he is to be a leader in the college community, he must be a person of character, integrity, and professional idealism—qualities sometimes overlooked in the filling of important teaching and administrative posts on college faculties today. Few enter—or should enter—the library profession to make money; ideals for the most part must be the determinant. A devotion to one's profession goes a long way in establishing feelings of trust and confidence among the library staff and faculty.

### **Administrative Ability**

It would appear an obvious truism to declare the college librarian should have the qualities of a good administrator; yet so important are the librarian's instructional relations to the faculty that this requirement is not so generally nor so permanently borne in mind as it should be. Dr. Harvie Branscomb correctly states that the administrative problems of the university librarian are more complex, but it must be stressed that so far as the realities of college library work are concerned, one of the best services of the librarian is to be a good administrator and leader in the library. It is essential that the librarian assume a large measure of administrative responsibility, including the supervision of the staff, the proper budgeting and expenditure of library funds, and the oversight of the library building. These functions require frequent consultations and close relationships with the president, the business officers, and department heads, and the Librarian must impress them with his sound business judgement and innate ability to manage the library's affairs. He must also hold the confidence of the library staff by his ability to develop a systematic organization of library work, to conduct the many types of transactions involving the administration and faculty, and to administer personnel, budgets, and services in a satisfactory manner.

In many books and articles, the qualities of the executive are given. One of the best brief summaries is contained in Randall and Goodrich, who state that administrative ability consists generally of four things :

- (1) the power to see clearly the significance and the implications of problem
- (2) the ability to analyse a known problem in such a way as to identify the important parts of its structure;
- (3) the genius to put facts side by side, to consider their combined significance, and thus to come to a conclusion; and
- (4) the faculty to secure cooperation from others.

To attain even to an approximation of these qualities, the librarian first must understand thoroughly the objectives of the library in the particular college programme, the functional organization of library materials, and the problems and needs of those he serves. One who has not the personal ability to work with others and to secure their cooperation will not make a good administrator, but he may improve his chances for success considerably by making a serious effort to understand the psychological factors involved in personnel relations. These are discussed in chapters in books on personnel management and personnel administration, some of which are listed in the references at the end of this chapter. In the space available here it is only possible to mention a few of these factors briefly.

Mutual confidence is an important factor in satisfactory personnel management. If the Librarian is to have confidence in the staff, he must first have confidence in his own judgement. "Indecision is fatal to good administration," write Randall and Goodrich, but "self-confidence must not develop into obstinacy." Staff members are attracted by a librarian who will take responsibility; conversely they are likely to be wary of one who hesitates because of lack of confidence in his own judgement or who tries to "pass the buck." Mutual confidence implies also that the librarian should have full confidence in the staff.

The best evidence of his trust is the degree to which he is willing and able to delegate authority in work to be done. To be given a particular job to do and to have the satisfaction of seeing its final accomplishment is a great motivator. On the other hand, always to be doing something patently as a sub-ordinate and under constant supervision and checking and to see nothing of personal accomplishment in what is done has a very debilitating effect. The librarian is also responsible for cultivating and maintaining an *esprit de corps*.

In plain language this amounts to giving everyone on the staff a square deal in matters of promotion and salary, in providing for the physical comfort of workers, in showing appreciation of satisfactory performance, and in being fair and impartial in criticism. Sometimes grievances and friction will show up in the staff for reasons which have nothing to do with the librarian personal administration. It is then his job to determine the cause of the friction and to eliminate it firmly and openly. He cannot hope to do this unless he knows each staff member well and has the courage to deal firmly with older and experienced members of the staff as well as with the new members. One other factor, even in a brief summary, merits careful consideration. The attitude of the librarian in administration should be democratic. The greatest danger to satisfactory

personnel relations and effective library service is represented by the librarian who is domineering, autocratic, and reprehensible in his attitude in handling people in subordinate positions. As President Mildred H. McAfee of Wellesley College once pointed out in a talk to college librarians:

*It is easy to forget how really unimportant we are in our own right. A president has less reason for existence apart from the institution than the library does, but not much less. You know the danger signals for me and my presidential colleagues. While I was a teacher, I asked my college president for some advice about my office, and he said, "Don't bother me with that. That's what I hired you for." "I hired you"—a bad symptom when the college president begins to think of himself as the boss, his colleagues as his employees.*

The librarian is the one to take the initiative in formulating administrative policies, but he should see to it that his policies do not constitute dictatorship. Consideration for subordinates is not only essential for maintaining an *esprit de corps*; it is also the best way for securing good work.

### **Scholarly Interest and Understanding**

Practically all writers stress the importance of an understanding and appreciation of scholarship on the part of the college librarian. John D. Russel, presenting the point of view of the college professor, writes :

*In order to maintain effectively his position in this community of scholars..., the librarian must himself qualify as a scholar. He must be broadly acquainted with the manifold fields of human knowledge. He must be able to speak the language of scholars. He must know the ways in which scholars and specialists in various fields derive their knowledge and apply it to practical situations. Under modern conditions one can scarcely qualify as a scholar unless, in addition to the general types of knowledge already indicated, one has penetrated fairly deeply into one or more specialized fields. This last characteristic, however, is sometimes unfortunately over emphasized, I believe, almost to the exclusion of the grasp of the broader types of knowledge which in former generations was the predominant characteristic of the scholar.*

It is worth while to dwell a moment on the meaning of this quotation, for it is a fact that unless the college Librarian can develop sympathetic understanding of the book needs of the scholar who teach and do the

research work in the college, he cannot fully enter into the possibilities of his calling.

It is not the intent of Professor Russell, or of others within the library profession who write about the scholarly requirements of college librarianship, that the librarian should be a scholar in the sense of an eminent specialist or research man. There is one very practical reason why he cannot be. His work allows him no time for the continuous application to a single subject which is essential for the specialist. His working hours are long, he is interrupted at every turn, and his administrative and instructional duties in the library require him to switch his attention at a moment's notice to a new subject. As a librarian his function is not primarily to engage in teaching or research; he exists, rather, to aid those who are teaching, investigating, or writing. He certainly must have the instincts and sympathies of a scholar, and yet be able to think independently while attending to the interests of others. He should be familiar with the methods of research; he should be competent to impart his knowledge in the training of young people in the proper use of bibliographical tools and in offering counsel in problems of research. As a librarian of scholarly interests and instincts, he should know thoroughly the organization and curriculum of the college and should be able to select and evaluate books in relation to the courses of instruction. Above all, he should be a person of broad interests with the intelligence and ability to appreciate and understand the problems of others. Sir Frederic Kenyon, at one time librarian of the British Museum stresses this quality in these words: "The moral basis of both the capacity and the willingness to help others in their several pursuits is sympathy... It is the capacity of entering into the mind of another, of being able to see interest where he sees it, and thereby of being able to cooperate genuinely in the search which he has hand." A broad academic background and professional training should give direction to these qualities; experience should provide practical judgement.

### ***Ability to Work with Students***

The ability of the librarian to work with students is a requirement so widely recognized by the profession and so frequently emphasized in the several chapters of this book that it calls for no extended mention here. One word of caution may be in order, however. So sharply have modern methods of teaching focused attention upon library relations with the faculty that there is danger the librarian may not fully appreciate the fact that the library is similarly designed to be of service to the college student. The library fails to fulfil its complete function unless the librarian knows the students' needs, how they may be met and what students expect of

the library The adaptation of library service to student needs must necessarily be developed in terms of a particular college serving a specific student body. There are three general factors, however, which will greatly affect the success with which the librarian carries on his work with the students. These are discussed briefly in the following:

***Personal Contacts with Students:*** In a college library, the librarian has a good many personal contacts with students. They may range from the recommendation of supplementary reading for a class assignment to the explanation of library policy and regulations. They may, and often do include the giving of lectures in the use of the library, the provision of books for some special class or extra-curricular project, the arrangement of an exhibit to illustrate some subject of instruction, or the recommendation of books on careers for a particular student.

The successful librarian is at the service of each student who needs help in his studies, guidance in outside reading, or advice on personal problems. He need not be all things to all men, nor be unremitting in industry, but he must have wide intellectual interests and a sympathetic understanding of the problems of young people. The quality of sympathy is the least dispensable.

***Student Opinion of the Library Staff:*** As one writer has wisely pointed out, the best test of the real usefulness of a library is the composite attitude of the library staff toward the student. What ever demands a body of undergraduates may make upon the library, they do not wish to be treated as so many automations.

They have little respect for a servile, smirking type of service, and the resent the begrudging, hostile attitude which sometimes characterizes loan desk service. What they want first and foremost is sympathy, an understanding of themselves as well as of their need. By virtue of his responsibility for the selection and guidance of library personnel, the librarian must see to it that the staff develop a real understanding and appreciation of the human aspects of its work.

***Faculty Opinion of the Librarian:*** The way in which the librarian is regarded by the faculty, and the interpretation he encourages students to put upon his place in the college will greatly influence the success with which he carries on his work with students. Is he regarded simply as a caretaker of the books, as a mechanic, as an administrator, or is he regarded as a helpful friend and adviser, as a librarian-teacher, and as the leader of a staff competent and willing to aid the teacher? In a librarian who evidences the second set of qualities, there is a definiteness and forthrightness which inspire the confidence of teachers. They will respect his suggestions and encourage the students to seek his help and advice.

**Academic and Professional Training of College Librarians**

Two major criticisms have been levelled at college librarians and professional training for librarianship. It is often said that college librarians are expert in the making of catalogues and in the technical processes of the library, but that they lack the educational and scholarly experience of those whose colleagues they ought to be. The second criticism applies particularly to the chief librarian, who, it is claimed, often lacks the vision and ability to play an active part in the formulation of college policy. There is, no doubt, a great deal of truth in both criticisms and they deserve to be brought out into the open, though it is questionable whether every newly-fledged holder of the doctorate is doing his profession a service by discussing the weaknesses of his colleagues at every opportunity he is given to speak or write. A reasonable amount of criticism is healthful, but it can be carried to the point where it is neither profitable nor wise.

**Comprehension Before Criticism**

Before discussing trends in education for librarianship which are designed to eliminate the weaknesses cited in the criticisms above, it is worth while to mention four things which the student and critic of librarianship should keep in mind in evaluating library training and librarian performance.

The field of modern college librarianship is comparatively young. The librarian and his staff, in the development of educational processes in which they have had an increasingly active part have had to change their entire concept of the library function. Some of the difficulties incident to this change, particularly as regards the librarian's relationship to faculty members and instruction, are still with the profession.

Library service is not to be judged exclusively on the technical aspects of its work. For example, the limitations of the card catalogue are sometimes attached to the work of the library and its staff as a whole. No librarian will deny that card catalogues are awkward to use, costly, and inadequate; but to appraise the whole of library service in terms of the technical cataloguing is to overlook the many-sided character of a library.

Success in college library administration, or in reference work, or in instruction in the use of the library, or in readers' advisory service—to mention only four important aspects of the library job—depends less on technical skill than on broad cultural knowledge, wide reading, and versatility in aiding readers. By and large, college librarians have shown themselves to be more successful in these phases of their work than they have in producing a usable and practical catalogue.

There is, as Dr. William Warner Bishop points out, some misunderstanding regarding a "supposed basic contradiction between scholarship and librarianship." In the last analysis scholarship is dependent upon books and books are the stock in trade of libraries. "It is equally obvious," Dr. Bishop continues, that in the organization of books and library materials for scholarly use "there has been a working combination of librarian, library staff, and the university's several faculties." The same is true in the college library.

The librarian is naturally dependent on the various members of the teaching staff, each of whom is an authority on the literature of his subject, for the development of the collections in aid of instruction and scholarship. It is obvious that the librarian cannot be a specialist in all fields. It is at least open to question whether he would prove as better librarian by becoming an expert in one field rather than by cultivating a diversity of interests in several. His job, in this one aspect of library work, is to maintain a proper balance in the collections and to see that they fit the needs of students. The difficulty sometimes is to get the specialist to take sufficient trouble to submit *desiderate* to the library, whereas in other cases the enthusiasm of the professor produces wholesale recommendations in his own special field, out of all proportion to its importance in the college or to the requirements of undergraduate students. In the development of a college library, therefore, it would seem that each group—the librarian, library staff, and professor—has its own role to play.

Finally, although it is all too true that the librarian has not played an active part in the formulation of college policy, there is at least some reason to doubt whether this is as much a defect of his professional training as certain other factors over which he has no control. The trouble lies at least half the time in the fact that the library is still a relatively unknown factor in college education to most faculty members and administrators.

It is unknown in the sense, of course, that its potential contribution is not realized. In the formal organization of the college its relationship to instruction is often left to the initiative of the librarian, whose best efforts will prove abortive if he is too aggressive, or to a committee for whose members the library is only a sideline. The president, under pressure from all sides, is frequently too busy to see that the right relationships are provided even though he may be interested and sympathetic with what the library is trying to do. In other words, a greater degree of personality and mental attainment is required for appointment on the part of the librarian and the library staff to membership there educational and policy-making committees of the college than to the faculty who have already

an accepted place in the academic circle. It is an anomaly of the educational world that librarians everywhere should be actuated by such genuinely high motives of service and yet should so often fail to find an opportunity to contribute their best.

The foregoing is not an attempt to justify present library practices or library school teaching programmes. As was said at the outset, there is a certain amount of disquieting truth in the weaknesses these criticisms typify. It is, therefore, of interest to inquire what has been done in recent years to remedy the faults and to raise the level of scholarship in the profession. The most noticeable trends so far as they affect the training of college librarians, are in the selection and recruitment of personnel, in the library training programme itself, and in the continuing education of librarians in-service. The discussion of the last of these trends is deferred to a later section of this chapter.

### ***Trends in Professional Library Education***

So far as recruitment is concerned, there has been a determined effort to improve the quality of candidates entering the profession. The American Library Association through publication and through its board on education for librarianship has sought to interest the most promising graduates, particularly men, in entering the profession. All library schools have developed comprehensive plans for selective admission, usually based on college scholarship records, interviews and counselling procedures, and intelligence and aptitude tests. Higher standards of admission are required for entrance to library schools. A much greater emphasis than formerly is placed on personal qualities of leadership. The responsibility of the college librarian and his staff in discovering students with unusual abilities for library service has been stressed. This is a matter which is of real concern to college librarians because their institutions send larger proportion of students to library schools in comparison with their enrolment than do the universities. The college librarian moreover, has many personal contact with students which enable him to weigh not only their scholarly ability but the more intangible factors of personality.

The improvement in the quality of library school graduates by better methods of passing upon the fitness of applicants for admission and by creating greater interest in library service as a career for college graduates of exceptional ability has been accompanied by a more precise definition of the requirements for pre-profession training. Fundamentally, this training should consist of a general education leading to a knowledge of broad fields of learning and a real understanding of the relevance of this knowledge to the intellectual and social structure of the world. For this reason the intensive type of survey course in broad fields of knowledge has been recommended as highly desirable during the underclass college years.

Specialization in the upperclass years has largely been sought in the humanities in the past. It is now urged that more students should choose for their final collegiate specialization work in the social, biological, and physical sciences. In addition to a major field of study, the student is expected to have a good reading knowledge of at least two foreign languages. Leadership in college library work requires training in educational aims, statistical methods, and in the general principles of administration.

A very promising trend in education for librarianship has been the change in emphasis from the study of techniques to the study of principles in the first-year professional curriculum. Most college librarians and library school faculties now agree that the first-year library school student should concentrate less on specific skills and more on the fundamental knowledge and principles of librarianship.

This is evident in the provision for "courses which seek to orient libraries and librarianship..., which stress the reason and requirements underlying technical operations, and which present books with a view to mastery rather than manipulation." It is evident also in the statement of the major objectives of first-year library school courses as set forth by library school directors and faculties. Professor Reece of Columbia suggests six objectives :

- (1) To give students all the knowledge possible about the materials conditions relating to their duties;
- (2) to imbue them with understanding of the purposes of their calling;
- (3) to put them in command of the principles involved in organizing and conducting libraries;
- (4) to make near than these purposes, principles, and knowledge are to be the controlling cors in their work;
- (5) to enable them to see the enterprise in which they are about to engage both as an entity and as a part of the social mechanism; and
- (6) to make the student so familiar with means and devices that he will be able to select and employ them or to direct their employment when the need comes.

The same trend is further evident in the emphasis which is being placed on the development of educational understanding on the part of students specializing in the college library field. Courses in college library administration begin with a consideration of the American college, its objectives types, and services, its support, government, and administrative organization. The student is made to see that the library is not something which operates independently or in isolation from the teaching faculty but

rather that its effectiveness depends on a realization of the function of the college and an understanding of curricular programmes.

The change in emphasis from technical knowledge and efficiency to the broader aspects of librarianship, as noted above, is probably the most significant trend in recent instructional methods in library schools. Without minimizing the importance of technical knowledge and skill, an effort is being made to lay a broader foundation for technical training and, at the same time, to give the prospective librarian a more scholarly background for his work.

Some attention has also been given to distinguishing between the potential abilities of students in library school for different levels of library work. The system of course syllabi and comprehensive examination at Columbia enables the incoming student to begin his work at the level on which a year's study will yield the greatest returns, and to use his professional degree not upon a certain number of credits accumulated by the process of taking courses but upon evidence obtained through objective, comprehensive examinations. The syllabi place a greater responsibility upon the student and provide for a larger share of independent study. They have also helped to eliminate unnecessary overlapping in the content of library school courses, and they have provided the basis for the comprehensive examinations.

For work beyond the first year of library school, there are also noticeable improvements in the curricular offerings, for librarians. One established practice is illustrated by the extent to which the facilities and resources of many departments are brought into the educational programme of the librarian. At the University of Illinois, for example, a student may combine a major in library science with a minor in any special subject for which he is adequately prepared.

The practice quite properly recognizes the close relationship that exists between librarianship and instruction in the various subject fields, and it emphasizes one way in which the subject field departments can contribute to the education of the superior librarian. As a further aid to the development of the librarian's critical ability and his understanding of faculty research work, courses are being introduced in methods of research and investigation. Dr. Wilson calls attention to this in his statement of the four objectives for the student at the second year level of library training :

At the M.A. level he should be expected

- (1) to become acquainted with the methods and spirit of graduate and research in the fields of library science;
- (2) to extend his knowledge of library science generally;

- (3) to increase considerably his knowledge of the special field of university [one might insert *college* here] librarianship and related subject fields; and
- (4) to demonstrate his ability to use research methods in the preparation of a report or thesis in the field of his specialization.

Finally, there is a strong trend toward taking graduate courses in the academic and professional fields which will lead to the doctor's degree. There is no general agreement that the Ph. D. is essential in the work of the librarian, but it is recommended on the ground that if the librarian is to work effectively with a group of scholars, he should have a scholarly training equal to theirs.

The opinions of the leading university librarians support this thesis for the university librarian, and the fact that many of the recent graduates of the Chicago Graduate Library school have filled the top positions in college libraries argues strongly in its favour. In the A.L.A. *Classification and pay plans* the minimum qualifications for the positions of chief librarian, associate librarian, department heads, and certain other persons occupying places of importance in college libraries recommend the doctorate degree in librarianship or in a special subject field. All these statements mount up to a very strong argument for advanced training, indeed, and they can be supported by the practical argument that the higher degree commands a higher salary and greater prestige.

On the other hand, it is equally necessary to point out that graduate work at the present time suffers from an overemphasis on narrow specialization, and that for the college librarians, at least, there is little doubt that breadth of learning in many fields is more important than narrow concentration. It is not the intention here, however, to debate the question. It is enough to note that there is a distinct trend in favour of the doctor's degree and that the opportunities are improving for the librarian to pursue advanced training without having to confine himself to the narrowing effects of specialization.

These illustrations in library programmes are only a few examples of the many changes that are taking place and are now under consideration in the preparation of librarians. *Programmes for library schools*, by Professor Ernest J. Reece, contains a summary of the defects in present training practices and suggests possible remedies. Efforts are being made to improve recruitment methods and to attract a higher grade of college graduate to the profession. The pre-professional training of prospective librarians is being emphasized and more specifically defined. The educational programme in the first two years of library school work is placing more emphasis on

the broad aspects of librarianship and less on the training of specific skills, on the acquisition of educational and social understanding on the part of librarians, and on the training of librarians in methods of research.

There is considerable pressure on younger librarians to set higher academic and professional training leading to the doctorate. All these efforts have improved the quality of librarians and are helping to make librarianship a more integral part of college education than it has been in the past.

### **Selection and Appointment of the Staff**

The president's approval, of course, is subject to the final approval of the board of trustees. In this chapter the processes which the librarian goes through in selecting a candidate for a staff position are discussed. While the treatment is from the point of view of the administrator, the information concerns every staff member indirectly, and sometimes directly.

#### **Basis of Selection**

The fundamental basis of selection is an obvious one: to secure the best person for the salary the library is able to afford. Some of the qualifications taken into account in the attempt to secure the best person are these :

**Education:** The minimum training required of a person who is planning a professional career in college library work is graduation from a recognized college or university and one year of library training from a library school accredited by the American Library Association. Consideration is given to the undergraduate institution from which the candidate has received a degree and the quality of the work he did there. If the work to be performed falls somewhere between the classification of professional and clerical duties and yet calls for a broader educational background than is expected of a clerical assistant, it is customary for the librarian to make his choice from the college's own graduates. The term "sub-professional" is sometimes applied to a position classification of this nature. The position of reserve librarian, for example, may be filled in some libraries by a competent college graduate without library training, or a graduate of a college or university which offers accredited library instruction in the final year of the undergraduate programme.

**Experience:** The amount of professional training and experience required depends in the last analysis upon the position to be filled. The A.L.A. *Classification and pay plans* suggests the principal prerequisites for different positions in varying types and sizes of college libraries. As a general rule, librarians prefer experienced staff members for the more

advanced positions and for types of work involving instructional duties with students and faculty.

Should all librarians insist upon this preference, it would be impossible for the inexperienced library school graduate to get a position. As it is, the deficiency in library salary budgets and the under-supply of librarians usually results in a majority of appointments being made from the immature and inexperienced librarians. There is little danger that they will lack for a chance to gain experience.

In the long run, it is to the advantage of the library to fill the larger number of its professional positions with superior library school graduates rather than to employ less able librarians whose chief claim for consideration is a year or so of experience. College librarians seem to prefer staff members between the ages of twenty and thirty in the initial appointments. The age limit in the original appointment may be extended to thirty-five for the more important positions, but in general, librarians are reluctant to make such appointments beyond this age group.

***Personal Qualifications:*** There is a wide variation in the personal qualifications desired in staff members, although some effort in the direction of standardizing certain general traits is indicated in the A.L.A. *Classification and pay plans*. These are given as follows: intelligence, integrity, good health, pleasing voice and manner, attractive appearance, pleasing personality, interest in people, imagination, dependability, courtesy, physical and mental energy, dignity, ability to do team work and forcefulness. Personal traits for specific positions are also suggested. Miss Clara Herbert stresses for such positions the importance of a distinctive cultural background, physical health as a personal attraction, spiritual comprehension and taste and genuine interests in the profession. "some line on these qualities," she points out, "may be secured from information as to the extracurricular activities and social life at college; some from the personal interview and some from the recommendations of college and library school officers."

### ***Methods of selection***

Having observed that the college librarian selects and nominates the library staff for appointment and that staff members are selected on the basis of their training, experience, and personal qualifications, there remains for consideration the matter of how the library personnel is employed and what methods are used for insuring the best selection possible for a given position.

Intelligent procedure in the employment of personnel obviously demands accurate knowledge of the position to be filled. When a vacancy

occurs for which there is no eligible candidate within the library system, the librarian prepares a description of the position for submission to the placement offices of library schools and to other sources of recruitment.

The description gives a realistic picture of the position in terms of the education and experience required, personal qualifications, the character of the work to be performed, the conditions under which it is done, and preferably a statement of the living conditions in the community. Specific information should be given regarding the time when the position will be filled, the beginning salary or salary range, the wishes of the librarian in respect to individual applications, recommendations, photographs of candidates applying, and whether or not an interview is contemplated. This amounts to what in some professions and in industry is called an occupational description.

When completed, it is transmitted in the form of a letter to the library schools and other sources of recruitment. It may be sent to all library schools on the accredited American Library Association list, or it may, in the event the position is specialized rather than general, be sent only to library schools which offer instruction in the particular field. For recruitment in the higher grades of service where experience is important, the librarian may visit library schools for personal interviews, or he may seek contacts through university and large reference libraries or at library meetings, and he may also ask for recommendations from the placement bureau of the American Library Association. This later service is open to librarians at no expense, as well as to members who are seeking better positions or a change in position.

In most college libraries, where the turnover in staff is comparatively small, there is no urgent need for application forms. When the librarian has selected tentatively what he considers the best possible candidate or candidates from the recommendations of library schools and other placement agencies, he writes them for an expression of their interests, and, if they are interested, for details of their qualifications. There are certain advantages, however, in having an application form if the college library staff is large enough to have a fairly large turnover in personnel and if the library receives many direct requests each year from persons who are interested in working there. The application form can be sent to those who make inquiries about positions whether there are vacancies or not. The information about prospective candidates is then conveniently at hand and in a form that can be readily scrutinized in the event there arises an unexpected vacancy. The data generally called for in application forms used in public libraries may be adapted to college library use. Miss Herbert mentions among other items; the name, address, age, full information as

to education with names of institutions attended and general standing, subjects of special study, professional training and experience the position or work preferred, specific skills, and references. Each librarian will vary his form to meet his particular attitude toward library work. One librarian will stress training and ask many questions relevant to the preparation of the candidate; another will emphasize experience, or breadth of interest, or some other aspect of personal qualification and will ask more questions about each of these.

When the applications and recommendations have been sifted and narrowed down to the top candidate or candidates for a particular position, the library may ask for an interview if distance does not make this impractical or impossible. The personal interview and the opportunity for visiting and seeing the library and library staff are also of considerable advantage to the person being interviewed. If the interview is well conducted, it serves both parties, whatever the final decision may be. Its technique is discussed in detail by Bingham and Moore in *How to interview*. The average library interview is a less complicated affair, but it is nevertheless susceptible of deliberate planning. It should be easy, never hurried, and should elicit information on such questions as: Is the candidate a negative, or positive type of person? Is he frank and sincere? Is he mentally alert and observant? Miss Herbet wisely cautions that "it is most important to exercise care that the dreams for the development of the position or the idealism of the appointing officer should not innocently misrepresent the situation.

### **Appointment of the Staff**

The final steps in the appointment will vary in different institutions, depending on who exercises the final authority. Generally speaking, however, the process of selection is completed when the librarian's nomination is approved and the chief executive officer of the college has notified the candidate of his appointment to the library staff. The notification may be made by wire, but it should be confirmed in a letter stating the date of the appointment, the position, the salary, and whether the appointment is temporary or permanent after a period of probation. Ordinarily all first year appointments are for one year only, with the hope and expectation that if the candidate's services are satisfactory and he or she is content the contract will be renewed. In one library, the librarian informs the candidate of his appointment immediately after a decision has been made, and states that the confirmation will be sent by the president of the college. This has the advantage of making sure of the services of a candidate who might be considering other opportunities, and it enables the librarian to confirm the arrangements regarding vacations and other

matters which are sometimes omitted from the president's appointment letter. When the final appointment is made, it is common courtesy to inform the other applicants that the position has been filled. The librarian should also inform the library schools that an appointment has been made whether or not it was one of their candidates who was chosen. By such cooperation between librarians and the placement officers, the efficiency of the library school's placement service can be materially increased.

After a library staff member has been appointed and comfortably located in suitable lodgings, he should be introduced to the college administrative officers, members of the faculty, and his associates. He should be instructed in the general policies of the library and be given specific instruction regarding his special duties by the librarian or his immediate supervisor. Not only is the adjustment of the staff member to his position necessary, but he should be given a good deal of help, encouragement, and direction during the first few months of his work.

### Size of The Staff

Donald Coney, librarian of the University of Texas, has suggested certain variables which determine the size of the staff in a particular institution:

- (1) the rate of acquisition;
- (2) the number of students and faculty members;
- (3) the nature of the teaching programme;
- (4) the hours of opening, the number of service units, and the organization of procedures in the library; and
- (5) the nature of the building programme.

When the libraries selected for comparison are chosen with an eye to their similarity in type and size, it is evident that the factors of enrolment, number of faculty, and rate of acquisition would afford an approximate basis for estimating staff size.

In the past the usual method of determining staff size has been the student enrolment. The *Land grant survey* recommended five full-time trained librarians for the first five hundred students, ten for one thousand students, and four additional staff members for each additional five hundred students. A more scientific approach to the estimate of staff size is contained in a recent report previously mentioned, the A.L.A. *Classification and play plans*. In this report there are designated six classes of libraries for four-year degree conferring institutions. For each, there is a set of minimum standards which includes an estimate of staff size. The problem for each librarian, then, is to determine in which of the six classes his library

belongs. This is done by establishing the library's service unit load according to a formula given in the report. Each underclass (undergraduate) student other than an honours student is counted as one unit, each upperclass (undergraduate) student other than an honours student as two units, each honours student as three units, each graduate student as four units, and each faculty member of the teaching staff as five units. For the purpose of illustration, it may be assumed that a particular library's service unit load totalled 3998 units. According to the A.L.A. *Classification and pay plans*, this library would belong in Class 4 and would have a minimum staff of three professional positions for the first 800 service units, plus one more for each additional 500 units, plus the chief librarian. The number of professional positions in the example used, therefore, would be nine or possibly nine and one-half in full-time equivalent. The number of clerical staff positions recommended in the report ranges from a minimum of 40% of the number of the professional positions to a maximum of 60%. Student assistants are counted in terms of their full-time equivalent in the electrical force.

In the preparation of the A.L.A. formula, tests were made with a large number of institutions of varying types and sizes to in suit its validity. In using it as a basis for estimating staff size, however, it is important to keep two things in mind In the first place the recommendations are minimum. It is expected that average libraries and better than average libraries will exceed the estimates and requirements. In the second place it is recognized that no computation of a library's service load can be precisely estimated. It is claimed only that the method of determination in terms of service units is more nearly an accurate measure than the older method of estimating staff size in terms of student enrolment.

### Staff Status

"Status" is commonly defined as relative rank or position. Dr. Robert McEwen suggests that a satisfactory status would mean a relative position in the situation and community in which he [the librarian] lives and works which would express satisfactorily this sense of his relation to that situation and community." At present the academic status of college librarians and library staff is somewhat confused and uncertain. A contributing cause to the uncertainty lies in the nature of library duties themselves. These are in part technical, in part administrative, and in part instructional. This uncertainty, as Dr.. McEwen points, out, is illustrated in the statement on status in Randall and Goodrich:

*As a matter of fact, the proper status of the librarian seems to be rather administrative, in the class of the deans, secretary,*

*etc., then pedagogical, in the class of the actual teaching faculty...Even though the librarian conducts no classes, his teaching function is very important. If a distinction in rank is to be made, his professional responsibilities should place him with the faculty group rather than the administrative.*

The question of staff status should not be thought of in terms of rank alone. Satisfactory status is determined in the last analysis not only by academic rank but also by such matters as salary, tenure and retirement provisions, vacations, sick, leave, membership on college boards and committees, social relations to the faculty, attendance at meetings, and the opportunity for continuing education. Each of these elements of staff status is discussed in later sections of this chapter.

### **Opinions Regarding Staff Status**

The opinions of a majority of librarians and of many educators are tinged somewhat with the same trend of thought as that expressed by Randall and Coodrich. As early as 1898, President Gilman of Johns Hopkins University made the statement that :

*The librarian's office should rank with that of professor... The profession of librarian should be distinctly recognized. Men and women should be encouraged to enter it, should be trained to discharge its duties, and should be rewarded promoted, and honoured in proportion to the services they render.*

From another administrator, the president of Brown University, times this statement:

*The librarian, in summary, despite his administrative duties, is primarily an officer of instruction. He should have the scholarly interests and tastes which are expected of other members of the faculty. He should be given faculty status, and should participate in all the committee and other discussions incidental to that status.*

The following are typical comments of librarians:

*The problem is different from the business organization... because of the essential connection of the library staff with the teaching and research programme.*

*The conclusion seems inescapable that whatever dignity may attach to an "administrative" official is limited to himself, and in the minds of others almost inevitably results in the classification of his assistants as clerks.*

The general consensus of library opinion is summed up in the A.L.A. *Classification and pay plans* report, which reads in part :

*As all professional staff members contribute to the educational programme of the institution they are deemed to be of an academic rank corresponding to deans, teaching staff and departmental assistants. They should also enjoy the academic privileges including participation in retirement plans.*

### **Prevailing Practices as Regards Staff Status**

In 1939 Mrs. Miriam C. Maloy addressed an inquiry to librarians of staff status and the results of her summary provide the first factual picture of conditions pertaining to staff status in the college library field. She warns, however, that her figures must be used with caution because "the percentage of non-faculty librarians who asked that their reports be held confidential was more than one and a half times the percentage of faculty librarians making the same request.

In summarizing it is found that :

1. Out of a total of 129 institutions, the chief librarian has faculty status and appropriate academic ranking in 73 per cent of the institutions, the status of administrative officer in 14 per cent and no faculty or administrative status in 13 per cent.
2. Out of a total of 70 institutions, the assistant librarian has faculty status and appropriate ranking in 43 per cent of the institutions the status of administrative officer in 36 per cent, and no faculty or administrative status in 21 per cent.
3. Out of a total of 52 institutions, the department head in the college library has faculty status and appropriate ranking in 54 per cent of the institutions, the status of administrative officer in 20 per cent, and no faculty or administrative status in 14 per cent.
4. Out of a total of 50 institutions, the professional library assistant has faculty status and appropriate academic rank in 40 per cent of the institutions, the status of administrative officer in 22 per cent and no faculty or academic status in 38 per cent. Since the number of professional library assistants holding any kind of faculty rank is comparatively small in these tables, the percentages are somewhat less reliable as a picture of general conditions than those for department heads and chief librarians.

The essentially educational character of library work and the academic and professional qualifications required for service clearly indicate that librarianship can be more logically classified with teaching than with clerical or administrative work. Failure of a college to recognize it as such

is to deny the importance of the role of the library in modern education. The important functions of the librarian as teacher cannot be disputed. They are definite and they are becoming more pronounced in modern library practice. Yet in too many colleges the status of library staff still remains unsatisfactory. Where salaries and working conditions are reasonably satisfactory the attitude of most librarians is to let well enough alone. Others feel that more immediate advantages can be gained by stressing their status as a separate professional group rather than as faculty or administrative employees. In the last analysis, the problem of status seems to hinge on two questions:

- (1) are librarians doing the kind of work that demands faculty status because of its importance educationally? and
- (2) if librarians are doing work of real educational significance, have they the necessary qualifications to do this work properly? When these two questions can be answered affirmatively, the status of the library staff will be made the same or the equivalent of that of the teacher. If librarians are to make this advancement, they must :
  - base their work on a clearly defined philosophy of education;
  - express this philosophy in terms of definite objectives;
  - distinguish clearly between the professional and clerical activities designed to carry out these objectives;
  - free the professional staff from all routines, such as charging books, typing, and filing, in order that its members may devote their full time to such things as book selection, bibliographical instruction, and reading guidance; and
  - require of their staff the equivalent in academic and professional qualifications of the teaching faculty.

### **Salaries**

Formal status and appropriate ranking are important factors in raising the level of staff efficiency, quality, and morale. But formal "listing with the faculty in the college catalogue" or assignment to the somewhat anomalous status of faculty membership will not solve the problems of library personnel unless status is accompanied by full faculty privileges. These include comparable provision for salaries appropriate to training and responsibilities, tenure and retirement provisions, vacations, membership on faculty committees, social privileges, and opportunity for advancement and study. Of all these various aspects of faculty status, none is more important to the librarian than salary. In almost all colleges there

is need for strengthening the library staff. Generally speaking, this can be accomplished only by making available additional funds for increasing salaries.

During the past few decades library salaries have been increasing, and what is more important, they appear to be increasing at a more rapid rate than the salaries of the teaching faculty. In spite of this favourable progress, the salaries of librarians, particularly those in the staff ranks, are not high enough to attract and hold persons as efficient in librarianship as those in teaching. A few leading librarians and educators have held that the position of the librarian is fairly comparable to that of the dean or the head of a major department, the position of head of a department in the library to that of the associate or assistants professor, and so on. This classification has been followed in comparing the salaries of professor and librarians.

There appears to be a direct relationship between the salaries paid to librarians in the higher positions and the size of the student enrolment. The median salary for the chief librarian in the large college and university class is almost 10 per cent larger than it is in the other two classes. Attention is also called to the fact that the salaries in the teachers colleges are somewhat higher for all grades of library service than those in the small liberal arts colleges. Significantly, there is a considerable difference between the salary paid to professional assistants and to librarians in the highest brackets in the large college and university class.

This variation is greater than in either the small college or teachers college class. It is true, of course, that the same variation seems to hold true for the salaries of the instructor and professor in the large college and university class, but library staff are numerically small and there is less opportunity for individual advancement. This is not to suggest that the salaries paid to the heads of departments or to the chief librarian in large college and university libraries are too high.

The salaries of chief librarians and department heads are not so large as those of their teaching colleagues with comparable responsibilities and training; but at the same time it is quite evident that capable people cannot be attracted to and held in the position of professional library assistant by the salaries now in effect. In comparing the salaries of teachers and librarians, it is observed that the greatest discrepancies occur in the ranks of assistant professor and instructor on the one hand and the department head and professional library assistant on the other. The median beginning salary is higher for the teaching faculty, and the range in salary is greater for those in each rank. This means that the instructor

and assistant professor have a much greater opportunity to advance to a higher salary within their respective ranks than the professional library assistant and department library head have. And as has already been pointed out, the situation is still less favourable to the professional library assistant because he has fewer opportunities to move from one grade of service to the next higher grade. Attention is also called to the fact that instructors have an opportunity not open to college library staff members—namely to receive additional remuneration during summer sessions beyond their annual nine months salary.

In an effort to provide a plan of classification of library positions with recommendations for salaries based on duties, training, and responsibilities, the board on salaries of the American Library Association has made an intensive study in the last few years of the whole subject of training and salaries. This plan has now been published in a manual which has been previously referred to as the A.L.A. *Classification and pay plans*, and it may be regarded as one of the most important aids and guides to future efforts for the improvement of salaries. It emphasizes the need for a clear distinction between professional and clerical work in the library, for adequate training in positions which make an important contribution to instruction, for a salary schedule providing advancement on the basis of satisfactory performance, and for a basic salary of \$1620 for the beginning professional assistant.

### **Conditions of Work**

The librarian, acting in his capacity as chief of the library staff, is usually directly responsible for, or vitally interested in, a considerable number of other personnel matters in addition to the selection and training of the staff, academic ranking, and salaries. These include such matters as the physical conditions under which staff members work, hours of service, hours of work, vacations and sick level, tenure and retirement provision, and other matters having to do with the improvement of the staff in service. It goes without saying that every library staff member is also directly concerned. Each of these topics is discussed briefly in the remainder of this chapter.

### **Physical Factors**

It is important that every consideration be given to provide the best working conditions possible for the staff. This involves consideration of the layout of the building, building, facilities, storage facilities, heating, lighting, ventilation, air-conditioning, floors, floor coverings, communication systems, furniture and equipment, as well as office maintenance.

In 1939 Miss Clara Herbert laid down certain requirements which she regarded as minimum essentials in working conditions in public libraries. The most important of these are summarized briefly as follows :

1. Library work makes heavy demands upon the vitality of its staff. It is of the utmost importance, therefore, that librarians give due regard to such details as will result in the maximum output with the minimum expenditure of nervous energy.
2. Work requiring concentration and accuracy should not be scheduled during the time an assistant is at the loan desk.
3. Workrooms should be planned in detail with an eye to improving efficiency and securing economy of effort. Furniture should be so arranged as to expedite duties without loss of motion or time. In the allocation of space, 100 square feet per person is the usual rough allowance which includes space for files and typewriters. From 3 to 3 1/2 feet should be allowed between the back of one desk and the front of another, and 4 feet should be regarded as the minimum width for aisles.
4. Proper conditions of ventilation and heating are important. The optimum atmospheric conditions for the comfort and health of personnel are temperature of from 68° to 70° and 40-60 per cent relative humidity.
5. The lighting of workrooms and offices, whether by means of incandescent or fluorescent lights, should be economical in operation, supply sufficient illumination without glare, and give a uniform and nearly shadowless illumination for desks. As much natural light as possible in offices is desirable.
6. Noise is a contributing element to fatigue and should be minimized as far as possible. Acoustical tiling and noiseless floor coverings are recommended.
7. Experience has demonstrated the desirability of individual desks so that each person can have his own outfit of necessary tools. Consideration should be given to the proper selection of chairs tables, supply closets, and other conveniences in the workrooms.

In addition to those mentioned above, there are certain other physical factors which have an important bearing on staff efficiency. The most important of these concern the equipment with which the staff has to work. Many scientific inventions not intended primarily for libraries are directly usable or adaptable, and it is well worth the time and expense involved to discover and apply them. They include major equipment items which should be considered at the time of building or remodelling; ventilating

and air-conditioning systems, passenger and freight elevators, book lifts and conveyor systems and telephones and their adaptations. They include also smaller and less expensive but equally necessary types of equipment such as typewriters, duplicating machines—particularly the mimeograph, calculating machines for office and record work, visible record files, card sorters, charging machines, book marking aids, stapling machines, light meters, and other types of equipment.

### **Hours of Service**

There is considerable variation in the number of hours that college libraries are kept open for the use of students and faculty. The size of the staff, the number of rooms to be serviced, and the students enrolment are controlling factors. The hours open for circulation service in a group of twenty-six typical college libraries in 1942, as reported to the American Library Association, ranged from fifty-four to eighty-six, with the median at seventy-seven hours.

If to these hours is added the time the library is open for reading and study but not for circulation service, the range increases from fifty four to one hundred and three, and the median is seventy-eight. Most college libraries are open on Sundays for limited service—study and reading; and for shorter hours than during the week—three to four hours Sunday afternoon.

An increasing number of libraries, however are making available the full services of the library during Sunday afternoon and evening. If the library is playing its part in developing reading habits and in producing the qualities of mind aimed at by the whole educational programme, then it is important that a professional staff member should be on duty at all hours during which the building is open.

### **Hours of Work**

Hours of work should not exceed thirty-eight a week, although the latest statistics reported to the American Library Association reveal a range of thirty-six to fifty and a median of forty hours per week for college librarians in institutions with a thousand enrolment or less. If thirty-eight hours a week does not cover the library schedule, then the remedy is an extra staff member and not excessive hours of duty—not even occasionally. If Sunday duty is extra, this fact should be made clear to the assistant at the time of appointment. Randall and Goodrich report that Sunday duty “may be voluntary on the part of the staff members, and paid for at a fixed rate per hour, or the time may be considered as part of the weekly schedule with commensurate freedom at other periods.

### Vacations and Sick Leave

As in the case of hours of service, the length of vacations and leaves of absence for illness with pay varies greatly in different colleges. In 1939 Miss Hazel Timmerman reported that "eighty two per cent of these university and college libraries grant twenty-four or more working days to all or certain members of the professional staffs.

In certain institutions she noted some variation in the length of vacations based on length of service and on position. As regards the former, twelve working days were allowed for less than one year of service, eighteen working days for one to five years, and twenty-six working days thereafter. In colleges where the vacation varied with position the chief librarian and department heads were allowed one month and the professional staff eighteen working days. If there is to be a difference in vacation allowance based on position, then it is logical and equitable to make this distinction on the basis of the contribution of the position to instruction and to scholarship requirements which it entails Miss Blanche P. McCrum holds to this view in her recommendations:

*That six weeks in summer, with time equal to one week during the winter holidays be granted to the professional staff as a whole. In the case of the head librarian, reference librarian, bibliographer, archivist, curator of special collections, and for the incumbents of the other posts requiring increasing scholarship, that the summer allowance be extended to the cull faculty vacation. The same implied requirement as that in force for the faculty should, however, obtain for these librarians, namely, that travel, the study of books and publishers at home and abroad, and at least some contributions to knowledge should give proof of the wise use of this leisure.*

Library work does not offer a high financial reward. Therefore, it may be argued that a generous vacation allowance will help to offset the salary deficiency and attract those who might otherwise go into other fields of work. If this is a reasonable assumption, then it is questionable whether there should be any distinction in the length of vacations granted to professional members of the library staff. An arrangement of vacations to give the fullest benefit to all members of the professional staff will undoubtedly improve morale and encourage the staff to give compensating service.

In all cases, the usual general holidays of the college are in addition to the vacation period. Provision should also be made for persons who change positions in the middle of the year or just before their annual leave

is due. The practice will vary in each library, but no person can be expected to work for two years at the peak of his efficiency without a vacation.

College libraries apparently make few regulations about sick leave, but make adjustments depending upon the individual case. Among the few that have special rulings on sick leave, the practice seems to be about as follows :

- One library allows three months
- One library allows forty days
- Eleven libraries allow a month's salary in case of illness
- Thirty-seven libraries allow two weeks or thereabouts.

Library regulations on sick leave should in general conform to the college's policy in regard to faculty leaves of absence or sick leave, Whenever possible, the regulations should be definite and codified.

### **Retirement Provision**

Retirement provision is an important element of faculty status. It is particularly important that the library staff should participate in any form of retirement provision granted to the faculty because library salaries are not adequate to provide for old age and disability. In addition to compensating in part for lower salaries, the retirement provision is a strong moral builder and it attracts a higher type of personnel to library work.

In state colleges which have a retirements provision for the faculty, the librarians are usually included on the same basis as other employees of the college. In such as system the librarian makes a regular contribution to the retirement fund which is matched by the state. These contributions are credited to him with interest, and his own share, plus interest, may be withdrawn in the event of a change in position or resignation. At the time the librarian retires, the sum of the contributions plus the accumulated interest serves as a basis for an annuity based on standard mortality tables.

Some form of retirement allowance comparable to that above is in effect at various private institutions such as Antioch, Vassar, and Lawrence, but the library staff is not always included. An excellent policy of its kind is offered through the American Library Association retirement plan in which individuals may participate jointly with the library or independently. McCrum points out the advantages of the Teachers Insurance and Annuity Association of America plan, in which teachers and librarians contribute five per cent of their monthly salary, the college adds a like amount and the whole whole purchases an annuity at the retirement age.

**Promotions, Service Ratings, Tenure, and Dismissal**

Although the principles of promotions and dismissal the methods of measuring personnel efficiency, and the regulations concerning tenure are well understood and applied in business and education, librarians in college libraries have shown remarkably little interest in such matters. At least very few studies have investigated the factors pertaining to these problems. The situation offers a challenge to practicing librarians and an opportunity to advanced students in library schools to make a worth-while contribution to professional writing.

**Promotions**

Few college libraries have a definite programme of promotion. The number of positions available and the size of the personnel budget in the average college library are too small to provide for the advancement of staff members who are entitled to promotion on the basis of an excellent service record. Moreover, promotions in salary are all too frequently a matter of individual bargaining—the librarian with the president for additional salary funds, and the staff members with the librarian for an increase in salary. When promotions in position are made, they are likely to occur as a result of a vacancy on the staff or the creation of a new position in the library.

When it is impossible to advance a staff member in position or salary, it is sometimes possible to show recognition for good work by transferring the staff member to another position offering new experience, placing him in charge of a special experiment, giving him some supervisory duties, or putting him in charge of some general library activity. However, there are objections to these makeshifts because they may detract from the success of the work that the staff member has been doing effectively and for which he is deserving of additional compensation or a promotion to a higher paid position.

The policy of granting periodic increments in salary on the basis of efficiency followed in some libraries, would greatly bolster staff morale and increase the effectiveness of library service if it were more widely adopted by colleges. The three municipal colleges of New York City, administered under the jurisdiction of the Municipal Civil Service Commission, have a definite salary schedule with mandatory increments for assistants in the beginning bracket. Salaries for these assistants range from \$1400 to \$3000 with mandatory increments of \$150 per year up to \$2,400. Thereafter increments are given only for outstanding merit. Recommendations for increases and promotions are made by a committee on appointments in each library.

Very few studies have investigated the facts pertaining to promotions in college libraries. In such evidence as the professional writings afford, it would appear that the following principles should govern the administration of promotions :

1. Promotions in position and salary should be made for reasons of merit and not on the basis of years in service. The merit principle is just, stimulates a high performance to work, and encourages the staff member of improve himself in service and through further preparation in order to be eligible for a higher position.
2. Promotions should be based on records of fitness such as service ratings and not alone on the individual judgment of the librarian.
3. When vacancies occur, careful consideration should be given to the qualifications and experience of the present staff with a view to promoting a qualified person to the vacant position.
4. When new appointments are made to the junior levels of professional service, consideration should be given to persons whose qualifications and record seem likely to entitle them later to promotion to more responsible positions.

### **Service Ratings**

Service ratings of the library staff, when they exist at all, are usually informal and are based on the personal opinion of the librarian or the librarian in consultation with the immediate supervisor of the staff member. One of the best definitions of the service rating is that given by Mr. J. B. Probst, who writes that it is generally "taken to mean the periodical measurement or appraisal of an employee's worth or value to his employer.... A service rating properly embraces the factors of efficiency, character and conduct." Some of the advantages of a service rating plan in the college library with a staff of sufficient size to warrant several departments are :

- (1) it assist supervisors in comparing the work of an assistant with the standards set up in the library, which is essential to a fair policy of promotion and salary increase;
- (2) it may indicate the need for transferring an assistant from one type of work to another;
- (3) it helps to reveal weaknesses which can be corrected at the outset;
- (4) if affords a just basis for dismissal if weaknesses are not corrected and if the assistant continues to do poor work;
- (5) it helps to discover staff talent and enables the librarian to assign special work to those persons who have special capacities; and

- (6) it stimulates interest in self-improvement because the ratings are impartial and are shown to and discussed with the staff member. Some limitations of a service rating plan are :
- it is difficult to rate personality,
  - the raters may interpret the traits on the rating sheets differently, and
  - the raters may not be wholly aware of certain personal tendencies which colour their judgment of others.

The principles of constructing and using a service rating plan are summarized by Miss Lucy Buker :

1. Ratings should be clear and simple.
2. Ratings should insure a fair appraisal of the qualifications and work of each person.
3. Ratings should be uniform for those doing similar work.
3. Ratings should be made at regular intervals, but not too frequently to allow for change.
5. Ratings should be made by three raters when possible, or passed upon by a reviewing board.
6. Ratings which provide for an expression of the rater's opinion in his own words are of more value than those the rater checks, or those in which standardized adjectives are called for.
7. Ratings should be confined to past or present accomplishment.
8. Each question should concern one quality only.
9. A general statement is often the most valuable part of a rating.
10. Unfavourable ratings should be followed up with definite suggestions for improvement.
11. Each rating should bear the signatures of the rater and of the department head, the date, and the name of the institution.

The usual frequency of rating is not more than once every six months and not less than once a year, with periodic cumulative records because these are more apt to be accurate than a single rating. Although there is some disagreement among librarians as to the desirability of discussing ratings with staff employees, this practice is recommended in good personnel procedure. Personnel experts say that friendly, informal discussion between each assistant and his supervisor provides the soundest basis for staff development. In 1943 Miss Marguerite Giezentanner constructed a service rating form for use in college and university libraries. The form lists seven factors on which an assistant is to be rated:

- (1) contact with people,
- (2) understanding the job,
- (3) quality of work,
- (4) knowledge and use of books,
- (5) professional spirit,
- (6) executive ability, and
- (7) quantity of work.

Several factors are listed under each of these headings to help the rater make a fair appraisal. An example is given below :

**Contact with people**

Factors to consider :

1. Understanding of and interest in different types of people
2. Friendly and helpful attitude toward students and faculty
3. Courtesy, tact poise tolerance, good department
4. Thoughtfulness of others
5. Ability to get along with fellow workers
6. Acceptance of criticism, suggestion
7. Personal cleanliness; neatness, business-like appearance.

**Tenure**

The activities of the A.L.A. Board on salaries have contributed significantly to the improvement of most library personnel problems but have not shed much light on the problem of tenure. College libraries will find some help in determining principles and practices of tenure in "The statement of principles, 1940, academic freedom and tenure" of the American Association of University Professors. In the absence of any specific library statement, the attempt is made here to suggest certain principles which should receive consideration in the operation of tenure regulations in the college library :

1. The purposes of tenure regulations should be stated. The primary aim would seem to be to retain able assistants and to eliminate the unfit.
2. The probationary period for the more responsible positions should extend beyond one year but should probably not exceed three years.
3. After the expiration of a probationary period library assistants should have permanent or continuous tenure on the same basis as other members of the faculty, and their services should be terminated only for adequate cause.

4. Tenure provisions for staff members below the rank of department heads should be carefully safeguarded. Tenure beyond a year's appointment for faculty members is usually accorded only to those with the rank of associate professor or higher, but the instructor has more opportunity to advance to these ranks than the professional library assistant has to advance to a library rank where there may be equivalent regulations regarding tenure. There are only a few top positions in any single library system and the turnover in these positions is quite small. Even if tenure is provided for the higher library ranks by virtue of the fact that they carry the equivalent faculty rank of associate professor or higher, the chances of a professional assistant reaching a top library position are comparatively remote.

In interpreting these principles, the following suggestions are offered as a basis of acceptable library practice.

1. The precise terms and conditions of every appointment should be stated in writing and be in the hands of the institution's officers and the staff member before the appointment is completed.
2. During the probationary period the staff members's work should be carefully studied and every effort should be made to develop his ability. Service ratings should be kept. Transfers from one position to another should be permitted if the staff members shows promise of doing better in another position than the one he entered.
3. After the probationary period, the proposed dismissal of a staff members on account of incompetency or neglect of duty should be preceded by a warning and specific statement in writing of defects. Sufficient time should be allowed for the staff members of seek a position elsewhere.
4. Staff members who do not desire to continue in their positions are responsible for giving at least a month's notice in writing of their intention to resign.

### **Dismissal**

The authority to nominate members of the library staff presupposes the right to recommend their dismissal. Each of these powers is usually vested in the librarian. The major cause of dismissal has to do with factors affecting the efficiency and usefulness of the staff member. Continued incompetency to do the work assigned, continued criticism of and friction with fellow staff members, and violations of college rules and regulations are just cause for dismissal. It frequently happens that a young librarian, in his desire to secure a position, accept an offer in which he is later unable

to render the most efficient service. If the appointment were originally made on a temporary or probationary basis, this person should be dropped from the staff provided his services cannot be used in some other position in the library. In such cases the librarian has a moral obligation to help the staff member secure a new position and it is unfair to regard the separation from the service of the library as a case of dismissal.

The improvement of the staff member in service quite naturally depends upon other factors than the natural ability of the individual. It depends upon the amount and quality of his training upon his experience, upon his orientation to the library and the position in which he finds himself, upon his attitude toward his work while employed, and upon the possibility of additional academic and professional training. Because library staffs and salaries in most colleges are small, the opportunities for additional training may be less attractive to the staff member than the opportunities which a progressive library administration finds for stimulating growth within the service of the library. There are a number of administrative plans for developing the ability and usefulness of staff members in service. Some of these plans are discussed in the following paragraphs.

### ***Orientation of the New Staff Member***

This has already been touched upon in the discussion of the selection of library personnel. In any progressive library programme, an essential feature is the practice of acquainting the new staff member with the policies of the college and of the library, with the general layout and special features of the library, and with the functions in the particular division of the library in which the new staff member will work. An important part of this induction plan is the emphasis which the librarian places upon the educational function of the library. An effort is made to give each newcomer an understanding of the proper approach towards aiding students in a way that will be educationally significant. The librarian also indicates clearly what the new staff member may expect in supervision.

He sees to it that the new staff member familiarize himself with the staff or divisional manual and with other published library instructions and guides. As a rule the new assistant in the college library is chosen for a particular position. But if he fails to make a proper adjustment to this position, an effort is made to place him in work where he will render the most efficient service for the good of the library. Whenever possible, the new employee is given some opportunity for experience in all or most divisions of the library's work, even though this may not last beyond an orientation period. The knowledge of what goes on in each phase of the library programme is indispensable to good service in any one branch.

**Staff Manual**

A simple method for making known the policies and practices in a large college library is essential for effective service. It is for this reason that many college libraries codify their policies and practices for staff use in what is commonly known as a staff manual. From inquiries sent to two hundred and forty-four college and university libraries, Wilson and Tauber found that forty per cent prepared and used a staff manual. Although their study confirmed what one would expect, namely, that the staff manual is most useful in the large college library where there is a considerable turnover in professional and clerical positions, they discovered that "in many of the smaller libraries, the staffs of which often consists of a single professional worker, such manuals are indispensable media of instruction for a constantly changing body of student workers."

They found, also, that the size of the library is not the only factor of importance. Staff manuals were found useful where library practice varied from the standard codes and manuals, where student help was used to a large extent, and where members of the staff were frequently rotated from one position to another in a particular library.

As a device for improving librarians in service, the staff manual has three main functions :

1. It introduces the new staff members to the library's policies and to the specific duties in the division of service in which he will serve. It fixes and promotes thoroughness. Failure to follow library practices carefully and accurately cannot be excused with the statements, "I was not told about it."
2. It assists a staff member to broaden his point of view. It not only introduces him to the work in all departments of the library, but it stresses the educational objectives of the library and the proper professional attitude necessary to attain these objectives.
3. The preparation of the manual is usually a cooperative affair. In its preparation, it affords an opportunity for experienced members of the staff to systematize and organize their work more effectively, to refine procedures, to eliminate duplication of duties, and to determine responsibility.

As an administrative device for improving the service of the library the staff manual:

1. Promotes efficiency by insuring a proper sequence of work, by securing uniform procedures in routine and by improving administrative organization.

2. Provides an effective medium for interpreting the library to the administration and the faculty.

Not all librarians agree that staff manuals are important in library management or worth the effort they take to compile. Wilson and Tauber found that some librarians objected to manuals because they tended to "crystallize action and thought," permitting "little freedom of expression of a professional attitude;" others said that manuals were expensive and took too much time to prepare in relation to their worth; and still others felt that there were acceptable substitutes which were simple and effective. There can be no question that the compilation of a staff manual is time-consuming, but no substitute will prove quite so satisfactory or efficient. Ordinarily, staff manuals do not prescribe the action of the professional assistant in the instructional phases of his work where individual judgement and responsibility are most important. The essential aim in a staff manual is to eliminate mere personal opinion in routines and in technical detail, to make sure that all elements of library efficiency have been given proper consideration and weight in the formation of a final judgement, and to insure that rules, regulations, and practices are based on a sure foundation of facts and sound educational principles. There will always be opportunity for individual initiative on the part of the staff member if the administration of the library is enlightened and effective.

Staff manuals are generally of two types, the general manual and the departmental manual. The general manual deals with policies and practices in the library as a whole. It is intended to give the new assistant a fundamental background knowledge of the library, its policies, internal organization and clientele, and particularly to inform him of his responsibilities and privileges as a member of the staff. The departmental manual, which is sometimes combined with the general manual, contains concrete and specific information about the work of the department in question, the relation of the department to other department, and the way in which the work is carried on in the department. College libraries are more likely to compile general manuals, and in the small libraries, these are particularly designed for student assistant use. Antioch, Kenyon, Flora Stone Mather, Wheaton, and Lawrence colleges have typical general manuals; Birmingham-Southern, Bowdoin, and Swarthmore have manuals for student use. The nature of information contained in a general manual is illustrated in the following outline, prepared by Miss Lucy E. Fay.

Manuals are not static instruments of managerial instruction; revision will be found necessary and desirable. For this reason, it is best to prepare and publish the manual in some simple, inexpensive manner with provision for revisions. A typescript, loose-leaf form is best for the first edition and

one copy should be available for each department of the library's work. In subsequent revision it is desirable to mimeograph the manual so that copies may be made available to other libraries and to library schools.

### **Staff Meetings**

The typical library staff meeting has a two-fold function, namely, to facilitate the general administration of the library and to improve the librarians in service. Unfortunately, as one writer has pointed out, it is used primarily for the discussion of administrative detail and only secondarily has attention been given to the improvement of librarians in service.

The staff meeting provides an opportunity for the exchange of ideas on procedures, services, and problems as they arise. For this reason, it is desirable to hold regular meetings, not less often than once a month, and to arrange a time when all staff members can be present. In the medium-sized and large college library, it may be possible to use library time for the meeting, arranging the schedule so that only one or two members are absent on regular duty, and providing for rotation of work so that all members have an opportunity to attend most of the meetings. In one library the staff meets at a monthly luncheon meeting and follows this with an hour of business or discussion. The officers consist of a chairman and a secretary, and minutes are kept for official purposes as well as to acquaint those who were unable to attend with the plans and decisions agreed upon at the meetings. In the last analysis, of course the time and scheduling of staff meetings is entirely dependent upon the administrative policy of the library and upon the local conditions in each college.

Aside from its value in providing an opportunity for a free exchange of ideas on current problems of library administration and routine, the staff meeting furnishes the logical means for introducing new plans and procedures before they go into effect. The good administrator is interested in the promotion of staff discussion of all aspects of a problem, in the development of all points of view so that out of the exchange of ideas and convictions the very best plans will be adopted and perfected. Such discussions not only provide a balanced consideration of all facts before decisions are made, but promote interest and *esprit de corps*.

If the staff meeting is to be truly effective as a means of improving librarians in service, it must concern itself with something more than the work staff members are doing every day and have they are doing it. Kenneth Gapp stresses the importance of using the staff meeting for a critical approach to librarianship. He points out that librarians have not yet formulated clearly a philosophy of librarianship in terms of educational

objectives and corresponding activities. "The discussion with the staff of the main advances in professional research, of the development of techniques, of policy and of educational objectives keeps alive interests in the newer phases of library service. Another writer emphasizes the necessity for familiarity with the literature of particular subjects taught in the college. Miss Ann messick's account of her experiments at the Colorado state College of Agriculture shows the advantages and difficulties of conducting staff meetings as a seminar for the discussion and report of the literature of subject fields. Mr. Julian Fowler carries her plan a step further and suggests several small staff seminars, instead of one general meeting, with staff members who are taking courses in the college serving as leaders of discussion. In some colleges members of the faculty are invited to speak at the library staff meetings on recent developments in their fields because it is felt that the staff can better fit itself to serve and cooperate with the faculty when it knows the various activities in the teaching departments. Another plan is for the staff to select by common consent, some topic or subject for study which is pertinent to the colleges and libraries in question. A given problem is studied for the greater part of the semester or year, or until sufficient time has been provided for real knowledge and understanding. The study of the problem is approached from the point of view of both theory and practice. For example, the improvement of teaching through library service or the very practical problem of microphotography in the college library are representative topics. Assignments should be made and reports should be given at the settings. If properly planned and managed, such a programme can be very effective in the improvement of librarians in service.

### ***The Continuing Education of Librarians***

Inadequate salaries, a fixed schedule of relatively long hours, and an unwise overloading and distribution of duties are three obstacles to the continuing education of the library staff. There is a fourth. Even under the best of conditions, librarianship has a tendency to become routine and stale. There is routine work even in duties which are predominantly professional, and a great deal more of it in work that goes on behind the scenes. There is the ever present danger that the experienced non-progressive staff member, having adjusted himself to these conditions, will see the routines as ends in themselves and will be satisfied so long as his work moves smoothly.

In the good college, there is a continual challenge to the librarian and the staff to make the library an ever growing factor of importance in instruction. The librarian cannot meet this challenge if he permits himself or his staff to become too preoccupied with routine work. The librarians

and staff must continue to grow with the college. Unless they are constantly on the alert mentally and imaginatively, they will not be able to develop a type of library service which is effective in teaching. The college educational programme is undergoing change at all times, and the library must adapt itself to these changes. "Continuing education," therefore, is a phrase significant to the librarian and the library staff. It should be emphasized at the outset that it is the librarian's responsibility to encourage the staff to improve itself. If he fails to do this, it is rather certain that only a limited number of people will make the effort.

*Informal Methods of Continuing Education.* The informal self-education programme of the library staff consists in the main of reading, attendance at every kind of real cultural entertainment, such as lecture and music programmes, and personal and professional meetings. Each of these is discussed briefly in the following paragraphs.

The importance of wide reading in professional and educational journals and books requires no special comment. It is probably true that members of the staff do not keep up with their professional literature as well or as broadly as they should. Some devices such as the routine of books and journals to each staff members, the allowance of library time for at least an hour of professional reading a week, and the provision for the discussion of professional literature at staff meetings have been found useful in stimulating professional reading. Staff reading should not, of course, be confined to professional and educational writings. If one is to work in a college, he ought to read widely enough and deeply enough so that he may talk intelligently with faculty members in their own field and gain something from them as well as contribute to them. Mr. Julian S. Fowler and Miss Luise Richardson in separate articles have each voiced the views of many librarians in emphasizing the importance of reading systematically in the literature of subject fields. Dr. Hurt has suggested a useful outline for carrying out such a reading programme and his suggestions, stated briefly, are these :

- (1) secure a topical outline of the subject content of the field;
- (2) give brief consideration to the principal encyclopedic works;
- (3) locate and examine all guides to the literature of the field;
- (4) prepare a basic list of textbooks and other general works devoted to the entire field and examine some of the outstanding titles;
- (5) make a similar study of the books and monographs devoted to special phases of the subject;
- (6) give attention to the sources of printed materials, i.e. the learned societies, institutions, agencies, and individuals responsible for the production of the best publications, in the field;

- (7) become familiar with the periodical literature and serial publications;
- (8) consider the pamphlets and ephemeral material;
- (9) make a thorough study of the reference books;
- (10) note the related fields having publications of interest; and
- (11) learn the trends of research.

If a member of the staff is interested in writing and speaking, he should be encouraged to do so even if this entails some release from scheduled desk duties. When a person writes or speaks, he submits his own powers of thinking and reasoning to an examination by others or to a test by those who are presumably competent to judge. If he encounters criticism, he learns from that; if his work is accepted, it gives him incentive and an invigorating pleasure in his work as a whole. As a group, librarians are not as much interested in speaking and writing as the members of some other professions and the obligation to speak and write is certainly less than that of the professor. There is very little time after the day's work to do much in the way of preparing papers or speeches. If a staff member has a natural bent for speaking or writing, he should be encouraged if not, it is unwise that he should be placed in the position where he feels he has to do either because of administrative pressure. There are other opportunities for cultural improvement, more personal and recreative, such as attending the lecture and music programmes sponsored by the college or by organizations in the community. If desk schedules conflict, some changes should be made so that the same people are not repeatedly barred from enjoying these cultural opportunities.

Active participation in local, state, and national library meetings, and inspection visits to other libraries are encouraged as one of the best means of improving staff performance and stimulating further study. The mutual discussion of problems which takes place at these meetings enables the staff member to visualize current practice, prevents staleness, and provides that continuous knowledge of what is being done, which is so vital to a broad and progressive professional viewpoint. The meetings encourage staff members to continue their academic and professional training because, as Miss McCrum points out, "it is at such meetings that news of grants-in-aid, scholarships, research funds, and national and state projects of benefit to libraries are announced." Membership in learned and educational organizations may be of equal importance, particularly to the librarian, because such bodies afford stimulating contacts and opportunities for the librarian to contribute to the broader group. Visits to other libraries provide opportunities for studying specific problems in actual practice and afford interesting and valuable contacts. In contrast to these off-campus

activities, some librarians favour the participation of the staff in departmental and committee meetings of the faculty because of the opportunity it affords to correlate the services of the library with the new demands in instruction and research.

*Formal Study on Campus.* Continued formal study, in service and during leaves of absence, is an important source of refreshment and reinvigoration. Fowler points out the necessity for "applying to the enrichment of library service, the academic training that is at hand." He suggests a rotation programme of study which would permit selected and qualified members of the staff to pursue advanced courses in fields in which they are interested without curbing the efficiency of library service as a whole.

He further proposes that these staff members act as leaders in staff seminar discussions on the subjects they are studying in order that the whole staff may share in the benefits of the current programme. Whether this particular plan will work or not depends on local conditions in each institution and in each library, but it is generally recognized that the plan of encouraging staff members to take courses while in service is one of the best methods for keeping the staff intellectually competent. It enables the staff member to remove deficiencies in his own undergraduate training, it broadens his point of view and deepens his knowledge, and he relearns a good many things about assignments and the approach of the particular instruction which will enable him to improve library service to instruction. Mr. Fowler rightly warns that any such programme requires careful planning on the part of the librarian in order to distribute both the load and the benefits to different intellectual fields as well as to different departments of the library.

In some colleges provision is made for staff members to take courses up to a definite maximum limit of units or course hours each semester with or without being excused from library duties for attendance at classes. In certain instances there are special inducements in the way of reduced fees for courses. Significant practices in twenty-six state universities are admirably summarized in the University of Washington staff association survey from which the following is quoted :

*While the twenty-six institutions give opportunity for graduate study for credit, only one exempts all fees, while fifteen other levy under varying conditions, special rates for librarians. Librarians of the Oregon State system have full faculty standing and consequently have the benefit of greatly reduced fees for courses.... Sixteen universities make no charge whatsoever for taking courses without credit, thus permitting students who do*

*not desire advanced degree to continue to work along lines of special interest. All but six institutions allow unrestricted selection of courses.*

*Leaves of Absence for Study.* Most college libraries grant leaves of absence to staff members, though usually without pay, to provide opportunity for advanced study at professional library schools or large universities after service has begun. From an examination of the practices in two hundred and fifty college and university libraries in 1939, Miss Irene Smith found that :

1. Fifteen give their staffs leave with pay for study, in time varying from two weeks to a year.
2. Several grant a similar privilege on half salary.
3. Only two report that the library staff enjoys sabbatical leaves equal to those conferred on the faculty.
4. About sixty allow leaves without pay for study.

A few libraries provide a sabbatical for staff members, after every five, ten or fifteen years of service, though rarely is this comparable in either time or compensation to the sabbaticals awarded to the teaching faculty. Nevertheless these sabbaticals, ranging, from a week to an extra month of additional vacation, offer an invaluable opportunity for study or travel.

It is apparent that the inducements, financial and otherwise, are not markedly favourable in present library practice to the encouragement of further study. The person who is possessed of initiative, originality, and an inquiring spirit will take vacation periods for summer school study and attendance at institutes, but the majority will not attempt to secure additional training under present conditions. Salary schedules are too low to encourage leaves of absence without pay, and too few libraries are sufficiently well-staffed to permit absences from regular duties. On the other hand, the opportunities for educational and professional development are more abundant than they ever were before. In the professional field, to cite but one example, there are the excellent summer institutes held by the Graduate Library School of the University of Chicago. Although fellowships and grants-in-aid for advanced professional study are not as great as in certain other subject fields, they are increasing in number.

### **Ethical Relations of Librarians**

The rapid development of library service and the consequent increase in the library personnel have served to call attention to the duties and obligations of librarians. Librarians in their working relations are not isolated individuals; they have professional problems in common which

can be met most satisfactorily in a professional way. Because of this fact, they have developed a national professional association which has attempted to raise not only the level of professional competency and to improve working conditions for librarians but also to define the duties and obligations of its members toward the library governing authority, toward the community and society, toward the library profession, and toward one another.

The first practical suggestions for a code were made in an address to the Illinois Library Association in April, 1903 by Miss Mary Plummer. By 1929 the American Library Association had drawn up suggestions for ethical relationships governing the conduct of the librarian in his work and profession, and these were officially adopted in a code in 1938.

#### **Code of Ethics Adopted by the American Library Association**

**Preamble:** 1. The library as an institution exists for the benefit of a given constituency, whether it be the citizens of a community, members of an educational institutions, or some larger or more specialized group. Those who enter the library profession assume an obligation to maintain ethical standards of behaviour in relation to the governing authority under which they work, to the library constituency, to the library as an institution and to fellow workers on the staff, to other members of the library profession, and to society in general. 2. The term librarian in this code applies to any person who is employed by a library to do work that is recognized to be professional in character according to standards established by the American Library Association. 3. This code sets forth principles of ethical behaviour for the professional librarian. It is not a declaration of prerogatives nor a statement of recommended practices in specific situations.

The code applies specifically to all aspects of college library work and to all members of the library staff, a fact which is sometimes overlooked by those who think of ethical codes simply in terms of staff relationships to the public at the charging desk. This fact is clearly stated in the code. It emphasizes that librarians cannot act as isolated individuals in their work. The library is interpreted by their actions. They belong to a class which has professional problems which must be met in a professional way.

**Relation of the Librarian to the Governing Authority:** 4. The librarian should perform his duties with realization of the fact that final jurisdiction over the administration of the library rests in the officially constituted governing authority. This authority may be vested in a designated individual, or in a group such as a committee or board. 5. The chief librarian should keep the governing authority informed on professional standards and progressive action. Each librarian should be responsible for

carrying out the policies of the governing authority and its appointed executives with a spirit of loyalty to the library. 6. The chief librarian should interpret decisions of the governing authority to the staff, and should act as liaison officer in maintaining friendly relations between staff members and those in authority. 7. Recommendations to the governing authority for the appointment of a staff member should be made by the chief librarian solely upon the basis of the candidate's professional and personal qualifications for the position. Continuance in service and promotion should depend upon the quality of performance, following a definite and known policy. Whenever the good of the service requires a change in personnel, timely warning should be given. If desirable adjustment cannot be made, unsatisfactory service should be terminated in accordance with the policy of the library and the rules of tenure. 8. Resolutions, petitions, and requests of a staff organization or group should be submitted through a duly appointed representative to the chief librarian. If a mutually satisfactory solution cannot be reached, the chief librarian, on request of the staff, should transmit the matter to the governing authority. The staff may further request that they be allowed to send a representative to the governing authority, in order to present their opinion in person.

This section of the code establishes the relationship of the college librarian to the chief administrative officer of the college and to the board of trustees. Certain of the suggestions are more directly applicable to the large college or university library, such as those pertaining to staff resolutions. In general, however, it places the appointment of the staff squarely on a basis of merit and relieves the librarian from pressure to make nominations for appointments by interested parties. It should perhaps be mentioned that the librarian and the staff of state colleges are employees of the state and are therefore subject to state laws. The laws of each state have a section devoted to the conduct of public officers, and the regulations therein should be known to the librarian and to members of the library staff.

***Relation of the Librarian to his Constituency.*** 9. The chief librarian, aided by staff members in touch with the constituency, should study the present and future needs of the library, and should acquire materials on the basis of those needs. Provision should be made for as wide a range of publications and as varied a representation of viewpoints as is consistent with the policies of the library and with the funds available. 10. It is the librarian's responsibility to make the resources and services of the library known to its potential users. Impartial service should be rendered to all who are entitled to use the library. 11. It is the librarians obligation to treat as confidential any private information obtained through contact

with library patrons. 12. The librarian should try to protect library property and to inculcate in users a sense of their responsibility for its preservation.

This section of the code applies particularly to public libraries and in reality lays the foundation for a sound programme of public relations in public library work. The general features of the code however, apply equally well to college libraries, and it cannot be stated too emphatically that "impartial service" is a factor of great importance in effective relationships with students and faculty. It is probably one of the standards which is most frequently violated, intentionally or inadvertently, by college librarians. The impartial enforcement of rules and regulations and the safeguarding of students privileges as regards new books which may be secured or held out by faculty members comes under this heading. The library staff members are the interpreters of the library to faculty and students, and therefore all users should be given impartial and fair treatment in getting what they need.

***Relations of the Librarian within the Library:*** 13. The chief librarian should delegate authority, encourage a sense of responsibility and initiative on the part of staff members, provide for their professional development, and appreciate good work. Staff members should be informed of the duties of their positions and the policies and problems of the library. 14. Loyalty to fellow workers and a spirit of courteous cooperation, whether between individuals or between departments, are essential to effective library service. 15. Criticism of library policies, service, and personnel should be offered only to the proper authority for the sole purpose of improvement of the library. 16. Acceptance of a position in a library incurs an obligation to remain long enough to repay the library for the expense incident to adjustment. A contract signed or agreement made should be adhered to faithfully until it expires or is dissolved by mutual consent. 17. Resignations should be made long enough before they are to take effect to allow adequate time for the work to be put in shape and a successor appointed. 18. A librarian should never enter into a business dealing on behalf of the library which will result in personal profit. 19. A librarian should never turn the library resources to personal use, to the detriment of services which the library renders to its patrons.

On the subject of the librarian's relation to the staff, nothing more need be said since the principles set forth above are obvious even though at times the practice may be difficult. Consideration for staff members is not only an obvious moral duty, it is also the best way to promote the efficiency of library service. Fewer conflicts will result if members of the staff are kept fully informed regarding events in the college and in the library so far as they contribute to the library's welfare. The fundamental

point in staff relations to the librarian and to each other is that the interests of the library should be placed above personal interest. It follows from this that criticism of library policy should be curbed unless it is actuated by a sincere desire to further the library's welfare, that criticism of library practice should be made to the one next higher in authority, that personal criticism of one's library or teaching colleagues should be avoided and that the provisions of the code as they relate to job responsibility, changes in position, and resignations should be adhered to strictly. The staff member must bear in mind that it is not personal gain but opportunity for service which makes librarianship a profession, and no such service should be considered in the light only of its value as a stepping-stone. Three things which young and new assistants should be particularly careful to avoid are intolerance in expression of opinion, a seeming or real resentment to criticism by superiors, and an unwillingness to share in occasional overtime work or some of the less attractive assignments. Courtesy, Impartiality, and self-control are essential in dealing with users of the library.

***Relation of the Librarian to his Profession:*** 20. Librarians should recognize librarianship as an educational profession and realize that the growing effectiveness of their service is dependent upon their own development. 21. In view of the importance of ability and personality in library work, a librarian should encourage only those persons with suitable aptitudes to enter the library profession and should discourage the continuance in service of the unfit. 22. Recommendations should be confidential and should be fair to the candidate and the prospective employer by presenting an unbiased statement of strong and weak points. 23. Librarians should have a sincere belief and a critical interest in the library profession. They should endeavour to achieve and maintain adequate salaries and proper working conditions. 24. Formal appraisal of the policies or practices of another library should be given only upon the invitation of that library's governing authority or chief librarian. 25. Librarians, in recognizing the essential unity of their profession, should have membership in library organizations and should be ready to attend and participate in library meetings and conferences.

The efforts of librarians to secure academic status on their own campuses and to secure recognition of librarianship as a profession co-equal to that of teaching is evidence enough of the importance of the standards set forth in this section of the code. On the one hand, college librarians have the obligation and the opportunity to recruit the very best students from their own clientele for the library profession. On the other hand, they have, as accepted members of the library profession, the obligation to increase the prestige and the standing of their profession to

the best of their constructive ability. They cannot hope to do this without adequate and frequent academic and professional training, participation in the intellectual activities of the college, familiarity with current professional and educational writings, and active membership in professional organizations.

***Relation of the Library to Society:*** 26. Librarians should encourage a general realization of the value of library service and be informed concerning movements, organizations, and institutions whose aims are compatible with those of the library. 27. Librarians should participate in public and community affairs and so represent the library that it will take its place among [other] educational, social and cultural agencies. 28. A librarian's conduct should be such as to maintain public esteem for the library and for library work.

### **Student Assistants**

In practically all college libraries a considerable amount of employment is given to student assistants. They perform numerous routine tasks such as desk duty in the library and in departmental reading rooms, shelving, filing, and typing. When they are carefully selected and well-trained and when they are not so numerous as to overwhelm the library staff with supervisory duties, student assistants can render a useful service to the library while helping themselves financially and educationally.

### **Problems Involved in Student Employment**

There have been, traditionally, two contrasting points of view regarding the employment of students in the library. On the one hand, librarians have sentimentalized the role of student employment as an important factor in developing initiative and character. This point of view sees only virtue in student help and attributes only favourable and beneficial results to such activity. On the other hand, there are librarians who feel that student employment interferes with the work for which the students principally come to college and that it has decidedly adverse effects on the service of the library. To put it bluntly they strenuously object to being bothered with students help. However one feels on either side of this question, the fact remains that librarians can hardly escape the necessity of employing and training student assistants.

In the past, colleges have found it necessary to provide remunerative work of some sort for a substantial number of students who would not be able to attend college without financial assistance. Up to the outbreak of World War II, this number was increasing each year. There is no reason to believe that the situation will change markedly when conditions are

normal again. Under such conditions, therefore, it seems highly improbable that the library would be excepted from the campus departments which usually employ students, even if librarians wanted to eliminate their student help. Looking at the picture realistically, it would seem best to accept the fact that students are going to be employed and to try to get from the situation the best service possible for the library while attempting to make the student's experience educationally as well as financially profitable.

The problems and difficulties presented by the employment of students are very real and common. One of the chief problems relates to the number of part-time student assistants the library is obliged to employ in order to cover its work schedule. Student help is notoriously inefficient without proper training and careful supervision. The proportion of full-time staff members to part-time student assistants is, therefore, a matter of importance in operating a library efficiently. There are at present no standards to determine what this ratio should be; if there were they would probably be of little use. In the last analysis the amount of student help in proportion to full-time staff is a question for each college to answer for itself. College instruction could probably be carried on if the library staff were reduced to two or three librarians for ordering and cataloguing books and a part-time student staff for policing and handing out books over the loan desks. But if the college expects its library to familiarize students with the use of books and to prove the kind of educational service that is advocated throughout this book, then the professional staff must be large enough and sufficiently free from routines and supervisory duties to give proper attention to readers needs.

It is apparent that the ratio of student help to full-time staff is considerably greater in the small than in the large colleges. When it is considered that student assistants work only a few hours each week and when it is considered that they frequently shift hours and change positions, it seems highly probable that the proportion of student help in the smaller colleges is too large to insure the kind of library service that is educationally effective. All this is a matter of opinion, however, unsupported by evidence of a factual nature which is entirely lacking on this subject in the professional writings. In the absence of such evidence, the sensible opinion of Miss Mildred Camp may be quoted as typical of the opinion of most experienced librarians:

*In these days we are frequently asked how far we may use student assistants with economy? We can use them to the extent that their work can be adequately supervised and no farther and we cannot use them to such an extent that the trained*

*assistant in charge of their work cannot accomplish her own work. It is better to train students for proficiency in the less technical work than to put them at the more difficult things that require more constant supervision. More time can be saved in this way. It is very poor economy for any library to have too few trained and experienced people to supervise the work of student help. It is a detriment to both the library staff and the public.*

### **Full-Time Clerical Assistant vs. Student Assistants**

There is a widespread feeling among librarians borne out by experience, especially in the smaller colleges, that too much student help is a detriment to efficient library service. Dr. Randall states: "Student assistance should not be expected to fill the need for additional full-time staff members." The weightiest practical reason for student help is economy. Brown and Bousfield contend against this argument that "The time expended on the almost continual training of new student attendants is one factor which should be considered. Another more important consideration is the inability of students to work a sufficient length of time to gain the experience necessary for many library duties which can be performed by clerical assistants of several years' experience." In a study of student employment practices in six well-known college libraries, Miss Helen Brown observed that it had been found desirable to replace some part of student service by full-time clerical assistants. She further stated that "The employment of a clerical worker to replace several student assistants working an equivalent number of hours is a great saving in the cost of staff time for training and supervision." This statement is true, of course, but it must be recognized that it implies an actual increase in library personnel costs. The problem of most librarians is to convince their college administrators that the staff time thus saved can be utilized for services which are vital to the development of the student and his advancement along the road toward real education.

The one type of work in which students are almost universally used in college libraries is loan desk work. There are two principal reasons why this is so. In the first place there are a good many routines in connection with loan desk work which students can perform without much training provided they are carefully supervised. At least one staff member is generally available at the loan desk to give this supervision. In the second place, loan desk work varies in volume from one part of the day to another, from one day to another, and from one week to another. This variation requires great flexibility in loan desk scheduling if the service is to be furnished

efficiently and economically. It is easier to provide this flexibility with a large number of part-time student assistants than it is with one or two full-time clerical assistants. It is also possible to schedule student assistants more easily at irregular hours such as lunch and dinner periods. All libraries in the Brown survey "emphasized the greater leeway of irregular time which an amount of money spent for student service can give over the same amount spent for clerical service."

On the other hand it has been found that clerical assistants produce better results as typists than do student assistants. There is also a surprisingly large amount of detailed routine work in the acquisition and preparation divisions of a library which can be done more efficiently by persons giving full time service. To do the work satisfactorily in the first place requires several weeks and sometimes months of careful training and supervision. If the librarians or department head in charge of this work is obliged to give this training to several student assistants, and perhaps to repeat it frequently because the turnover in student help is generally high, he will be pushed to complete his own work and will have no time for improving or developing the service. Typical examples of duties for which full-time help is preferable to student help include: the typing of catalogue cards, alphabetizing and filing in the card catalogue and shelf list, the preparation of book orders after the bibliographical checking has been completed, and the general office work of the librarian.

### **Selection of Student Assistants**

In most small college libraries, the staff is composed largely of student help. The quality of service depends much upon the ability of this student staff; therefore, a careful and intelligent selection of student assistants is a matter of great importance.

#### **Basis of Selection**

The main requirement for a student assistant is his ability to do the work assigned. Brown and Bousefield regard this criterion as the sole basis of appointment.

*There is one principle which does not seem to be generally recognized in the appointment of student attendants. The all-important function of a college library is to serve its clientele. Students should be selected to work in the library solely because of their ability to do the work better than other candidates. Considerations such as aid to needy students and the value of preparing students to enter the library profession, are entirely subordinate. The employment of students with these objects in*

*view may result in deterioration of service to many for the benefit of a few.*

Although in theory students should be selected solely on the basis of their personal fitness, in practice it is often necessary to give consideration to factors other than ability. The very existence of student employment on the campus is evidence of the necessity of providing needy students with some form of remunerative work. In her study, Miss Brown found that the factor of need was a first consideration in several situations in the appointment of students to library positions. And all librarians, in the colleges she studied, reported giving special consideration to students interested in library work as a career. The consideration of need as one factor in selection is not necessarily a handicap to wise selection. It should be remembered that the needy students are often more actively motivated in their studies and work than the average student. Students interested in library work as a career are naturally desirous of doing their work well and of learning as much as they can about library procedures.

The ability to do the work assigned is a rather vague and indefinite criterion of selection: It must be interpreted in terms of definite qualifications.

The requirements of student employees lie in accuracy, method, responsibility, and good health. Accuracy is no doubt stressed because a large amount of student time is spent in such tasks as shelving, charging, and discharging books—duties in which repeated errors would cause great inconvenience to readers and a considerable waste of time. Courtesy is not mentioned in the first ten qualities but it cannot be emphasized too strongly in the selection and training of student assistants. The factor of the student's scholastic promise is not among the requirements most frequently mentioned. Probably a majority of librarians would agree with Mr. McHale that "we have no place in the library for the failing student... [but] on the other hand, merely because a student is on the honour roll is no guarantee that he will be a titanic success as a circulation assistant." Somewhat more enlightening is the opinion of Miss Mildred Camp that "outstanding scholastic attainments do not necessarily mean that the student has the greatest number of qualities desirable in library assistants such as the capacity for careful, painstaking work, a desire to conform to established regulations, ability to work with other people, and the right attitude toward his work as a library assistant."

### **Methods of Selection**

Student employment is made possible in college libraries from two principal sources: (1) scholarships or grants-in-aid, and (2) special funds

allocated to the library for student service. In a few exceptional instances, student service may be paid from general college funds without a direct assessment against the library budget.

Although there is insufficient evidence in print on which to base an opinion regarding the respective merits of each of the plans mentioned above, there seems to be little doubt that the direct employment of student assistants from library funds provides a degree of flexibility in the management of student help which is not always possible under a scholarship plan.

The underlying purpose of scholarships is to provide financial help for students of high scholastic promise. It has already been pointed out that scholarship is not regarded as a first requirement by librarians in the selection of student help. In line with the basic assumption upon which scholarships were awarded, it is also true that there are sometimes special requirements regarding the training and work given to students. More serious, however, is the situation reported in certain colleges where the librarian does not have the final authority in the selection, appointment, and dismissal of students employment on a scholarship basis. If the librarian is held responsible for the operation and service of the library, there should be no interference with his authority to select assistant qualified to do the work required of them.

In practically all colleges where student assistants are employed and paid from library funds, the selection of help is made from an "eligible" list by the librarian or the staff member in charge of student help. The "eligible" list is composed of all those students who have shown need of part-time employment in order to attend or to remain in college.

In a few colleges the selection of student assistants is made by the librarian without reference to an "eligible" list or to any outside authority; and, in the others, the selection and assignment of student help to all college departments is made by the college personnel officer. In the latter case the question of qualifications may be, and often is, subordinated to that of student need.

The prevailing practice of selection from an "eligible" list has much to commend it. The personnel department maintaining the list usually has a convenient record of the qualifications and experience of students whose names appear on the list. These records may be consulted by any member of the faculty desiring to employ student assistants. In the second place, the personnel department or officer usually sets the rates of pay for the campus as a whole and thereby eliminates the tendency of some departments to bid against one another for the best student assistants.

In the selection of students for work in the library, the librarian or staff member in charge of student help must keep in mind these things :

- (1) the duties of each position to be filled;
- (2) the character of the work
- (3) the amount of time required for doing the work each week and the need for consecutive working time;
- (4) the minimum qualifications and special qualifications such as lettering ability or pre-service experience;
- (5) the personal qualities that seem desirable; and
- (6) the physical requirements.

A great deal of relevant and useful information on the background, qualifications, school and college record, special skills and interests, and health record of possible candidates may be secured from the dean's office and the registrar's office. The records in the placement bureau or personnel office will be particularly helpful for the light they shed on the student's previous work experience in college. The recommendations of faculty members who are intimately acquainted with the work of the library are often helpful. This is about as far as the busy librarian can go in the initial stages of selecting student help. Attention has been called, however, to the advantages of using intelligence tests in selecting student assistants. The experience of Iowa State College Library with the National Institute of Industrial Psychology test scores and the American Council on Education Psychological examination scores indicates that such tests provide a reasonably accurate estimate of the students's probable success in college library work.

After the preliminary sorting, of candidates is made from the records and tests mentioned above, the students who survive the initial weeding-out process should be interviewed or re-interviewed in order that the librarian may choose the best from among them. If the applicant seems to be personally desirable, it may be possible to determine more about his qualifications at this time by requiring him to take some "simple test for skills, such as informal tests for typing, lettering, use of the catalogue, and shelving." Examinations are given in some libraries without the student having had any special instruction, or, as in some cases, following instruction offered by the library making the selection. If the library is large and has several departments in which student help is used, the general interview with the staff member in charge of student assistants should be followed by an interview with the staff member or members who will directly supervise the student's work after appointment.

The final appointment may depend to some extent upon the student's schedule and course of work. One library has a policy of eliminating candidates, with exceptions, who have extra heavy laboratory schedules unless they are free for scheduling at irregular periods such as at meal hours at the loan desk. Another college establishes a weekly minimum of hours below which no student is permitted to work. A third gives preference to freshmen and sophomores because after they are trained the library has the possibility of benefiting from their service for three or four years more.

### **Training and Supervision**

The employment of student assistants is not completed until they are properly introduced to the work of the library as a whole and trained in their particular positions.

The best training comes from actual doing under careful supervision but it is obviously necessary to give new students some special instruction in their particular duties at the outset. Where there are a considerable number of student assistants, this instruction is generally given to all students at one time or to several groups. The method of giving the instruction varies but follows in general some such pattern as follows:

1. A meeting of all new student assistant is scheduled at the opening of college at which time the librarian or staff supervisor of student help explains in detail the nature and responsibility of student work. Attention is given to such matters as these: the importance of accuracy, method, punctuality, and courtesy in loan desk work; the rules and regulations of the library, the need strict impartiality in serving student readers; the rules regarding constitutes when students are unable to work their scheduled time are limits to which students are permitted to go in helping readers and the proper care and handling of library books and equipment.
2. Students are shown the location of various reading rooms and are given simple instructions in the use of the catalogue and the classification system: The students may then be given a manual with instructions that they will be given a brief test on the innovation contained in the manual when they return for practice week.
3. After students have been given general instruction at the use of the library and certain simple practice problems to acquaint them with library procedure, they are then usually introduced to the work of the particular departments in which they will serve. The supervisor of each department will introduce the students to the routines that will be expected of them in that department.

Complete training of the student assistant in the preliminary instruction period is impossible. It is necessary to follow up this preliminary instruction with careful supervision and guidance because most students are relatively unfamiliar with library practices and the materials with which they work. Such instruction is provided through individual guidance, manuals and departmental instruction sheets, and student staff meetings. The student staff meetings are particularly valuable for giving general working directions and explaining new policies in loan desk work. The frequency with which meetings will be held will depend somewhat on the adequacy of the supervisory staff responsible for service to readers. If there are a number of full-time professional staff members in loan desk work it may be possible to reduce the number of student staff meetings to the minimum required to take care of the general routine and the announcements of changes in practices and routines. Aside from giving general directions and correcting faults which have shown up in the daily work, these meetings are valuable in promoting, interest and morale.

As an additional aid to supervision and instruction, most libraries attempt by one means or another to measure the accomplishment of student assistants in service. This is done largely on the basis of personal opinion and comparison, but a few libraries use special rating forms to evaluate student services. Mount Holyoke College Library, for example, uses an employee rating scale designed to guide the supervisor in grading the student assistants on such factors as the following: output—quantity and quality, accuracy, organization, cooperativeness, disposition, dependableness, persistence, vitality, initiative, tact, poise, ability to learn, power of analysis, ability to meet people, supervisory ability, and personal appearance.



## Library Finances

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This chapter embraces the fiscal of collage library work. The administration of finances in the collage library has both immediate and long-time objectives. The immediate objectives are financial economy adequate support and wise expenditure of funds; the ultimate objective is more particularly a library programme planned supported and adapted to changing educational needs. Successful administration and financial planning requires an understanding of the sources of income for the collage library, budgetary procedure and the keeping of accurate financial records.

### Sources of Income

There are four main sources of financial support for collage libraries. The one considerable source of income is the appropriation or allocation from the current operating funds of the collage. In addition, collage libraries obtain income from endowments, gifts and bequests, and fines and fees. Libraries depend on these four sources of income in different proportions. If the income from one of them is diminished, the required amount for effective library service must be made up by increased income from one of the other three or else expenditures must be reduced. The alternative is not practical or possible for most collage libraries for several reasons, but the one given by Randall and Goodrich is most important:

*Many libraries in collage are attempting services which are not justified by their incomes. The temptation for the collage administrator to add to the functions of his library without providing for a commensurate increase in its expenditures seems a common one; and the librarian who belongs to an obliging craft is too prone to accept the added duties and to struggle through somehow. Such conditions inevitably react unfavorably on faculty members, students and library staff. A meagerly*

*stocked library means scant teaching materials for the professors and insufficient numbers of books for the students. An understaffed library means poor bibliographic and reference service. Either or both of these spell failure in library service and frustration to the academic programme.*

The relative proportions of funds received from each of the sources average:

- (1) allocation-74 per cent for all libraries;
- (2) endowment-14 per cent for 21 libraries;
- (3) gifts-4 per cent for 18 libraries;
- (4) library fees-17 per cent for 4 libraries;
- (5) petty cash fines, sale of publications, etc.-2 per cent for 16 libraries; and
- (6) miscellaneous sources-2 per cent for 6 libraries.

#### **Allocation from the Current Operating Funds of the Collage**

Of the privately controlled institutions more than half of the libraries receive ninety to one hundred per cent of their income from the current operating funds of the collage. In tax supported institutions, an even larger share of the library income is derived from the collage appropriation, although in some tax supported institutions the library budget is set up separately and state or municipal funds are voted specifically for this purpose. The amount of money allocated to the library is determined by the librarian's budget estimate and the ability of the collage to appropriate all or a portion of the income requested. The two main contributing factors are the ability of the librarian to present the budget needs convincingly and the liberal-mindedness of the collage administrator to recognize the library as an essential part of the college programme.

#### **Income from Endowment**

Endowment funds have two elements: (1) principal, and (2) income. It is important that the principal be kept intact since only in this way can the object of endowment be permanently carried out. It is equally important that the income be kept as large as possible in order that the benefits of the fund may be made more extensive. Library income from endowment is comparatively small but, it is perhaps significant that the total budgets of those libraries which do have substantial endowments are well above the average for college libraries generally.

The most typical of endowment gifts to libraries, quite naturally are made in the form of memorial funds for the purchase of books in a special

field or fields. These books are not rare, but most of them are expensive. They are representative of the serious and scholarly books which form the stock of a library serving an institution of higher learning.

Current reports on book endowments for libraries are recorded in the annual reports of librarians, in *College and research libraries* and in special publications issued by libraries. Salaries of librarians, are rarely secured from endowment funds, though not to be over looked is the very unusual group of grants made in 1930-32, when the Carnegie Corporation of New York voted grants for \$150,000 each to Lafayette, Mount Holyoke oberlin Swarthmore and Wesleyan for endowment of the college librarianship. In like manner at various times, the General Education Board, the Rockefeller Foundation and the Rosenwald Fund have established endowments for librarians with the idea of calling to the attention of the academic and "gift-giving world" the fact that the position of librarian is as important as a professorship in some widely recognized field where endowed chairs are common.

One of the major drawbacks to endowment for current library operation is the fact that it is next to impossible to secure a uniform return on investments made at different times since in some periods rates of return on suitable investments will be small and at other periods they will be on a high level. This affects the usefulness of endowment funds for books buildings but more especially for personnel. Two further limitations endowments for college library purposes are noted by Randall and Goodrich.

*First such endowments are seldom large enough to provide sufficient funds for library purposes. In most cases they were made when the functions, and therefore the need, of the libraries were much more limited than they are today. What might have been a generous income for a college library in 1910 will fall far short of providing sufficient funds for the successful operation of the unit at the present time. Yet the fact that the library is endowed appears to act as an excuse for the college administration to fail to provide additional funds from other sources. It thus happens that the endowed libraries are often less adequately supported than those which depend upon appropriations for current income.*

*Second these funds from endowment are often limited in their use to the purchase of books in particular fields. When the endowment is of long standing it frequently happens that comparatively large amounts of income must be used for purposes which are no longer of paramount importance to the college and that more important purposes have limited funds at their*

*disposal. The changing methods of education as well as the changing curriculums of colleges, have, in many cases made the important books and fields of yesterday the unimportant ones of today. The college librarian faced with the acceptance of an endowment for the purchase of books should urge that the donor leave unspecified the type of subject matter of the books to be acquired with it.*

### **Income from Gifts**

Practically all college libraries receive gifts of books-sometimes the entire book content of a private library. Current expendable gifts, the most efficient and useful type of gift for the college library, are rare except in the long-established and well-known private college. Substantial sums are sometimes donated by individual donors or foundations for the erection of new library buildings, particularly in private colleges. Most book gifts come from members of the faculty alumni and friends of the college. Books and endowments for books are frequently made by college classes, although it would appear that few college librarians are encouraging the cultivation of this source of gifts. Gift collections of older books are often of little value to the college library and are not worth the cost of cataloguing and shelving but occasionally they contain items of real value and provide very welcome additions to the shelves.

Current expendable gifts are both restricted and unrestricted a gift for library service in general for the purchase of books and periodicals in a special field for library equipment or for the development of some special type of library service such as micro photography. Under present conditions which are very uncertain for the enlargement of library appropriations from the general college fund, it would seem wise in the opinion of many administrators and librarians for each library to multiply its list of prospective donors.

In order to do this, it may be necessary for the library to submerge its independent programme of gift building into the gift programme of the college but the library needs for service should be made known continuously through personal contacts and printed material. Every experienced commentator on college library gifts emphasizes the necessity for "letting your needs be known." "A good many years of experience have convinced me," writes a former distinguished librarian of Princeton, "that the reason why we do not get more substantial gifts is that it does not occur to people that we want them." Speaking generally many alumni hesitate to give books or funds for fear that their gifts may appear to be inadequate; probably many would be willing to be of service to the library which has

helped them in acquiring their education if they knew what was needed. Among libraries in endowed private institutions-if not in other type of educational institutions-the Friends of the library movement has proved a workable programme and has produced some excellent results. Many libraries have Friends groups sometimes without any formal organization which assist the library directly by making donations or indirectly by influencing others to give gifts.

Class gifts have received little attention in professional library writings but are prominently mentioned in the annual reports of college presidents and librarians. In her annual report for 1908, President Thomas of Bryn Mawr stated that the library had received generous class gifts in the past. The class of 1893, for instance gave the sum of \$515.83 for the purchase of books for the English department and the class of 1902 gave \$500 to the library as a general book fund.

Bowdoin College has received endowments for its library from more than seven class. A recent bulletin of Pomona College announced a class gift to the library of 275 volumes in the field of the classics. Wellesley College has always maintained the tradition of class gifts. When the library was first opened the young women of the college gave a sum of money for the purchase of foreign periodicals urgently needed by the library; the class of 1895 gave a portrait of a Wellesley College president painted by an eminent artist; and substantial expenditures are listed from the class of 1918 in the librarian's annual report for 1940-41.

Vassar College, likewise has devoted class funds for library use beginning with a gift of \$350.00 for chemistry books from the class of 1870. Recognizing the need for funds for the administration of the library as well as for books the class of 1854 gave \$1544 for unrestricted use. In her recent annual reports the librarian of Vassar acknowledges alumnae gifts to increase the original endowment of earlier class gifts.

In 1942 the Woman's College library of the University of North Carolina received a \$ 1000 class endowment fund for the purchase of biography in honour of the Dean of the College. In several reports of college presidents class funds for the general use of the library are often emphasized. All these illustrations afford evidence of the valuable aid that college graduating classes and alumni can render the college. The librarian has an important duty in bringing about class participation in the development of the library. In the judgment of the writer, this responsibility has not always been recognized or actively followed up by appropriate suggestion and class stimulation. Personal contact with class presidents, membership on student committees, and notices of library needs in book bulletins and student

publications should all be utilized more than they are at present. If libraries are to secure and to derive the most benefit from gifts, it is necessary to have a definite policy. The policy statement of the American Library Association, quoted below, contains useful suggestions although it is pointed especially to the particular needs of public libraries. The statements reads as follows :

1. The Association recommends that, in recognition of the economic situation, any programme for gifts and bequests should be formulated carefully and with long-term objectives which should be kept constantly in the public mind.
2. The Association believes that memorials in the form of funds for library purposes have a strong appeal to many people because they present the opportunity to carry on the life interest of an individual or a group and can continue a beneficent service through the years. It recommends, therefore, the encouragement of such memorials,
3. The Association believes that the development of trust funds presents a field for constructive work on the part of library boards and recommends to such boards, or to others responsible for the administration of libraries, that the possibilities and opportunities presented by such funds be called to the attention of their constituencies.
4. The Association believes that one way to broaden the base of giving to libraries is to interest a large number of people in writing bequests into their wills, and it recommends that libraries let it be known that a modest bequest may be made with just as much sincerity and dignity as a large one and that it is just as acceptable to the library.
5. The Association believes that insurance policies, including annuities, offer a form of gifts to libraries, the possibilities of which have as yet not been fully explored, and it recommends that libraries be suggested as the beneficiaries of such policies.
6. The Association strongly urges that in considering any gift or bequest, the donor be asked to consult the library administration in order to make the benefaction of the greatest possible use both for the present and for the future and that he be asked to protect his gift legally in such a way that changed conditions in future years may be met without impairing the usefulness and general purpose of his gift.

The most important thing in developing a programme of gift building is to impress possible donors with the fact that the library is a useful and necessary part of the college, to present it as a growing organism, and to

make its needs for future growth fully understood, The fewer people who are hazy or unwitting about the purposes of the library and its collections, the less difficult will be the problem of gifts. This calls for a positive attitude towards supplementing the library collection from gift sources. Except in very special instances, gifts with "strings tied" to them should not be accepted. Librarians are naturally so acquisitive that it is very difficult for them to say no.

Yet, the acceptance of a noteworthy special collection of books in a particular field places upon the college the responsibility for offering courses which will make use of the collection for instruction and research. If those responsible for instruction are not willing to do their duty by such a collection, then it is only proper that the librarian should recommend that the proposed gift be given to an institution that will. Again, if a special collection is offered to the college subject to the condition that it be kept as a separate unit, the decision to accept it should be weighed very carefully.

Such collections are difficult to administer and costly to maintain. Furthermore, their usefulness is often decreased by the necessity for keeping the books away from the library's own material. When a miscellaneous collection of books is offered as a gift to the library, it is desirable to request the donor to submit a list of the titles for checking against the library's holdings. In this way the librarian has a chance to select what is needed and has not the difficult and time-consuming task of later disposing of unnecessary duplicates, It is important, however, to secure the privilege form the donor of exchanging duplicates with other libraries if the gift is received unchecked.

It goes without saying that gifts, regardless of size, should be properly bookplated and acknowledged, although this does not hold for many unsolicited books and pamphlets which come in daily mail. A carefully prepared and printed form card may be used for smaller gifts. A letter form the librarian responding to gifts of substantial size adds a more personal touch of the gift and creates a warmer feeling between the library and the benefactor. Exact and complete records of all gift should be kept in order that the books may be produced if the donor visits the library and wishes to see the books he has presented. After a lapse of years, if it is desired to publish a brochure about the library's gifts or to compile a history of the library, these records will be of inestimable value and importance.

### ***Income from Fees, Fines, and Miscellaneous Sources***

In 1933 the American Library Association made a study of special library fees in a survey of one hundred and ten colleges. This survey showed that the special library fee is a relatively unimportant source of

income for most college libraries. Two-thirds of the colleges reported that they did not levy a special library fee; among those that did, the largest number were denominational colleges with low educational expenditures and low library expenditures. The conclusion of the survey was that the trend was away from the levying of special fees of any kind. The same trend was evident in the *Land-grant survey*, where it was found that special fees were quite generally being replaced by a combined, single fee covering all tuition charges.

In favor of the special library fee, it may be said that it has been the sole means of income for a few libraries, that it has supplemented the income of others, and that it has sometimes helped to pay the cost of new library buildings. The argument against the special library fee is summed up by Mr. Charles H. Brown as follows;

*The library is a necessary and integral part of the educational and research work of the whole institution. It should serve every instructional and every research department. There is grave danger in regarding library service as distinct from the educational and research fields and as a service which must be met by a special charge, Laboratory fees may be justified as applicable only to certain classes of students, athletic fees may be defended as used for extracurricular activities. Library fees, however, do not belong to either of the aforementioned classes. As the necessary part of the education work of an institution, the library should be recognized as entitled to a certain proportion of the funds appropriate by the State for educational purposes, to a certain proportion of the regular tuition charges, and to a certain portion of the research funds.*

Most libraries receive a certain amount of money from charges on overdue books, or damaged and lost books, or the sale of duplicates or library publications, but the practice in handling this money varies. In a large proportion of the colleges the income from such sources is credited directly to the library budget. In some colleges, however, the funds are used for other college purposes. In state colleges the receipts from library fines may revert to the state treasury. Even where this money goes directly to the library, it is doubtful whether it is sufficient to pay the salary-hours and postage spent in recording and trying to collect fines.

The actual money received from the sale of library publications amounts to little or nothing because few libraries have such publications. Those that do are likely to distribute them on an exchange basis. This means that one library receives publications of comparable value to what it sent from another library, but the transaction involves no money except to pay for

transportation costs. If the occasional library has an extensive list of publications which are sold, it is likely that the receipts will be set up as a special revolving fund and that publication revisions or new publications will be charge against it. Librarians have not recorded such transactions in their regular budget reports.

The practice with regard to library receipts form rental collections also varies. Some libraries record the receipts and expenditures in connection with the rental collection in their financial records; others operate the rental collection as a separate unit. The collection is established by a special financial arrangement, with receipts and disbursements handled as a revolving fund, expenditure being entirely dependent upon receipts.

Fees are sometimes charged non-college borrowers who use the facilities of the library, but the income from such a source is not likely to amount to much in any but a small number of libraries where contract service has been established with the community or with neighbouring regions.

### **The Budget**

The most important element in the financial picture of the college library is the budget. It should provide a complete financial programme for the year or biennium which it covers. No two budgets could be expected to be exactly alike either in content, form, or presentation., Every library has its own peculiar budgetary problems. Such variable as the size and location of the library, the type of college which it serves, the period covered by the budget, the physical arrangement of the library, and the organization of library services—all these affect budgetary practices. Nevertheless, the essential elements of the college library budget are the same. These elements can be reduced to fundamental principles which may well be applied in building any college library budget.

### **Some Principles of Budget-Making**

The most important principle to keep in mind in budget-making is the simple and obvious one that the budget should make ample provision for necessary items of expenditure in current library operation—for staff salaries, student service, books, periodicals, binding and rebinding, supplies, equipment, printing, travel, postage and express, and other miscellaneous expenditure. Capital outlay for new buildings, additions or alterations to existing buildings, and major items of equipment such as steel stack shelving or carrel equipment will not ordinarily be estimated in the current library budget request. These “capital expenses” are generally provided for in a special request drawn up in consultation with the president for the consideration of the official body of control. Building and maintenance

costs are usually set up by the college as a separate budget item without any attempt to pro-rate expenditures to departments or divisions of the college, though practices varies in this regard.

One helpful device for insuring that all needs will be presented in the budget request is the adoption of a *programme of budget-making* which is carried on continuously and simultaneously with the administration of the current budget in use. Miss Blanche P. McCrum regards this step as a first essential in budget-making:

*The first golden rule is to begin plans for the next year the day after the budget for the current year is passed...The librarian who expects to secure funds to budget must be able to produce proof that funds are needed. This proof lies hidden away in many library activities, hardly one of which, if studied and analysed over a period of months, will not demonstrate needs both convincing and moving. But the necessary figures cannot be gathered in a hectic effort to write a good budget just before the estimate is due. Rather they are a matter of careful record-keeping for the year.*

The final goal of the budget is a thoroughly objective financial estimate of library needs built around the educational services of the library to the college and to its community. A budget based upon the educational programme must of necessity utilize the complete resources of the college and give equal attention to all needs of the college and instruction. For this reason, the best experience emphasizes the desirability of the librarian working closely with the administrative officers of the college, the heads of departments, and the heads of departments and divisions of the library in the collection and consideration of information required for making the preliminary estimates.

The assistance of teaching department heads will ordinarily be confined to suggestions and advice regarding the book and periodical needs of their departments for the period of the budget. The information may be obtained through personal consultation with the professors or by letter, or both. The letter may be of a general nature asking for suggestions about the department's book needs and particularly for a statements of any factors in the proposed teaching programme of the department which might affect library needs, a new course or the addition of a new member to the faculty in the department will undoubtedly affect library expenditures and should be taken into consideration in preparing the budget estimates. Or, in place of general letter, the librarian may ask for specific estimates of the amount of money needed for books and journals and accompany is request with information which will help the professor to translate his knowledge of

book needs into financial terms. This information may take the form of a list of bibliographies for checking in the fields represented by the department, or it may include statistical data on the expenditures of previous years.

What holds true for faculty participation in the development of the budget estimates for the library is also applicable to the library staff, only more so. Staff recommendations are important in making decisions on salary increases and the employment of additional personnel for supporting existing services or undertaking new work. Every user of supplies and materials should be represented in the estimate of needs for these materials. The budget estimate for maintaining periodical files, binding, Library of Congress cards, and many other items will also depend upon the assistance and cooperation of the staff.

In the presentation of the budget, the librarian's interpretation may be reinforced by the numerous studies and investigations of the staff in connection with their specific duties in reference, circulation, cataloguing, and other phases of library work.

A fourth important principle concerns the classification of the budget. It is desirable

- (1) to conform as closely as possible to the budget classification form used by the college business office;
- (2) to show detailed itemization of the several items of operating expense under the major classification heads used in the budget; and
- (3) to follow as closely as possible the expenditure classification of the library.

In general the college business office makes fewer divisions in its budget record for the library than most librarians find it necessary to keep. These divisions are commonly salaries, books, and supplies. The librarian, not the business office, will need to have records on such items as Library of Congress cards and periodical and binding estimates. A detailed itemization of the library budget has three main values to the librarian:

- (1) it helps to insure that no important item is overlooked in preparing the budget estimate;
- (2) it clarifies and supports the budget request for the administrative officers who approve the budget; and
- (3) it serves to establish the librarian's authority for charging special expenditures of library operation against certain of the major classifications in the budget.

Some types of budget classification of current operating needs is typical of all library budgets, although there is no universally accepted classification. However, since libraries are requested each year to fill out the expenditures record of the U.S. Office of Education statistical report form, it is advisable to base the budget classification on this form.

The two main categories in this form are current expenditures and capital outlay. Under the current expenditures category there are included ten main headings: salaries, library staff; student services; books; periodicals; binding and rebinding; supplies; stationary, printing, etc., telephone, postage, freight, express; building operations and maintenance; and other. The one item under capital outlay that is likely to be represented annually in the normal library budget request is that of equipment. The distinction between current expenditures and capital outlay, recognized in the two divisions of the U.S. Office of Education statistical report form, is explained briefly and clearly by Wight:

*A current expense is an expenditure which is "used up" during the current period, that is, it does not result in the acquisition of fixed asset. Salaries, wages, office supplies and heat and fuel are common examples. On the other hand, capital outlay results in the addition of fixed assets. Buildings, books, and equipment represent the largest capital outlays of a public library.*

In nine out of ten cases, the college library budget request will in actual practice include an estimate for books and equipment as items of current expense. The distinction in so far as classification goes is not significant. But it is important to know exactly what the college policy is regarding the distinction between supplies (current expense) and equipment (capital outlay) if funds are fixed once they are appropriated and whether the library equipments fund in accountable for the purchase of new equipment or just equipment replaced.

The current expenditures classification of the U.S. Office of Education statistical report form suggests the major classification headings for the librarian's budget request. When the budget request is made, these categories should be further separated into appropriate subheadings. In the large college library, the category "salaries" will have subheadings for staff, clerical, and student service; in the small college library the breakdown may go further and list the titles of staff positions, the estimated salaries for each position, and the estimated budget need for student service. Under the category "supplies" the subheadings will probably include printing, Library of Congress cards, transportation, supplies, and the estimated amounts needed for each of these items.

It was pointed out above that there is no uniform plan of budget classification for college libraries. Variations in practice are to be found in the classification of such items as binding, printing, Library of Congress cards, and transportation charges. For example, postage and express may be charged to “books” and estimated under this category, or they may be set up as a separate fund.

Library of Congress cards may be charged to “books” or to “supplies”. These and other variations are not of great significance. The important thing is not so much where a certain item is budgeted and charged in the library accounts as it is that all the items of expenditure be properly specified in the detailed break-down of the budget. The U.S. Office of Education statistical report form classification, for example, has no special heading under “travel” yet this is an important item of expenditure on the college library that is developing a staff for real, educational service.

In addition to the principles already mentioned, there are certain others of lesser significance—readily recognized by the experienced librarian—which should be considered as a basis for preparing the budget statement. These may be briefly stated.

The budget should represent actual needs estimated as honestly and as accurately as possible, and justified in terms of the educational value of library service to instruction and to the college community. Comparative data, especially comparisons with the finances of other college libraries, should be used sparingly and with extreme caution.

Unless the libraries are of like size, situated in the same geographical area, serving colleges having the same type of programme and economic status, and have similar problems, the comparison may be meaningless and harmful. A careful study of the library’s own activities and work programme provides the soundest basis for making budget estimates. Such figures as the librarian and his staff may obtain from a careful self-survey of the library’s activities are more convincing than comparisons with other colleges. The librarian should be aggressive and convincing in his statement of library needs. At the same time he should keep in mind the numerous demands made upon the college administration by other departments and financial ability of the college, and he should attempt to combine the ideal with the practical.

### ***Preparation of the Budget Statement***

When the information needed for making the estimates for the library budget have been assembled, the next step is the preparation of the budget estimate itself. In some institutions, forms and work sheets are provided by the business office on which the various departments of the college

make their estimates for such items as salaries and supplies. More commonly, however, the college librarian prepares a separate report based on the information obtained from the preliminary collection and study of budget data. The form and method of presenting this material in the written report is important. No set rules can be laid down as a matter of necessity for each library to follow, but the following suggestions make for clarity and may increase the chances for the acceptance and approval of the budget.

1. The statement should show the total amount of money needed and the separate amounts for each major classification and subdivision of the budget.
2. The opening pages of the budget statement may well contain a summary table showing three things:
  - (a) the total amount needed and the amount for each major classification in the budget;
  - (b) comparative data on expenditures of the library for at least two years previous to the current budget; and
  - (c) a comparison of the proposed expenditures with those of the current budget year based on expenditures at the time the new budget is being prepared.

These data and comparisons will be presented most clearly if they are arranged in columns. They should be shown in sufficient detail to reveal the various subdivisions of the budget.

3. The statement should contain a brief analysis of the proposed expenditures, justifying the amounts requested for each item in the budget.
4. The statement should contain tables and figures if these help to support the interpretation of the budget, and it should be neat and attractive in appearance.
5. It should be no longer than necessary. The college president or the business manager will be flooded with budgets by other departments. An un-necessarily long budget militates against itself.

### ***Basis of the Budget Estimates***

The librarian's estimate for personnel, books, supplies, and other items in the budget may be based simply on the sum required in the preceding year with a certain percentage added to take care of increases. Such a budget is not likely to be closely related to need and would be exceedingly difficult to defend. A careful survey of the needs of the library with the determination of specific work to be done and an estimate of this

cost will develop a more accurate budget and one which will more likely meet with the approval of the college administration.

**Fixed and Variable Charges:** A second approach to estimating the financial need of the library is to consider the various items of the budget from the point of view of fixed and variable charges. Fixed charges are those which are relatively stable in amount from year to year or which may be estimated with reasonable accuracy from the records which college libraries keep in the normal course of their work. Examples are continuations, periodicals, binding, and printing.

The personnel employed in building and processing the book collection or in supplying the services at the loan desks constitutes the most important of the variable charges. The factors which must be taken into account in making the estimate for personnel needs include; the desirability and possibility of expanding certain phases of the library programme in the next fiscal period, the enrolment trend in the institution, the adequacy of the professional and clerical staff which are provided for in the current budget, the relation of the library salaries to the teaching salaries, inequalities in existing staff salaries, and the probable economic trend in the year or years immediately ahead.

A careful study of these factors and others peculiar to the local situation, by a committee of the staff working with the librarian, will enable the latter to establish a close estimate of required expenditures for services. In recent years, there has been an increased demand by certain administrators and librarians for a more exact determination of the cost of variable charges, based on unit cost studies, in the expectation that such cost determination will lead to economies similar to those unearthed in business.

Among college librarians as a whole there is no unanimity of opinion as to the relative value of these cost studies and in consequence few are employing them as a basis for preparing the budget estimate. Unit cost studies, as the name implies, are intended to show the actual cost of specific tasks done or services rendered. Their application to library accounting has been made chiefly in the technical processes. Perhaps the most complete and thorough of these investigations was made by Mr. Fremont Rider, librarian of Wesleyan University. From his analysis of the operations of the Wesleyan University library, he emerged with a determination of the labor and the total cost per unit for ordering and purchasing books, accessioning, cataloguing, circulation, receiving and checking in periodicals and binding. In 1937 Mr. Robert Miller made a more detailed time and cost study of acquisition and cataloguing operations, and in 1943 Miss Patricia B. Knapp devised a simpler technique for

determining cataloguing costs in the small college library. These studies, and others like them, are intended to show that the cost of library services and operations can be computed; they are not intended to establish standards of cost for measuring performance even though in some quarters they have been employed for this purpose. Until a large number of unit cost studies have been made in libraries of similar type, function, and size, they cannot be used for comparative purposes and are therefore limited in their present usefulness for budget estimating. They do, however, provide a technique for other librarians to follow, and it is likely that every progressive librarian will wish, from time to time, to make similar studies of the cost of specific processes in his own library. Until libraries are more adequately staffed, however, and until the techniques of unit cost studies are simplified and refined, it is unlikely that they will be extensively used in the preparation of the budget.

**Standards of Support:** A third approach to the problem of determining the amount of money needed for library services makes use of widely accepted standards. In general, the standards set forth these financial criteria as being most closely related to the educational efficiency of the library:

- (1) the percentage of the total educational expenditure of the college, exclusive of capital outlay, devoted to the library;
- (2) the amount of money spent for books and periodicals over a period of years; and
- (3) the annual expenditure for library staff salaries, weighted for enrolment.

A comprehensive review of minimum standards of support based on studies and the opinions of experienced librarians appears in Miss Blanche P. McCrum's *Estimate of standards for a college library*. The importance of the first criterion is attested to in Professor Reeves and Russell's investigations of the expenditures for library service in thirty-five denominational colleges. They express their conviction that the percentage of the total college expenditure allotted to the library is a reliable measure for determining excellence of library service...there is, nevertheless, a high correlation between the total amount of the educational budget and the total amount of the library budget...; both the size of the educational budget per student and the efficiency of management vitally affect the proportion that goes for the support of the library."

Since the appearance of Miss McCrum's summary of standards, two important works have been published which support the validity of the other two criteria of library support mentioned above. The first of these

is the study of the college library made by Dr. Douglas Waples and others for the North Central Association. This study was interested in getting at a *basis for the evaluation* and comparison of different libraries. With relation to finances, Waples sums up the results of his study as follows : "These considerations explain the adoption of two financial factors: the average expenditure for new books and periodicals over a five-year period, and the annual expenditure for library salaries, weighted for enrolment." The second study, cited frequently in earlier chapters in this book, is the *Classification and pay plans for libraries in institution of higher education* prepared and published by the American Library Association. This study suggests standards for the annual salary budget and the annual book budget based on the service load of the college library. The service load is computed in terms of service units based on varying numbers of underclass and upperclass (undergraduate) students, honours students, graduate students, and faculty members.

No library budget could be prepared solely on the basis of these standards or of any other standards without taking into consideration local factors, such as the cost of living in the community, present status of the library book collection, curriculum changes, and the physical arrangement of the library. They serve a useful purpose, however, in checking the librarian's estimate of his needs and in justifying the recommendations for increases in the library's income if it is not already larger than the amounts cited in the standards. The librarian should keep in mind the general limitations inherent in all types of standards and the fact that in many cases they set up figures which are intended to be regarded as minima.

### **Funds for Administration**

Because so many college libraries show a considerable deficiency in the amount of money available for the organization and administration of the library, it is important not to neglect this aspect of library service in the budget estimate and justification. An approximate formula established through the experience of college and university libraries is 50 to 60 per cent for personnel, 40 to 30 per cent for books, periodicals, and binding, and 10 per cent for supplies and other items—a formula which, if overlooked, inevitably leads to unsatisfactory library performance and, in the end, defeats some of the very purposes which the curriculum and the provision of book funds were intended to promote. There are some notable variations in these figures in the published expenditures of college libraries, but there is a remarkable uniformity in general, and in it is interesting to note that the greater the emphasis on educational and

scholarly services, the larger the expenditure for personnel. It is also of considerable significance that the percentage of expenditures suggested in the formula coincides closely with the actual percentages found to obtain in recently published statistics on college libraries.

The order of procedures, as set forth in the steps outlined to this point, is;

- (1) to assemble the information;
- (2) to estimate the expenditures necessary to provide for adequate library service; and
- (3) to prepare the budget statement with supporting interpretation.

After all the information has been assembled and prepared the proposed budget is presented for consideration and adoption to the president or to whoever passes on the budget. In presenting the budget, the librarian endeavours to show its relationship to the objectives of the library and to the educational aims of the college. The purpose is to show what services the library can render on an adequate budget and the returns to the college in terms of educational values.

This purpose is defeated if the librarian merely attempts to show how efficiently and economically the library can be managed. When the college authorities have studied the library budget, they may find that the request is larger than they think desirable or can allocate from the anticipated income of the college during the next fiscal period. In reducing the total request or the amount for any item in the classified budget, the librarian should have an opportunity to defend the request and to advise on reductions if they to be made.

When the library budget is approved, it is set up in final form in the librarian's financial records, Detailed records of the budget are kept in the business office for control purposes.

The form in which the budget is appropriated to the library varies in different colleges. It may be appropriated in a lump sum or appropriated under the various subdivisions of the budget classification set up in the business office. In the former case, the librarian would have complete freedom, except in matter of salary, to authorize expenditure from the budget as may seem best. Salary expenditures vary little if any during the fiscal periods and are strictly controlled; no charge for personnel services may be made against the unapportioned lump sum appropriation after the established salary total has been deducted, without the approval of the college administrative officers. When the appropriation for the library is made in a rigidly segregated budget, a practice common in state

colleges, the category classification of the budget must be strictly adhered to. There can be no transfer of funds from one category to another without the consent of the college administrative authorities or the appropriating body. There are advantages to both types of appropriation but the ideal lies somewhere between the two extremes. Control must be sufficient to insure efficient administration, but, on the other hand, not so rigid as to hamper the library in carrying out its services.

### Administration of the Book Budget

The book fund is one of the largest and most important items in the library budget. The policy of administering this fund follows two general patterns. One method places the entire book fund in the hands of the librarian, to whom applications are made by faculty members who have need of purchases. The other method distributes all unrestricted book money into fixed portions, scarcely ever equal but carefully proportioned to the needs of the teaching department.

The second plan is generally followed in most colleges. Thirty-five of forty-eight college and university libraries studied in the *Land-grant survey* stated that they made a formal division of the book fund. In almost all of the thirty-five denominational colleges surveyed by Reeves and Russell, the funds for new books were apportioned among the departments of instruction.

Among one hundred and five colleges, surveyed by Mr. Hans Muller, seventy-seven operated under formal apportionments. Such evidence as the foregoing points to the desirability of apportioning a part of the new book fund to departments even, though in some colleges the spending of the entire book fund is placed in the hands of the librarian. The advantages of apportionment are summarized by Muller as follows:

1. Apportionment ensures the obtaining of an evenly distributed and well-rounded book collection.
2. It provides a safeguard against unreasonable demands of certain faculty members.
3. It stimulates the faculty to participate more actively in book selection, since it enables departments to feel that there is some money available which they can call their own.
4. It guards the librarian against the possible charge that the expenditure of book funds has been unjust to some departments.
5. It prevents the clash of personalities among the faculty.
6. It curbs the exercise of an excessive degree of discretionary power and arbitrariness on the part of librarians.

While the apportionment plan has proved practical and useful in a large number of colleges, it is not claimed that it is entirely free of disadvantages. The chief objections to apportionment appearing in the professional writings are summarized by Muller in the article previously mentioned :

1. Several writers have pointed out that apportionment leads to a waste of money. Some departments are allotted much less money than they need, whereas others have too much money to spend. Thus apportionment has the effect of hampering the departments that could really use the money.
2. The apportionment plan is said to prevent any systematic building-up of the library book collection.
3. Complaints are occasionally voiced about the excessive amount of red tape and book keeping involved in the apportionment plan.
4. Librarians have also frequently complained about the tendency for apportionments to remain fixed for too long a period—in disregard of changes in the curriculum. The reason for this lack of flexibility is that changes are difficult to make, since no department is willing to consent to a reduction of its own allotment.

Theoretically, at least, the plan of all book fund spending in the hands of the librarians is sound procedure (1) if the funds are so ample that there seldom will be need to deny a faculty request for a book, or (2) if funds are so limited that the division of funds is hardly worth while and may discourage rather than stimulate systematic buying by the faculty.

Most library book appropriations, however, fall somewhere between these two extremes, but are still inadequate to meet all instructional needs. Under these circumstances faculty requests for books have to be repeatedly refused, with the result that some faculty members hesitate to make further recommendations, and may, if their book needs are pressing, attempt to secure the books they need by some other means.

In general, therefore, it would seem that a system by which departments could count with reasonably assurance upon a sum of money for books purchases, even though it be small, would result in more interest in planning the development of departmental book needs, a better knowledge of the library's contents, and improved morale on the campus with reference to the work of the library.

Assuming that the book funds are to be apportioned in a particular library, the next question naturally is how they shall be apportioned. This problem is discussed in the following pages, first with reference to the portion of the budget set aside for general library purposes,

and second with reference to the allocation of the remainder among departments.

### **The General Book Fund**

A basic assumption in the apportionment of book funds is that a substantial sum should be set aside for direct expenditure by the librarian. Ordinarily this sum is spoken of as the general book fund and it is intended to take care of the need for general reference books, general continuations (continuations for a particular department being charged to the book funds allocated to that department), cultural and recreational reading, duplicates and replacements recommended and purchases by the librarian, and special items which exceed in cost the amount which it would be wise to allocate regularly to the various departments. The size of the general book fund will naturally depend on the local situation. For example, a college library located in a city and with convenient access to a good public library will probably spend very little on current fiction. In a group of sixty-four liberal arts colleges surveyed by Muller, the average percentage of the total book fund left unapportioned was 28 per cent; the range extended all the way from zero to 70 per cent. Two distinctive modes were noted as 25 and 33.3 per cent.

Budget proportion such as these are useful only as a guide. Perhaps a sounder basis of determining the amount of the general book fund is to keep exact annual records on the expenditure for each type of material purchased and to base the estimate on the average annual expenditure over a period of years. Such a method has its limitations, to be sure, but it carries private assurance that local conditions are being taken into account. The greatest variation in the amount of money needed from year to year in the general book fund is likely to be reflected in the purchase of reference sets. In the young, rapidly growing library where these sets have not already been acquired, it should be possible to plan their acquisition over period of years. The price of older, authoritative reference works is easily obtained. In the matter of estimating the budget need for new sets, it is frequently possible to anticipate unusual expenditures by watching for the pre-publication announcement of such sets.

The funds for the purchase of periodicals and for binding, usually considered part of the total book fund, may be administered as part of the general book fund, or they may be appointed to the departments. There are two definite dangers in leaving periodical and binding funds unapportioned. The first is a tendency to refer to the librarian, for purchase from the general book fund, many requests for new journals and for costly back files which the department probably would not purchase if the

expenditure came directly from its own funds; the second is the lack of knowledge or consideration on the part of departments as to the secondary costs involved in unrestricted periodical purchasing—such as binding, processing, and shelving. Aside from these possible objections, the advantages are strongly in favour of maintaining the periodical and binding funds on an unapportioned basis. Under such an arrangement the library can:

- (1) formulate and carry out a long-time plan of acquisition;
- (2) prevent the discontinuance of journals which later may be needed for instruction and then can only be acquired with great difficulty and at considerable expense; and
- (3) simplify its bookkeeping procedures.

Moreover, it is extremely difficult to make such an apportionment fair and just because the subject content of many journals overlaps several fields. If periodical and binding funds are apportioned, however, it is advisable to set aside a substantial sum for the purchase of general journals, back replacements and duplicates needed for binding.

#### ***Procedure in Apportioning Departmental Book Funds***

The basis of distribution most commonly in effects in that of the personal estimates of the librarian checked by the impressions of the needs made upon the members of the faculty library committee.

The librarian's subjective estimate of needs is usually based on such factors as: the requests of the several departments; the average annual expenditure for books, periodicals, and binding of each department over a period of years; the deficiencies in certain departments collections which have shown up in requests for material at the loan desks; the use of books by the several departments, and the probable changes in the course programmed and teaching staff which may effect a department's need for library materials.

The advantages of this plan are that it is simple, flexible, and provides for faculty participation in the determination of its book needs. It has been frequently criticized, however, on the ground that it is largely subjective and that it favours the aggressive faculty member at the expense of one who is less effective in presenting his book needs.

Those librarians and professors who criticize the impressionistic method of apportionment recognize of course, that it is impossible to secure an exact formula for dividing the budget, but they are inclined generally to seek a more scientific basis for apportionment. They proceed on the assumption that the following criteria (all or some), not necessarily

in order of importance, determine the adequacy of a department's book needs:

- (1) the departmental enrolment;
- (2) the relative use of library facilities by different department;
- (3) the extent of new publications in the various fields;
- (4) the relative cost per volume of books in the several fields;
- (5) the existing collections in each field already in the library; and
- (6) the needs of new instructors.

They then attempt to reduce these factors to numerical ratings and to develop a percentage ratio of the book fund for each department. This percentage ratio is then applied to the division of the book funds to be apportioned and the faculty library committee and the librarian make certain adjustments to take care for special factors or conditions not provided for in the distribution formula. An example of an attempt to developed a more scientific apportionment of the book fund is summarized below to illustrate the method and technique used.

This plan originated at Goucher College, where the faculty library committee participates in the distribution of the book fund. The plan used at Goucher is based on two kinds of evidence:

- (1) general or outside, that is, a consideration of the books and journals needed by a department in any good college; and
- (2) specific or inside evidence, that is the use Goucher College makes of printed matter.

In collecting the outside evidence, the committee adapted the percentage allocations, developed earlier by Professor Randall, to its own departmental set-up. Using the periodical lists in Shaw's *List of books for college libraries*. The inside evidence was based on the estimated dependence of each course on the library and on the size of classes. Courses were ranked by the faculty in three categories:

- (1) A—beginning language and laboratory courses requiring a minimum amount of library materials;
- (2) B—courses utilizing textbooks but making more use of the library than those in A; and
- (3) C—courses with no textbooks and depending entirely upon the resources of the library.

Courses in category A were given a weighting of 1, in B a weighting of 2, and C a weighting of 3. The factor of class size was considered by using an enrolment of ten as a base and adding one-half point for each

additional ten students. Thus ten students registered in an A course counted as one and twenty students counted as one and a half; ten students in a B course counted as two and twenty as three; ten students in a C course counted as three and twenty as four and a half, etc.

These weightings were totalled and turned into a table of percentages, a table which showed the relative use of books and periodicals by departments. A final table was then made by combining the outside and the inside evidence. Because the committee felt that it had been more arbitrary in dealing with the inside than in dealing with the outside evidence, it decided to count the former as only 40 per cent of the total and the outside evidence as 60 per cent. A number of other methods have been suggested for apportioning book funds, but those involving the use of a formula are not essentially different in method from the example mentioned above. All such plans as seek a scientific basis of distribution present many difficulties. They require a great deal of faculty and library time to prepare and assemble the necessary information, and temporary book-keeping records must be set up until the final apportionment is made.

The results are never as objective or scientifically accurate as the term "formula" would seem to imply. For example, the whole basis of scientific apportionment rests on the assumption that such and such criteria are the basic factors in determining a department's needs. To some extent, at least, the techniques used involved personal opinion or pooled judgement, such as the weighting of courses in terms of library need. Nevertheless, there can be little doubt that the attempt to reduce as far as possible the degree of subjectivity that affects the process of apportionment results in a fairer distribution of funds and helps to safeguard the library against the charge of favouritism.

The very frequency with which librarians have investigated and discussed this subject in their professional writings is evidence of the desire to secure a more objective basis of apportionment than is possible where all factors are weighted subjectively. Although the task of assembling the necessary information is a time-consuming and costly one, it is not necessary to go through this process every year. For purposes of currency, the formula or index of appointment need not be revised more than once every three or four years unless there is a considerable shift in departmental courses. Even though funds are appointed, the administration and spending of these funds are done in the office of the librarian. It is only logical, therefore, that the departments should be informed frequently regarding the balances in their funds. Ordinarily this information is sent to the head of the department or to the department-library representative and is made available only to that department. In some libraries this information is made available to any faculty member in the department who asks for it

and even departmental allocations may not be held confidential. To avoid the rush of last-minute, hurried buying some libraries include in their notification of balances a statement that all unspent funds for which no outstanding commitment has been made will revert to the general library fund a month or so before the end of the fiscal year.

### **Library Bookkeeping**

There would appear to be almost as many methods of keeping financial records in college libraries as there are libraries. This fact alone makes it impractical to attempt a detailed and technical treatment of financial records in this chapter. On the other hand, even though different situations require different forms of records, the underlying principles are the same. It is of first importance, therefore, to know the reason why records are kept and their uses. This much is attempted in the following discussion, together with a suggestion of the minimum essential records without which a library cannot reasonably determine its financial condition.

#### **Purposes and Uses of Records**

The fundamental purpose of financial records is to show the amount of money set aside by the college for library purposes for the fiscal period, the amount spent, the purposes for which it was spent, and the balance that remain. Some of the more important uses to which records are put include the following:

- (1) to aid in the preparation of the budget;
- (2) to control the spending of the library's funds in a way that will increase the efficiency of library service;
- (3) to insure that no funds are overdrawn;
- (4) to report at any time to any department the exact (or approximate) status of its share of the library book fund;
- (5) to aid in the preparation of the annual report and special reports; and
- (6) to provide information on library finances for reports to accrediting and library agencies.

#### **How Library Financial Records Differ from Accounting Record**

Most college libraries keep their financial records according to a single entry system and so not attempt to record receipts, the expenditure record being the primary transaction in which they are interested. When the budget is approved and set up in the librarians's office, the income of the library remains relatively stationary except for small sums which are received from fines, replacements, and the sale of publications, The single entry system for recording expenditures is, therefore, obviously an

incomplete record of the library's financial condition and would not be considered sufficient where great importance is attached to sound principles of accounting. It is true, moreover, that the financial records of the library ordinarily make no provision for determining the depreciation on equipment and that certain items of expense such as books and binding are regarded as "operating expenses," whereas in accounting procedure they would be regarded as capital investment.

These shortcomings of library records are not intended to suggest that the financial records of college libraries are hopelessly inadequate or inefficient. As viewed by an accountant, they might be considered incomplete and unsystematic. But for all practical purposes, and for the uses for which they are intended, the conventional library records serve their purposes with reasonable satisfaction and efficiency. If detailed records of cost are to be kept on the separate processes and services of the library, then a more elaborate and exact method of bookkeeping is necessary. The most important function in library bookkeeping is to set up control records to keep the budget in balance. By this is meant that the amount of money available in the various subdivisions of the budget for a certain fiscal period equals or exceeds the expenditures and commitment for salaries, books, supplies, and the other categories of expense in the budget. In considering the accounts payable, the total of outstanding book orders cannot be ignored, particularly in the final months and weeks of the fiscal period. An important link between the method of keeping the financial records and the purposes served is the classification of accounts in the library record of expenditures. Although it is necessary to use a classification which will enable the librarian to check his accounts with those of the treasurer's office without too much difficulty—preferably once a month—it is equally desirable that the classification scheme used in the record of expenditures should correspond to that of the budget in order that each will be of service in the preparation of the other.

It is also important that the classification used be one which will enable the librarian to furnish the financial statistics required by various library and accrediting agencies. In the past there has been little or no uniformity in the requests received from these agencies and librarians have been put to a great deal of trouble to supply the information requested. With the general adoption of the U.S. Office of Education statistical report in rendering accounts, it is now possible to work toward a standard plan of reporting financial statistics.

### ***The Financial Records***

In methods of keeping library accounts there is great diversity. The essential thing to keep in mind, however, is that the records should serve

the purposes enumerated above and any special requirements necessitated by local conditions, At the very minimum, these record must:

- (1) serve as a control on library expenditures;
- (2) provide a convenient reference tool for checking on claims for unpaid bills and similar items; and
- (3) furnish authoritative evidence to show for what purposes the library monies have been spent.

An enumeration of the records necessary for accomplishing these purposes should include:

- (1) a control report of monthly expenditures and balances;
- (2) a record of outstanding book order commitments;
- (3) a schedule of approved accounts payable;
- (4) a permanent file of dealers' bills;
- (5) a student pay-roll register; and
- (6) a record of petty cash. A brief explanation of each of these records follows.

**Control Report of Monthly Expenditures and Balances:** A monthly report which shows clearly and definitely expenditures and balances is of vital importance in the efficient management of the library. This record may consists of a single sheet arranged in vertical columns. The various categories of the budget classification are entered in the first column to the left, the amount of the budget for each category in the second column, the expenditure for the month in the third column, and the balances in the fourth column.

In the form shown the expenditures and balances are entered on a single sheet for two months and then are carried over to a second and third sheet and so forth until the fiscal year expires. It will be noticed that this single sheet follows exactly the classification scheme of the budget and serves not only as a record of past expenditures but as a guide to those in the future as well. In addition, it shows the sums spent each month by departments for books, and the balance that remains to the spent. This part of the record is indispensable if book funds are apportioned because there is no duplicate record of departmental accounts in the business office. Some libraries may prefer to keep separate accounts on the book budget, expenditures, and balances of each department.

The sample shows two subdivisions of the general book fund, which is the unapportioned part of the total book fund, namely, "books" and "periodicals". Some libraries may prefer to show a more detailed breakdown of the expenditures from the general book fund in order to defend the budget request and to determine more exactly for what purposes the

fund is being spent. Such a record may be kept on a single sheet giving monthly summary reports on the amounts spent for reference books, continuation, fiction, general non-fiction, and Library of Congress cards and transportation expenses if these last two accounts are charged against the general book fund.

**Record of Outstanding Book order Commitments:** A control report, such as described above, provides no control for encumbrances such as outstanding book orders. There is, therefore, a need for a record which will show currently the extent of outstanding book commitments, in a library which is ordering regularly a large number of new books.

The keeping of this record involves a good bit of clerical work, and the results are only an approximation at best because no one can tell in advance what books will be cancelled, what the exact discounts will be, or estimate exactly the outstanding obligations on continuation orders. For this reason, few librarians set up their control record of outstanding book orders until the last few months and weeks of the fiscal year or until the balances in the departmental funds become so low that there is danger of overdrawing them. A form for keeping the record is described by Trent:

*A sheet of paper is ruled into seven vertical columns for the following headings: Date of order/Order number/ List price/ Estimated cost/Monthly total/Cancellations/Estimated balance. When an order is placed, the date, number, total list price, and total estimated cost (list prices less estimated discount) are entered in the proper columns. Cancellations are entered on a memorandum sheet until the monthly balance is struck, when they are totalled in the proper column. A monthly balance is kept by totaling the orders, subtracting the cancellations, and in turn subtracting this sum from the balance in the last column. It is suggested that the balance be struck monthly until funds grow low, when a weekly balance will probably be necessary. An experienced order librarian can estimate the discount accurately enough for this record...No effort is made in this system to correlate estimated prices with actual billed prices. The regular bookkeeping system will show the actual balance remaining after bills are paid and it is thought unnecessary to duplicate this record.*

Library supplies and equipment are usually purchased in lots two or three times a year. The orders are written in triplicate or quadruplicate according to the practice of each library. Beyond this record, in the typical college library, it is obviously unnecessary to set up any special or elaborate record of commitments for this purpose.

**Record of Approved Accounts Payable:** When bills are approved and forwarded to the business office for payment—usually once a month—the library must maintain some record of these bills for reference purposes. It frequently happens that a second or a third bill is sent by a dealer. Dealers “statements” and claims for unpaid bills must be checked. These and numerous other questions relating to the payment of bills make it necessary to provide a convenient and accurate record for reference and verification.

A file of duplicate bills in the librarian’s office, arranged first by month and second by dealer and stamped individually with the date of approval, would serve for reference and verification. It would not, however, be so convenient for quick reference as a page-listing. Moreover, most libraries keep their files of duplicate bills in an alphabetical dealer arrangement for the entire fiscal period.

Probably the most satisfactory method of providing a quick reference means of checking on bills is to prepare a monthly record of approved accounts payable. This record includes entries for all expenditures except salaries and payments from petty cash. It is made up at the time bills are approved and forwarded for payment. The method of recording is alphabetical by dealer, with entries for the date of the bill, the date approved for payment, and any other special information required to fit the particular library’s need. Since dealers sometimes send more than one bill of the same date for different groups of books, some libraries enter the first book title after the name of the dealer to facilitate accurate and quick verification of bills when questions come up.

In most college libraries doing a reasonably large volume of business, it would seem advisable to keep both a file of duplicate bills and a record of approved accounts payable.

**Permanent File of Dealers’ Bills:** This file has already been explained above. Libraries commonly keep, in addition, permanent separate records of the cost of individual books and of supplies and equipment. The record of the cost of books may be kept on the order card if it is filed permanently after the order transaction is completed. Alternative places for keeping this record are the shelf list and accession record. This record is useful in determining readily the cost of a book which must be replaced, in adding duplicate copies, and in making out insurance claims in the event of fire, water, or other damage covered by insurance.

The permanent, separate record of supplies and equipment requires a card for each item of supply and equipment purchased, with the entry showing the date purchased, amount, source, and unit cost. In addition to providing immediate information on the price of supply and equipment

items, this record is useful in determining the budget estimate for supplies and equipment, in showing price fluctuations, and in taking inventory.

***Student Pay-roll Register:*** Once staff appointments are completed, the salaries of assistants are paid directly from the business office without the necessity of the librarian's approval, as in other expenditure. These salaries seldom vary from month to month unless these are resignations or special deductions. Accordingly the business office accounts on library salaries are all that is needed in the way of salary expenditures. It is advisable for the librarian to check the business office's balances each month and to enter these in his monthly statement. The wages of student assistants are in most cases paid on an hourly basis, and the pay-roll are ordinarily made up and approved by the librarian or an assistant at stated intervals. A simple pay-roll statement gives the names of the student employees, their monthly wage, and deductions, if any, and the net amount due. The original copy of the pay-roll, and as many copies as are required, are sent to the business office for payment. A duplicate copy of the pay-roll register is then filed in the permanent file of expenditures.

***Record of Petty Cash:*** In general, petty cash accounts are handled in two principal ways: (1) in some libraries, fines and replacement monies are turned into petty cash directly by the library; and (2) in other libraries, the petty cash fund is established by a cash payment from the treasurer's office, it being assumed that fines and other collectable income are turned over to the college and are not credited to the library. This is regarded as the best practice by most finance officers. In the first case, a special account book should be kept of all income and expenditures.

When fines revert to the college or state funds, then it is necessary for the library to establish a petty cash fund for small items of expenditure by drawing a certain amount of money from the treasurer's office. This sum, amounting to whatever is though necessary to take care of petty cash expenditures for a month or more is charged against the library's "supply" fund, and a record is kept by the librarian for totaling the amount in the monthly record of expenditure for the particular month when it is withdrawn. The money is placed in petty cash box and vouchers are secured supporting every payment from the fund. When the petty cash money is exhausted, a statement of all payments made from the fund, together with vouchers supporting same, is turned over to the treasurer who pays the library an amount equal to the total disbursements as shown by the statement. In this plan, the fund remains intact after it is created. The only record the librarian has to make is the statement of payments with supporting vouchers and the deduction from the "supplies" fund of the library each time a withdrawal is made to replenish the fund.

## Understanding of College Library Service

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The title in the chapter heading is used to distinguish library interpretation from *mere* publicity because there is a difference which should be recognized. The former implies a definite plan coordinated with library objectives; the latter is based on expediency—the opportunity to publicize library services as occasions arise. This is not to suggest that there is anything wrong with the term “publicity” *per se*, but only to emphasize that if library publicity is to be effective, it must be based on a sound plan of educational interpretation. The basis of planing depends on the functions of the library.

### Relation of Interpretation to the Functions of the College Library

The primary objective of the college library, is to make its service contribute as effectively as possible to the educational programme of the college. In so doing, it performs certain functions:

- (1) it provides study and reference materials required for supplementing classroom instruction;
- (2) it provides technical and specialized study materials needed to keep the faculty abreast of their fields;
- (3) it provides, as far as possible, research materials needed by members of the faculty;
- (4) it encourages students to use books independently and attempts to develop in students sound habits of reading;
- (5) it participates in such programmes of post-collegiate education for alumni as are sponsored by the college;
- (6) it provides study materials needed by extension and correspondence students in colleges where such instruction is offered; and

- (7) it cooperates with other libraries in strengthening the total resources in the region of which the college is a part.

It is of the greatest importance that—through a clear interpretation of these functions and the activities which are performed in carrying them out—the administration, faculty, students, and others concerned with the welfare of the college should be thoroughly informed as to that the library is and what it does.

The success of the college library in carrying out its functions is dependent upon the confidence and respect of those it serves. Progress can be made only as the record of library achievement is made known. The main objective of library interpretation, therefore, is to assist in making the library an integral and real part of the educational programme of the college. It follows that if the interpretation efforts are successful in developing confidence in and understanding of the aims and methods of the library, the administration will then see to it that the library receives its full share of financial support.

### **Organization for Interpretation**

Library interpretation in most colleges is often a very haphazard affair. This is only natural since a great deal of publicity must of necessity depend on the opportunity to prepare a news article, make a talk, or arrange an exhibit. On the other hand if the results are to serve a useful purpose, there should be a clearly defined programme of interpretation and one person to guide and plan its development. The more systematic and definitely pointed the interpretation plan is, the more effective it will be and more easily managed. This is not to say that interpretation should be the work of only one person. A simple but effective organization will utilize the skills and co-operation of all members of the staff because above all other persons they are the active agents of interpretation.

In the small college library, the librarian will direct the work and plan the organization, largely utilizing student help for carrying out the routines. In the large college library, the work of planning and directing publicity may well be delegated as a part-time activity to a member of the staff working under the direct supervision of the librarian. It is necessary, of course, for the person to be released sufficiently from other duties to give real attention and time to planning publicity.

Such a person would assemble information for local newspaper and student reporters or for the college news bureau, prepare and write the copy for book bulletins, make arrangements with the person in charge of library departments for exhibits and for faculty participation in planning

exhibits, arrange for competent student help to make posters and signs and perform other duties related to interpretation work. Unless some one person gives thought to planning and directing the interpretation work there is real danger that it will become a routine affair, unrelated in any real way to the functions which the library is attempting to perform. Also, there is likely to be duplication of effort and a great lack of co-ordination.

The approach to library interpretation is two fold :(1) through personal contact between librarians and the individuals and groups they serve, and (2) through the planned distribution of information about the library. The former is often spoken of as “public relations” and the latter as “publicity” Public relations involves relationships with (1) campus groups: the college administrative officers, boards and advisory committees, the faculty council, department heads, teachers, faculty committees, and students, and (2) off-campus groups the alumni and Friends of the library groups: members of the college community; professional, accrediting, and educational councils and associations, and foundations. Publicity includes the following media of interpretation: the annual report, handbooks, the college catalogue, book bulletins and booklist, local and student, newspapers, bulletin boards and posters, exhibits and book displays, and the radio. Progressive college libraries are trying to use most of these various types of publicity media. The college catalogue and annual report have always been used though not always recognized as an avenue of interpretation. College libraries have always had displays and exhibits, but here again these media have often been so routine in nature and hit-or-miss in planing that they have not always proved effective as a means of interpreting the library and making library services more useful to instruction.

### **Library Relationship on Campus**

Developing an adequate programme of library service is not alone the responsibility of the library. As has been repeatedly pointed out in this book, good library service is a cooperative undertaking requiring the combined effort of the administration, faculty, library staff, and students. Upon their knowledge of the aims and methods of the library rest their judgement and willingness to cooperate. The relationship of the library to the various campus groups have been discussed in detail in different parts of this book, but it may be well to summarize some of these relationships here in order to show their importance in interpretation.

Certain functions in interpretation, such as determining objectives, establishing the proper relationships with administrative authorities, and preparing official reports, are the responsibility of the librarian. On the other hand, the member of the library staff are the persons who come in

contact most frequently with the users of the library, and they must have all the facts on policies, methods, and services. These data are provided partly through staff meetings, bulletins, and booklists but largely through individual conferences between heads of departments and the librarian. It is not enough, however, to have the facts. The attitude of the staff member towards those he helps is even more important. Upon his tact and patience in working with students and upon his competency and friendliness in contacts with faculty will depend much of the success of the library and its interpretation programme.

### **Relationship to Administrative Officers**

In an important chapter in *Teaching with books* Dr. Branscomb points out very clearly that little can be accomplished by the librarian without the support and cooperation of the college president. A majority of librarians are directly responsible to the president. He approves the budget and staff appointments even though the final authority in these matters rests with the board of trustees. In developing the policies of the library, he is consulted at every step. The librarian's annual report is directed to the president and through the president the major needs of the library are transmitted to the board of trustees. Thus, in most colleges the development of library services is in the last analysis determined by the librarian working closely with the president. If there are differences of opinion or lack of mutual respect, they must be ironed out or they will inevitably lead to a weakening of library service. It is equally important, states Dr. Branscomb, that the college president should see to it that in the organization of the college "the librarian is not separated from, but rather is brought into vital relationship to, the educational programme." In most colleges this will mean that the president will have to be given a clearer picture of the range and importance of library service in the educational programme than he now possesses.

In a few colleges the librarian is directly responsible to the dean, but in all colleges he has close relationships with the business manager and his assistants. These relationships vary in different colleges but in general involve the placement of library orders, the payment of bills, the checking of library balances, the determination of insurance inventories, the employment of the clerical staff, and the review of the budget. Satisfactory relationships here are based on common sense and good business administration. The business manager expects the library to be well organized and managed. He will not object to the librarian's taking a strong stand on library needs and support, but he expects him to temper his requests to the known financial ability of the college, to combine the ideal with the practical, and to effect both a balanced library programme

and a balanced financial programme. On the other hand, the librarian has a right to expect full cooperation from the business manager in the arrangements for checking library balances, in safeguarding the library's interests where special funds are involved, in taking a broad educational view and not a penny-saving attitude towards library support, and in assisting the library to meet unusual and unexpected financial obligations which may arise after the approved budget is in operation. Other important administrative relationships include those with the dean of men and the dean of women in matters of student cooperation and discipline, the personnel officer in the employment of student help, and with other officers in such matters as student counselling.

### ***Relationship to the Administrative Board or Advisory Council***

In most colleges there is an administrative board or advisory council which acts as the planning (executive) committee of the faculty and serves in an advisory capacity to the college president. The board considers matters of affecting the library—such as personnel, finances, and curriculum, policy.

It would seem desirable therefore, that the college librarian should be given a place on the board or advisory council. The library, of all departments on the campus, can least afford to be self-contained. Universities have quite generally recognized the importance of this relationship and have in their statutes or by-laws made provision for the librarian as an *ex-officio* member of the board. But in colleges, the librarian is seldom represented on the board or advisory council. This is unfortunate since this is one of the important committees on which the librarian might serve, both for his contribution and the increased effectiveness of the library's service which would result. His function on such a board would be to keep library services abreast of new developments and to hold library interests before the group. Without such representation, the librarian is at a disadvantage in making the library a more effective instrument of instruction than it has been heretofore.

### ***Relationship to the Faculty***

The importance of this relationship requires little comment. Without the cooperation of the faculty, the librarian can do little to coordinate library services with instruction. Without adequate to library support, college instruction is handicapped and faculty research is blocked. Library, laboratory, and classroom must be so planned as to reinforce the teaching process in every possible way. The improvement of library service should therefore be, to a far greater extent than is present the case, a matter of faculty-library cooperation.

In most colleges where the librarian is a member of the faculty with professional rank, he is automatically a member of the faculty council and has the right to vote. The faculty council determines the policies and methods concerning admission, teaching, counselling, and examination. Membership and attendance by the librarian and members of the staff in the council meetings will afford many opportunities for learning at first hand about matters which have an important bearing on library service. Much of the work of the council is done through committees. Where these committees are concerned with educational policy and curriculum changes, it would seem to be the part of wisdom that any administration seeking to improve the conditions of colleges work would see to it that the librarian and the staff members who hold responsible positions are represented on these committees. To relegate the librarians to the status of an administrative assistant or a clerk is equivalent to dwarfing much of the driving force which contributes to the success of a college. In the highest and best type of library service, the librarian is more likely to be a liaison instructor between classroom and library rather than a mere clerk handing out books.

Although it is unfortunately true that little is done to bring the judgement and experience of the librarian and the members of the library staff to bear on the determination of policies formulated in faculty committees, it is true that the library has other opportunities to establish close relationship with the faculty. The librarian works closely and intimately with department heads in the preparation of the book budget and in the determination of budget allocations for books. Through the faculty library committee, there is opportunity to discuss and formulate policies which affect jointly the work of the teaching staff and the library. The staff, in its contact with faculty, furnishes information of first importance in teaching and research. These cooperative relationships are all important in developing a genuinely educational type of library service, and they afford an opportunity to stress the joint responsibility of the library staff and the faculty in this enterprise.

### ***Relationship to Students***

Service to students by the librarians in cooperation with the faculty is the main task of the library. Library relationships with students are conducted mainly throughs:

- (1) services at the loan and reference desks and personal conference;
- (2) talks, group tours, and instruction in the use of the library and bibliography;

- (3) publicity in the form of printed literature, displays, and exhibits, and
- (4) the student library committee.

The nature of the first two relationships has already been discussed in detail in previous chapters. Publicity is discussed later in this chapter. The student library committee, a fairly recent phenomenon in college library administration, is discussed briefly at this point.

Not more than a half-dozen colleges have student library committees and few of these are mentioned in the professional writings. Yet close student-library relationships are necessary to an understanding of the conditions of student use of the library and to the development of constructive measures of any sort for improving library service. The student library committee, in the light of its stated functions, may properly be regarded as one device for encouraging friendly associations. These functions are usually given as follows:

- (1) to establish a cooperative spirit between the students and the library staff in order to aid the library in meeting curricular and extra-curricular student library needs;
- (2) to encourage students to participate in the recommendation of book purchase for the library;
- (3) to help the librarian interpret the objectives, policies, rules and regulations of the library to the student body;
- (4) to promote general and recreational reading and to increase student appreciation of good literature;
- (5) to forestall criticism of the library by keeping the librarian posted on student library needs, and
- (6) to help relate the work of the library to instruction.

The stimulation of student reading in books of a general and recreational character is emphasized by all committees now functioning.

Membership on student library committees ranges from five to eight persons. The committee is commonly appointed by the student government association in consultation with the librarian. Miss Ruby Dare, describing the student committee of the Greenville (III). College library emphasizes the importance of selecting students who have "an interest in literature evidenced by considerable general extra-course reading; a sufficiently attractive personality to be able to lead students; ability to carry responsibility; reliability; and a real enthusiasm for serving on such a committee." Consideration is sometimes given to class, residence hall, and student library staff representation on the student library committee. The

members of the committee ordinarily elect their own chairman. Meetings are usually irregular, with the librarian always in attendance.

The duties and work of the student library committees naturally vary according to the special needs of each library. Activities in which such committee have successfully promoted the aims of the library at Rockford, Wellesley, Scripps, Mills, Greenville (III), and Penn. State include the following:

- (1) the preparation of book reviews for the student newspaper;
- (2) aid in the planning and arrangement of library exhibits in and outside the library building;
- (3) assistance in the selection of books of particular interest to student;
- (4) planning a programme to encourage students to build their own personal libraries while in college;
- (5) supervision of residence hall libraries; and
- (6) assistance in making surveys of student opinion and the use of library resources.

This last activity would seem to be one of great potential usefulness to both students and the library. The library stand to gain understanding, otherwise inaccessible, of conditions of student use of the library, and to benefit in the development of any changes that are made by the sense of general confidence which such cooperation tends to develop. The students gain whatever values may come from friendly associations with the librarians, by the improvements in library service they are able to suggest, and by a broader understanding of the purposes and uses of the library. The librarian plays an important role in the formation of the committee, in attendance at its meetings, and in guiding its work. In all these activities the remains in the back ground as much as possible. His function is advisory suggesting problems to be considered, discussing possible solutions, and sharing with the committee his special knowledge of library work. His personality, ability to talk easily with students, sense of humor, and tactfulness and patience in dealing with suggestions and complaints will have to great deal to do with the success of the student advisory committee on the library.

### **Library Relations Off Campus**

The chief values of cooperation between the library and various campus groups have already been suggested. An attempt is now made in the following pages to define the range of relationships beyond campus boundaries in which cooperation is applicable and desirable. Such relationships are second only in importance to those on campus in a broad

view of interpretation because they stimulate personal and professional growth, afford new opportunities for useful educational service, establish contacts which may be helpful in the development and support of the library, and help to interpret the distinctive contribution which college libraries can make to society.

### ***Relationship to Alumni and to Friends of the Library Groups***

Interpretation to alumni may take two forms : (1) lending and reference services, and (2) publicity designed to encourage gifts. The opportunity to provide an educational service to alumni through the distribution of reading lists, the lending of books for scholarly or technical work, and the uses of the reference facilities of the library have already been touched upon in an earlier chapter. There will be a great diversity in the request received by the college library for information and books loans some of them will be answerable by a book loan or a collection of pamphlet material about a particular subject, others will necessitate a letter in which the specific information is given with reference to sources which may be borrowed by the alumnus from the college library or from some other library. Still others will lead to conferences between the reference librarian and members of the faculty and will result in the sending of a systematic course of reading to meet the alumnus's particular need.

Publicity for gifts may take the form of direct appeals to individual alumni for special purchases or the publication of lists of desiderata in the alumni magazine. As a prelude to either, it is important to build up good relationships by keeping the alumni informed of library progress and development. In addition to articles in the alumni journal the librarian should take every opportunity to know the alumni and to meet them at reunions. When a person has been out of college for twenty years he has forgotten all about the library. A regular column of library notes in the alumni magazine and an occasional picture of some interesting phase of library work will help to build up interest and goodwill.

Some colleges have found that an organization of Friends working steadily and intelligently toward definite goals had added much to the value and usefulness of the library. In actual practice, these Friends of the library groups are composed largely of alumni. The initiative in suggesting the idea of the Friends organization may well be taken by the librarian. He knows what such organizations have contributed to libraries in other institutions, what has been written about them, and what methods have been used in establishing and keeping them going. Beyond this initial stimulation, the librarian's relationship to the Friends organization is largely a subordinate one. Unless there is some one person among the

alumni or college friends who has the interest, understanding, and energy to take an active part in creating enthusiasm and membership for the organization, the results are not likely to prove lasting or worth while, If the Friends organization is simply the librarian's show and if the group relies on him to keep it going and alive, its value is largely lost.

Although the librarian remains in the background in the actual development of the Friends organization, he has an important contribution to make as an adviser to its promoters and leaders, At the time of establishment, the Friends organization should be given a "frank and full statement of what the library now is, what it is doing, what it desires to become and how its friends can aid in its progress toward that goal." After the group is established, the librarian is the logical person to furnish the information about gifts that are needed to build up the collections and services. Unless this relationship exists, there is the possible danger that the Friends organization may prove an embarrassment to the library by leading to gifts of rare and special collections which are not pertinent to curriculum needs and which result in a heavy administrative expenditure from an already over-taxed budget.

### ***Relationship to the College Community***

In both service and interpretation, it is important that the college librarian take into account the community in which the college is located. Some libraries, such as Oberlin, maintain full public library service for residents of the community. In most colleges, provision is made for townspeople to use the library as a reference centre and to borrow books of a scholarly or research nature if they are not in use by the faculty and students. State supported colleges have a great obligation not only to citizens of the local community but to residents of the entire state.

Regardless of the nature or extent of library service to the community residents, the library cannot afford to overlook these persons in its interpretation programme. News of the college is published in local newspapers which are often read throughout the state, If the library is mentioned in the news releases, it will enhance its prestige on the campus and beyond campus boundaries.

### ***Relationship to Association and Foundations***

In addition to the necessity of maintaining close relationships with alumni, friends, citizens of the local community, and the general public, librarians are under professional obligation to participate in the work of their national and state library associations. Moreover, since libraries are an integral part of colleges, librarians are naturally concerned with the interests and activities of educational associations and philanthropic

foundations. It is important, therefore, that college librarians should identify themselves as closely as possible with the aims of these organizations by attendance at some of their meetings, contributions to convention programmes, and by wide reading in their published reports and proceedings. The value and significance of these outside relationships may be more readily understood by the newcomer to the library profession by review of the purposes and work of the more important of these organizations. This review follows in the briefest and most general terms.

*American Library Association.* Founded in 1876, the American Library Association is the oldest and largest association in the world. Of its many objectives and accomplishments, three are of particular concern to college librarians:

- (1) to raise standards and promulgate ideals of library service;
- (2) to assist libraries to operate with the utmost economy and efficiency;
- (3) to improve the status of librarians by working to advance salary standards, by maintaining an effective placement and personnel service, and by increasing professional knowledge through original research.

The Association conducts and disseminates important educational research studies, furnishes comprehensive book selection and bibliographical services, and fosters a programme of sound educational interpretation. The programmes of the Association deal with important current educational problems.

***Association of College and Reference Libraries:*** Of the five major division of the American Library Association, the one most closely identified with college library interests in the Association of College and Reference Libraries. Established as a division under its new name in 1940, though having a continuous existence as a section of the Association since 1889, the A.C.R.L, as it is popularly known, aims "to bring together in an annual meeting college and university librarians and staff members, librarians and staff members of reference libraries, as well as the reference librarians of public libraries, for the discussion of their common problems and the problems peculiar to academic and scholarly work." Through its section committees journal, *College and research libraries*, it has stimulated experimentation and research for the improvement of college library service and it has helped to integrate the efforts of college, university, and reference librarians with those of kindred groups such as educational and research agencies.

*Other National Library Societies.* The American Library Association maintains close relationships with six affiliated national societies and nine

other national library societies. Although membership is limited to libraries concerned with the collection and service of research materials, librarians in larger colleges are concerned with the work and publications of the Association of Research Libraries.

In recent years this Association has made available at a price that most large college libraries can afford a valuable research and catalogue tool in the *Catalogue of books represented by Library of Congress printed cards* (160 vols.) and has continued to sponsor the important annual list of *Doctoral dissertations accepted by American universities*. College libraries hold institutional memberships in the Music Library Association and college librarians have contributed to such valuable technical tools as the *Code for cataloguing music* and the *Subject headings for the literature of music from the Library of Congress subject headings*.

Through its treatment of technical problems in special fields, particularly those relating to the subject and content of college, and university departmental libraries, the Special Libraries Association has furnished valuable aids and tools for the college library. In the pages of its official bulletin, *Special Libraries*. College librarians are finding practical and useful information on the handling of special collections, audio-visual materials, and ephemeral or fugitive materials. Close relationships exist between college librarians and the Bibliographical Society of America, which has as its purpose the promotion of bibliographical research and publication. College librarians have served as officers of the Society and as members of its various committees. The semi-annual meetings of the Society have considered bibliographical matters of direct interest of college librarians, such as problem of bibliographical instruction in colleges, The Society has sponsored and published research in which college librarians have participated and benefited, such as *Incunabula in American libraries* and *American newspapers, 1821-1836; a union list of files available in the United States and Canada*.

**State and Local Library Association:** State, regional, and local library associations have contributed to college libraries primarily through strengthening the American Library Association and through annual or biennial meetings which have enabled librarians and staff members to come together for informal discussions of common problems. Moreover, they have challenged, perhaps not so much as they should, college librarians to cultivate a broader view of their profession than is possibly by restricting themselves merely to campus problems. State associations have introduced and interested college librarians in such problems as state aid for public libraries, regional libraries, and reading studies. College librarians, on the other hand, have contributed to public and school members of the state

association by discovering and promulgating opportunities for cooperation through the loan of books, the promotion of library exchanges, and the publications and dissemination of bibliographical works and studies, State, regional, and local association sometimes have publicity committees, publish bulletins, and in other ways influence the attitude of the public towards libraries, including those of the colleges.

**Accrediting Associations:** The importance of and the influence exerted by the various accrediting associations on the development of college libraries. The work of the North Central Association and the Southern Association of Colleges and Secondary Schools has been particularly beneficial to college librarians. The basis of accreditation as previously indicated is no longer limited to quantitative measurements but is to be found in the adequacy of the book and periodical collection for the academic programme of the particular institution and in the use of these materials by students and faculty. College librarians have played an increasingly active part in the development of the criteria of measurement for the associations. In 1935, Dr. Douglas Waples and his colleagues at the University of Chicago Graduate Library School developed more exact measures for the evaluation of the part the library plays in the achievement of educational objectives. In June, 1942, the North Central Association again appointed committees, on which college librarians were prominently represented, for revising forms and checklists. In 1940 the Southern Association invited college and university librarians to assist in re-defining its standards for college, teacher college, and junior college libraries; and in 1942 the Southern Association sponsored a work conference on problems of higher education in which the library was a major topic of discussion and in which libraries were invited to participate. From this brief review, one is perhaps justified in concluding that at no time has the accreditation movement established closer relations with college librarians or shown greater effectiveness in evaluation than it is manifesting right now. More and more, it is plain, accrediting associations are taking college librarians into their confidence with reference to the actual evaluation of library service. The importance of this relationship lies in the increased opportunity it gives librarians to make their services more truly effective in the educational programme.

**Learned Societies, Councils, and Educational Associations:** College librarians, taking their cue from their university colleagues, are increasingly recognizing the importance of the relationship of the library to learned societies, councils, and educational associations. The councils and associations, on the other hand, are taking a more active interest in recent years than ever before in problems directly and indirectly relate

to libraries. The four major councils are the National Research Council, the Social Science Research Council, the American Council of Learned Societies, and the American Council of Education. Their constituent members include among other associations: the Association of American Colleges, the American Association of Teachers Colleges, and the American Association of Junior Colleges.

The constituent associations maintain approved lists of colleges and establish criteria for accrediting which take into account the adequacy of the library. The four major councils have three major purposes: (1) to be of service to the government; (2) to promote research; and (3) to serve as a coordinating function between the constituent agencies. Unquestionably, the exercise of the last two functions has some bearing on the problems of college libraries. An illustration of this fact is to be seen in the activity of the Social Science Research Council in the promotion of a nationwide movement to collect and preserve source materials in each state. This activity has been coordinated with the work of various committees of the American Library Association and has resulted, among other things, in the publication of study of the methods and equipment for reproducing research materials by photographic processes.

The importance of educational associations to college libraries lies in the fact that these associations would appear to have comprehended more fully the strategic role of the library in education than many of the administrators and faculty members of individual colleges have. Through the meetings, projects, standards, and publications of these associations, college librarians are finding an increasing opportunity to interpret the educational function of their libraries to college administrators and to faculties.

The Association of American Colleges has frequently stressed the fact that the college library should be coordinated more effectively with the educational and recreational programmes of the college. That point of view was taken in its Library Project of 1937. The purpose of this project was to study the library from the standpoint of the educational effectiveness. The study was undertaken by Dr. Harvie Branscomb and culminated in the publication of *Teaching with books*, which as the title suggests, has as much to do with the improvement of teaching as with library procedures for coordinating the work of the library with instruction.

In 1937 Dr. William Warner Bishop, writing in the bulletin of the Association of American Colleges, pointed out the same general truth, namely, that "success in college teaching in the next few decades will more and more depend upon success in making the college library a true teaching

instrument.” In the task of making the library a more vital factor in teaching and in broadening the responsibility for bringing this about, it is apparent that college librarians will bring this about, it is apparent that college librarians will benefit tremendously by close relationships with learned societies and educational associations.

Hence it behooves college librarians to become acquainted with the purposes of these societies and associations, study their programmes and reports, and establish a friendly basis for cooperative action.

**Foundation:** The contribution of the endowed foundations to the growth and effectiveness of college library services has been mentioned at several points in this book. It is apparent that these foundations—particularly Carnegie and Rockefeller, and the General Education Board—have played no small part in the development of the college library. The purposes of these foundations in supporting college libraries are similar to those reported above. Summarizing the Carnegie Corporation gifts of over four million dollars for academic libraries. Mr. Robert Lester, secretary of the Corporation, states :

*...It is believed that as the years go by, the usefulness of books will become more and more impressed on the consciousness of the academic community, and that the wideawake professors, librarians, and presidents— and there are many of this kind who drive students to books—will so adapt college teaching that students will be eager to draw upon what President Wilkins has termed, “the transforming riches of the library.”*

Foundation money for libraries has gone into buildings and equipment, library, endowments, librarianship endowment, the purchases of books, library surveys, bibliographical research, bibliographical publications, and cooperative projects. In as much as these foundations, more than any other outside agencies, have contributed directly to the support of library service and to the improvement of book collections and facilities, it is of the utmost importance that college librarians be familiar with their policies of philanthropy.

### **Publicity : The Media of Interpretation**

Up to this point an attempt has been made to show the importance of close and cordial relationship between the library and certain groups and organizations which use its services or contribute to its growth and development.

The remainder of this chapter will be devoted to a description of the media which are commonly used to interpret the services of the library

to these groups. These media were listed at the beginning of the chapter but may be mentioned here again for the sake of clarity and emphasis:

- Annual reports
- Handbooks
- College catalogue
- The newspaper
- Bulletin boards and displays
- Book bulletins and booklists
- Exhibits and book displays
- Radio.

These avenues, or media, though which the library may be interpreted vary somewhat in accordance with the size of the college. The large college may use many more; the small college may select certain media and place its emphasis upon these.

As the library grows in size and resources, an increasing proportion of its most substantial publicity emanates directly from its own publication—in booklist, bulletins, annual reports, and brochures for special occasions. Broadly speaking, one generally finds that libraries notable for the variety and excellence of their publications are also notable for their administration and service.

Regardless of whether this is true or not, however, the librarian as expositor to the good things to be had from the printed page has a definite responsibility to aim at excellence in his own publications. Everything the library issues, from the simplest booklist to the monthly book bulletin, should stand as an example of good work. The preliminary knowledge of the essential required in careful editing and printing cannot be treated here, but the student will find an excellent summary and outline of these matters in Mr. F. K. Walter's *The library's own printing*.

### **Annual Reports**

Annual reports such as those most commonly issued—emphasizing the number of new accessions, volumes in the library, and circulation use—are not a positive force in the interpretative programme of the college library. Their effectiveness as a medium of publicity is further restricted because many librarians are preparing reports for too limited a circle of readers. “No longer can the report be regarded as for the eye of the president alone. It is a document that should be read by faculty and governing bodies and by every member of the staff.” Studies dealing with annual reports such as those by Professor Fay in 1934 and Professor

Russell in 1936 have been helpful in acquainting librarians not only with present practices, but more particularly with deficiencies in reporting and suggestions for improvement.

Professor Russell's questionnaire on college library reports was direct to the librarians of 500 colleges of the liberal arts types.

The most significant revelations of his findings were; that fully one-half of the librarians in American colleges either never make a report of any kind or are uninterested in reporting procedures; that there is a tendency for the stronger and better colleges to be more attentive than the weaker colleges to the matter of library reporting; that annual reports are usually not intended for any readers except those directly connected with the college in some official capacity; and that about half the colleges give no publicity whatever to the library report.

***Purpose of the Report:*** There can be no reasonable quarrel with the usefulness of the annual report of the librarian to the college and to the administration. The single necessity of an annual accounting for funds expended in relation to services rendered would be sufficient if no other considerations were involved. To this purpose, however, must be added others of less obvious but genuinely practical importance:

- (1) the report enables the librarian and the library staff to comprehend the course of events by study of all departmental reports and thereby to discover means for the improvement of service;
- (2) it serves as a practical device for keeping members of the board of trustees and faculty posted on library purposes and achievements;
- (3) it may serve to interest alumni and friends of the library in making donations to meet special library needs;
- (4) it is a valuable document for investigation and research in graduate library schools;
- (5) it provides a history of the college library and a record of its contribution to instruction; and
- (6) it may be considered, in the opinion of Professor Fay, a valuable primary source material for historical and social science classes, when and if the reports of college librarians "progress towards greater unity in form, arrangement, content, and availability."

Ideally speaking, the preparation of the annual report should be an all-year task. A file of clippings and notes will certainly prove useful when it comes to the actual writing of the report, but few librarians have the patience or time to keep such a record. If the library issues a mimeographed booklist of accessions, the notes prepared for the monthly cover sheet will

serve as a reminder of outstanding events, salient figures, and important gifts. The successful report is interesting and graphic.

***Contents of the Report:*** In analysing the contents of reports submitted in connection with his study, Professor Russell selected twenty-five reports which he considered superior to all the remainder, It would seem probable, therefore, that an analysis of the items treated in these reports would suggests the contents of a satisfactory report.

The use of a topical outline, is a help and time-saved in assembling and organizing the material for the annual report. The final form of the report, of course, will vary according to the points which the librarian wishes to emphasize. Some librarians put a great deal of care and energy into making the report as complete as possible. Others write a brief summary of the chief events and incorporate summary digests of the staff reports. Still others prefer to concentrate on one particular phase of library activity each year and to build the whole report about this topic. Such a plan has been followed very effectively in recent years by the librarian of Wellesely College. Good writing, careful organization, and individuality are equally essential to all of them however.

***Form of the Report:*** In presenting the information contained in the report a conscious effort should be made to avoid technical expressions and to express the pertinent ideas so that they will be readily grasped by one unfamiliar with library procedures. Graphs and tables are frequently used effectively. A typewritten copy is the final form in which most college library reports appear, but it is obviously impossible to reproduce sufficient copies economically in this form if the report is to go to a large number of people. Professor Russell noted in his study that a growing "number of the colleges either mimeograph or print the library report and are thus able to provide enough copies to supply many interested readers."

If the annual report is to qualify as a valuable medium of publicity, it should be sent to the president of the college and to other administrative officer, the members of the board of trustees, the faculty library committee the faculty, the library staff, and a select group of alumni, friends, and students. In addition, an effort should be made to give it wider public notice through a brief summary in the newspapers and alumni magazine. Libraries which issue book bulletins frequently publish the highlights of the librarian's annual report in one issue each year, In some colleges a summary of the librarian's report is published in the president's annual report. In colleges where this is done, there would still be need for a complete mimeographed or printed report for circulation to the faculty, to library schools, and to friends of the library.

### **Handbooks**

Each year more and more college libraries are offering their students and faculty some sort of guide to library resources and services. The guides now in print are notable for their variety in scope and their ingenuity in form and presentation. No two publications have quite the same format, content, or tone, since each one naturally reflects the attitudes and needs of a particular institution.

***Library Handbook for Students:*** A library handbook for students may have permanent values. The information it contains may be used by students throughout their undergraduate years as well as after college. "To learn to use the William and Mary College Library," writes the author of the guide of this library, "is (with adaptations) to learn how to use almost any non-technical American library and to provide oneself with one of the most important tools for remaining an educated man or woman". Permanency, therefore, is an advance which handbooks have over certain other forms of printed library publicity.

The library handbooks for students is also important for its instructional value and its timeliness. A student writing a paper on "Literary culture in colonial Virginia" will need to use the general periodical indexes as well as books. In high school or during Freshman week he has probably heard about the *Readers's guide*; but at the time he had no occasion to use it and has since forgotten that it exists. A good handbook will explain the general periodical indexes and associate their use with writing themes on current topics. Later, a suggestion from the teacher or the librarian may send the student back to his handbook at the "psychological time". This same quality of timeliness applies to all of the usual types of information found in the handbook—from the discussion of reference books to the schedule of library hours.

The library handbook has direct publicity value. In many, if not in most colleges, the handbook is about the only printed matter which the library can afford to publish. If it is well designed and printed, if it is interesting and informative, and if it is distributed at a time when its pertinence to college studies is readily apparent to the student, the handbook not only contributes to the prestige of the library but it also provides a very real link to instruction.

Library handbooks for students differ according to their approach (the purpose for which they were written) and the individual differences in college library organization. Yet it is possible from an examination of a large number of such handbooks to reconstruct a "type" or at least to point out features which are common to all. A typical handbook is printed and

bound in a stiff paper cover. The word "handbook" is used in the title. The average handbook costs 2½ cents a copy, measures 4¾ by 7¾ inches, and fills 22 pages. Other favourite sizes are 4 × 6 inches and 6 × 9 inches. The contents usually includes these topics:

<i>Purpose of the handbook</i>	<i>Reference books</i>
Hours	Reference room—arrangement
Staff	of books, personal services
General information about the book collection and the building of periodicals, current and	Periodical indexes
How to borrow books—steps traced from filling out a call slip to returning the book	Periodical room—arrangement
Reserve books	back files
Card catalogue	Browsing room
Classification.	Library rules and regulations
	Floor plans
	Index

The contents of the larger and more comprehensive handbooks, such as Wesleyan's *Library Handbook*, may give additional information under such headings as "The use of books—their parts and make-up," "Personal book buying," "Facilities for graduate study," "Access to stacks," "Government documents," "How to compile a bibliography," "Local libraries," "Books and reading," and "History of the library."

Handbooks are frequently distributed from the various loan desks in the library. Obviously, then there must be something about the cover, the title, or the printing and design on the cover to catch the student's eye. New York University combines a clever cartoon with a good title—*The guide*; Antioch offers the house and lot—*This is your library*; Vassar appeals by the artistic quality of an original print reproduced on the cover; the Woman's College of the University of North Carolina depends on a combination of fine printing, simple design, and a catch title—*Help yourself*

A handbook is intended primarily as an instructional leaflet. No amount of "window dressing" will make a good handbook if the text is badly arranged or poorly written. The first thing, therefore, is to maintain the interests kindled by an exciting cover and to present the material in such a way that the student will get the maximum benefit from reading it. It is a marked characteristic of the best library handbooks that they introduce the student to the main services of the library by function or

department. To illustrate with one specific example: under the heading, "How to find books easily", the Williams College *Library handbook* introduces the card catalogue as the logical starting point in investigation, interprets its use by means of sample cards and brief notes, tells what a call slip is and how it should be filled out, directs the student to the stack and the particular section indicated by the call number tells how the book may be charged when found, and repeats briefly the rules and period of loan.

The work "function" is used to describe this method, not simply because it groups material on processes which logically follow one another, but also because it suggests a method of investigation which is an important part of library instruction. The same approach should be used throughout the handbook. An effort should be made to link specific library aids with the student's class problems. The description of periodical indexes offers an opportunity to associate these tools with the preparation of source themes. The index may also serve as a device for making the association of library aids with class problems more vivid and understandable.

The style of the handbook should be simple, friendly, and clear. Illustrations, charts, and diagrams of all sorts are helpful in explaining library aids and guides. A large number of the smaller college libraries, and a few of the larger, mimeograph their handbooks. A printed handbook is superior to any reproduced by the newer printing substitutes, and it need cost very little more if careful attention is paid to the method of printing and revision. From the angle of economy, such items as library hours, library staff, and rules may be printed on the inside of the cover, front and back, because these are the items most frequently revised. A new cover for a new edition is desirable in any even and this suggestion will free the text of numerous corrections.

***Library Handbook for Faculty:*** The preparation of a college library, handbook is made difficult by the necessity for keeping in mind a variety of readers—the tyro and the sure-footed, the indifferent students and the serious student, the bewildered freshman and the experienced faculty member. Most libraries attempt to strike a happy medium, and to present the essential information for all types of readers in single handbook. A few libraries have given considerable thought to this problem and attempt to meet the needs of different readers by separate handbooks or by a special arrangement of material.

Pennsylvania State College and the Woman's College of the University of North Carolina issue two handbooks, one for undergraduates and one for graduate students and faculty members. Some duplication of the material in the student library handbook is inevitable but there are distinct

advantages to having two handbooks. A hand-book for the faculty serves two purposes. It is an administrative device for keeping the faculty informed of library methods, staff personnel, hours of service, and like details. As such, it serves a useful reference purpose.

In the second place, it promotes library faculty cooperation and library effectiveness in teaching. This second and more important purposes is not accomplished unless the handbook contains information on such matters as these; a clear statement of book policy defining faculty responsibility as participants in book selection; the necessity for some organization within the teaching department to insure systematic checking and ordering of library materials; the special collections and special materials (films, records, etc.) available in the library for supplementing modern methods of teaching; the policy of the library in regard to helping students with reference services; the responsibility of the faculty in making assignments to library material; and the facilities of the library for the promotion of research.

Frequent revision is perhaps not as essential as in a student handbook, but a thorough indexing greatly facilitates its use.

### **College Catalogue**

The college catalogue is sent to all prospective students applying for admission to a particular college and to other institutions of higher learning. This would seem to stamp it as an important medium for interpreting library services, but actually it has not been used for this purpose by librarians except to record the more obvious facts of size and to inform students about hours, regulations, and directions for finding materials in particular departments or rooms in the library.

Specific deficiencies noted by Miss Florence King in her extensive study of the library in the college catalogue included the following:

1. The library is given a relatively small space in the college catalogue in proportion to the importance of its instructional function.
2. The catalogue is indexed inadequately for the purpose of making available all information about the library and library personnel.
3. The importance of the library is obscured in the catalogue by the unfortunate position of descriptive information which tends to emphasize its architectural rather than its instructional character.
4. In respect to matters of administration, organization, and service to readers, the library does not receive the attention it deserves in order to present sufficient, significant, and effective information for either the student or the professional group.

A consideration of the purposes of the college catalogue will help to show its value as a medium of interpretation for the college library. In the first place, it is intended to acquaint prospective students and their parents with an accurate statement of what the college offers in the way of a sound education.

Therefore, it should include a statement of the place of the library in the college programme and of its book and periodical resources for serving instruction. Direct teaching services such as library talks and group tours during Freshman week, instruction in the use of the library, and printed handbooks and guides should be mentioned. The assistance given to students at the reference and readers' advisory desks should be stressed. Special materials of value to teaching—such as slides, pictures, maps, and pamphlets—should also be mentioned. Since the catalogue is intended primarily for student reading, the description of library resources and services should be direct and simple in language.

As a reference tool on the campus, the catalogue is in constant use by teacher and students. It should contain a brief summary of library rules and regulations and specify the hours of library service during the regular session, summer session, and vacation periods. All important information pertaining to the library should be fully indexed, particularly when this information appears in two or three different places in the catalogue. Library facilities close by and available to faculty and students should be mentioned in terms of their special usefulness to these groups. The library staff should be listed as a group and those with academic ranking should also be listed in their proper place with the teaching faculty.

Another group to whom the catalogue represents the college is the prospective donor. Full descriptive and qualitative information should be given about special collections. As a general rule little is said about these special collections beyond a mention of their names and those of the donors who are responsible for them. A brief description of their contents not only implies a proper recognition of the importance of special collections but increases their usefulness to research workers. The knowledge that a library has such collections, takes proper care of them and relates their use to instruction may prove an incentive to other benefactors to make donations to the library.

The catalogue is an important source of college history. Without detracting from the main purpose of emphasizing the relation of the library to instruction, it should be possible to set forth briefly the important highlights of college library history in the catalogue and to add, from year to year, significant which will be of special interest to the future historian.

**The Newspaper**

Newspaper publicity is valuable in a college library for three principal reasons; it enables the library;

- (1) to explain its resources and services to students and to faculty;
- (2) to interpret its broader functions to the public at large; and
- (3) it enhances the opportunity of the library to win public support for additional endowment from private sources or for increased appropriations from the state legislature.

The first objective is realized mainly through articles in the student newspaper and the last two through articles in the local, state, and national papers.

**Student Newspaper:** The student newspaper provides an outlet for library interpretation through news articles, feature stories, book columns and student editorials. The aim is to make the students aware of the value of the library in their education and to stimulate them to use its resources. News articles are best handled through interviews with students reporters. If the librarian makes arrangements for a regular interviewing period at the beginning of the year, it will improve the chances of having a continuous appearance of library news in the student newspaper. The following types of stories have appeared frequently as news stories in student papers; remodelling and other physical changes in the library building, staff activities (personnel changes, staff member appearing on radio programme, etc.), rare book exhibits book displays in special fields, new rules and regulations, student library prize awards recent accession to the magazines, important magazine articles of the month, recent books, browsing room talks and music concerts, special collections, gifts, and special facilities for student study. Obviously the list is almost limitless and could be extended in each college, depending on the current happenings and the resources of the library.

Feature stories which interpret library services or special resources are even more important than news stories. In every college library there are pamphlet collections, bibliographical tools, government documents, and special services which are not used so much as they should be because students do not know about them or do not understand their usefulness.

Articles about these materials or service are more likely to be accepted as feature stories for the student newspaper than for the city newspapers, particularly if a member of the library staff prepares the material and "puts into the story an interest that the editor might have neither time nor inclination to find." Feature stories have appeared in student

newspapers on the resources and services of the library as a whole, on special collections in the library, on the kind of questions received and answered to the reference desk, on the card catalogue and special catalogue and indexes, and on student reading interests as shown through the circulation records.

The same kind of interpretation is made possible through a regular library column in the student newspaper, although the emphasis in the column is usually on new books or books about a particular subject. Such columns have appeared under the title of *Look'n 'em over*, *From the library*, *Bits about books*, *The bookshelf*, and *A Word of the wise*. Student editorials about the library have pointed to the need for additional space, to student honor in borrowing and in handling library books, and to the educational opportunities to be found in using the library.

**Local Newspapers:** Events in the college library which possess news possibilities to local and state papers are rather limited unless the library receives numerous gifts and possesses collections of unique or special regional interest. If the college is large enough to have a separate news bureau division, the library news should be prepared in rough form for the person in charge of this office. If this person is made to realize the aims and objectives of the library, and if he is given an insight into the nature and importance of library materials and services, he will probably do his best to see that library news is presented even though it may not have the "spot news" value of the "Betty Coed" Type of story.

If the publicity releases originate with the library, such as in colleges where there is no news bureau or person designated to send out college news, certain techniques of modern news-writing must be complied with before the articles are to be considered for publication. These principles are summarized by Miss Marie D. Loizeaux in her *Publicity Primer* :

1. Place the name of the library in the upper left hand corner of page one, together with the name of the person sending the story, position, release date.
2. Copy should start one third or halfway down the first page; do not caption or title a story.
3. Number all pages after the first.
4. There should be no hyphenation at the end of lines and no dividing of paragraphs from one page to another.
5. The first paragraph must answer the questions, who? when? where? why? and what?
6. The copy should be written with accuracy, brevity, and clearness.

7. The word “more” should be written on the bottom of the page to indicate that copy is unfinished and is to be continued on the next page.
8. The end of the story should be indicated by an “end mark”.

Apart from the techniques involved, the story itself is the chief concern of the news editor. Miss Loizeaux stresses the importance of “making the story interesting” and of “writing with the non-user of the library in mind.” College library stories—at least those which are significant from the point of view of library interpretation—are rarely of the light, human-interest type. Their chances of being accepted for printing are determined in large part by their significance and the appeal of the lead, or opening sentence in the first paragraph.

With the increasing emphasis placed on news photographs, it is probable that the library story would receive more favourable attention on the part of the newspaper editors if it were accompanied by photographs. The point is usually made that pictures should feature people rather than objects and that close-ups of a reader using library tools is better than a large group picture. In submitting pictures to newspapers, these rules should be observed:

1. Pictures should be printed with a glossy finish.
2. A good size is 5 × 7 inches or 4 × 5 inches.
3. Type a brief caption for the picture and past in on the lower back edge in such a way that it will hang down below the edge, the caption facing the front.
4. Wrap carefully and back with a stiff cardboard in mailing.

### **Bulletin Boards and Posters**

Bulletin boards and posters offer many possibilities for interpreting library services. They may be used to stimulate interest in selected books on a particular subject; to call attention to special resources and services; to present short, graphic summaries of important national and local news; and to announce programmes and lectures. Posters not only guide and instruct but have cultural values also. A striking poster may satisfy a student’s aesthetic instinct as completely as a beautiful piece of sculpture or a finely printed book.

In planning bulletin boards, it has been found useful to keep an informal file of ideas for bulletin board use—titles that appeal, slogans, notes on special days, authors, and events, pictures, book jackets, and pictorial or outline maps. An effort is made to tie national, educational, literary, scientific, and seasonal events with the use of library materials,

Local news clippings are most important—radio programmes, newspapers and magazine clipping about persons and things of local interest, etc. The lesser-known materials which form the background of reference service are often emphasized, such as pamphlets, government documents, bibliographies, and special collections. Attention is called to services as well as to materials. All too often students and faculty are not aware of the help they can get through the reference and readers' advisory services of the library.

Bulletin board displays will not command attention unless some care is given to their arrangement and design. An experienced librarian publicist emphasizes these details in bulletin board arrangement :

1. Neatness, simplicity and visibility are essential.
2. Few displays should be shown simultaneously in one room.
3. Long lists of explanations on the board will not be read.
4. When the subject is changed, the form of the display should be changed, or else the colour scheme, or both.
5. Pictures, jackets, captions—all should emphasize on idea.
6. Captions and slogans should be brief and arresting, unhackneyed, confined to a single idea, yet expressed with clearness and force.
7. A few book jackets, neatly trimmed, and well displayed, are more effective than a great many shown at one time.
8. Illustration should excite interest and be to the point, be large enough to be visible at a distance, simple in design, and with no unnecessary detail.
9. Letters and lettering should be neat, simple, carefully spaced, and well-proportioned to the size of board or poster.
10. Background materials may contribute colour, but should be less intense than the rest of the display; can be varied, but must be planned to harmonize with the materials exhibited and the room in which used.
11. Arrangement of material on the bulletin board may be
  - (a) by symmetric, with formal balance—i.e. with a reversed pattern to the right and left of a vertical centre line.
  - (b) informal, with occult balance, using a "beam scale" arrangement in which symmetry is gained through balance by size, weight, and/or colour.
  - (c) dynamically balanced, so that material is arranged to bring about a forceful line movement of the eye, properly stopped at points of interest at beginning or end.

The poster collection may be supplemented by clippings from magazines and by purchase or gift from educational and commercial firms which make and distribute posters. *Leads No. 7*, from the American Library Association, gives specific sources for posters and display materials. The sources of maps listed therein may be supplemented by the excellent bibliography of pictorial maps compiled by Miss Betty Brown. Educational and library posters may be obtained from the National Association of Book Publishers, Metropolitan Life Insurance, Co., National Child Welfare Association, National Safety Council, the H. W. Wilson Co., and other associations and publishers. Most of the home furnishing and picture magazines contain excellent poster material in their cover, text, and advertising pages. Textbooks from the fields of visual education contain sources of posters and charts. Certain colleges publish lists of posters of particular interest for display in connection with subject materials. Display material sources are listed in articles and pamphlets and in practically every issue of the library journals.

#### **Book Bulletins and Booklists**

College library publications of this type may be divided into four groups according to their format, contents, and purpose:

- (1) book bulletins,
- (2) mimeographed list of new accession,
- (3) book-lists and
- (4) Friends of the library bulletins.

**Book Bulletins:** Printed periodical book bulletins in college libraries are rare. The reason, of course, is obvious. A successful bulletin is expensive and takes time to edit. A monthly of any size and distinction will scarcely cost less than five hundred dollars a year, and two of the best quarterlies now published cost, on an average, seventy-five dollars an issue for publication costs alone. In terms of hardheaded investments, it is unlikely that the library will receive in the early years of bulletin publication an equivalent in cash or book gifts. Library bulletins are primarily a means for increasing the usefulness of a library. Only indirectly may they help to build up goodwill and support. It is not uncommon, for example, for the editor of a book bulletin to mention special books which the library cannot afford to purchase from its regular budget. And not infrequently one reads in a later issue the acknowledgment of a gift of some of these items from a reader and friend of the library. The library bulletin increases the usefulness of the library by calling attention to new books received by the library and by interpreting library services to students and faculty and alumni. The library way of doing things and its resources are frequently

unknown and a little mysterious to many of its readers. The book bulletin offers an opportunity to clear up these mysteries; to explain the work of the catalogue the order, and the circulation departments; to label and interpret such intangible services as personal guidance in reading and using the library; to describe exhibits and special collections and to call attention to materials and services which are of little use because nobody knows about them.

Although it is not widely removed from the current pattern of printed bulletins, Dartmouth's *Library bulletin* has assets which make it a worthy model for study. It came out first in 1931 and has been the inspiration of many other bulletins since then. Its appearance is pleasing and it never fails to make the most commonplace incidents in library work interesting and amusing. Distinction and beauty are contributed through the choice of a rich quality of paper and fine typography. In the main, however, its excellence stems directly from the variety, interest, and graceful literary style of its contents. This is accomplished in two ways. First, in approaching every aspect of the work of the library—from rare books down to the most mechanical operation in library routine—the editor of the bulletin thinks primarily in terms of his readers. Second, the style of writing is direct,, pleasant, and witty. There is nothing official or impersonal about it, some of the types of material qualifying for admission to its pages include:

1. Special collections;
  - Americana
  - Italian dialect collection
  - Nineteenth- and twentieth-century Spanish plays
  - Art library
  - Medical library
  - Map collection
  - Music resources
  - Pamphlet collection.
2. Explanation of library policies and rules;
  - Open-stack policy
  - Reclassification problems
  - Faculty return of books
  - Book selection
  - Files.
3. Publicity and interpretation;
  - Notice of exhibits

- Excerpts from the librarians's annual reports
  - Lists of desiderata
  - Acknowledgment of gifts
  - Notable purchases of indicating liens of interest
  - Friends of the library.
4. The work of department;
    - Interesting summaries of the functions and procedures in
    - Catalogue department
    - Order department
    - Periodical,
    - Reserves
    - Bindery
    - Treasure room
    - Tower room (recreational reading).
  5. Special services;
    - Inter-library loan
    - Photostats and film
    - Research services.
  6. Booklists;
    - Recent accessions—selected and briefly annotated
    - Occasional articles about books on a special subject
    - New periodicals.
  7. Archival material;
    - Reprints of interesting and often humorous letters and documents from the college archives.
  8. Fillers;
    - Amusing incidents relating to service
    - Bookish notes.

With less skilful editing, this material might be very dull. Fortunately, the editor of the *Library bulletin* has a facile pen and a rare gift for communicating has sense of high adventure in librarianships and books. His handling of Dartmouth is archival lore and culture for brief fillers gives a special flavour to the bulletin. One's curiosity is piqued by titles such as these—"Books behind bars," "\$3,000 unwanted" (fines), "Top soil" (this for a discussion of the grimy edges of catalogue cards), "To him that hath" (polite reminder to the faculty to get books back within a reasonable

time), and "Diversion in Baker street". Articles are signed with the writer's initials, and faculty contributions are frequently included.

One chief difference between Dartmouth's *Library bulletin* and the printed and mimeographed bulletins of other college libraries is the emphasis which the latter place on book notes. Wesleyan's *about books*, issued quarterly and paid for by the Friends of the library, carries regularly two or three pages of book notes about a "few more or less significant books" and occasional articles about books on timely topics or reprints of important booklists which have appeared elsewhere. Pennsylvania State College's *Headlight* devotes ten of its twelve pages, as a general rule, to short notices of new books, and like *About books*, carries short bibliographies on special subjects. The book notes in the *Headlight* are written by the faculty and members of the library staff and are signed in full or with initials, Colby Junior College's superbly captioned and neatly printed pocket digest, the *Book pedlar*, carries several pages of book comment and library news written to meet the needs and tastes of younger students. *Library jottings* of St. Vincent College (Pa.) is an example of what the very small college can do in a mimeographed bulletin. In concise form it records the library news, changes in library regulations, new books, and general book news.

Special emphasis is placed on the format of the book bulletin to the end that it will not only appear attractive to the reader but also reflect credit on the library whose name it bears. Three college library book bulletins add variety by using a different-colour paper stock for the covers of successive issues. Their type is large enough for comfortable reading and in proportion to the size of the page. A six by nine inch page appears to be a favourite size, and six of the book bulletins run to about twelve pages a copy. Local printing costs, the size of the bulletin, the use of illustrations, and the quality of the paper stock influence publishing expenses. Therefore it is impossible to estimate accurately the cost of a "typical" bulletin.

Book bulletins are distributed on the campus to administrative officers, faculty; and selected group of students by local mail or from the main library loan desks and the departmental libraries. By outside mail they are sent to trustees, alumni, friends of the library, editors of library periodicals, library school, and other libraries.

*Mimeographed Lists of Recent Accessions*, Mimeographed book lists for out number all other forms of library publications for general distribution. Some of the best of these have qualities in common with the book bulletins just described, although their main purpose is to record the new acquisitions. The actual publication cost is small. One library estimates the cost of its

monthly booklist (300 copies per issue) at approximately \$2.45 for stencils and paper, but this does not include labor costs.

In planning a mimeographed booklist to keep the faculty informed of new additions the librarian can take the entire stock of current additions for material or he can make a selection. In the large college library it may not be either desirable or justifiable to issue a complete serial list of current accessions, but since the demand for this information comes from the faculty who want to know what books are being added in their own and related fields, it would seem desirable to aim at completeness whenever possible. If selection is essential because of bulk of current accessions, then it is better to eliminate certain classes of material which are less likely to be of use to the larger group than to attempt a haphazard selection of titles from the accessions of each month. One library omits foreign language, fiction, juvenile and professional library books from its listing.

The format and arrangement of the mimeographed lists of accessions are as varied as their titles. Most libraries follow the classification scheme of their libraries, giving suitable captions for each class and arranging titles alphabetically under class. Another plan is to classify the books by subject and to arrange the subjects alphabetically throughout the list. In most cases the information for each title consists of the call number, author, title and date of publication. For the mimeographed list of accession, as for the book bulletin, a distinctive title is of considerable importance. Some titles used for the lists include: *Stray library leaves*, *On the shelf*, *Library book list*, *Library leaves*, *Scout*, *New books*, *Recent accession*, and *Monthly record*. Variety and appearance are enhanced by changing the colour of the cover sheet in consecutive issues and by using a printed masthead for the title on the cover sheet.

While the demand for the mimeographed list of current accessions comes mainly from the faculty, the thing that keeps the publication alive is the librarian's ambition to have a regular channel of communication with the faculty. Few librarians overlook the opportunity to use the introductory pages of each number for presenting interesting and informative notes about staff activities, exhibits, gifts, and new services. Items which qualify for admission to the introductory page of the mimeographed list of one library include the following:

- Statement of policy concerning the loan of bound periodicals, stack use, etc.
- New periodicals and continuations
- Annotated list of important additions to the reference collection
- Gifts and acknowledgments of gifts

- Faculty publications of the month
- Descriptions of important exhibits
- Circulation statistics interpreted
- Notes on little-known sources of information in the college library
- Notes on instruction in the use of the library.

The issuance of mimeographed weekly, monthly, or quarterly list of accessions is the most interesting, and probably the least hazardous, adventure in publishing on which a college library can embark. The factors which insure success are regularity and continuity in issuance, an arrangement of subjects and titles which will facilitate its use by the faculty, and a page or two of introductory comment with enough of human inspiration, information, and humor to make the list not only a useful tool but interesting and readable. Copies are usually sent to all members of the faculty and administration and are sometimes sent to outside friends of the library. Copies are also posted in the dormitories and in departmental libraries and are available for consultation in the main library by students. Mailing lists are revised frequently to make sure that the list is being sent only to those who really want it and make use of it.

**Booklists:** In addition to book bulletins and mimeographed lists of accessions, some libraries print or mimeograph booklists. Most libraries are either too small, or insufficiently wedded to print, to make the former a practicable proposition. Fewer still are the college libraries that have reported their experience with booklists. For purposes of illustration one has to turn to the university library field.

For a number of years now the University of Washington library has been experimenting with booklists in an effort to stimulate student reading beyond their class assignments. Subjects are chosen with the interests of students uppermost in mind; *Poetry Learning to listen*, and *Your private library*. Current discussion prompted.

*Consumer help thyself* and *Why democracy?* Purely literary interest suggested; *Some foreign novels in translation* and *Historical novels*. Many were prepared in response to faculty and student requests; *Elizabethan scene*, *Americas to the South*, *Map of America*, and *Canada*. All books are ready by the compiler of the list and the book notes are original. A distinctive feature of the lists are the illustrated covers. They are designed by staff members or students artists, For the most part they are original, although a few are adapted from pictures or are copies. The lists are printed on a sheet four by eight inches and the illustration appears on the front cover. This size is convenient for display and for mailing. Approximately eight to ten lists have been issued annually. The expense

of publication is kept low by reproducing the illustrations and text by the lithograph process.

Booklists can be mimeographed or typewritten if only a few copies are needed for posing on library bulletins boards. Titles should be listed with sufficient bibliographical detail to enable the reader to secure the book quickly from the stacks or shelves and should be accompanied by brief, readable annotations. Copies are distributed through book displays in the library, by professor in classes, at the loan desks, and the through the mail to selected libraries and to individuals who request them.

***Friends of the library bulletins:*** The final group of library publications to be mentioned at this point is the Friends of the library bulletins. There are many of these published on behalf of university libraries, few in the interest of college libraries. Several of the library book bulletins, previously mentioned, are distributed to Friends regardless of whether the Friends organization contributes directly to the sponsorship of the bulletin. The necessity for a separate Friends bulletin will depend largely on the interest and generosity of the Friends.

An excellent example of an attractive and very successful bulletin sponsored by an active Friends group is *Books for the Knox College Library*, a periodical issued from time to time by the Friends of the Knox College Library to give its members news about the needs and acquisitions of the library. In place of a periodical publication, some college libraries issue an occasional brochure commemorating gifts of Friends or calling attention to needs whether or not there is any formal organization of a group or association by that name.

### **Book Displays and Exhibits**

Book displays are generally intended to call attention to books for immediate circulation, to encourage browsing, and to help the reader in his selection of books. Exhibits have a more specific aim. They are intended to tell a logical story. The book, pamphlets, objects, or other materials used in the exhibit are not available for immediate circulation. The exhibit "must be preserved as a *whole* during the period of the exhibition." A single theme must be stressed throughout so that the student comes away with a tangible idea, easily remembered.

Whether the book display consists of one book or a group of books, it should catch the eye and stand out from the surrounding objects in the room. The various parts of the display, such as the poster or book legend, should help to carry out the idea of the display. Colour, compelling slogans and skilful arrangements of the books have a great deal to do with the way in which a display is able to circulate books. The practice of placing

several books displays in various parts of the library where many readers pass or come to study is important. A single book placed on a stand in a prominent place on the loan desk will often circulate immediately if a brief note or caption suggests its timeliness and particular interest. Many college librarians have found it worth while to prepare subject displays for use outside the library in college buildings where institutes or some special programmes are being held.

Independent reading is encouraged by providing a continuous flow of new books attractively and invitingly arranged to catch the student's eye. One library has its *Under the clock* collection of popular titles; another its *Week-end shelf* which is filled with selections from the new acquisitions. These display centres may well become routine in order that students will form the habit of selecting a book for leisure reading.

Some college libraries give their students an opportunity to see all the new books. They put all their new acquisitions on display for a week where students and faculty may look them over and leave reservations for those books they would like to read. This plan has the advantage of letting students see all the new books an opportunity they would not have if the books were sent directly to the faculty members who ordered them.

It is the function of education to lead students to discriminate between the better and the worse, to arrive at a higher standard. Book displays can contribute to this aim by calling attention to older standards works, primary sources and the more important monthlies and quarterlies which students all too frequently neglect for the digest magazine or the pictorial weekly. If the book display is built around a *subject*, readers are less likely to be concerned whether the books are new or old. Little-known but useful books from the Reference room collection should be brought out and displayed. The success of public libraries in luring readers from the novel or play to history and science through movie tie-ups should not be overlooked by the college librarian. Most book displays will naturally be developed in connection with the student's class work, but supplementary suggestions may be secured from reading lists, library book bulletins, and library annual reports.

In a study of exhibit practices in a large number of college libraries, Miss Agnes Reagan found that exhibits were most commonly prepared to serve these purposes :

1. To publicize little-known or rare library materials,
2. To stimulate reading for information and recreation.
3. To promote interest in a specific subject field or group of subject fields.

4. To call attention to a particular anniversary or special occasion.
5. To promote the work of an individual teacher, or to promote interest in a specific course or group of related courses.
6. To encourage donations by honoring benefactors and calling attention to valuable gifts to the library.
7. To encourage hobbies.
8. To further the work of student organizations.
9. To publicize research and any other activities of the faculty.

Librarians gave first place to exhibits about particular countries and localities. Such exhibits aimed to cover the history, culture, geography, social life, and customs of the countries represented and two-thirds of the exhibits dealt with North American countries. Other subjects, listed in descending order of frequency in the Reagan study, included the following : current events, graphic arts, literary and author anniversary exhibits, book arts, college history, special types of materials such as rare books and little-known resources of the library, and collective and individual biography. Most of the following types of exhibits were reported less frequently but were found in more than one college: exhibits on the Negro, religion, drama, Greek and Latin classics, holidays, science vocations, arts and crafts, photography, architecture, education, geography, home economics, Indians, music, and physical education.

In general, Miss Reagan found very little evidence of a systematic effort to make exhibits an integral part of college courses. When exhibits were related to academic subjects, they were restricted to one or two subject fields and were systematically promoted in only two or three libraries. While there is little doubt that most college libraries could improve the educational importance of their exhibits by attempting to relate them to curricular purposes, it should not be overlooked that there are strong practical objections to such a plan.

In the first place there are other opportunities in the library programme where it is perhaps more important to seek faculty cooperation than in the preparation of exhibits. In the second place it is practically impossible to get around to all departments in such a programme. As a result, the relating of exhibits to the course of a few teaching departments is likely to exaggerate the importance of those particular courses which lend themselves to visual display, and correspondingly to diminish, interest in others which may be of equal importance in a student's education. There is also the factor of self-advertisement, seized upon by certain teachers who are always on the alert to any means of making their work stand out. Finally, the primary objective of exhibits should be to stimulate the student

mind to broad social and cultural interests. Education is not confined to courses but extends to every phase of student life. Exhibits should emphasize the obvious fact that there are more ways of becoming educated than by merely taking courses.

Exhibits should stimulate student initiative, breadth of view, and intellectual curiosity. The evidence revealed in Miss Reagan's study shows that for the most part the better college libraries are planning exhibits which are accomplishing these very purposes.

It is not necessary to be an expert in visual techniques to produce exhibits which are educationally and recreationally effective. Certain definite principles, however, must be observed.

1. Every exhibit should have an objective, that is, a main idea which is to be dramatized. This idea should be the centre of interest. Since the story or idea visualized in an exhibit is told, for the most part, on walls or in cases, it is necessary to plan and arrange the exhibit in such a way that the student will know at once where to begin observing, how to progress, and where to end.
2. The design must appeal to the eye. A single object skilfully placed or a balanced arrangement of several objects, is far better than a crowded exhibit. Details are important.
3. The method of presentation should be adapted to the purpose of the exhibit and to the group to be reached. Miss Reagan states that : "Materials vary widely and range from books and pictures on the one hand to puppets and playing cards on the other. Illustrated textural materials, pictures, posters, maps, manuscripts, and periodicals have been exhibited most frequently in college libraries." If the object of the exhibit and the materials used can be related to courses which the student is taking or to events which are currently prominent, the exhibit will make a more vital appeal.
4. In any visual presentation colour plays an important role. Through the use of colour contrasts and background, the important highlights in the exhibit may be put in advantageous position so that it is impossible to avoid them. Illuminations, "props," and exhibit equipment are also important in making the exhibit effective.

For the most part libraries draw upon their won resources and upon loans from members of the faculty and the local community for the materials for exhibits. A number of exhibits are available for loan from art associations and museums, the governments, publishers, and societies, *Leads No. 7* from the American Library Association, gives specific sources for rented and borrowed exhibits. Many additional ideas and materials for exhibits

may be obtained from *Library literature*, college library annual reports, library book bulletins, and professional library journals.

### **Radio**

Little Significance is attached by most college librarians to the possibility of relating the radio to college objectives and library interpretation. Few librarians participate in radio broadcasts although many college faculties put on radio programmes of some sort. Those college librarians who are concerned with the possible uses of radio in library work have two main approaches:

- (1) providing radio programme guides and supplementary reading services, and
- (2) participation in radio broadcasts.

For the library to experiment in either direction requires the part time of a member of the staff who has faith in the value of project, enthusiasm for its advancement and development, and some knowledge of recent scientific studies of the effects of radio on reading.

**Programme Guides and Services:** As a basis for determining procedures in developing broadcast guides and supplementary reading services, a study was made of the listening habits of approximately one hundred students in a particular college.

On the basis of this study and from information obtained from other colleges, it would appear that libraries might usefully render these kinds of radio service to student and faculty listeners:

1. Serious talks, though not as popular as music, news, and drama, have a relatively high ranking for their value to students in college courses and have a considerable reading "pull." Therefore, they need to be more publicized. They appear at more irregular times on the air than certain music programmes in which students show most interest, and they are more apt to be overlooked unless attention is called to them. In its simplest form this entails setting aside prominent bulletin board space in the library for posting advance notices of programmes. Eye-arresting captions on bright-coloured poster paper should call attention to the announcements. It also means selecting programmes for the bulletin board from the various bulletins and announcements of broadcasting companies.
2. On national radio programmes there are symphonic and opera programmes, news reports, talks, and book programmes which lead to a certain amount of follow-up reading. Students reported having followed-up such radio programmes with library reading in current

news journals, popular science journals, specific plays and books mentioned in the broadcast, stories of operas, composers' lives music appreciation books, and librettos. Interest in opera broadcasts may be encouraged by prominently located bulletin board displays of pictures of operatic stars; synopses of operas to be broadcast and librettos should be available for use in listening to the programmes. Books, pamphlets, and librettos may be displayed in a case beneath the radio bulletin board and tied up with the programme announcement above. A great deal of reading matter directly pertinent to the programmes may be obtained free from programme sponsors or the broadcasting companies. Reprints of important lectures and talks are often available free of charge or for a very small cost. These should be displayed, singly or in quantity, along with such books and journal articles as are put on display.

3. The college radio programme will provide similar programmes to encourage study as well as reading, programmes such as music appreciation lectures and music broadcasts, interpretation of events back of the news, travel talks, adaptations from great dramas, poetry readings, and popular knowledge talks. The library has a special responsibility to call attention to these programmes and most departments will readily cooperate in supplying photographs of speakers, programmes announcements, and even copies of scripts. There is opportunity here also for aid to faculty broadcasters and script writers. Several libraries report that they furnish information for members of the faculty and the student body for talks on the college programme series.
4. Several colleges report library tie-ups with student-faculty listening groups, particularly in connection with radio programmes designed to stimulate discussion and debate. A very good example of this sort of cooperation was reported in print by the Syracuse School of Citizenship Library in connection with the *Town Meeting of the Air* Broadcasts.

**Participation in Radio Broadcasting:** Direct participation in the radio broadcast on a scale to amount to anything has been confined largely to state college libraries. The library of Iowa State College, for example, has worked closely with the extension staff of the college in using the radio to encourage reading and to promote the extension to library facilities throughout the state. In 1938 the librarian in charge on extension service reported: "Now the library time on the air has increased so that one full time person is employed for broadcasting under the supervision of the librarian with several assistants spending part time on radio work. The

college library is now on the air twelve times a week, the periods varying from five to thirty minutes. The programmes include book reviews, travel, public affairs, short stories...and a book which is read serially six days a week.”

It is not uncommon for college librarians to be called upon to participate in a faculty programme broadcast regularly over municipally owned stations. Book reviews are most common, although book panels, author talks, and prose and poetry readings have been given Michigan State College reports reviews and readings from alumni publications, Contributions in the faculty broadcasts are made by the librarians of Chico State College, Mills College, and Oklahoma... and M. College. A few college libraries report having weekly sustaining programmes of fifteen-minute and half-hour periods. The staff of the Oregon State College library has used the radio to interpret the services of the various departments of the library. General talks about the library and its services to the college and to the community are sometimes given by other librarians.

The then are some of the possibilities of radio use in college library service and interpretation. Although the summary is incomplete, it is evident that librarians are not unaware of the importance of the radio in their work.



## Library Cooperation and Interlibrary Loan

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Library cooperation and resource sharing is a national effort affecting most libraries. Libraries have cooperated for many years; two examples being inter-library loan, which started in the early 1900s, and shared cataloguing information, which started in the 1880s. In recent years there has been increased pressure for more cooperation, including plans to create national library networks, thereby making the nation's library resources available to any patron in any library.

One example of a cooperative effort is resource sharing. The volume of materials published each year makes it impossible for any one library to acquire more than a small percentage of the total. At least three elements determine how much a library can or should acquire: 1) size of the budget, 2) space available to store the material, and 3) the need to acquire materials to meet the library's purpose. Libraries are able to make more resources accessible to their patrons through resource sharing.

This chapter will cover several concepts and methods used to achieve library cooperation. We will discuss in detail one method of co-operation used in most libraries and which will involve the LMTA-interlibrary loan.

### Library Cooperation

Library cooperation occurs when two or more libraries exchange information and share resources. This extended use of resources and information will result in better service for the patron. One of the tenets of our democracy is open access to information for all citizens; it follows that even the smallest library should have access to information no matter where the information is located. While this ideal of information sharing is not yet fully implemented, libraries at all levels are making efforts to meet the challenge. A California court decision held that local property

taxes are an unfair base for school support, since community wealth then becomes the main factor in quality education. Educational opportunity based primarily on community wealth is antithetical to the idea of equal opportunity of education regardless of wealth. How these decisions might be applied to libraries remains to be seen. But it is certainly true that not all citizens have equal access to information, and that this accessibility is almost entirely dependent upon the financial ability and willingness of taxpayers to support libraries. Library cooperation should be beneficial—or at least not detrimental—to a library's goals. When libraries enter into cooperative ventures, they are aware of the possible result and the resources needed to make the project work. For example, a heavily used library might not want to expand its service area in a cooperative effort if the increased workload or increased collection use would lower the quality of service to all patrons. Cooperative ventures promise the possibility of better service, not necessarily less expense. Just because cooperation is possible does not mean that it should be done in every case. The problems of personnel, funds, and legal authorization are all areas that the librarian must study at length before decisions can be made.

### **Types of Library Cooperation**

Hundreds of cooperative activities and projects are operating currently in the United States. These cooperative efforts range from telephone calls between two libraries to a plan to create a national network using computers and sophisticated telecommunication systems. We cannot discuss every method or type of cooperation. We will discuss some of the more frequently used forms of cooperation that the LMTA will be likely to encounter.

A study of library cooperation lists 24 different kinds of major cooperative activities. Some of the more popular activities are reciprocal borrowing privileges, union catalogues or lists, photocopying services, cooperative reference service, courier or delivery services, cooperative acquisition arrangements, subject or area specialization in collection building, centralized, cataloguing and card production and central storage of materials.

### **Reciprocal Borrowing**

Reciprocal borrowing privileges are one way to share a library's resources. It was mentioned that a library card for one library might give the patron the right to use other libraries. In some cases a patron registered in one public library can charge out materials from any other public library in the state. Colleges and universities frequently allow nonstudents to use materials in the library and often establish borrowing privileges for local special groups, such as school teachers. Academic libraries in a given

geographic area may make arrangements to allow students registered at one institution to borrow materials from other cooperating institutions. The California State University, with 19 widely separated campuses, allows a student registered at one campus to borrow materials from any of the 19 campus libraries, upon presentation of a valid student identification card.

### **Union Catalogues**

Union catalogues and union lists are a widespread method of cooperation. To share materials, libraries must know what is available and where it can be found. To make this information available, libraries can cooperate by developing lists of holdings for individual libraries and union lists containing the holdings of several libraries. We have already discussed three major holdings lists that are national in their coverage: *National Union Catalogue*, *Union List of Serials in the Libraries of the United States and Canada*, and *New Serial Titles*. By using these works a library can locate material in libraries throughout the country. On a smaller scale libraries can compile lists of their periodical holdings and make them available to other libraries. A library entering into this kind of cooperation compiles a list of its periodical holdings and current subscriptions. It then exchanges lists with the other libraries. Every library in the network can then know the holdings of other libraries and arrange for interlibrary loans or tell the patron where to find the material. In some places, regional bibliographic centres have been established and libraries send their acquisitions information to the centre. Any library in the system can communicate directly with the centre to locate material in other libraries. Depending on the sophistication of the network, interlibrary communication may be by mail, telephone, teletypewriter (TWX), or computes.

Another types of “union catalogue” has developed out of cooperative cataloguing through several centralized cataloguing services. OCLC, Research Libraries Information Network (RLIN) and Washington Library Network (WLN) are currently the three major cooperative cataloguing services in the United States. In late 1984 OCLC was one of the largest with a database of nearly 11,000,000 entries, over 160,000,000 location identifiers and over 3,800 libraries using its services. Consequently, any library with OCLC can locate over 10,000,000 works in libraries throughout the country. The same thing is true for libraries using RLIN or WLN, except fewer libraries participate. The use of these bibliographic databases will be discussed later in the section on interlibrary loans.

### **Photocopying**

Photocopying services are found in most libraries. In response to interlibrary loan requests or other kinds of special requests, the lending

library will photocopy magazine articles or other material and send a copy rather than the original to the requesting library. There is usually a charge for photocopying service and either the requesting patron or the requesting library will pay. There are limits on what or how much can be copied because of the 1976 Copyright Revision Act. The law is very complex and not all the questions raised have been resolved. Copyright is discussed at the end of this chapter.

### **Cooperative Reference**

Cooperative reference service attempts to answer questions using the reference services of cooperating libraries. The simplest network of this kind might exist within a library. If a question cannot be answered at the information desk, it will be transferred to the reference desk. This is a form of network used to direct the patron to the source that can best give an answer to his question. An expansion of this kind of network might involve referring a reference question from a branch library to the main library, to a regional reference service or state library and then to the Library of Congress or other national library such as the National Library of Medicine. An example of an information network available as a bibliographic database is the Medical Literature Analysis and Retrieval System (*Medlars*). As an on-line database it is called MEDLINE (MEDLARS on-line). Requests for a search of MEDLARS can be sent to the national Library of Medicine or initiated in-house if the library has access to database services. In either case a library has access to the nation's medical literature. Cooperative reference networks can be linked by mail service, telephone, teletype, computer, or electronic mail.

### **Delivery Service**

Another cooperative effort is a courier or delivery service between libraries. These services can be used to carry interlibrary loan requests and patrons between libraries on a regular basis. An example of a courier service is one operating between the University of California at Los Angeles and other campuses of the University in Southern California. The UCLA service carries both patrons and materials. The California State University, with 19 campuses, is now operating a delivery service between some campuses.

### **Cooperative Acquisitions**

Cooperative purchasing agreements help insure that important materials are acquired by at least one library in geographical area or in a library system. Implicit in these agreements is some understanding for sharing these materials. The sharing may involve interlibrary loan or the right to let anyone use the material in the library where the material is housed. For example, several libraries may decide that a complete set of

the *New York Time* on microfilm should be available locally. Rather than purchase several sets, one of the libraries may agree to purchase a set and make it available to all. In return, each of the other libraries may agree to purchase important sets or works, which they would then make available to the other libraries.

Another type of cooperative purchasing agreement concerns special collection development. If there are several colleges in an area, one may agree to develop a good Chinese history collection, another a science fiction collection, and yet another a Mexican art collection. This information would be communicated to the reference staffs, who would refer patrons to the special collections. There are infinite possibilities for cooperative purchasing agreements, depending on local needs.

### **Cooperative Cataloguing**

Cooperative cataloguing efforts have been used since the early 1900s when the Library of Congress began selling printed catalogue cards. Since then many other cooperative centralized cataloguing centres have been established. The latest development in cooperative cataloguing is the automated computer-based service such as OCLC, RLIN and WLN. The best known, OCLC, was originally established in 1967 to serve academic libraries in Ohio. By 1971 an on-line shared cataloguing system was operational. In 1975 OCLC cataloguing information was available outside of Ohio by means of telecommunication and CRT typewriter terminal. In 1984 OCLC was selling over 130,000,000 catalogue cards a year to member libraries. Cooperative cataloguing is probably the most successful form of library cooperation in terms of its far-reaching effect on libraries throughout the country.

### **Centralized Storage**

Centralized storage is another way libraries cooperate. In its simplest operation. Libraries in a cooperative arrangement store little-used or specialized materials in a common storage area. A list or catalogue of materials in storage is available at each member library. When an item is requested, it is delivered or mailed to the requesting library. Some studies have questioned the cost and effectiveness of centralized storage, but it is still used by some cooperatives.

### **Interlibrary Loan**

An interlibrary loan (ILL) is simply a transaction in which one library lends material, or a copy of the material, to another library. Interlibrary loan is one of the older methods of library cooperation. The first loan procedures were issued in 1917 by the American Library Association. That code has been modified over the years and we will later discuss the *National Interlibrary Loan Code, 1980*. Numerous local and network

interlibrary loan codes exist in addition to the national code. The LMTA should be aware of his library's ILL policy, the national code and any codes and arrangements with local libraries.

Interlibrary loan service is limited in many libraries because it is an expensive service in terms of labour costs. ILL service in an academic library, for example, may be offered only to faculty and graduate students; a public library might limit the number of items a patron may request at one time. In recent years some libraries have started charging fees for lending materials on ILL and these fees are often passed on to the patron. Fees act to limit requests from many patrons. This is unfortunate, but the fiscal limitations of many libraries do not allow them to absorb the entire cost of ILL services.

The LMTA in public services is likely to work with ILL at some time. The LMTA should be familiar with local ILL policies. More details about ILL procedures follow later in this chapter.

### **Miscellaneous Cooperative Projects**

Many other cooperative projects are currently operating throughout the country. Perhaps the best known is the Library of Congress shared cataloguing on MARC tapes. MARC is an acronym for machine readable cataloguing. MARC tapes are available for purchase by libraries and cataloguing services. The Farmington Plan was a cooperative acquisitions arrangement among 60 libraries to purchase materials in selected areas from foreign countries mostly in Europe. Each library was responsible for one special area. The Farmington Plan started in 1942 and ended in 1972. Among cooperative networks frequently mentioned in library literature are the Southwestern Library Interstate Cooperative Endeavor (SLICE), OCLC, New England Library Network (NELINET), Southeastern Library Network (SOLINET), Conversion of Serials (CONSER), California Library Authority for Systems and Services (CLASS), AMIGOS and IROS (instant Response Order System), which is a commercial venture. A discussion of these cooperative ventures is beyond the scope of this text, but the interested reader will find numerous articles indexed in *Library Literature*.

### **Interlibrary Loan Procedures**

"An interlibrary loan is a transaction in which library material, or a copy of the material, is made available by one library to another upon request." Interlibrary loan (ILL) is *not* a transaction directly between the patron and the lending library. A lending library will only fill an interlibrary loan request when the request is made on the proper form and is sent directly from the borrowing library. Before reading further it will be helpful to read the *National Interlibrary Loan Code, 1980*, which is reproduced in Appendix B in this text.

A request is initiated when a patron fills out a request form listing the desired materials. The request is checked to see if the material is a type that can be requested on interlibrary loan. The borrowing library may also have a collection of loan policies of other libraries listing materials not available on interlibrary loan by a particular library. Most libraries will have such policy statements for the most frequently used lending libraries.

Next the request is checked against the library's catalogue to be certain it is not in the collection. *Never* accept a patron's assurance, "I checked the catalogue and you don't have it." Be diplomatic, but skeptical! The complexities of main entries used in cataloguing and the complexities of filing rules can mislead the inexperienced person. Requests must always be checked by trained staff.

A copy of the library's loan policy and other information should be given to the patron. This written information should let the patron know what materials can be requested, the time required to obtain the material, the cost to the patron, and other important information.

After verifying that the material is not in the library's collection, two further steps are necessary before sending the request to another library. First, the existence of the material must be verified and the correct bibliographic information (author, title, edition, publisher, date of publication) must be confirmed. And, second, a library must be located that has the material.

The existence of a *book* and the correct bibliographic information can be verified in one of several sources. Bibliographies like the *National Union Catalogue*, *Cumulative Book Index* and *American Book Publishing Record* can be used to verify the bibliographic information. Libraries with access to an automated cataloguing service (OCLC, RLIN, WLN), can search the databases to locate bibliographic information. In late 1984 OCLC has about 11,000,000 records in its database.

Bibliographic information for periodicals can be verified in the National Union Catalogue, New Serial Titles, Union List of Serials in the United States and Canada, Ulrich's International Periodicals Directory, and published holdings lists of libraries. Occasionally, abstracts and indexes like Chemical Abstracts and Readers' Guide to periodical Literature may be used. Libraries with automated cataloguing service can check that database.

After verifying that an item exists and obtaining the correct bibliographic information, a library that has the material must be found. The *National Union Catalogue* and the *National Union Catalogue-Register of Additional Locations* give the locations for many items and are especially

strong for locating books. Locations for periodicals are given in the *National Union Catalogue*, *New Serial Titles* and the *Union List of Serials in the Libraries of the United States and Canada*. In addition many libraries compile periodicals holdings lists and distribute and/or exchange lists with other libraries as a method of sharing resources. The three automated cataloguing services (OCLC, RLIN, WLN) all give location for the materials catalogued in their databases. OCLC alone has over 160,000,000 location symbols in its database.

Next the verified bibliographic information is transferred to an interlibrary loan request form. The form in Figure 23.9 is in the format approved by the American Library Association to accommodate provisions of the 1976 Copyright Act. (Copyright will be discussed later in this chapter.) Many other forms are used within local networks or by groups of cooperating libraries. The LMTA must be familiar with the forms used in his library.

When the request is received by the lending library, it will be evaluated against that library's lending policy. If the material can be loaned, it is charged out and packed for shipping. One or more copies of the request form and a special return shipping label are shipped with the material. The return label is used so the package can be identified as a returned interlibrary loan item when the borrowing library sends it back.

When the item is received by the borrowing library the physical condition of the item is checked and the patron is notified of its arrival. The patron should be told how long he can have the material and whether any restrictions have been placed on its use (i.e., item can be used only in the library). When the patron returns the material the library must arrange for shipment to the lending library.

Libraries using services such as OCLC, RLIN and WLN have access to an interlibrary subsystem using an automated process. We briefly will discuss the OCLC system because it is currently the largest, serving over 3,800 libraries. A full discussion of how to process an interlibrary loan on OCLC is beyond the scope of this text. OCLC has a detailed manual with instructions on using the interlibrary loan subsystem: *Interlibrary Loan: Users Manual* (2nd ed., Dublin OH: OCLC, 1982).

A request for an interlibrary loan is entered into OCLC via a CRT keyboard terminal. All information will appear in the OCLC interlibrary loan workform format. At each step of the transaction—agreeing to lend, shipping, receiving, return shipping, final receipt—the information is entered on the worksheet. Thus, the worksheet will have updated information input several times during the course of completing the transaction. This, of course, is a greatly simplified description of OCLC's interlibrary loan subsystem. It can be easily learned by "hands on" work at the terminal

using instructions in the *Interlibrary Loan : Users Manual*. The descriptions above of the manual and automated methods of interlibrary loan procedures are only a general outline. The LMTA with responsibilities in interlibrary loan must be familiar with the *National Interlibrary Loan Code, 1980*, any locally used codes, the forms used by the library and library policy on lending and borrowing. Also the LMTA should become familiar with the standard procedures set forth in Thomson's *Interlibrary Loan Procedure Manual*.

### **Copyright Law**

The Copyright Revision Act of 1976 became effective on January 1, 1978. The law is complex and its long-term implications for libraries are not yet clear. Two sections of the law, 107 and 108, deal respectively with "Fair Use" and "Library Reproductions" and both affect library services. The LMTA will have little occasion to be involved in any legal interpretation of the copyright law. (No interpretations of the law are made in this text.) However, all library staff should be aware of several ways libraries have been affected by the copyright law.

Libraries with reproduction services are not allowed to copy material just because it is requested by a patron. Certain materials cannot be copied, while other materials can be reproduced in *limited* numbers. A library policy manual should give specific guidelines to library staff.

Every photocopy machine in a library for the patron's use and uncontrolled by the library must have this notice posted on the machine:

### **Notice**

The copyright law of the United States (Title 17 U.S. CODE) governs the making of photocopies of copyrighted material. The person using this equipment is liable for any infringement. Without this notice, a library could be liable for misuse by patrons.

The copyright law's greatest potential impact is on interlibrary loan procedures. The in-library patron request form for interlibrary loan must have a warning concerning copyright restrictions. The loan request form sent out of the library must conform to copyright guidelines. Two boxes followed by required copyright statements appear in the lower left corner of the form. The borrowing library *must* check one of these statements verifying that the request conforms to the copyright law or copyright guidelines. CCG means the request "Conforms to Copyright Guidelines"; CCL means the request "Conforms to Copyright Law." The LMTA should not be too concerned with having to interpret the law for each request. Most libraries have established guidelines and rules based on legal interpretations. The wisest course of action is *never* attempt to interpret

the law yourself; refer any questions unanswered by the library's policy manual to librarian.

The copyright guidelines allow libraries to be the following for interlibrary loans: (1) make up to six copies a year from a periodical publicised in the last five years; (2) make up to six copies a year of short excerpts from longer works; 3) make copies of material (especially periodicals) to replace damaged copies); and (4) make copies of out-of-print materials after an appropriate search determines it cannot be obtained at a fair price. The law is constantly reinterpreted, so any or all of the above provisions are subject to change. Librarians keep close watch on new court decisions and alter library policies in line with the latest ruling. To respect—the LMTA should avoid interpreting copyright law to a patron, but should refer questions to a librarian.

### **Reference Services :Special Materials and Services**

This chapter gives a brief introduction to the functions of several specialized reference materials and services. The topics to be discussed are the vertical file, special reference files, periodicals, public relations, automation, databases and supervision of personnel. The LMTA's role in these specialized services will vary among libraries. Regardless of the role, however, the LMTA should have a general knowledge of how a library approaches these special areas. Even if he or she never sees or uses a vertical file the LMTA should know that such files exist, whether the library has one or not and if so, where is located and whom the patron should consult. The same is true for periodicals. If the library has periodical subscriptions and most do, the LMTA should know where the periodicals are located, whether or not they are catalogued or shelved alphabetically and whether there are special holdings records.

#### ***The Vertical File and Special Collections***

The vertical file is a useful tool for providing access to uncatalogued materials that are not shelved with the catalogued collection. Type of materials placed in a vertical file collection may include pamphlets, clippings, maps, brochures, photographs, postcards and other ephemeral times. Generally vertical file materials have a limited useful life and are on currently popular topics or topics about which questions are frequently asked. An example of currently popular material would be pamphlets or brochures on narcotics or the woman's movement. Examples of materials constantly in demand are items on jobs or occupations.

What a library places in its vertical file depends on patron needs and library policy. Some libraries maintain a small vertical file and catalogue as much as possible with the collection. Other libraries develop extensive

vertical file collections while, at the other extreme, some libraries have no vertical file and reason that anything worth keeping is worth cataloguing. Libraries should—and usually do—have a policy on vertical files stating what material is included and how it is arranged.

Two popular ways of arranging materials in a vertical file are alphabetically by subject or by classification number. For example, if the materials are arranged by subjects, items on the same subject are placed in a folder or larger envelope and a subject heading is assigned and placed on the folder or envelope. The user can then look in a particular folder to see what material is available. Each item in the folder has the subject heading placed on it so it can be returned to the correct folder. If the file is arranged by classification number, the same system might be employed using classification numbers in place of subject headings. Some libraries prefer classification numbers so that all the materials on a subject will have the same classification whether in the catalogued collection, vertical file, or other special collections. The Dewey Decimal Classification is usually used, since the Library of Congress Classification is somewhat cumbersome for this type of file. If subject headings are assigned, some standard guide may be used along with “home-made” subject headings. In order to have some consistency, subject headings, used by *Readers' Guide to Periodical Literature*, *Vertical File Index*, *Public Affairs Information Service Bulletin*, or one of the standard subject heading lists, *Sears List of Subject Headings* or *Library of Congress Subject Headings*, may be used. Regardless of the source of subject headings, an authority file of the headings used in the vertical file will be established to help maintain consistency.

Subject references in the catalogue can be used to direct the patron to materials in the vertical file. These references are filed with the entries for a subject and are often typed on a coloured card. The wording varies, of course, from library to library. Some libraries have several vertical files. There may be one for general materials, one for illustrations and pictures and one for local history. These are only a few of many possibilities.

Another special collection with which the LMTA should be familiar is college catalogues. College catalogues are shelved in a special area. The number of catalogues in a collection can range from only a few, for local institutions and important universities, to several thousand catalogues of institutions in the United States and foreign countries. Because this collection is usually well used, the LMTA should know both its location and how the catalogues are arranged. Two more popular arrangements are alphabetical by name of the institution or alphabetical by the state where is located. Collections of college catalogues are also available in microfiche editions.

Archival collections are found in many libraries. Archives may contain materials on the history of the library, public records, historical documents, personal letters or diaries of persons of distinction, books, pamphlets, clippings, pictures and photographs, posters, handbills and other nonbook materials. The LMTA should be aware of the library's policy on such a collection, where the collection is located, whether there are special indexes to the collection and to whom the patron should be referred.

The LMTA should also be aware that many libraries maintain special information files. Some of these files might be: a file of answers to questions that were particularly difficult to find; a file of answers to questions frequently asked; a file of local speakers and information on how to contact them; and a file listing popular local organizations and how to contact them. There may of course, be many other files depending on a library's needs.

### **Periodicals**

In earlier chapters we discussed some indexes to periodicals, lists of periodical holdings of a library and the union lists like *New Serial Titles*. We are concerned here with some problems in the shelving of periodicals.

There are several methods for arranging periodicals in the library collection. Both bound and unbound periodicals can be classified, using either the Dewey Decimal Classification or the Library of Congress Classification and shelved with the book collection. The current unbound issues of periodicals can be stored in special containers and placed in the proper place on the shelves; however, it is more common for current issues to be shelved in a separate area, either by classification number or alphabetically by title. Regardless of the location of the current periodicals, this method has the advantage of placing bound and unbound, periodicals on a subject with the books on the subject. It has the disadvantage of scattering the periodical collection and it creates an extra cataloguing load for technical services.

A second popular arrangement is alphabetically by title. In this arrangement the periodicals separate from the book collection. The current issues of periodicals may be placed in special containers and placed next to the bound volumes; however, in this arrangement it is more common to shelve the current issues in a separate area. This arrangement has the advantage of bringing all the periodicals together in one area. The disadvantage is that the periodicals are not arranged by subject. There are many variations of these two basic types of arrangement.

Newspapers are often placed near the periodicals and are arranged alphabetically by city. Newspapers are among the most popular materials in libraries and the LMTA should know their location.

The LMTA should also be familiar with the local holdings list for periodicals. The holdings may be listed on special cards in a Kardex or Linedex, on a prinked list, or possible on special cards filed in the card catalogue. No matter what system is used, the LMTA must know how to interpret the list to patrons. In addition to recording the periodical holdings, such a list also indicated the location of periodicals if they are stored in more than one place. For example, the list may show that the current issues of a periodical are in the “current section,” the bound volumes are catalogued and microform holdings are in a third location.

It is obvious that familiarity with the physical layout of a library and the location of material is essential to give good service. Directional questions such as “Where are the periodicals?” Are not necessarily so easy to answer; it is necessary to know how periodicals are handled in the library, whether the request is for a current issue or a retrospective bound volume and whether the library has bound holdings or microform holdings.

### **Public Relations**

Almost everything done in a library is an act of public relations. Anything that affects the patron’s attitude toward the library—negatively or positively—is part of public relations. How long it takes to catalogue books, how the telephone is answered, the accuracy of resolving materials, the inflection in one’s voice in answering a question and the “warmth” or “atmosphere” of a library are only a few examples of things that represent public relations. It is not just reference service that gives a library its image, but a combination of all library activities. Earlier we discussed the general techniques of handling patron inquiries. What we will discuss below are some of the activities through which a library can help the patron and improve the services and image of the library. Two main goals of public relations are to “sell” the library and its services and to make patrons aware of the materials and services. In many libraries a full-time librarian is assigned to carry out public relations activities. A commercial artist may be on the staff to handle the design work associated with displays, posters and exhibits.

One popular way to sell the library and its materials is through exhibits and displays. The subject possibilities for exhibits and displays are endless. There are many travelling exhibits from the Library of Congress, the Smithsonian Institution, other libraries, associations and clubs available to libraries. The subjects of these exhibits range from rare books to photographs of famous people. Along with these exhibits the library might display its own materials on the topic to let patrons know what is available in their library. The informational signs in a library are good image-creating devices. Signs that are interestingly designed, well placed and worded in a friendly way can be a real asset in creating a good library

“atmosphere.” It is hoped that the day is gone when the first sign seen in a library reads “No Talking, No Smoking, No Eating, No Nothing!” The image of the librarian maintaining “law and order” was not conceived without cause.

The bulletin board is another useful public relations tool. Announcements of local cultural events, book talks, library events, etc., can be displayed in an attractive format. This sort of centralized information centre can be of real value to patrons.

Other things libraries might do to advertise their services and improve their image include sponsoring book reviews, presenting film series, publishing newspaper articles, arranging for lectures on topics of current of community interest, presenting programs on radio and television, offering library facilities to discussion groups or to various other community clubs and getting librarians into school classrooms to discuss library services.

Publications such as topical or subject bibliographies, library service information sheets, bookmarks and reports on research can be made available to the patrons. These projects—especially topical bibliographies—require a lot of hard work by the library staff; they are projects that cannot be successful without great effort.

Perhaps the most important library publication is one that is seldom if ever seen by the library’s uses, yet it has a potentially significant effect on library service. The annual report, a combination of statistical information and a description of library accomplishments, is written to achieve certain political goals. Usually the main goal is to show a governing body—board of trustees, college president, school superintendent—that the budget should be maintained at present levels or increased to provide better service. If the library does not have personal representation at crucial budget meetings, a well-prepared annual report can be of help. The LMTA must be aware that even libraries, full as they are of “culture and virtue,” exist in a real political world with economic limits.

### ***Automation and Bibliographic Databases***

Library automation’s greatest impact has been in technical services. Cataloguing, acquisitions and financial record-keeping work more easily lend themselves to automation. The automation of public services has been slower in developing widespread applications. Only recently has the computer made a significant impact on circulation and reference services. Despite the vast body of literature on automated circulation and database searches, less than 5% of the 100,000 libraries in the United States had automated circulation system in 1982. Bibliographic database searches were available in less than 10% of all academic libraries while the percentage was much lower in public libraries and practically nonexistent in school

libraries. Nonetheless, libraries appear on the verge of a "computer revolution" that will find both automated circulation systems and database search capabilities in a large percentage of libraries within the next decade. The technology exists, only the financial and political problems need resolution.

The LMTA should not assume that great numbers of staff will be eliminated by the computer. The computer may enhance service, but it has not reduced staff to the extent once though possible. If public service follow the example of technical services, the need for *skilled* paraprofessionals will increase as service become more sophisticated.

Some products of technical services automation already are used in public services: periodical holding lists, acquisitions lists, COM catalogues and computer produced catalogue cards. Unique to public services are automated circulation systems. A direct outgrowth of automated circulation is the development of on-line catalogues to replace the card catalogue. On-line catalogues are operational only in a few libraries, but their growth should be rapid in the next decade. Again, much depends on the financial ability of libraries to purchase the hardware and pay for ongoing maintenance.

Automated bibliographic database searches are a successful application of the computer in reference services. A bibliographic database is an orderly compilation of bibliographic citations in a machine readable format. Many of the available databases developed from the application of the computerized printing technology for publications such as the *National Union Catalogue*, *Chemical Abstracts* and the *New York Times Index*.

Bibliographic searches using databases have several advantages: 1) they are much faster than manual searches; 2) the researcher is more likely to find more important citations; 3) because databases can be more thoroughly indexed than printed indexes a more complex search is possible, one that may be impossible using a manual index; and 4) results are immediate, which allows the searcher to change his approach if the citations are not the type desired. Several disadvantages of database searches are: 1) the search yields citations, but the actual materials still must be located; 2) the cost to the patron and library may be expensive. Many libraries charge a fee for database searches. "Fee" on "no fee" searches are currently a much debated topic among librarians; and 3) database searches usually increase interlibrary loan requests and photocopy service workload. Surveys show that patrons are very positive about database services.

By early 1983 approximately 500 databases were available. Four major distributors of databases are Lockheed Information Systems, SDC (System Development Corporation) Search Service, Bibliographic Retrieval Service (BRS) and the New York Times through Mead Data control.

Lockheed's service is called DIALOG and SDC's service is called ORBIT. An example of the capacity of these services to perform wide-ranging searches is that a subscriber to Lockheed's DIALOG has access to over 180 databases with over 80,000,000 citations. In addition, Lockheed recently started a Dial Order program that allows automatic ordering

of documents cited in the search. If this service is successful it will help eliminate the problem of locating documents and ease the interlibrary loan workload. It is, however, a relatively expensive service.

Read carefully the information on the forms and examples to get a feel for the service being offered. The details of how to perform a search are beyond the scope of this text and require specialized course work and training.

The abstract shown above was located in a narrow search for precise information on the organization of labour in the Florida citrus industry. The material was located when the computer was asked to search for information "MANUEL CHAVEZ and FLORIDA and CITRUS and COCA COLA COMPANY" The abstract covers negotiations between Manuel Chavez and Coca Cola about organizing agricultural labourers in the Florida citrus industry. A manual search for such precise information would be difficult and time-consuming. A search using comprehensive terms like "AGRICULTURE and LABOR" would bring out numerous articles. BY using the proper search terms the search can be narrowed to the precise information given.

The LMTA will probably have a little role in data base searching in the near future. A possible exception might be the LMTA with an advanced degree in a subject field. The need for detailed question analysis, knowledge of special thesauri listing subject terms, specialized subject knowledge and the high cost of searches mitigate against anyone except librarian and subject specialists handling database inquiries. The LMTA working in reference must be familiar with any database services offered by the library, and see the service as another reference too!

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## Distributors and Vendors

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Like all other organizations involved in the information business, library vendors and distributors are facing a changing environment, in large measure due to technology. Another factor in their changing environment is what has been happening to the majority of libraries; the past 20 years or so have not been the best of times for library funding and support in general. Library staffs are under pressure to do more with less, including personnel. Because they want to continue to do business with libraries, as well as take advantage of new business opportunities, many vendors and suppliers are offering a wider range of services to libraries. This is one of the places for libraries to consider outsourcing some of their traditional in-house activities. We mention a few of these new “services” later in this chapter.

We identified three major problems for materials producers; economics, copyright infringement, and distribution. Knowledge of the information product distribution system is essential for developing the most cost-effective collection of information materials. Wholesalers, retailers, and remainder houses are major sources of material for the library collection. Often, several different sources can supply the same item. Is there an important difference among these sources? What services does each provide? For example, if one is looking for a book published last year, it is possible to acquire a copy from many of the sources. Would it matter which source is used? How likely is it that all would matter which source is used? How likely is it that all would have the book? For that matter, what function does each source perform?

### **Jobbers and Wholesalers**

Librarians refer to *jobbers* or *vendors* rather than wholesalers. There is a technical difference between a wholesaler and a jobber, but for

libraries the difference is insignificant. Jobbers purchase quantities of books from various publishers, then sell the copies to bookstores and libraries. Because they buy in volume, they receive a substantial discount from publishers. When the jobber sells a book, the purchaser receives a discount off the producer's list price, but it is much lower than the discount that the jobber received. For instance, if the jobber received a 40 percent discount from the producer, the discount given the library will be 15 to 20 percent. If the library or bookstore orders the book directly from the publisher, the discount may be just as high or perhaps even higher.

Discounting is a complex issue in any commercial activity, and it is highly complex in the book trade. Every producer has a discount schedule that is slightly different, if not unique. Some items are *net* (no discount); usually, these are textbooks, science/technology/medical (STM) titles, or items of limited sales appeal. *Short discounts* are normally 20 percent; these are items the producer expects will have limited appeal, but with more potential than the net titles. *Trade discounts* range from 30 to 60 percent or more; items in this category are high-demand items or high-risk popular fiction. Publishers believe that by giving a high discount for fiction, bookstores will stock more copies and thus help promote the title. Jobbers normally receive 40 to 50 percent discounts, primarily because of their high-volume orders (hundreds of copies per title rather than the tens that most libraries and independent bookstore owners order).

Recently, jobbers have encountered financial problems in the form of rising costs and declining sales. A number of publishers are requiring prepayment or have placed jobbers on a *pro forma* status. Pro forma status requires prepayment, and suppliers extend credit on the basis of the current performance in payment of bills. Much of the credit an order fulfillment extended by publishers depends on an almost personal relationship with a jobber. This means that libraries must select a jobber with care. It is not inappropriate to check a prospective jobber's financial status (through a rating service, such as Dun & Bradstreet).

One very pertinent question for the library is how many vendors to use. There are pros and cons to consolidating one's business with only one or two vendors, just as there are to using a number of vendors for the same type of product. Consolidation usually means that the vendor gains a better sense of the library requirements, perhaps a better discount for the library and some "free" services from the vendor. The primary danger is the vendor's viability. Today's environment requires substantial investment in technology on a regular basis, which, combined with libraries' budget woes, means that smaller firms may not be able to survive—or

at the least not be able to keep up with technological developments in the field. In contrast, having several vendors for one type of product may also yield a higher discount, because there is a degree of competition for the library's business. On the downside the service may not be as good, and perhaps the vendors will not have the resources to invest in newer technology. The primary concern should be service followed by financial strength (serials librarians may recall the scare that occurred when a major serials vendor had a serious financial problem). As stated earlier, privately held companies can be checked in a services such as Dun & Bradstreet, and publicly held firms file 10K reports that one can see.

### What can Jobbers Do?

Why buy from an indirect source that charges the same or a higher price than the direct source would? Service! Jobbers provide an important service in that they can save a library a significant amount of time and money. Although jobbers do not give high discounts, the time saved by placing a single order for 10 different titles from 10 different publishers (instead of 10 different orders) more than pays for the slightly higher price. Others savings can result from the batch effect of unpacking only one box and authorizing only one payment. Most jobbers also promise to provide fast, accurate service. It is true that a few publishers, if they accept single-copy orders (and most do), handle these orders more slowly than they do large orders. But it is also true that jobbers do not always have a specific title when the library wants it, which means that the library must allow additional time to secure the desired item.

Many jobbers promise 24-hours shipment of items in stock. Do they make good on such claims? Generally, yes; however, the key phrase is *in stock*. Frequently, there can be delays of three to four months in receiving a complete order because some titles are not in stock. When talking with jobbers, do not be impressed by numbers quoted in their advertising, for example, "more than 2 million books in stock." What is important is how many titles and which publishers they stock. For various reasons, from economic to personal, some publishers refuse to deal with a particular jobber. Four important questions to ask any jobber before a library contracts for that firm's services are :

1. Will you give me a list of all the publishers that you do not handle?
2. How does your firm handle a request for a title not in stock?
3. Will you give me a list of series that your firm does not handle?
4. Do you have any service charges on any category of material? (If so, ask if the charge is indicated on the invoice as a separate cost.)

Often the answer to the first question is difficult to obtain. Sales representatives want to say they can supply any title from any publisher, with only minor exceptions. However, libraries in the same system may simultaneously receive different lists from various representatives of the same firm. The issue is important, and the acquisitions department must resolve the question if it is to operate effectively. Sending an order for a title from a publisher that the jobber cannot handle only delays matters. In some cases, the jobber will report that it is trying to secure the item; this often leads to a later report of failure, making the acquisition process even slower. Buying directly from the publishers is the best approach to this problem, if one knows which publishers the jobber cannot handle.

The second question relates to the speed of service. Some jobbers order a single title from a publisher when it is not in stock. Others say they will do this, but they may actually wait they have received multiple requests before placing the order. By placing a multiple-copy order, the jobber receives a better discount. For the library, the delay may be one to several months because it will take that long for the jobber to accumulate enough individual requests for the title to make up an order of sufficient size. Usually, jobbers that place single-copy orders for a customer offer a lower discount on those items. Again, the acquisitions staff must weigh service and speed against discount. Occasionally, a jobber will have a title in stock after the publisher has listed the item as out-of-print (OP). On occasion, a jobber can supply out-of-print material, and a few jobbers will even try to find out-of-print items for their best customers. This is a special service that is never advertised and is offered only to favoured customers.

Beyond fast, accurate service, jobbers should provide personal service. A smooth working relationship is based on mutual understanding and respect. When those are present, it is much easier to solve problems, even the difficult ones. The jobber, because of the smaller base of customers, normally can provide answers more quickly than a publisher's customer service department. Even the small-account customer receives a jobber's careful attention (in order to hold the account), something that seldom happens with publishers.

No single jobber can stock all of the in-print items that a library will need. However, most large firms do carry the high-demand current and backlist items. Book trade folklore says that 20 percent of the current and backlist titles represent 80 percent of total sales. All of the good jobbers, try to stock the right 20 percent of titles. Some are more successful than others. Bookstores find this useful for maintaining their stock of bestsellers. Libraries, however, must acquire a broader range of titles. Thus, the

opinion of bookstore owners about the best jobbers is useful only if librarians and bookstores agree about whether 20 percent of all titles will fill 80 percent of all needs.

One problem with a jobber that has limited stock is in invoicing and billing procedures. A small jobber may ship and bill for those items in stock, then backorder the remainder of the titles. In this case, the jobber expects to receive payment for the partial fulfillment of the order. However, some funding authorities allow payment only for complete orders. That is, the library must receive or cancel every item on an order before the business office will issue a check. This procedure can cause problems for small jobbers and libraries alike. Few small vendors are able to willing to wait for payment until a particular order is complete. For small libraries with small materials budgets, the challenge is to find a jobber that will accept complicated procedures and delays despite low volume. It is becoming harder to find such firms, and libraries are attempting to persuade their funding authorities to simplify ordering and payment procedures.

Jobbers may handle thousands of different publishers and may maintain in inventory of more than 200,000 titles. One useful service that many large jobbers offer is a periodic report on the status of all of a library's orders. Many provide a monthly report on all items not yet shipped. They provide a list of backordered items along with the reason why each item is unavailable. A timely and complete status report will save both library and jobber unnecessary letter-writing campaign and telephone calls. Most large jobbers offer a flexible order and invoicing system; that, is they try to adapt to the library's need, rather than force the library to use their methods.

Status reports are an area of concern for both the acquisitions and collection development staff. Almost everyone in the field has been frustrated by these reports. Does a report stating that a book is out of print mean that the book is *really* out of print? It should, but occasionally, by contacting the publishers, the library may have the item in hand in less than 30 days. This happens often enough to keep alive doubts about the quality of jobbers reports. Perhaps two of the most frustrating reports are out-of-stock (OS) and temporarily out-of-stock (TOS) reports. Exactly what these two reports mean varies from jobber to jobber. The basic meaning is clear: the book is not available at present. Beyond that, however, doubt exists. How long will the title be out of stock? Some cynics suggest that these reports really mean: "We are waiting until we get enough orders from buyers to secure a good discount from the producer." The cynics propose that the difference between the two reports is that

TOS means “We expect to have enough soon,” and Os means “Don’t hold your breath.” Those interpretations are much too harsh, but they do indicate some problems with the quality and content of the reporting system. (*Note* : Not all blame for faulty reporting lies with jobbers; sometimes producers change plans after reporting status to a jobber.) Article in a 1989 issue of *School Library Journal* reported that 10 percent of all school library orders and 7 percent of public library orders are unavailable for some reason.

Does it really matter how accurate the reports are? Yes, it does matter, and the result can have an impact on collection development. An item on order encumbers (sets aside) the necessary funds for payment. The acquisitions staff cannot determine the precise cost of the item until the invoice arrives; the price may change, the exact discount is unknown, and shipping and handling charges vary. One hopes to set aside slightly more than the total cost. Most libraries and information centres have annual budgets and operate in a system where any monies not expended at the end of the fiscal year revert to the general fund (that is the funds do not carry forward into the next fiscal year). In essence the library loses the unspent money. Having large sums of money tied up (encumbered) in outstanding orders that are undeliverable before the end of the fiscal year can result in a real loss for the collection. In a sense, the library loses twice: wanted items go unreceived, and the library loses funds.

Another problem commonly encountered is the paperwork involved in cancellations and reordering. Many people have estimated the cost of normal library paperwork; these estimates range from \$4 for a simple, two-paragraph business letter, to more than \$21 for placing an order, to even more, depending on the complexity of the task, the organization, and the cost elements included in the calculation. Regardless of how one calculates the costs, one must consider that staff time, forms, letters, and postage involved in each transaction. Though these costs do not come out of the acquisitions budget they represent a loss in the sense that the order did not result in the library receiving the desired material.

Finally, the library does lose some buying power as funds remain encumbered. Unlike money in a savings account, which earns a small amount of interest each day, encumbered funds lose a small amount of purchasing power each day. If inflation is rapid or if one is buying foreign books and the currency’s value is fluctuating widely, losses can be large. Producers raise prices without notice, and in times of inflation one can count on regular price increases. The less time funds remain encumbered, the more purchasing power the library has. Thus, the accuracy of vendor reports is important. If the vendor cannot supply an item (OP, OS, or TOS)

in time, and so informs the library, the library can cancel the order and use the funds for something that is available for delivery. Monitoring of vendor performance in report accuracy and speed of delivery can help control the problem.

Where does one learn about vendors and services? One method that allows one to talk directly with a variety of vendors in a short time is to attend an American Library Association summer or winter meeting. Here one will find just about every major vendor doing business with U.S. libraries; and yes, firms from many other countries are also present. In addition to “majors,” there are always a surprising number of smaller firms present that are trying to break into the library market.

Beyond library association conference contacts and word-of-mouth suggestions from one’s peers, several guides are available. General publications such as *Literary Market Place*, *International Library Market Place*, *International Subscription Agents*, or specialized lists by format, region of the world, and subject matter will provide a long list of possibilities. One can also post questions about who uses who on acquisitions discussion lists.

A number of jobbers offer their services to U.S. libraries. Some of the larger firms that are active in marketing their programs are Brodart, Baker and Taylor, Ingram, Yankee Book Peddler, Ballen, Coutts, and Blackwell North America. There are also specialized jobbers, such as majors, a leading firm for medical, science, and technical books. Serials jobbers include EBSCO, Faxon, and Readmore.

When selecting a vendor, one should keep several factors in mind. We have mentioned them earlier, but a summary list is useful.

When selecting a vendor; one should keep several factors in mind. We have mentioned them earlier, but a summary list is useful.

- \* Service—a representative, toll-free numbers, Websites, etc.
- \* Quality of service—ask for and check references, ease of handling “problems”
- \* Speed of fulfillment—this includes accuracy
- \* Discounts and pricing
- \* Vendor’s financial viability
- \* Vendor ability to work with the library’s automation system
- \* Special services available—free and at a cost.

Needless to say, these are the same factors one should use to evaluate the vendor(s) after selection.

### **Vendor-Added Services**

Today, most vendors offer services beyond the basics of supplying books, serials, media, and electronic resources at “wholesale” prices. Some of the more common services are;

- \* Acquisition assistance—searches and verification, for example
- \* Automated selection assistance programs (some including book reviews)
- \* Book rental plans
- \* Cataloguing and shelf-ready processing
- \* Customized management data
- \* Electronic financial transactions beyond the basics
- \* More than one information format
- \* Provision of electronic tables of contents or machine-readable data
- \* Library furniture
- \* Library supplies.

As this list suggests, vendors are entering the outsourcing market and some are attempting to offer most of the supplies and services necessary for library operation.

Many small libraries, and today more and more large libraries, find it beneficial to buy books shelf-ready. Future studies may show this approach to be very cost-effective, if the public service staff and users find that the material supplied is adequate. Normally, the technical services offered by vendors allow the library a number of choices. Processing kits that include catalogue cards, pockets, labels, jackets, and so forth are available for purchase; the library staff uses the kit to complete the processing routines. Some firms offer completely processed, ready-for-shelf products and in cooperation with OCLC provide records for the library's OPAC. Flexibility is essential in these are limits on the variations allowed or, at least, a high sales volume for each variation. Thus, one can expect to receive a degree of personalized customer service but not custom processing.

One jobber, Brodart, offers a rather unusual service, the McNaughton Plan, to help solve the problem of providing an adequate number of high-demand titles for both books and audiobooks. Most libraries have suffered the problem of high demand for a popular book, with the demand lasting only a few months. Should the library buy many copies and discard all but one or two after the demand subsides, or buy only a few copies and take reservations? The McNaughton Plan offers another alternative: rent

multiple copies for the duration of the title's popularity. Brodart describes the plan as a leasing program. The plan offers high-demand items that Brodart's staff selects; one cannot order just any book; it must be on Brodart's list of high-demand titles. Savings occur in several areas. There are no processing costs, because the books come ready for the shelf, and the leasing fee is considerably lower than the item's purchase price. Patrons will be happier about shorter waiting times for the high-interest books. All in all, anyone involved in meeting recreational reading interests will find the program worth investigating. College and university libraries may use it to stock a variety of materials for recreational reading without taking too much money out of the book fund.

Other services many vendors offer are electronic ordering and, especially useful for serials, electronic invoicing. Access to an electronic version of *Books in Print* is often part of the service as well. With electronic ordering, acquisitions staff have dial-in access to the vendor's inventory database. This allows one to learn the availability of a title, place an order, receive confirmation of receipt of the order, and receive the invoice electronically, with the entire process taking only a few seconds. One problem with electronic ordering is that most acquisitions departments use many different vendors, and each vendor offering this type of service seems to have a number of variations in the system. This is an area where standards could be beneficial to everyone. Learning and remembering, or consulting manuals for several by using such systems. Some vendors offer useful management reports based on their electronic systems. An example from a book vendor is illustrated; it is a report from a serials vendor. Such reports assist the library in making budget requests and estimating encumbrances for standing orders and blanket orders.

### **What Should Jobbers and Librarians Expect from Each Other?**

Librarians are responsible for helping to maintain good working relationships with vendors. Simply stated, a vendor's profits are the difference between the price it pays producers and the resale price. Is this any different than for any other type of business? Not in the fundamentals, but there are some special aspects to the book trade and library market. One such variation is that any buyer can buy directly from the materials producer. This is seldom true in other fields. Another difference is that, to a large degree, libraries can find out the maximum price of any item by checking in-print lists, such as *Books in Print*, or by consulting the producer. When every buyer knows the maximum price, as well as any producer discount, vendors must at least match the maximum price and provide superior service to hold customers.

Volume buying and selling is the only way a jobber can make a profit. Efficient plant operations and low overhead can help, but no matter how efficient the operation, it will fail without high volume. One order for 15 or 20 titles in quantities will yield a high discount for the jobber, perhaps as high as 60 percent. Even after giving a 20 to 25 percent discount to the library, the jobber's discount is 50 percent. A smaller margin is still acceptable if all the items sell—but not all of them do! Many publishers have a return policy (in which a publisher buys back unsold books). However, many producers are changing or dropping the return policy, thus increasing the risk for the vendor. Return normally result in credits against the current account or future purchases. They seldom result in a cash refund for book jobbers.

Jobbers, being dependent on volume sales, must know their markets very well to project sales and maintain proper stock in their warehouses. When a vendor representative stops by, the purpose is not mere public relations, or necessarily, an attempts to sell more books. Rather, it is an attempt to determine the library's plans for collection development. It is not curiosity nor an attempt to make conversation that generates questions like "How does next year's materials budget look?" The collection development librarian should take time to explain new programs and areas to be worked on or describe how budget prospects look for the next year. This type of information helps vendors plan their buying policies for the coming months.

Selection officers should ask jobbers's representatives about what is available in any field the library is developing, even if the selection officers think they know. The answers may be surprising. One should ask what the vendor do to supply the items. It is a field the vendor carries as part of the normal inventory, or is the field one for which the jobber has listed publishers? (Listed publishers but does not stock its titles. If the library uses a vendor for listed publishers, there will be a delay in receiving the martial, because the jobber must forward the order to the publisher.) Such discussion take time but result in better service.

To get the maximum discount, some librarians dump their "problem" orders on vendors and order items directly from the publishers. Nothing could be more shortsighted. Without the income from easy, high-volume items, no jobber can stay in business. Someone has to handle the problem orders, and most vendors will try to track down the difficult items, especially for good customer. However, libraries should give jobbers easy orders as well. Almost all of the problems facing jobbers involve cash flow. Lack of cash has been they handle only problem orders; staff expenses go up, but income does not. Failure of jobbers would lead to higher labor

costs for most acquisitions departments, as a result of having to place all orders directly with publishers.

Whenever possible, the library should use the order format preferred by the vendor and not plead legal or system requirements for a particular method of ordering, unless it is impossible to change the requirement. Most vendors and publishers go out of their way to accommodate the legal requirements of library ordering procedures. If libraries could come closer to a standardized order procedure, jobbers, could provide better service, because they would not have to keep track of hundreds of variations. If libraries keep all paperwork to a minimum, everyone will benefit.

Though most jobbers accept a few returns from libraries, even if the library is at fault, returns create a lot of paperwork. If an item serves no purpose in library's collection, perhaps it would save time and money to accept the mistake and discard it rather than return it, assuming mistakes are infrequent.

Frequent mistakes signal a problem in a acquisitions departments or selection procedures. (*Note* : This discussion refers to items sent in error; the library should return any defective copy received for replacement.) Finally, libraries should process invoices promptly; the acquisitions department should not hold them longer than necessary. Most library systems require at least two approvals before issuing a payment voucher: the library's approval and the business office's approval. Some systems have three or more offices involved in the approval process. The collection development officer should know the system, from approval to final payment. If payment takes longer than six weeks, the library should inform any new jobber of that is also a need to inform jobbers of any changes in the system that may affect the speed of payment. Most jobbers would like to receive payment within 30 days, because they are on a 30-day payment cycle with publishers.

Jobbers provide a valuable service to libraries. Given a good working relationship, both parties benefit. Following is a summary of the basic factors at work in establishing such a relationship.

### **What do Libraries Expect from Jobbers?**

A collection development officer has reason to believe that a chosen jobber will provide :

- \* A large inventory of titles
- \* Prompt and accurate order fulfillment
- \* Prompt and accurate reporting on items not in stock
- \* Personal service at a reasonable price.

### **What do Jobbers Expect from Libraries?**

By the same token, jobbers should be able to expect :

- \* Time to get to know what the library needs
- \* Cooperation in placing orders
- \* Paperwork kept to a minimum
- \* Prompt payment for services.

### **Vendor Evaluation**

The trend in the 1990s has been toward making a contract between vendor and library. The contract is the result of either a formal bidding process or a response to a Request for Proposal (RFP). If one has choice—and often public libraries have to employ a bidding process—the RFP is the better option. Often the bid process is out of the library's hands, and is conducted by business officers who do not fully understand that information materials are *not* the same as pencils, paper, or even computers. With the RFP there should be least some library input to the requirements, if the library is not solely responsible for the document. An RFP will or should contain all the elements and aspects the library will use to evaluate the vendor's performance and often specifies performance parameters. The "Further Readings" section in this chapter provides references to resources that will assist in preparing an acquisition RFP.

Even without a formal contract, acquisitions departments and collection development officers should monitor vendor performance. In the past, monitoring vendors was time-consuming and difficult, and it still is one is working with a manual acquisitions system. However today's automated acquisitions systems can produce a variety of useful management/vendor reports very quickly and in various formats. Knowing what to do with the quantity of data the systems can produce is another matter. (*Note* : there are two types of evaluation that acquisitions staff undertake. One is more a monitoring of vendor performance, with an eye to identifying small concerns that left unnoticed could become a major issue. The other is a formal assessment of the vendor with an eye toward changing vendors or renewing a contract.)

One obvious issue that arises in evaluation is which vendor performs best on a certain type of order (example are conference proceedings music scores, or video recordings). The first thing to do is to decide what *best* means. Highest discount? Fastest delivery? Most accurate reports? Highest percentage of the order filled with the first shipment? All of the above? The answer varies from library to library depending on local needs and conditions. Once the library defines *best*, it knows what data to get from the system. This is an example where the RFP process is of assistance,

because the answers to these questions should be in that document. Other questions to consider are :

- \* Who handles rush orders most efficiently?
- \* Who handles international orders most effectively—a dealer in the country of origin or a general international dealer?
- \* Are specialty dealers more effective in handling their specialists than are general dealers?

It shows quantities of titles ordered; total expended; average delivery time; percentage of the order received; average cost of each order; what, if any, shipping/handling charges; and the discount for each of the vendors. In addition to system repros based on normal operating procedures one can conduct some experiments by placing a random sample of a type of order with several vendors to assess their performance. When doing a test or experiment, one must be certain that each vendor receives approximately the same mix of titles so that no vendor receives more or less easy or hard items to handle. Often, the normal procedure data reflects the use of a particular vendor for only one type of order. This makes comparing like groups. One can use the test method to select a vendor for a particular type of order and use the operating data approach to monitor ongoing performance.

Checking on the performance of serials vendors is more difficult. Most libraries use only domestic serials vendors, because of the complexity of changing ongoing subscriptions. A library that is just establishing a current subscription list, or is starting a large number of new subscriptions, might consider splitting the list between two or more vendors for several years to determine which would be the best sole source for the long term.

A limited amount of checking is possible through comparisons with other libraries. Often, this type of checking is done in a casual manner, that is, by merely asking a colleague in another library, “Do you use vendor X? How do you like them?” or “How much is your service charge?” To make valid and useful comparisons, one needs to know the other library’s title mix. Recent developments of union catalogues based on OPAC data suggest that collections, even in apparently similar libraries, have surprisingly different holdings. At one time a comparison was made of the monograph holdings of Loyola Marymount, Santa Clara, University of San Francisco, and the university of San Diego libraries for a 10-year period, using the AMIGOS CD-ROM collection analysis software. The university librarians through the collections would have a large percentage of overlap because the institutions are similar in size and programs. All were surprised to learn that more than 80,000 titles of the 159,000 titles in the databases were unique; that is only one of the four schools held the title. Although

the results were not as striking for serials holdings, the number of titles held by just one library as a surprise. These discoveries reinforced the idea that casual, impressionistic assessments are suspect.

One way to compare serials vendors is to take a sample of commonly held titles. Items to investigate include the service charges on those titles, the effectiveness, of claims processing, and other issues such as vendor follow-up and handling of credit memos.

In any vendor evaluation, keep in mind some of the problems vendors have with producers. These bear repeating ;

- \* Changes in title, or not publishing the title
- \* Not being informed when publishing schedules change or when publishers suspend or cease publication
- \* Incorrect ISBNs or ISSNs
- \* Producers refusing to take returns
- \* Producers refusing to sell through vendors
- \* Producer reducing discounts or charging for freight and handling when those were free in the past
- \* Poor fulfillment on the producer's part
- \* Constantly changing policies on the producer's part
- \* Producer price increases without prior notice.

We provide references to several "models" for conducting vendor evaluation studies in the "Further Readings" section.

Several years ago, a student in one of Dr. Evans's collection development classes asked, during a discussion of vendors, "Why are you so pro-vendor? They are our enemies, with all their high prices and low discounts." Perhaps being somewhat more aware of vendors' problems, having had work experienced in both publishing and libraries, is a factor in the senior author's not being highly negative about vendors. However, it is not a matter of being "pro-vendor," but rather recognition that there are at least two sides to most stories. Libraries depend on vendors; they offer services that save libraries time, effort, and staffing. Libraries need vendors and need to understand the vendors' problems.

That said, one must monitor their performance, question charges, and challenge charges that seem inappropriate. Maintaining good relations is everyone's business. If librarians, vendors, and producers take time to learn about one another's business, working relationships will be better. The senior author met a new regional manager of our serials vendor who had no prior experience in the library marketing sector. He asked if he

could spend a week in or library marketing sector. He asked if he could spend a week in our library learning how we handle journals and how our customers use the journals.

We said yes, and he spend three days in technical services with the serials acquisition staff and two days in public services. Even if our operations are not completely typical, his experience made him more aware of the problems libraries face in handling serials. Another outcome has been that several of our staff have spent tow or more days observing the vendor's operations.

Increased understanding of one another's problems solidified an already good working relationship. It is not necessary to go to such lengths, but reading about developments in each other's fields and asking informed questions helps build mutual understanding and respect. Having realistic expectation for one another is the key, just as it is in personal relationships. Be professional and ethical in working with vendors and publishers : expect and demand the same from them.

### **Retail Outlets**

Several articles appeared in the late 1990s about the potential competition between bookstores and libraries, in particular public libraries. Essentially the articles suggested that bookstores have a great advantage over libraries. In some ways, this message is surprising, as one often hears that public libraries in particular hurt the sales of bookstores because they offer large quantities of popular titles for free. Authors and bookstores have both made such claims in the past. Why buy a copy of the latest bestseller that everyone is talking about, especially if it is not a topic one has a long-term interest in, when one can get a copy for free in the library? For some countries this claim, at least from authors, has given rise to legislation that compensates authors for "lost income" due to the presence of their books in libraries—public lending right laws.

Public libraries and bookstores have existed side by side in communities for close to 200 years. Both have been in the book and magazine business and now both see themselves as being in the information business. Both generally stock a variety of formats, not just print-based materials.

Despite the long association and similarity in activity, neither side seems to have taken much time to learn about the other. We believe that libraries can learn some useful lessons from bookstores and, further, that there are potentially useful library/bookstore partnership opportunities. Certainly bookstores can be and often are a source for acquisitions units, especially when the item is popular and has to be in-house today.

### **How do New Bookstores Operate?**

New bookstores—stores selling new books, not stores that just opened—are interesting places to visit, whether or not one is responsible for collection development. Many librarians started haunting bookstores long before they became librarians. (If there is a bibliographic equivalent of alcoholism, many librarians have it.) *Bibliomania* is defined as “excessive fondness for acquiring and possessing books.” Most bibliomaniacs (librarians included) cannot stay out of bookstores, and consider it a great feat of willpower and self-control if they manage to leave one without buying a book or two.

Bookstore owners would be happy if a large percentage of the general population suffered from bibliomania. In the United States, however, they do not. In fact, the general population appears to have a high level immunity. On a percentage basis, book buyers are a minority group in most countries, although their actual numbers are large. As a result, bookstores generally exist in somewhat special environments and operate in a certain way. Though most librarians have undoubtedly visited many bookstores innumerable times, each one should make a special visit to at least two stores to answer some specific questions. What are the environmental and operating conditions necessary for a good bookstore? How does the store display and market its materials? What is for sale? How wide a range of materials is available? Could this shop of any value in developing the collection?

One consideration for any bookstore owner is location. Many owners live and work in the community for a long time before they open their stores. Just as the person responsible for library collection development needs to know the community, so does the bookstore owner. Bookstores, like libraries, must face the “Law of Least Effort,” which means having a location that is easy to find and convenient to use.

A few librarians harbor the dream of finding a quaint little town where they will retire and then open up a small bookstore. Most use it as a nice day-dream on the occasional “bad library day.” Of those who go further and try to implement the idea, few succeed. Those who *do* succeed do so by locating the store in a community they know, and the community knows them as a result of frequent visits and extended stays. A successful bookstore is a busy, people-oriented organization. It is not a quiet retreat for persons who do not like working with people, any more than a library is. Furthermore, owning a bookstore requires physical work on the part of the owner and a fairly large population base to support the required volume of sales, assuming that one hopes to live off the income.

Population base is a key consideration in determining where to locate a bookstore. The American Booksellers Association suggests that a minimum population to support a books-only store is 25,000 persons. Thus, large cities are the most likely locations for books-only stores. The smaller the community, the less likely it is that a books-only store will survive. Cultural activities in a large city help stimulate interest in reading. In major cities, it is even possible to find a variety of specialized bookstores (foreign language and subject matter). Smaller communities adjoining a good-sized academic institution, or having a high level of tourism, provide the primary exceptions to the rule.

The education level of the population is another factor in store location. As the average level of education in a community rises, so do the chances of bookstores's succeeding with a smaller population base. College graduates represent the largest segment of book buyers. Where one finds a high concentration of college-educated people living near a large shopping centre, one is also likely to find a bookstore.

A shopping centre is a desirable location for a bookstore, if there is a lot of foot traffic. A store tucked away in remote corner of the busiest centre is not likely to do well. If bookstore owners had to survive solely on sales to individuals seeking a particular book, there would be even fewer stores than now exist. Catering to the tastes of middle-and upper-income person increases a store's chance of success, because a large percentage of book sales result from impulse buying, which requires a location where the bookseller can stimulate the impulse in persons who can afford to indulge themselves. It frequently happens that one goes into a bookstore looking for just one book or something to read and walks out with three or four books. Bookstore owners depend on such impulse buying.

There are striking similarities between a successful bookstore and a successful library. Both require solid knowledge of the community. If librarians could select sites to do bookstore proprietors, library circulation would skyrocket. A public library branch in the centre of Stockholm provides an example of an almost ideal bookstore location: on shopping mall in the centre of the main business district, with a high volume of foot traffic, and near a concourse to a major subway station. This branch is the most active of all the service points in a system where high use is the norm. Atlanta, Georgia, also has a branch of its public library located in a subway station, and it too has very heavy usage.

Store owners attempt to stimulate buyers through a variety of sales methods. Owners employ store window and entryway displays to provide clues about the basic stock before customers enter. Only very large stores can afford to purchase newspaper advertisements on a weekly basis, and

radio and television advertising costs are prohibitively high for most owners. An occasional newspaper advertising costs are prohibitively high for most owners. An occasional newspaper advertisement and a good storefront display are the best they can do to promote business.

One can make a fair assessment of a bookstore merely by looking through its windows, without even walking in the door (of course this is an assessment of the type of material sold, not the level of service). Observing is not the same as casually looking. One can look closely, but without some guidelines one may not know what to look for or how to interpret what is seen. The following broad generalizations can serve as the most basic guidelines, providing a foundation on which to build as one gains experience. One can use retail store marketing techniques in a variety of library settings.

An owner has two basic methods for promoting a store through its windows: One is to focus on a particular topic or on a few bestsellers; the other is a "shotgun" approach, that is, displaying a wide variety of titles appealing to a wide range of interests. Using a little imagination, some nonbook props, and a good supply of books, successful store owners can create interesting window displays. Such windows can stimulate the inactive reader to come in and buy the promoted title, but such buyers seldom pause to examine other titles in the store. Typically, the display leads to good sales of the promoted title or subject. Unfortunately, most buyers, especially those interested only in a certain topic, will not return to the store until the store has another equally striking window display on that topic.

Shotgun window displays are less likely to attract inactive reader. If they are well done, however, such displays will stop a reader. A jumble of books in the window will not do the job, but a wealth of titles using some basic graphic techniques will. Store owners know that this type of window attracts the steady book-buying customer. Such individuals are as likely to buy four or five titles as one, and all of the titles may be impulse purchases, in the sense that the buyer did not come into the store looking for the specific titles purchased.

If a store has consistently striking windows featuring the latest top sellers, this likely reflects the orientation of the total book stock. Almost everything in such a store will have a proven track record. Backlist titles that have had steady sales (dictionaries, cookbooks, home reference items, and classics) will comprise the majority of items in stock, plus stacks of faddish titles and tables piled high with discount and gift books. Though shops of this type may be willing to order single titles, there will be little

advantage for the library. Almost the only reason for a library to patronize such store is for the discount (remainder) book they offer.

There is a remote chance that an independent (non-chain) store owner would special-order items for the library. In smaller communities, this may be the only type of store available. If the library were to buy \$10,000 worth of books each year from the store, this would probably be an adequate incentive for the owner to shift emphasis. (For many small libraries, \$10,000 would be 10 years' purchases.) It will still be possible for the store's regular patrons to find their favourite types of books there, and perhaps it will draw in some new steady customers as a result of the change.

If a store's windows do not provide enough clues to its stock, looking in the door can provide another quick visual check. A store with a good, wide range of stock cannot afford to devote much floor area to such sales method. All stores have sales from time to time—book that have not sold and may be past their return date, some remainders—and of course, there is always the pre-inventory sale. However, the store that is always having a sale is never really having a sale and is seldom of value of libraries.

Another quick visual check is for sideline items. A new bookstore selling only new books needs a minimum community population of 25,000 but almost all bookstores now sell some sidelines; greeting cards, stationary and office supplies, posters, art supplies, audio and video recordings, magazines and newspapers, calendars, games and so forth. Why the sideline? It is difficult to make a good living just selling books, because there are few buyers and the margin of profit on books is much smaller than the margin on sideline items.

The possible profit on books is a complex subject given the various discount arrangements available to booksellers. Publishers offer the same general discounts (trade, long, short, new, mass-market) to bookstores that they offer to jobbers. Bookstores receive long discounts (40 percent or more) on most trade hardback books. In the case of large orders (multiple copies), discounts of 50 percent or more are possible. Normally, the discount is 40 percent, and even then the store may have to buy a required minimum number of copies (five or more) to receive this amount. A few publishers offer 33 to 40 percent off an order of 10 different single titles under the Single Copy Order Plan (SCOP). Librarians ordering a sizable number of single copies from one publisher may find bookstores eager to place such orders. However, it is important to remember that such an agreement requires the bookseller to prepay and to do all the paperwork. Thus, if the library is slow in issuing payments, only large bookstores can afford to carry its accounts.

Some stores will order short-discount (20 to 25 percent) items but add a service charge. If the order contains enough short-discount items from a single publisher, most stores will handle the order without a service charge. On a \$20 book with a 25 percent discount, the bookstore has only a \$5 margin with which to work. After covering the clerical time and recordkeeping costs, the owner is lucky if the transaction has not cost the store more money than it received from the customer, so a service charge is not unreasonable.

There are two classes of paperbacks: quality and mass-market. Quality paperback (the term does not necessarily apply to the content of the book) generally sell for more than \$15 and are found only in bookstores. Mass-market books are those in drugstores, grocery stores, airports, and so forth, that usually sell for \$6 to \$8. Most publishers give a long discount on quality paperbacks when ordered in groups of five to ten or more. A store must order 25 to 50 assorted titles of the mass-market type to begin to approach a 40 percent discount. Orders for less than that amount will get a discount of 25 to 35 percent.

The book distribution system in the United States is cumbersome and frequently adds to the cost of books. A simplified system would benefit everyone. Perhaps the best illustration of the complexity of the system is in the area of discounts, returns, billings, and so forth. Each year the American Booksellers Association (ABA) publishes a 500-page guide titled *ABA Book Buyer's Handbook* (New York: American Booksellers Association, 1947—). Pity the poor bookseller, confronted with all the other problems of a bookstore, who also must wade through a mass of legal forms and sales conditions for purchasing from various publishers. It does create extra work for both bookseller and publisher, and they undoubtedly pass the costs on to the buyer.

Thus, when a sideline item offers a 70 to 80 percent discount, it is not surprising to find a mixed store; as much as 30 to 40 percent of the total store income comes from nonbook sales. A store that devotes more than one-third of the available floor space to nonbook items probably will not be of much use to a library for developing collections. The librarian should be sure to observe the percentage of floor space devoted to sidelines. In addition to quick visual checks, some acquaintance with the store's personnel will provide additional information about a store. Although more and more stores must use a self-service arrangement as labor costs rise, getting to know what staff there is can pay dividends in getting service. Most self-service operations emphasize paperback, sidelines, and popular trade books. Obviously, such stores offer little that will be of value to the library. In general, bookstores can be a valuable means of acquiring new books.

Carrying out visual inspection of local stores and discussing the library's needs with their owners can form an important link in the selection and acquisition program. Only a few libraries, in large metropolitan areas, have good bookstores nearby. Many libraries are lucky if there is one bookstore in the community. Although most libraries will spend only a small part of the materials budget in such stores, the possibility is worth exploring. Though most bookstores have limited potential as a major source of supply for collection development, when a general bookstore exists nearby, the library ought to talk to the owner to determine what, if any, business relationship might be possible. It may take time for the relationship to fully develop, but it can prove mutually beneficial. (*Note* : Most of the preceding discussion does not apply to the large national chains, such as Borders, Barnes & Noble, and Waldenbooks. The operations are very different.)

We cannot leave this section without making a few comments about Internet bookstores. When Amazon.com went online in 1995, it was the only e-store that was "independent." An early 1999 check of Yahoo!'s "Books" page had links to more than 270 online stores (both new and out-of-print sources). Certainly these stores are popular, but not always the quickest means of getting book in hand, at least not during holiday periods.

The Loyola Marymount University library has been using Amazon.com for several years for the purchase of some popular items. (We should note that it did take some effort to develop a workable means of payment.) Monica Fusich wrote a brief article on the use of Amazon.com and other e-stores that appeared in *College & Research Libraries News*. She outlined several services that she had found useful, in her role as a collection development officer who has a other duties as well. (Being a reference librarian or some other "fulltime" assignment as well as having selection responsibilities is very common in today's library environment.) The features she mentioned were :

- \* Cumulated book reviews (one remember that some of the reviews are from the general public)
- \* Search and browsing capability
- \* Size of the database(s)
- \* Coverage of both in-and out-of-print titles, as well as recorded music
- \* Notification services (a rather limited SDI service as of mid-1999).

Certainly e-stores are not *the* answer to the challenges facing busy librarians with a number of duties besides collection development, however, they are of assistance.

**Out-of-Print, Antiquarian, and Rare Book Dealers**

Retrospective collection building is one of the most interesting and challenging areas of collection development work. It was also one of the last to experience the impact of technology and the Internet. Libraries buy retrospectively for two reasons—to fill in gaps in the collection and to replace worn-out or lost copies of titles. There has been a steady decline in retrospective buying on the part of libraries over the past 20 years, due to limited budgets, as well as the need to increase purchases of nonprint formats.

Another factor in the decline has been the ever-growing bibliographic databases, such as OCLC, that make locating a copy of an out-of-print title to borrow through Ill much easier. As a result, acquisitions staff and selectors have less and less experience to draw upon when they need to work in this field. (Dealers in this field are a special breed, unlike other vendors with which the library has more experience.) One outcome of the decline is that this field, which was always very dependent on collectors, is now even more driven by collector interests.

Allowing for overlap, there are two broad categories of out-of-print (OP) dealers. (It should be noted that most of these dealers dislike the label “secondhand dealer.”) One category focuses primarily on general OP books, that is, with buying and selling relatively recent OP books. Often, these books set price. The other category of dealer focuses on rare, antiquarian, and special (for example, fore-edge-painted, miniature, or private press) books. Prices for this type of bok range from around \$10 to several thousand dollars per item.

There is a changing face to the field. Margaret Landesman provided an excellent, detailed outline of the current types of dealers :

- \* Book scouts, working part-time or full-time, searching out desirable books and selling them to dealers and collectors.
- \* Neighborhood stores that operate part- or full-time from low-cost facilities and depend primarily on walk-in trade and a few very loyal customers. They seldom issues catalogues or engage in searching except for their best customers.
- \* Specialized dealers that often issue catalogues and do searching in their speciality; more and more often, these firms operate only by mail or electronically (via an e-mail or Internet Website).
- \* General out-of-print dealers who have a rather large stock in varied areas; many have specialities as well. Some offer search services, some issue catalogues.

- \* Mixed in-print and out-of-print stores—often a store that was an independent new bookshop that is trying to survive the competition from the “superstores” by diversifying.
- \* Academic library book vendors that also offer out-of-print search services.
- \* Rare book dealers specializing in rare and expensive titles. Most established rare book dealers do not handle the more ordinary scholarly out-of-print titles, but many general out-of-print dealers also handle some rare books.

The vast majority of such dealers have small shops in low-rent areas or operate out of their homes. Because of this diversity, it is difficult to make many generalizations about this group. Sol Malkin painted a cheery picture of at least part of the out-of-print trade;

*Imagine a separate book world within the world of books where dealers set up their business where they please (store or office, home or barn); where the minimum markup is 100 percent; where they can call upon 5,000 fellow dealers throughout the world and a stock of over 200 million volumes, practically form the beginning of the printed word, where books are safely packed and mailed with no extra charge postage; where there is no competition from the publishers and discount houses; where colleagues help one another in time of need to provide fellow dealers with a unique service that makes customer happy all the time—an ideal imaginary book world that never was nor ever will be? Perhaps...but the above is 99 percent true in the antiquarian book trade.*

Most libraries will have occasion to use the services of these dealers. Collection development officers working, with large research collections spend much of their time, or did in the past, engaged in retrospective collection development. Changes in organizational goals and programs may result in developing whole new areas of collecting, of both current and retrospective materials. Public libraries also buy from Op dealers, especially for replacement copies and occasionally for retrospective collection building. School libraries make limited use of this distribution system, and when they do, it is for replacement copies, scientific and technical libraries rarely need to worry about acquiring retrospective materials.

Several directories to antiquarian or rare book dealers provide information about specialties (for example, *American Book Trade Directory* from R. R. Bowker), and anyone concerned with selection and acquisition needs to get to know these directories. Some major metropolitan areas have local directories or guides to special bookstores. In any case, a person

will find it worthwhile to develop a listing of the local shops. This can provide quick information about search services, hours and true specialties. One can go to a shop that advertises itself as a Western Americana store only to find the specialty stock very limited or overpriced. Nevertheless, one should examine the shop's stock to identify its true specialties and assess its general pricing policies. Maintaining this private directory can prove well worth the time required to keep it up-to-date. This is not to say that the published sources are worthless. However, owners change emphasis, and their stock turns over and is subject to local economic conditions that often changes faster than published sources can monitor.

Many acquisitions librarians and book dealers classify OP book distribution services into three general types : (1) a complete book service, (2) a complete sales service, and (3) a complete bookstore. The first two many operate in a manner that does not allow or at least require, customers to come to the seller's location. All contact is by mail, e-mail, and telephone. The owner may maintain only a small stock of choice items in garage or basement. In a complete book service, a dealer actively searches for items for a customer even if the items are not in stock, by placing an ad in a publication like *AB Bookman's Weekly* (Antiquarian Bookman).

Sales service is just what the name implies. A dealer reads the "wanted" sections of book trade publications and sends off quotes on items in his or her stock. Such services seldom place ads or conduct searches for a customer. The complete bookstore is a store operation that depends on in-person trade. Stores of this type often engage in book service, and sales service activities as well. Given the unpredictable nature of the OP trade, it is an unusual store does not need to exploit every possible sales outlet.

*AB Bookman's Weekly (AB)* is a weekly publication devoted solely to advertisement from dealers offering or searching for particular titles. Publications of this type are an essential ingredient in the OP book trade, because they serve as a finding and selling tool. Without services like this, the cost of acquiring an OP item would be much higher (Assuming the library could locate a copy without the service).

Selectors also use *AB* in their work. Other useful publications for both dealers and libraries are *AB's Yearbook*, *Bookman's Prince Index* (Gale), Bowker's *Book Out-of-Print*, Ruth Robinson and Daryush Farudi's *Buy Books Where—Sell Books Where* (Robinson Books), *American Book Prices Current* (Bancroft Parkman), and *Library Bookseller* (Antiquarian Bookman).

Both OP and rare bookstores require a high capital investment in a book stock that may not sell immediately. Most owners feel lucky if total

sals for a year equal one times the total stock. Indeed, some items may never sell, and most will remain on a shelf for several years before a buyer appears. Lacking the return rights of the new bookstore owner, a used or rare bookstore owner must be careful about purchases and have inexpensive storage facilities available.

Factors like high investment and low turnover force most owners to locate their business in low-rent areas. Rare and antiquarian shops can sometimes exist in high-rent areas, but in such locations the buyer will pay a premium price for the books. Shops in high-rent areas often grew up with the area and seldom resulted from an owner's decision to move into a high-rent area. Several attempts to start antiquarian shops in high-rent areas in Los Angeles fails, despite locations that had a high volume of foot traffic, well-to-do customers with higher-than average education, and large university only a few blocks away.

One requisite for an OP dealer is a reputation for honesty, service, and fair prices. To gain such a reputation requires a considerable period of time in this field., many newcomers to the business do not have adequate capital to carry them through this period, if they locate in a high-rent area. As a result, most OP shops operate in the less desirable areas of a community. This means that a person looking for such shops must make a special trip to visit them. Out-of-the-way, low-rent quarters for such a store also mean that there will be little walk-in trade. This means that most customers come looking for specific items and are unlikely to take an interest in nonbook items. Therefore, these stores do not stock sideline items, although a few may have selected used phonograph records, old photographs, or posters. Owners can only hope that they have the right items to spark some impulse book-buying in the true bibliophile.

One element in the OP trade is very mysterious to the outsider and even to librarians who have had years to experience with these dealers: How do dealers determine the asking price? As Malkin indicated, the markup is at least 100 percent, but how much more? One may find a book in an OP store with no price on it, take it to the salesperson (often the owner), ask the price, and receive, after a quick look, the answer, "Oh, yes. That is X dollars." Sometimes the amount is lower than one expects, other times much higher, but most of the time it is close to the price the library is willing to pay. Some salesperson seem to be mind readers, to know exactly how much a customer is willing to pay. Malkin summed up the outsider's feeling about pricing in the OP trade: "Many new book dealers think of the antiquarian bookseller as a secondhand junkman or as a weird character who obtains books by sorcery price them by cannibalistic necromancy and sells them by black magic."

It may appear that magic is the essential ingredient in successful OP operations. Actually, the mystery fades when one understands the interaction of three central issues concerning this trade: the source of supply, the predominant sales methods, and the way dealers set prices. Fortunately for those who enjoy the OP trade, the magic remains. With an excellent memory, a love for books, the ability and time to learn books enough capital to buy a basic stock of books, and finally, the patience to wait for a return on capital, anyone can become an OP bookseller.

To a large degree, dealers set prices after they know the answers to the questions of supply and potential sales. The OP dealer has several sources of supply, but only two consistently produce new stock. One major source is personal or business collections. Placing an ad in the telephone directory (saying "I buy old books") will generate a number of inquiries. Two of the most frequent reasons a private collection comes onto the market are household moves and the settling of estates. Only when outstanding private collections of well-known collector come on the market will dealers enter into a bidding contest. They may come to look at a collection, but only after determining by telephone that it is large and has potential value. After a quick review of the collection, they make a flat offer with a take-it-or-leave-it attitude. A person who has no experience with the OP trade is usually unhappy with what that person believes is too low an offer. After one or two such offers, a prospective seller might conclude that there is a conspiracy of OP dealers to cheat owners out of rare items.

Nothing could be further from the truth. Experienced OP dealers know how long most of the items they have bid on will occupy storage space in their shops. They also know how few of the seller's treasures are more than personal treasures. Grandfather's complete collection of *National Geographic* from 1921 to 1943 may be a family heirloom, but to most OP dealers it is only so much fodder for the 25-cent table.

Time is the central theme in the OP trade. In time, every education of a book will become OP; in time, most of the world's printed materials should return to pulp mills for recycling. In time, the few valuable books will find a buyer. But when is that time? Knowing the time factor as well as they do, OP dealers must buy for as little as they can or they will go out of business. Knowledgeable dealers know the local and the national market; therefore, it should not be surprising that several bids on the same collection are almost identical. Dealers read the same trade magazines, they see the same catalogues, and to some extent, they see the same local buyers. If they are to stay in business, they must know the market.

Walk-in sales are only a small segment of OP sales income. Mail-order sales—buying and selling items through publications such as *AB* and catalogues—are the major source of income. Most dealers prepare catalogues of selected items in stock and mail them to other dealers, libraries, and book collectors. Often, the catalogue will list only one type of material (for example, Western Americana, European history, first editions, or autographed books); at other times, it will list a variety of titles that the dealer hopes will appeal to many different buyers.

Just as the contents of catalogues vary, so does the quality of the item descriptions and the care taken in preparing the catalogue. Some catalogues are nothing more than hard-to-read photocopies of text typed on a typewriter in need of cleaning. At most, one can decipher an author, title, and price. On the other end of the spectrum are catalogues that are so well done and contain so much bibliographic information that research libraries add these catalogues to their permanent bibliography collection. Catalogues of high quality are less and less common today, and the trend is likely to continue because of rising printing costs. To recover the cost, it is necessary to sell the catalogue to buyers who are not regular customers, which also usually means that the prices for all the items in the catalogues will be rather high (\$100 and up).

When a librarian sees a catalogue or finds something on one of the OP Websites that contain something the library needs and can purchase, he or she should run, not walk, to the nearest telephone, fax, or e-mail computer and place the order. It will probably be too late, and the telephone offers almost the only chance of getting the order in quickly enough to secure the item. A mailed order is almost certain to arrive too late. Out-of-print folklore says that if one librarian wants an item, so do 30 others.

Dealer catalogues and magazines, such as *AB*, provide both a sales mechanism and a major means of establishing prices. If an OP dealer in London offers an autographed copy of the first edition of Richard Adams's *Watership down* for \$10, other dealers will use this information as a guide in setting prices for copies of the book that they have in stock. An unautographed copy of the first edition would be something less than \$10, assuming that both copies were in approximately the same physical condition. Other editions, including foreign first editions, also would sell for less. The foreign first editions might come close to the English first edition in price, but the *first* first edition, usually commands the highest price.

Prices are based on a number of interrelated factors :

1. How much it costs to acquire the item

2. The amount of current interest in collecting a particular subject or author
3. The number of copies printed and the number of copies still in existence
4. The physical condition of the copy
5. Any special features of the particular copy (autographed by the author or signed or owned by a famous person, for example)
6. What other dealers are asking for copies of the same edition in the same condition.

Without question, the current asking price is the major determining factor—given equal condition in the other five areas—thus making sales catalogues and *AB* major pricing tools.

A few additional facts about the condition of OP books are important for beginning librarians to know, because these bear directly on price. The condition of the book will affect its price. One may assume that most OP dealers sell their stock as described or “as is.” If there is no statement about the item’s condition, one may assume it to be in good or better condition. A common statement in catalogues is “terms—all books in original binding and in good or better condition unless otherwise stated.”

These are examples of the basic catalogues that a librarian concerned with retrospective buying would check. The sample from the William H. Allen catalogue represents more expensive materials, but is still well within the limits from which a beginner might select. All the catalogues give information about the condition of the items offered.

What does the “t.e.g.” indicate about item 6438 in Oriental and (very good) (item 3) and “fine” (item 9) in the Janice Bowen catalogue, or between “exceeding rare” (item 8470) and “scarce” (item 852) from the Jenkins Company? “T.e.g.” means “to edges gilt.” Some of the meanings become clear only after one gets to know the particular dealer, but some guidance can be found in books like John Carter’s *ABC for Book Collectors and The Bookman’s Glossary*. (New editions of such works appear periodically, but initially, any edition will be suitable.) Carter provides illuminating and entertaining notes about dealer adjectives describing the condition of a book :

**General**—As new, fine, good, fair, satisfactory (a trifle condescending, this) good second-hand condition (i.e., not very good, poor (often coupled with an assurance that the book is very rare in any condition), used, reading copy (fit for nothing more and below collector’s standard), working copy (may even need sticking together).

**Of exterior**—Fresh, sound (probably lacks “bloom”), neat (implies sobriety rather than charm); rubbed, scuffed, chafed, tender (of *joints*), shaken, loose, faded (purple cloth and green leather fade easily), tired (from the French *fatigue*) worn, defective (very widely interpreted), binding copy (i.e., needs it).

**Of interior**—Clean, crisp, unpressed, browned (like much later 16th century paper), age-stained, water-stained (usually in the depreciating form, “a few light water stains”), foxed (i.e. spotted or discolored in patches: often “foxed as usual,” implying that practically all copies are), soiled, thumbed (in the more lyrical catalogue notes, “lovingly thumbed by an early scholar”), and (very rare in English or American catalogues, but commendably frank), washed.

What one dealer describes as fine another may call good. An experienced special collections librarian suggests that one buy on approval whenever possible, especially when buying a dealer for the first time.

Because dealer catalogues are so important and the manner in which they describe an item’s condition is central to a buying decision, a former student of Dr. Evants conducted a small “experiment” in describing some out-of-print books. The student worked for an antiquarian book dealer and helped prepare sales catalogues. The students selected three items that were to appear in a forthcoming catalogue. The dealer’s description of each book was one element in the study. Two other antiquarian dealers who worked in the same subject areas were then given the three items to describe as if they were going to list the books in one of their catalogues. In addition, the books were given to two librarians (both were in charge of large rare books collections in major research libraries), (water stains, mildew, tears, and so forth) were previously identified in each book before the librarians and other dealers described the items. Both librarians noted all of the conditions for each book and gave precise information. All three dealers’ descriptions had to be combined to have a complete list of all the conditions for each item. No one dealer described all the conditions for all the items. It was also interesting, but not surprising, to find that the dealer descriptions tended to downplay the faults. One would expect this, because their goal to sell the items. Professional associations (such as ALA) and antiquarian dealer associations attempt to develop guidelines to help reduce the tensions that often arise between libraries and dealers as a result of catalogue descriptions.

Overall, working in this area can be fun and frustrating at the same time. Clearly, there is a need for experience with dealers to know if the descriptions of their offerings are good enough for the library. There is also the nagging question of fair market price for what is often a one-of-kind

offering, at least at that moment. There are commercial guides that can help one judge the asking/quoted price—*Bookman's Price Index* (Detroit, Mich.: Gale Research, 1964—), *American Book Prices Current* (New York: Bancroft-Parkman, annual, 1930), and *Book-Auction Records* (London: W. Dawson, annual, 1902-) are three examples.

This section, like the one on new bookstores, can only briefly outline some of the more significant points about the OP book trade provides some basic information upon which one can continue to build while buying and collecting books for oneself or a library.

### Other Media Retail Outlets

Because of the variety of their formats and purposes, it is not possible to generalize about retail outlets for other media. In most cases, libraries acquire most of the format directly from their producers or from an educational media jobber. The most common retail outlets for media other than books are the music shop and video store. Many small communities that do not have a bookstore have a music store and a video outlet. One reason for their popularity is that each tape or CD has a relatively low sales price (videocassettes are often rented), and a fairly large market exists for both formats. The top 20 recordings (tapes and CDs) of popular music may outsell the top 20 books by a 20-to-1 margin, at least in the United States.

Other than music and video stores, it is almost impossible to describe other media retail outlets, primarily because there are so few that it is hard to generalize. There are a few map shops in larger cities, most metropolitan areas have at least one sheet music store, and there are museums that sell slides and art reproductions. Sometimes, one can locate needed educational models and games at a teacher supply store. Libraries frequently purchase microforms from the producers. The distribution system for books and other library materials is varied and complex. One must know something about the system before beginning to develop a library collection. This chapter merely highlighted what one needs to know; it portrays just the beginning of a long, challenging, but enjoyable learning process. Jobbers, book dealers, and media vendors are more than willing to explain how they modify their operations to accommodate library requirements, when they know that a librarian has taken time to learn something about their operations.

### Fiscal Management

When faced with limited funding, a library must make the money go as far as possible. In the area of collection development, fiscal management

is a joint activity involving everyone who participates in the process— selectors, acquisitions staff, and senior management. Controlling expenditures and securing adequate funding are two key activities in collection management. Monies spent on materials for the collection constitute the second largest expense category for the majority of libraries and information centres. Traditionally, in United States libraries, salaries represent the largest percentage of the total budget, followed by the materials (book) budget, and finally, all other operating expenses. That order remains today, but the percentage spent on materials has decreased as salaries have risen. Although percentages vary, the order also remains the same in any type of information environment or any size collection. As is often the case, most of the literature on the topic of collection budgeting reflects a large research library orientation. However, the same issues exist in other libraries. Similarly, most of the ideas and suggestions contained in such articles apply equally well to other information settings.

In the recent past, there has been constant pressure on the materials budget of most libraries. This pressure resulted in a decline in the percentage of the total budget spent on acquiring items for the collection. The almost yearly double-digit inflation of serials prices further skewed the traditional balance in collection fund allocations. In many libraries in the United States, serials expenditures exceed monographic purchases even in institutions that have traditionally emphasized book collections.

If one compares the total amount of money expended on materials 30 years ago with the current funding levels, today's total is considerably higher. Unfortunately, the total expenditures do not tell the entire story. When one looks at the number of items acquired for the money, one sees that the increase in acquisitions is not proportional to the funding increases. We are spending more and acquiring less. Since the 1970s, many libraries, along with many other organizations have dealt with budgets that some persons call "steady state," others call "zero growth," and still others call "static." At best, budgeting of this type uses the previous year's inflation rate as the base for the next fiscal year's increase. An average inflation rate, like all averages, contains elements that increase at both above and below the average rate. For libraries this is a problem, because the inflation rate for information materials has been running well ahead of the overall inflation rate.

### **Problems in Fiscal Management**

Over the years, collection development staffs in the United States have faced several problems. Book and journal prices have generally increased, and continue to increase, at rates well above the country's

average inflation rate as measured by the Consumer Price Index (CPI). As a result, most libraries have experienced some decline in acquisition rates. Serials prices increased even more rapidly than did monographic prices. To maintain serials subscriptions, libraries took monies from book funds thus further reducing the number of monographs acquired. Eventually, libraries started cancelling subscriptions. Thus, differential inflation rates and the use of national average rates as the basis for calculating budgets have contributed to declining acquisition rates for many libraries.

A second problem was, and still is, that the materials budget is vulnerable in periods of tight budgets. Expenditures on materials are somewhat discretionary in that (in theory) one could wait to buy an item until the next fiscal year. Institutions set staff salaries on an annual basis, and staff reductions are rare during the middle of a fiscal year, unless the organization faces a major financial crisis. In essence, salaries are the last item organizations cut when attempting to save money. Without heat, light, and water (utility bills), the organization cannot remain open, so those generally are not cut during a fiscal year. Some operating expenses are discretionary; pens, pencils, paper, typewriter ribbons, and other office supplies. Professional development and travel reimbursements may likewise be frozen, in an attempt to save funds. Institutions may achieve small savings, in terms of percentage of the total budget, by cutting back in such areas. Institutions with relatively large library collections view the materials budget as one of the largest available pools of funds that could be cut in an emergency. (Even a medium-sized library, such as the Von der Ahe Library at Loyola Marymount University, has a materials budget of well over \$1.5 million. This amount is large enough to make the financial officer look at it as a source of significant funds if needed.) Further, the reality is that the monograph materials budget is the only place where significant cuts are easy to make, because of the non-ongoing nature of the material. All too often, the long-term impact of such decision does not receive enough consideration, and the other choices appear, at least in the short run, to be even less acceptable. These issues are institutional and apply to corporate and special libraries as much as to publicly funded libraries.

What happened in collecting in the 1970s and 1980s was a shift in emphasis from monographs to maintaining periodical collections. Today, that shift is slowly reversing, and through careful library budget preparation and presentation, funding authorities appear to be more willing to accept differential budget increases that more closely reflect the actual expense experience. If nothing else, the problems of the past

30 years caused collection development officers to become better planners and to develop more accurate methods for calculating budgetary needs. As a result they have more credibility with funding authorities.

This chapter covers several budget and fiscal topics; (1) a brief discussion of library accounting systems, (2) estimating costs of materials, (3) allocating available funds, (4) monitoring expenditures (encumbering), and (5) special budgeting problems.

### Library Fund Accounting

The vast majority of libraries and information centres are part of not-for-profit (NFP) organization. Being not-for-profit affects how the library maintains its financial record, particularly when contrasted with for-profit organizations. Libraries that are part of a governmental jurisdiction receive most revenues through an annual budget. Collection development officers must have accurate information about the monies available, and they need accurate data to assist in the preparation of budget requests. They funding authorities review the budget requests and authorize certain levels of funding for various activities. The three most common forms of income for libraries are appropriations (monies distributed by the governing body to its agencies to carry out specific purposes), revenue generated by the library as a result of service fees and fines, and endowment/donations.

Because of the nature of the financial activities, certain accounting terms and concepts are different for NFP organizations than for for-profit organizations. However, some general accounting rules and practices do apply. One special term for NFP accounting is *fund accounting*. (Fund accounting has been defined as a set of self-balancing account groups.)

Another difference is that the profit-oriented bookkeeping system equation uses *assets, liabilities* and *equity*; in NFP accounting the elements used are assets, liabilities, and *fund balance*. One of the equations for NFP bookkeeping is that assets must equal liabilities plus the fund balance; another is that the fund balance is the difference between assets and liabilities. Substituting equity for fund balance would make the equation is that an increase in fund balance carries with it no special meaning whereas an increase in equity is a positive signal in a for-profit organization. Other term, such as *debit, credit, journalizing, posting, and trial balance*, have the same meaning, regardless of the organization's profit orientation.

In most libraries, the major fund is the operating fund. Other fund may be endowment and physical plant funds. The operating funds are the group of accounts used to handle the day-to-day activities of the

library for a given time, usually one year, covering such items as salaries, materials purchases, and utility bills. Within the operating fund there may be two categories of accounts; restricted and unrestricted.

*Restricted accounts* require that one use the monies only for specific purposes. Collection development and acquisition staff often work with such accounts (frequently referred to as funds in the monetary rather than the accounting meaning of the term). More often than not, these accounts are the result of donations by individuals who have definite ideas about how the library may spend the money. Some libraries have endowments that are a combination of individual and corporate or foundation gifts; and example is endowments developed under the National Endowment for the Humanities Challenge Grant program. (Sometimes gifts are for current use, and sometimes they are for an endowment. Endowments should generate income for the library indefinitely. The normal procedure for endowments is to make available some percentage of the interest earned. The balance of the interest is returned to the endowment to increase its capital base. Private libraries, and an increasing number of publicly funded libraries, have one or more endowments.) Often the donor's restrictions are narrow. When the restrictions are too narrow, it is difficult to make effective use of the available monies. Most collection development officers prefer *unrestricted* book accounts (used for any appropriate item for the collection) or broad-based restricted accounts.

The purpose of the accounting system is to assure the proper use of monies provided and to make it possible to track expenditures. That is, one must record (charge) every financial transaction to some account, and keep a record to what the transaction involved. With a properly functioning fund accounting system, it is possible to tie every item acquired to a specific account and to verify when the transaction took place. With a good accounting system, one can easily provide accurate reports about all financial aspects of collection development activities. Furthermore, it is great planning aid. It takes time to understand accounting systems, but one must understand them if one wishes to be an effective and efficient collection development officer. A good book to consult for accounting is G. Stevenson Smith's *Managerial Accounting for Libraries and Other Not-for-Profit Organizations*. For budgeting, another very sound title is Richard S. Rounds's *Basic Budgeting practices for Librarians*.

### **Estimating Costs**

Several factors influence the funding needs for collection development. Changes in the composition of the service community may have an important impact in either a positive or negative sense. Another factors

is changes in collecting activities, such as the scope of depth desired in a subject areas. The two cost factors that come up year in and year out are the price of materials and inflation.

From time to time, libraries have had some problems establishing the credibility of collection development funding requirements. Though a good accounting system will assist in justifying budget requests, additional data about boo expenditures is often necessary. One example of the problems cause by inflation, stable budgets and rapidly, rising prices for materials (and perhaps limited credibility) is what happened to the expenditures and acquisition rates for academic libraries. Between 193 and 1998, monograph prices rose just over 25 percent. For serials, the data was almost shocking, if one experienced it; between 1986 and 1966 prices rose 169 percent. Although the total amount of money expanded was higher in 1998 than in 1993, monograph purchases fell by 14 percent. Libraries of every type and size experienced similar problems during this time. *Library Journal* periodically publishes surveys of spending and other activities of various types of libraries. Though the surveys do not appear predictably, when they become available they provide useful manual data to compare where your library falls.

Data about price increases has been available for some time. During the 1970s, the profession made an all-out effort to create useful library price indexes that measure rates of change. A subcommittee of the American National Standards Institute, the Z39 Committee, was able to develop guidelines for price indexes. By the early 1980s it was necessary to revise the guidelines. Another group effort was that of the Library Materials Price Index Committee (Resources Section, Resources and Services Division of ALA). That committee produced a price index for American materials and some international publications. These efforts provide consistent data on price changes over a long period, which, when averaged, is as close as one can come to predicting future price changes.

One finds the most recent data in journal; historical data appear in *The Bowker Annual*. Using *The Bowker Annual* may be adequate for some purposes, but one needs to be aware that the information appearing in the "current" volume is almost two years old. Preliminary data fro books published during a calender year appear in *Publishers Weekly* (often in late February or early March). Final data appear some months later (September or October). The major problem with the published indexes is that up-to-date data may not be readily available when one must prepare a budget request. Vendors can sometimes provide more current data. These information sheets contain price data about books handled

in the firm. At the time of preparation of this chapter the sheets covered titles processed between January 1997 and December 1998.

Just as libraries prepare budget requests at different times of the year, pricing data appears at various times during the year in a variety of sources. The challenge is to find the most current data, which may determine whether the library receives requested funding.

For libraries that purchase a significant number of foreign publications, there is a need to estimate the impact of exchange rates. Volatile exchange rates affect buying power almost as much as inflation. For example, in January 1985 the pound sterling was at \$1.2963 (U.S.); in January 1988 it was up to \$1.7813 (U.S.); in 1992 it was \$1.7653 (U.S.); by January 1994 it was down to \$1.4872 (U.S.); and in March 1999 had moved up to \$1.6064 (U.S.). During the same period, the Canadian dollar went from \$0.6345 to \$0.7693 (U.S.), then to \$0.7913 (U.S.), back to \$.736 (U.S.) and then to \$0.5199 (U.S.). Although it is impossible to accurately forecast the direction and amount of fluctuation in the exchange rates for the next 12 months, some effort should go into studying the past 12 months and attempting to predict future trends. Naturally, one must have good data about the amounts spent in various countries during the past year. The country of publication may be less important than the country in which the vendor is located. For example, if the library uses the vendor Harrassowitz, price will be in deutsche marks, regardless of the country of origin of the item purchases. After collecting the data, one can use them as factors in estimating the cost of continuing the current acquisition levels from the countries from which the library normally buys.

A new publication, started in 1999, may prove to be very useful for collection development budget planning. *Biblio Data Price Watcher* is a twice-monthly newsletter about four pages per issue, that tracks prices of information products in both print and electronic formats. Subscription information is available at the Bibliodata Website (<http://www.bibliodata.com>).

### **Allocation of Monies**

As mentioned earlier, collection development funds may be restricted or unrestricted. For most libraries, the unrestricted allocation represents the majority of monies available for collection development. Libraries employ internal allocation systems in an attempts to match monies available with needs and to assure that all collecting areas have some funding for the year. These systems provide guidelines for selection personnel; the allocation set limits on, and expectations for, purchases

in subject areas or for certain types of material. Ordinarily, the method selected reflects the collection development policy statement priorities. If the library employs a collecting intensity ranking system in the collection development policy, it is reasonable to expect to find those levels reflected in the amount allocated to the subject or format. Almost all allocation methods are complex, and how one goes about matching the needs and monies available requires consideration of several factors.

Among the factors one must consider are past practices, differential publication, unit cost and inflation rates, level of demand, and actual usage. Implementing a formal system takes time and effort. Some professionals question whether it is worthwhile allocating the monies. Opponents to allocation claim it is difficult to develop a fair allocation model and it is time-consuming to calculate the amounts needed. They also claim that, because the models are difficult to develop, libraries tend to leave the allocations in place too long and simply add in the next year's percentage increase rather than recalculate the figures annually. They suggest that selectors may not spend accounts effectively because there is too much or too little money available. Finally, they argue that it is difficult to effect transfers from one account to another during the year. Proponents claim that allocations provide better control of collection development and are a more effective way to monitor expenditures.

Some allocations do take place, regardless of the presence or absence of a formal allocation process. When there is no formal system, selectors engage in informal balancing of needs and funds available for various subjects or classes of material. (In the worst case, the more influential selectors have greater access to the funds, regardless of actual collection or user needs.) It seems reasonable, if the process is going to take place one way or another, to have the formal process provide the best opportunity for achieving a fair balance.

A good allocation process provides at least two outcomes. Obviously, its overall purpose is to match available funds with needs. Second, it provides selectors with guidelines regarding how they should allocate their time. That is, if one is responsible for three selection areas requires the most attention. (In some cases, it is harder to spend the smaller amount, because one must be careful to spend it wisely.)

Third, the allocation process provides a means of assessing the selector's work at the end of the fiscal year. Finally, it provides clients with a sense of collecting priorities, assuming the allocation information is made available to them. The library can communicate the information in terms of percentages rather than specific monetary amounts if there

is a concern about divulging budgetary data. The allocation process should be collaborative, with input from all interested parties. Two things are certain: Whether the library uses a formal or informal approach to gaining the input, the process has political overtones, and the outcome will invariably disappoint some individual or group. This is particularly true when introducing a revised allocation of a static budget. Those who receive more money will be happy but those who lose funds will object to the method used to reallocate the funds. Unfortunately, sometimes the objectors are influential enough to get the allocations changed, which defeats the purpose of the process—matching funds to needs.

What allocation method the library selects is influenced, in part, by internal library practices, institutional needs, and extra-institutional requirements (such as those of accreditation agencies). Internal factors include operational practices that determine what type of information is readily available to those making the allocation decisions (vendor's country to origin, number of approval titles versus firm orders, format and subject data, and use are some examples). How the library organizes its services—centralized or decentralized—also plays a role in the selection decision. Other internal factors affecting which allocation method is used include past practices for allocation and the purpose of allocation (that is, use as a control mechanism or guideline). Institutional factors, in addition to the obvious importance of the institution's mission and goals, include the type of budget control it employs, its organization, and its overall financial condition. Extra-institutional factors are the political atmosphere (for example, the degree of accountability), economic conditions, social expectations and values regarding information services (such as equal access and literacy levels), and outside agencies (such as accreditation bodies or governmental bodies) that monitor or control the institution.

One can think of allocation methods as being a continuum with impulse at one end and formula at the opposite end. Between the two extremes are several more-or-less structured methods. Impulse allocation can take the form of allowing active selectors to have greatest access to available funds or, with a slightly more structured approach, to allocate on the basis of perceptions of need. History of past use and some annual percentage increase for each allocation area is a little more formal; it is probably one of the most widely employed methods. Allocating on the basis of organizational structure (main and branch units) is still more formal (often, the allocation is a fixed percentage of the fund pool). If one adds to that method some incremental funding based on workload (such as circulation data), one moves even closer to the formula end of the continuum. Also, somewhere in the middle of the continuum is the format

allocation method (including books, serials, audiovisual, electronic, and reference).

Format allocation may be as simple as dividing monies between monographic and serials purchase accounts. Even this “easy” division is no longer easy, because serials prices increase more rapidly than other materials costs. How long can one shift monies from other accounts to maintain serials subscription levels without damaging the overall collection? Libraries employ several category allocation methods in addition to format, such as subject, unit, users, language, and formula. Most libraries that use a format allocation system use several approaches. Many small libraries, including most school media centres, employ the format system using monographs, serials, and audiovisuals as the broad groupings. The library divides these funds by subject (language arts), grade level (fifth grade), or user group (professional reading). Occasionally, libraries divide monograph funds into current, retrospective, and replacement categories. In libraries using approval, blanket-order, or standing-order plans, it is normal practice to set aside monies for each program before making any other allocations. A typical approach would be to set aside an amount equal to the prior year’s expenditure for the category with an additional amount to cover expected inflation. The reason for setting aside these funds first is that they are ongoing commitments.

Formula allocations have become more and more popular, especially in large libraries. Librarians have proposed many formulas over the years, but no one formula has become standard. Each library must decide which, if any, formula is most appropriate for its special circumstances. A 1992 article by Ian R. Young described a project that compared seven formulas. His results showed that, though each formula employed one or more unique variables, there were no statistically significant differences among the formula results in terms of a single institution. He concluded that there was a high degree of similarity among the seven formulas, at least when applied to his institutional setting. Based on our experience with formulas and the selection of a formula in several institutional settings, we would say the library selects the formula that contains all the variables necessary to satisfy all interested parties. (Thus, political rather than practical considerations dictate which formula is used.) Only quantifiable factors (for example, average price, number of titles published, and use data) can be used as variables in formulas. This does not mean that subjective judgments do not play a role, but the allocation process as a whole depends on weightings, circulation data, production figures, inflation and exchange rates, number of users, and so forth.

*ALA's Guide to Budget Allocation for Information Resources* indicates that there are six broad allocation methods: historical, zero-based (no consideration of past practice), formulas, ranking (a variation of formulas), percentages, and other modeling techniques. The book also outlines some of the variations in formulas by type of library. For example, academic libraries might consider enrolment by major or degrees granted in a field. Public libraries might factor in differences in the service communities being served, the ratio of copies per title of bestsellers to general titles, or the demand (in terms of use or requests) in popular subject fields. Special libraries employ factors like delivery time expectations of the clients, service chargebacks, and the number of clients or departments served. Many school media centres use factors like changes in curriculum, number and ability of students by grade level, and loss and aging rates of various subject areas in the collection. The guide provides a starting point for anyone thinking about changing the allocation process a library uses.

Allocating funds is an involved process, and changing an existing method is almost more difficult than establishing a new method. Often, past practices and political issues keep the process from moving forward or evolving. Serials inflation rates (almost 700 percent since 1970) make it difficult to provide both ongoing subscriptions and a reasonable level of monographic acquisitions. How much to allocate to current materials and how much to allocate to retrospective purchases is related, in part, to the serials inflation rate. If the decision is to maintain serials at the expense of monographs, in time, there will be a significant need for retrospective buying funds to fill in gaps in the monograph collection. Subject variations also complicate the picture: Science materials are very expensive; social science materials are substantially less costly but are more numerous. Electronic access, rather than local ownership, also clouds the picture, especially because electronic access often involves cost at the individual level, something with which allocation models have not dealt. Although allocation work frequently involves political issues and occasionally involves upset individuals, in the long run careful attention to this process will produce a better collection for the organization the library or information centre serves.

### **Encumbering**

One aspect of accounting and financial management in collection development that differs from typical accounting practice is the process of *encumbering*, which allows one to set aside monies to pay for ordered items. When the library waits 60, 90, or 120 or more days for orders, there

is some chance that the monies available will be over- or underspent if there is no system that allows for setting aside monies.

The following chart shows how the process works. Day 1, the first day of the fiscal year, shows the library with an annual allocation of \$1,000 for a particular subject area. On day 2, the library orders an item with a list price of \$24.95. Though there may be shipping and handling charges, there probably will be a discount. Because none of the costs and credits are known at the time, the list price is the amount a staff member records as encumbered. The unexpended column reflects the \$24.95 deduction, though there is still nothing in the expended category. Sixty-two days later, the item and invoice arrive; the invoice reflects a 15 percent discount (\$3.74) and no shipping or handling charges. The bookkeeper records the actual cost (\$21.21) under expended and adds the \$3.74 to the unexpended amount. The amount encumbered now is zero.

	<i>Unexpended</i>	<i>Encumbered</i>	<i>Expended</i>
Day 1	\$1,000.00	0	0
Day2	\$ 975.05	\$24.95	0
Day 62	\$ 978.79	0	\$21.21

Needless to say, this system is much more complex than the example suggests, because libraries place and receive multiple orders every day. With each transaction the amounts in each column change. *One seldom knows the precise balance, except on the first and last day of the fiscal year.* If the funding body takes back all unexpended funds at the end of the fiscal year (a cash accounting system), the collection development staff will want to know their fund(s) balances as they enter the final quarter of the year.

Several factors make it difficult to learn the exact status of the funds, even with the use of encumbrance. One factor is delivery of orders. Vendors may assure customers that they will deliver before the end of the fiscal year, but then fail to do so. Such a failure can result in the encumbered money being lost. With a cash system, the collection development staff must make some choices at the end of the fiscal year if there are funds in the encumbered category. The main issue is determining if the items still on order are important enough to leave on order. An affirmative answer has substantial implications for collection development. Using the foregoing example and assuming that day 62 comes after the start of a new fiscal year and that the new allocation is \$1,000, on day 1 of the new fiscal year, the amount unexpended would be \$975.05 (\$1,000 minus \$24.95), encumbered \$24.95, and expended zero. In essence, there is a reduction in the amount available for new

orders and the library lost \$24.95 from the prior year's allocation. (The senior author once took over as head of a library on June 25, and on July 1 the system financial officer reported that the entire acquisitions allocation was encumbered for the coming fiscal year. To have some funds for collection development over the next 12 months, it was necessary to cancel 347 orders.)

The staff also needs to consider how reliable the vendor or producer is, because occasionally an item never arrives. How long should one wait? The answer varies from producer to producer and country to country. If the library buys substantial amounts from developing countries, waiting several years is not unreasonable. Because print runs tend to be very close to the number of copies on order, the chance of never being able to acquire the item makes it dangerous to cancel the order.

There is a problem in leaving funds encumbered for long periods under either system, especially when there is rapid inflation or exchange rates are unfavourable. These are two reasons why a firm but reasonable date for automatic cancellation of unfilled orders is important.

Other factors making it difficult to know the precise fund balance during the year are pricing and discounts. Prices are subject to change without notice on most library materials, particularly online resources, which means that the price may be higher on delivery than when ordered. In addition, discounts are unpredictable.

Because of the uncertainty, most libraries encumber the list price without freight charges and just hope that the amount will be adequate. Exchange rates enter the picture for international acquisitions, and the question of when the rate is set can be a critical issue. Certainly, the rate is not firm on the date the order is placed, but is it firm at the time of shipment? The date of the invoice? The date the library receives the invoice and items? The date the financial office makes out the check? Possibly even the date the supplier deposits the check? With international orders, one can expect four months or more to elapse between order placement and delivery. In periods of rapid rate changes, even a four-month difference can significantly affect the amount of money available for purchases.

Moving monies back and forth, especially in a manual system, can lead to errors, so the acquisitions department needs a good bookkeeper. Automated accounting systems speed the recording activities and provide greater accuracy, as long as the data entry is correct. Despite the uncertainty that exists with the encumbering system, it is still better than having unexpended and expended categories, because without it one

would not know how much of the unexpended balance was actually needed for items on order.

### Special Problems

Shipping and handling rates and taxes on items purchased have taken a toll on the funds available for additions to the collection. Vendors that in the past paid for shipping now pass the cost to customers. The U.S. Postal Service has reduced the difference between postal rates such as the library rate and parcel post. For example, in 1970 it cost \$0.18 to ship a 2-pound book; in 1980 it cost \$0.80; by 1999 the rate was \$1.54. There are suggestions in the press that the Postal Service will request a 47 percent increase in the rate in the near future. All the charges on the invoice (postage, handling, shipping, taxes, and so forth) must come from the acquisitions budget. As these charges mount, there is less money for the items the library wishes to add.

Some publishers and vendors employ a freight pass-through (FPT) charge. Originally, in 1981, publishers intended FPT to create a two-tier pricing system to enable bookstores to pass on freight charges to the customer. That is, the publisher charged the bookstore an invoice price and the dust jacket carried the higher FPT price. Some publishers used a percentage of the invoice price (3 or 4 percent), and others used a flat fee (\$0.50). The problem for libraries buying from jobbers is determining what price the jobber used in calculating the library discount. Most contracts with jobbers call for discounts on list price. What is the list price: the invoice price or the FPT price printed on the dust jacket? Jobber practice varied from one extreme to the other. Though the percentages are small, as are the amounts of money for any one title, the cumulative effect on an acquisition budget is great. The FPT problem is not as important today as it once was, but the growing cost of shipping and postage is an ongoing concern.

### Audits

We have a favourite Robert Frost poem about accounting that goes:

Never ask of money spent

Where the spender thinks it went.

To remember or invent

What he did with every cent.

*Robert Frost,*

*“The Hardship of Accounting”*

One outcome of having the power to manage and expend substantial amounts of money is fiscal accountability. Actually, the amount of money need not be “substantial,” if they are public or private funds. Only a few librarians have the opportunity to expand the medium amount of an ARL library for collection development purposes (\$5.48 million in 1998). The process of establishing how well one has handled the monies one is responsible for expending is the audit.

A rather legalistic definition of an *audit* is the process of “accumulation and evaluation of evidence about quantifiable information of [an] economic entity to determine and report on the degree of correspondence between the information and established criteria.” More simply put, it is the process of assuring that the financial records are accurate and that the information is presented accurately, using accepted accounting practices; and of making recommendations for improvements in how the process is carried out. The basic questions and required records relate to: Was the purchase made with proper authorization? Was it received? Was it paid for in an appropriate manner? Is the item still available? (If the item is not still available, there should be appropriate records regarding its disposal.) Today, with automated acquisitions systems, undergoing an audit is less time-consuming than in the past, where the “paper trail” was in fact a number of different paper records that had to be gathered up and compared. At least now the system can pull up the necessary material fairly quickly.

Are audits really necessary in libraries? Must we remember how, where, on what, and when we spent every cent? Unfortunately, the answer is yes. Not many years ago Herbert Synder and Julia Hersberger published an article outlining embezzlement in public libraries.

### **Summary**

One must be constantly aware of changes in prices and in invoicing practices to gain the maximum number of additions to the collection. Watch for changes, and demand explanations of freight and handling charges, inappropriate dual-pricing systems, or other costs that may place additional strain on the budget. By understanding basic accounting principles and using the reports and records generated by the library’s accounting system, one will be better able to monitor the use of available monies and to use them effectively to meet the needs of the public.

## Legal Issues

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With the passage of the Digital Millennium Copyright Act in October 1998, much has changed for libraries and collection development officers. One issue that, at the time we prepared this chapter, remains unknown is just what the concept of “fair use” will mean in the future. Another legal issue that is becoming ever more important for libraries and collection managers is license agreements.

National laws and regulations influence collection development activities. Two of the topics discussed in this chapter are of concern only to U.S. libraries. However, most of the chapter addresses copyright, lending rights, licensing agreements, and other concepts of interest to libraries around the world. Two additional legal issues relating to U.S. libraries concern Internal Revenue Service (IRS) regulations.

### IRS Regulations

We noted in earlier chapters that libraries of all types receive gifts from time to time. Some gifts are useful and occasionally even very valuable; however, much of the time they are of little interest to the library. Nevertheless, the individuals giving the material generally believe that it is very valuable. People often expect, what, and/or request a document from the library indicating the value of their gift.

### Valuing Gifts

One of the IRS regulations relevant to libraries has to do with gifts and donations to a library or not-for-profit information centre. Any library, or its parent institution, that receives a gift-in-kind (books, journals, manuscripts, and so forth) with an appraised value of \$5,000 or more must report the gift to the IRS. A second regulation forbids the receiving party (in this case the library) to provide an estimated value for a gift-in-kind.

A third disinterested party or organization must make the valuation. The latter requirement grew out of concern that recipients were placing unrealistically high values on gifts. The donor received a larger tax deduction than was warranted, and it did not cost the receiving organization anything to place a high value on the gift. Normally, an appraiser charges a fee for valuing gifts, and the donor is supposed to pay the fee. Most often, the appraisers are antiquarian dealers who charge a flat fee for the service unless the collection is large or complex. If the appraisal is complex, the appraiser charges either a percentage of the appraised value or an hourly fee.

Typically, with gifts thought to be less than \$4,999 in value, the library may write a letter of acknowledgement indicating the number and type of items received. For gifts of less than \$250, the IRS does not require a letter. The donor can set a value on the gift for tax purposes. (The best practice is to provide a letter for any accepted gift.) If asked, the library can provide dealer catalogues so that donors can review retail prices for items similar to their donation. However, the final value of the gift is established by the donor and her or his tax accountant. *Note:* The collection development staff should be involved in the acceptance of gifts and must have a sound knowledge of material prices. Just because the gift is small in terms of number of items does not mean that the fair market value is below \$5,000. Recently, Loyola Marymount University (LMU) received a gift of 483 books about Japanese art, architecture, and landscape design; its appraised value was \$39,743. The donor might well have accepted a letter simply stating the number of books given and thus have lost a substantial tax deduction. (For additional discussion about gifts.)

To meet IRS requirements, an acknowledgment letter must contain the library's name, the date of the contribution, and the location or place of the gift. At a minimum, that description should state the number and kind of gift (100 mass-market paperbacks, 40 hardcover books, 6 complete and 20 unbound volumes of *National Geographic*).

### **Publishers' Inventories**

Another IRS regulation or ruling (the *Thor power Tool* decision) had some influence on acquisition practices in the 1980s and early 1990s. The ruling overturned a longstanding practice common in business (including the publishing industry), which was writing down the value of inventories to a low level each year. The practice produced a paper loss that the firm deducted from its income, thus reducing tax liability. The U.S. Supreme Court, deciding that this was taking a current deduction for an estimated future loss, said the practice was inappropriate. Only if the inventory is defective or if there is objective evidence that the firm offered the inventory for sale below cost could it employ the write-down.

What does the *Thor* decision have to do with collection development? Publishers who followed the write-down practice claimed it was the only way they could afford to publish small runs of books expected to sell slowly (four to five years to sell out the first printing). Publishers talked about destroying some of their stock, and some did. In 1981 and 1982, jobbers indicated that they had received increased OP and OS reports from publishers. Blackwell North America stated in a promotional flyer in mid-1981, "[We] are receiving more o.p., o.s. and generally non-reports, than ever before. In fact, our reports to libraries on unavailable titles have increased 47 percent over a year ago."

There was some hope that the U.S. Congress might pass some legislation exempting publishers. What probably helped resolve the concern was the 1987 tax reform act. Though it did not address the question of inventories, the act did reduce corporate tax rates, thus reducing the need to find deductions. Concern has decreased, but publishers appear to declare items out of print more quickly now than before the *Thor* decision. No one is certain whether there has been a decline in short-run titles published or whether such a decline, if it exists, is the result of the *Thor* decision or of a changing economy. The decision does mean that librarians should not count on finding this year's imprints available in a year or two. In the past, a library might well have decided not to buy some current items, thinking that they could be ordered in year or two, when funding would be better. Today, it is probably best to buy materials now rather than wait.

In 1990, Ambassador Book Service (a book jobber located in New York state), in response to librarian concerns about the increasing problem of OP and OS reports, issued some fact sheets. One sheet, based on data from the on-line version of *Books in Print (BIP)*, showed books published, in print and out-of-print for an 11-year period (1979-1989). The table illustrated what everyone knows: the percentage of out-of-print materials increases the farther back in time one goes. However, 81.9 percent of the titles listed in the 1979 *BIP* were available in 1984, and 46.9 percent were available in early 1990. Acquisition or collection development common knowledge was that most books go out of print within four to five years.

Which was right, the vendor's data or librarians' common knowledge? Both are right and wrong. The vendor's data is correct, as far as it goes—that is, items listed in *BIP*. When one considers that libraries acquire a wide range of items not in *BIP*, including small and regional press titles, report literature, scholarly society publications, and so forth, the picture changes. Without doubt, there has been an increase in items going OP. In many cases, the slowing economy and library cutbacks on monographic purchases caused small publishers (private or professional) to reduce press

runs. An article by Margaret McKinley, "The *Thor* Inventory Ruling," provided a good review of the issue. It leaves the reader with the impression that there was and still is some impact of the *Thor* decision, but not nearly as much as librarians believed.

### **Copyright**

IS copyright an issue in collection development? yes/ Cooperative collection development efforts depend on sharing resources through interlibrary loan or other reciprocal borrowing agreements. There are also questions about how many photocopies one can use for course reserve purposes in educational institutions. What about making a copy of an out-of-print work for preservation purposes: how does the copyright law affect these programs? Clearly, libraries have modified copying policies as well as interlibrary loan practices. For example, under the present law, a library in a not-for-profit setting may borrow no more than five articles per year from any given journal. If the library borrows more than five articles, the assumption is that the borrowing is in lieu of placing a subscription and thus is a violation of the law. If libraries may not freely exchange books, periodicals, or photocopies of copyrighted items, it will be difficult to develop effective cooperative systems.

Copyright grants the creators of works certain rights that protect their interest in the work. Originally, copyright's purpose was to provide protection against unauthorized printing publishing, importing, or selling of multiple copies of a work. In essence, it was protection from the unauthorized mass production and sale of a work. It was a straightforward and seemingly reasonable method of encouraging individuals or businesses to take a financial risk to produce and distribute information. Libraries, in contrast, exist to disseminate information on a mass, usually free, basis. Until photocopiers appeared on the scene, the relationship between copyright holders and libraries was cordial, if not always friendly.

With the development of fast, inexpensive photocopying, problems arose. Though the library might make only a single copy for a customer, the aggregate number of copies could be very high. By the mid-1960s, the volume of copying was so great that copyright holders became convinced that libraries, schools, and individuals were violating their rights-and in some cases they were correct.

In the past, copying printed matter for personal use was no problem. Word-for-word hand-copying of extensive sections of books or complete magazine articles was uncommon-people took notes. Today, quick, inexpensive copy services, as well as the ability to download digitized copyrighted material, exist everywhere. All of us have made photocopies

of complete journal articles or printed many pages of Internet material rather than take notes; some of those items were from current issues of periodicals that we could have purchased for not much more than the cost of the copied item. All of us have done it and, if we thought about it at all, we thought that just one copy isn't going to hurt anyone. Unfortunately, as the number of such copies and printing increases, so does the problem.

With audiovisual materials (for example, video-tapes and audiotapes), the problem is acute. Institutions and individuals who own the hardware to play these materials also have copying capabilities. Control of copying is even more difficult to achieve for audiovisual materials than for books or journals. Preview copies help control the institutional buying situation, because they tend to show wear to such an extent that many persons would not want to reproduce a copy. If the preview copy shows too much wear, however, the library's buyer may decide not to buy the item because it lacks technical quality.

The public still does have some rights to gain access to and to use copyrighted material. Where to draw the line between creators' and users' rights is a complicated problem, and has become more so with digitization of material and scanning devices. An old but still valid editorial by J. Berry in *Library Journal* summed up the complex issues involved in fair use. Today, the issues are even more complicated than they were when he wrote the editorial.

Here at *LJ* we are often asked why the magazine has not come out strongly on one side or the other of the copyright issue. We are after all a library magazine.... In the case of copyright, however, our library-mindedness is somewhat blunted by the facts of our existence as a publication which is in copyright and is published by an independent, commercial publisher. Not only is copyright protection fundamental to our continued fiscal health, [but] we believe that authors and publishers deserve compensation for their creative work and for the risks taken to package and deliver that creative effort to users of it.

Like any magazine publisher we have winced when it was obvious our rights in our published material have been violated... Yet there is the other side, the flattery in the notion that people want to read what we print, and the gratification that so many share our view of its importance.

So the issue of copyright, particularly of library copying, is deeply complicated for us... We don't believe that "fair use" should be eliminated, but we can't subscribe to the view that wholesale copying should be allowed for "educational purposes."

The answer has to be compromise.

Several points about copyright bear emphasis. First, the problem of how to handle the rights of creators and users is worldwide, in the sense that each country has to deal with both its own copyright problems and international copyright issues. Second, in the past much of the controversy centred on educational and library copying. Today, with computer technology so readily available, the problem has increased far beyond libraries and educational institutions. Third, copyright disputes divide authors, publishers, and producers from libraries, schools, and users, almost destroying what were once friendly working relationships. The relationship has not yet deteriorated to the point of hostility, but unless true compromises emerge, hostility may be the result.

Most librarians agree that creators' rights need and deserve protection and that those rights have occasionally been violated in any by libraries. However, direct daily contact with users and their needs tempers that recognition.

There is no question that some people copy materials for commercial purposes, especially music and video products. However, much of the "improper" usage is a function of not understanding the nature of copyright and what fair usage may be in various circumstances. There are many misconceptions about copyrights and we can only touch on a few of them. *Note: None of the following discussion of copyright or licensing should be thought of as legal advice. When in doubt, contact a legal specialist in the field of copyright, intellectual property, or contract law.*

One of the most common misunderstandings of copyright concerns notice of copyright. ("It did not indicate that it was copyrighted, so it must be public domain.") Part of the reason for confusion about the need to have a notice of copyright is because, in the United States, it *was* necessary until April 1, 1989. After that date, the United States joined most of the rest of the world as a signatory to the Berne copyright convention, which grants copyright with or without notice. Thus, the only safe assumption now is that everything is copyrighted, unless one has definite knowledge that it is not covered.

A related technical misconception is that if an item is on Usenet, it is public domain. For anything to be in the public domain, the creator or owner must include a statement putting the material into the public domain.

There is also a common belief that if one does not charge for a gain financially from the usage, there is no violation of copyright. We noted earlier that libraries should also purchase performance rights for the films and videos they purchase, if they are to be used in library programming.

Even a free “public performance” during a children’s program requires permission, if one did not pay for performance rights. Use in face-to-face instruction has been thought to be “fair use,” but even that idea is questioned by many copyright holders. As we mentioned, it is better to acquire performance rights if at all possible.

Fair use is an area full of “yes, you can/no, you can’t.” Now that the United States has passed the Digital Millennium Copyright Act, the issue of what will and will not be deemed fair use is unclear, as of mid-1999. (We explore this concept further later in this chapter.) Older guidelines seem to be under scrutiny and the goal appears to be a further lessening of fair use rights.

Another aspect of the situation seems to be people’s attitudes. There appears to be a sense that infringing copyright is not really a crime. The attitude is that it *really is okay to drive 70 miles per hour*. Related to that belief, which is inaccurate, is the notion that copyright holders are greedy and that the cost for permission to use copyrighted material is much too high. Therefore, using the material without permission is reasonable. Legally, it is not okay either to exceed the speed limit or to infringe copyright, even if no one is looking.

Libraries are caught in the middle of these issues. Librarians may agree that prices are high, but they also know that if there was no income and profit for the producers there would be no information. They believe in free access to information, especially for educational purposes, once the library acquires the material or information. Finding the balance, or John Berry compromise, is the challenge. In many ways, the only organized voice for users is library and educational associations.

### **Historical Background**

As noted earlier, producers need encouragement to risk creating something new and making it available. Without adequate incentives, the producer will not produce. For publishers and media producers, copyright is one of the most important incentives. In essence, copyright states: “Person (s) X owns this creation; if you are not person (s) X, before you make copies of this creation for more than your own personal use, you must get written permission from person(s) X.”

England was the first country to legalize creative ownership; in 1710, the England Parliament passed the Statute of Anne, the first copyright bill. This law did two things: it gave parliamentary recognition to a royal decree of 1556, and it gave legal recognition of a work’s author as the ultimate holder of copyright. Whereas contemporary copyright laws exist to encourage the creation of new, original works and to encourage their

wide public distribution, the 1556 decree had a less noble purpose: repression of the freedom of religion—in this case, the Protestant Reformation. Censorship, rather than free public dissemination of information and thought, was the goal. Without question, the Statute of Anne was a notable piece of legislation that did more than merely give legal sanction to censorship. Although by 1710 authors and publishers were allies in the fight to retain or gain more control over the use of their creations, it was an uneasy alliance, because the authors were the true creators of the copyrighted works. As the creators, authors thought they should have a greater share and say in the distribution of their works, and they thought the profits should be more evenly divided. Before 1710, all rights resided with the publisher. With the enactment of the Statute of Anne, authors received a 14-year monopoly on the publication of their works. An additional 14-year monopoly was possible if the author was still living at the end of the first term. Thus, for 28 years, the creator of a work could benefit from its publication.

The British colonies in North America developed a copyright concept based on the English model. Indeed, the concept was so much a part of American legal thought that it became part of the U.S. Constitution, wherein Congress was given the power “to promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive ending in 1891, Congress passed legislation granting exclusive rights to American authors and their representatives, but it refused to grant copyright to nonresident foreign authors. In 1831, Congress passed an act extending the copyright term: the new first term was for 28 years, though the second term remained 14 years. Extension of the exclusive rights has been of concern in all countries since the start of the nineteenth century.

By 1870, copyright also covered art prints, musical compositions, photographs, “works of fine arts,” translation rights, and the right to dramatize nondramatic works. In 1887, performance rights for plays and musical compositions received coverage. The Chace Act of 1891 finally granted copyright to nonresident foreign authors, if their work was published in English and was printed in the United States.

In 1909, Congress passed a new copyright act that was a matter of extended debate from 1905 to 1909. (Since 1909, each time a revision in copyright law has been put forward, the length of debate time has increased, as has the number of groups wanting to have their voices heard.) Several important issues remained unresolved in 1909, including libraries’ rights to import books printed in foreign countries and the use of copyright music on mechanical instruments, such as phonograph records and piano rolls.

After considerable debate, libraries and musicians received the desired rights. Libraries could import a limited number of copies of a foreign work, and copyright owners were to receive payment for the use of their music in mechanical devices. (The later development of jukeboxes, not covered by the 1909 law, caused another problem. When a new technology, the jukebox, appeared on the scene, there was no legal mechanism for requiring payment to copyright owners for the repeated use of their works in the new devices, which were making substantial profits for jukebox owners.) Composers worried about technological developments in 1909; in the 1970s, authors and publishers worried about technological developments. Today, everyone worries about technology and copyright.

Other provisions of the 1909 law (as passed and amended over the years) included coverage of motion pictures; allowance to the owner of a nondramatic literary work to control public renditions of the work for profit and to control the making of transcriptions or sound recordings of the work; granting of full copyright protection to foreign authors (this was done so the United States could join the Universal Copyright Convention in 1954) coverage of all sound recordings; extension of copyright terms to two terms of 28 years each, with a renewal requirement for the second term; and requirement of a notice of copyright to be displayed on all works. Several of these provisions created barriers for American and foreign producers and made it difficult for the United States to be an effective member of a worldwide copyright program. The three major stumbling blocks have been term of protection, the renewal requirements, and the manufacturing clause (i.e., the requirement that works of foreign authors be printed in the United States in order to be protected).

### ***International Copyright Conventions***

At the international level, there have been two important copyright conventions: the Berne Convention (1886) and the Universal Copyright Convention (1952). Until the signing of the Berne Convention in 1886, international copyright was in chaos, with reciprocity only on the basis of bilateral treaties. Some countries, like the United States, made no such agreements. As a result, during the nineteenth century, a new form of piracy appeared: literary piracy. Some countries signed the Berne Convention, with notable exceptions being the United States and Russia. Basically, the signatories agreed to give one another the same copyright protection they provided their own citizens. A 1908 revision required this coverage to be automatic-copyright owners did not have to file any forms to secure coverage. The Internet brought chaos back to copyright, as different countries have very different concepts of fair use (U.S.) or fair dealing (U.K.)

The United States did sign the Universal Copyright Convention (UCC) in 1954. How is it that the United States was able to sign one international convention but not the other? There were two important differences between the conventions. First, the UCC did not provide automatic copyright without formalities. The formalities, however, were that a work carry the copyright symbol, the name of the owner, and the date of first publication. That satisfied the U.S. notice requirement and, presumably, made life easier for American librarians. The second difference was that the term of copyright could be whatever term the country granted its citizens at the time of signing; the only minimum was 25 years for all works other than photographs and applied arts. (Photographs and applied arts must have at least 10 years' protection.)

In 1971, modifications to both the Berne Convention and the UCC ensured that developing countries would receive certain licensing rights. The revisions provided a mechanism for forcing a copyright owner to grant use rights to developing countries under certain conditions—in effect, it was compulsory licensing. Most of the signatories to the two conventions approved the revisions by 1990. Certainly, the revisions helped control what was becoming the second ear of international piracy of literary and creative works. Nevertheless, some countries are not party to any copyright agreement, not do the publishers in those countries bother to seek a license; hence, piracy is still alive in the 1960s.

To understand current U.S. copyright law, it is also necessary to look at and understand the international aspects of intellectual property protection. This is because the 1998 Digital Millennium Copyright Act (DMCA) was in part motivated by the need to conform to new international requirements.

As noted earlier, there were two major international conventions. The Berne Convention members set up an administrative group to handle its activities. That group evolved into today's World Intellectual Property Organization (WIPO), which is also one of the United Nation's specialized agencies. WIPO has 171 member countries and administers 21 treaties. Two of its goals are to "harmonize national intellectual property legislation and procedures," and to "marshal information technology as a tool for storing, accessing, and using valuable intellectual property information." (*Intellectual property* in this case of WIPO means industrial property, such as inventions, trademarks, and industrial design; and copyright covering such material as literary, musical, artistic, photographic, software [as a literary work] databases, and audiovisual works).

A WIPO meeting in Geneva in December 1996 led to the approval of two treaties: the WIP Copyright Treaty and the WIPO Performances and

Phonograms Treaty. A third proposed treaty, dealing with databases, was held over for later discussion. In part because of the lack of WIPO discussion, the matter of databases was not part of the DMCA either.

### **Digital Millennium Copyright Act**

The purpose of the DMCA was to update existing U.S. copyright law in terms of the digital world, as well as to conform to the 1996 WIPO treaties. Congress also passed a Copyright Term Extension Act in 1998, which added 20 years to the protection term for both individuals and corporate bodies.

The old protection terms were life plus 50 years for individuals and 75 years for corporate entities. (There was an exception for libraries, archives, and non-profit educational institutions during the last 20 years of protection. Essentially, these groups would have greater fair usage during the last 20 years, if the work was not commercially available. One must wonder just how often that will be necessary. How many requests do libraries receive for special fair usage of material that is 70 years old?).

The 1978 copyright law is still in force, but changed dramatically as a result of amendments and the DMCA. The fair use doctrine is given statutory recognition for the first time in the 1978 law. Traditionally, fair use has been a judicially created limitation on the exclusive right of copyright owners, developed by the courts because the 1909 copyright law made no provision for any copying. In the law, fair use allows copying of a limited amount of material without permission from, or payment to, the copyright owner (107).

The law extends copyright protection to unpublished works. Instead of the old dual system of protecting works under common law before publication and under federal law after publication, the law establishes a single system of statutory protection for all works, whether published or unpublished (301).

A five-member Copyright Royalty Tribunal exists to review royalty rates and to settle disputes among parties entitled to several specified types of statutory royalties in areas not directly affecting libraries (801).

Every librarian should have some knowledge of all of the following sections of the law. The sections of the law and the content of handbooks on the law can be helpful in developing a collection; however, when questions arise, the best source of information is an attorney who handles copyright cases. What follows *is not* legal advice—merely an outline of the sections and their content:

- 102-105 define works protected by copyright.
- 106 define the exclusive rights of the copyright owner.
- 107 establishes the basis of the right of fair use.
- 108 authorizes certain types of library copying.
- 108 (g) identifies library copying not authorized by the current law.
- 602 (a) (3) relates to the importation of copies by libraries.

### **Works Protected by Copyright**

Copyright protection extends to *literary* (including computer software) works; *dramatic* works; *pantomimes* and *choreographic* works; *pictorial*, *graphic*, and *sculptural* works; *motion pictures* and other *audiovisual* works; and *sound recordings* (102).

Unpublished works by U.S. and foreign authors receive protection under the copyright statute, as do published works by U.S. authors. The published works of foreign authors are subject to copyright under certain conditions, including coverage under national treaties such as the Universal Copyright Convention (104) and now the WIPO Copyright Treaty.

*United States government works are not copyrightable.* The law did not change the basic premise that works produced for the U.S. government by its officers and employees are not subject to copyright (105).

### **Exclusive Rights of Copyright Owners**

Section 106 states the exclusive rights of copyright owners. Subject to 107 through 118, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

1. To reproduce the copyrighted work in copies or phonorecords.
2. To prepare derivative works based upon the copyrighted work.
3. To distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.
4. In the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly.
5. In the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

It is important to understand the significant limitations on the exclusive rights stated in 106, which are stated in 107 through 118.

### Fair Use

In the last edition of this book we wrote, “Even the most adamant copyright holder advocate acknowledges that at least some kinds of copying are fair and permissible. The problem lies in defining what constitutes fair use.”

Although the existing law did recognise fair use, copyright holders have become less and less happy with the concept. Reading statements from representatives of copyright holders over the decade makes one wonder how long “fair use” will exist. For example, in 1992, the Association of American Publishers asserted:

*The copyright law provided the copyright holder with the exclusive right to control the making of copies of a copyrighted work. Exceptions to the exclusive right are intended to permit limited, occasional copying for individuals in particular circumstances which will not impair the rights of the copyright holder, nor generate regular business-like activities based upon usurpation of copyright owners' rights, markets, or materials. Richard Schockmel commented about the AAP statement in a 1996 article on fair use and use fees:*

*[T]his 1992 AAP statement.... in effect nullifies fair use: Copyright holders have exclusive rights to control all copying and no exceptions are allowed which would impair these rights. It is difficult to imagine any copying made without permission and/or fee which would not impair the exclusive right to control making copies.*

Perhaps a more worrisome statement is that of Marybeth Peters, U.S. Register of Copyrights, in a 1998 interview with *Library Journal* staff. She was asked about ALA's concern that proposed changes in the law would mean that fair use would not exist in the twenty-first century. Her response was, “I disagree. What the library community is arguing is that is a copyright owner employs technological protection measures to safeguard his work, they may never be able to get around that protection to exercise their fair use rights. My point is you can't argue fair use to get access to a work.” Later in the interview she said, “Fair use is a defence to copyright infringement to the unauthorized exercise of any of the exclusive rights of a copyright owner.” We are not clear how exercising the permission given in 107 for fair use is a defence against infringement, but then we are not lawyers. She went on to say, in relation to what was to become the DMCA, “That is why the act of circumventing a technological protection measure that prevents unauthorized exercise of any of the copyright owners'

rights *is not* prohibited. For example, if a librarian obtained legal access to a work.

If all of that seems confusing, it is because the matter is confusing. It is also the reason there are ongoing discussions about the concept. Attempts have been made to help define what really constitutes fair use. After passage of the 1976 law, the Conference on Technological Use (CONTU), drawing on the House Judiciary Committee report, developed some guidelines.

Though helpful, neither users nor owners have been pleased with its results as technology evolved. Another effort, in 1994, by the Conference on Fair Use (CONFU), attempted to resolve some of the technological concerns. (Several groups—for example, the American Association of University Professors and Association of American Law Schools—had opposed the existing guidelines as not representing the needs of higher education well). CONFU negotiators spent two years developing the report they issued in 1996.

The proposed guidelines generated expressions of concern from a substantial number of educational organisations, unlike the earlier guidelines. Perhaps the most important point to keep in mind is that the fair use guidelines do *not* have the force of law. They are only interpretations of the law and they are not the only possible interpretation. A good article on this issue is Kenneth Crews's "Fair Use and Higher Education : Are Guidelines the Answer?"

Fair use doctrine was codified in general terms in 107. That section refers to such purposes as criticism, commentary, news reporting, teaching, scholarship, or research, and it specifies four criteria to use in determining whether a particular instance of copying or other reproduction is fair. The statutory criteria in 107 are :

1. the purpose and character of the use, including whether such use is of a commercial nature or is for non profit educational purposes.
2. the nature of the copyrighted work.
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole.
4. the effect of the use upon the potential market for or value of the copyrighted work.

Depending on the circumstances, fair use might cover making a single copy or multiple copies. For example, multiple copying for classroom use may be considered fair use under certain circumstances. In deciding whether any particular instance of copying is fair use, one must always consider the statutory fair use criteria.

### **Guidelines for Copying**

The 1976 Guidelines developed by educators, publishers, and authors provided some indication of what various parties believe is reasonable fair use. The guidelines are not apart of the statute, but they are part of the House Judiciary Committee's report on the copyright bill. They are *Guidelines for Classroom, Copying in Not-for-Profit Educational Institutions* and *Guidelines for Educational Uses of Music*. As noted earlier, there is much debate about fair use and use of the guidelines as "safe harbours". However, until there is a clear court decision or Congress clarifies the meaning of fair use, the guidelines are all that users have to go by.

### **Library Copying Authorized by Section 108**

In addition to copying that would fall within the fair use section of the statute, certain types of library copying that may not be considered fair use are authorized by 108. Section 108 in no way limits the library's fair use right (108(f)(4)).

Section 108(a) contains general conditions and limitations that apply to the authorized copying outlined in the rest of the section. These general conditions apply:

1. The copy is made without any purpose of direct or indirect commercial advantage.
2. The collections of the library are open to the public or available not only to researchers affiliated with the library but also to other persons doing research in a specialized field.
3. The copy includes a notice of copyright.

The House Judiciary Committee's report clarified the status of special libraries in for-profit institutions with respect to the criterion "without direct or indirect commercial advantage" (108(a)(1)). It is the library or archives within the institution that must meet the criteria, not the institution itself.

In addition to the general conditions of 108(a), it is possible for contractual obligations between a publisher or distributor and a library to limit copying that would otherwise be permissible under 108. Furthermore, the limited types of copying authorized by 108 can be augmented by written

### **Possible Contractual Limitations on Section 108**

Section 108(f)(4) states that the right of reproduction granted to libraries do not override any contractual obligations assumed by the library when it obtained a work for its collection. In view of this provision, librarians

must be especially sensitive to the conditions under which they purchase materials. Before executing an agreement that would limit their rights under the copyright law, they should consult with legal counsel. *This is the key section with regard to licensing agreements.*

### **Single Copy of Single Article or Small Excerpt**

Section 108(d) authorizes the making of a single copy of a single article or a copy of a small part of a copyrighted work in the library's collections, provided that (1) the copy becomes the property of the user; (2) the library has no notice that the use of the copy would be for any purpose other than private study, scholarship, or research; and (3) the library both includes on its order form and displays prominently at the place where users submit copying requests a warning about copyright in accordance with requirements prescribed by the register of copyrights.

The *Federal Register* (February 26, 1991) printed the text for a second warning sign for computer software. The warning is similar to the first warning, but the wording differs.

### **Copying for Interlibrary Loan**

Section 108(d) authorizes the making of a single copy of a single article or a copy of a small part of a copyrighted work for purposes of interlibrary loan, provided that it meets all the conditions previously listed regarding a single copy of a single article from the library's own collections, and further provided (108(g)(2)) that requests for interlibrary loan photocopies are not in such aggregate quantities as to substitute for purchases or subscriptions. The wording of the statute places responsibility for compliance on the library requesting the photocopy, not on the library fulfilling the request. The National Commission on New Technological Uses of Copyrighted Works (CONTU), in consultation with authors, publishers, and librarians, developed guidelines to assist libraries in complying with this provision. A library or archive may receive no more than five photocopy per year of articles published in the restricted issues of a periodical. (They may be five copies of one article or single copies of five different articles.) The restriction applies only to issues published within the last five years. Duplication of older issues is limited only by the broad provisions of 108(g)(2), which prohibit copying that by its nature would substitute for a subscription. We should note that not all journal publishers agree with those guidelines. Also, in 1997 there was a ruling that has clouded the picture, at least for document delivery services.

UnCover, as of mid-1999, was facing a serious legal ruling in a copyright lawsuit. UnCover provides copies of journal articles as part of a document delivery service. One reason for using such a service for ILL requests is that part of the fee goes to cover royalty charges, based on a negotiated

rate between UnCover and the various journal publishers. A San Francisco United States District Court judge issued a summary judgment in favour of the five freelance authors who filed the suit. Daniel Reidy, attorney for the plaintiffs, said, "In essence, the lawsuit's a copyright infringement action because UnCover typically only seeks permission from publishers, without seeking permission from freelance authors. Our position is that unless the authors have either assigned their copyrights or given the publisher express permission to sell individual copies of their articles, UnCover would need to get permission from authors." He also indicated that the law firm was working on developing the case into a class action suit. If successful against UnCover, other document delivery firms might face similar suits; because libraries are also providers of such items, they too might be named in future lawsuits of this type. One wonders why the suit was not filed against the publishers in order to receive a share of the revenue the publishers received from UnCover.

### **Coin-Operated Copying Machines**

Section 108(f)(1) and (2) make it clear that *neither libraries nor library employees are* liable for the unsupervised use of reproducing equipment (this does include microform reader/printers) located on library premises, if the machine displays the required notice. The person making the copy is, of course, subject to liability for copyright infringement, if his or her copying exceeds the provisions of 107.

### **Library Copying Not Authorized by Section 108**

With the exception of audiovisual news programs, 108 does not authorize a library to make multiple copies. Two general types of library copying that are not clearly defined in the statute are specifically not authorized by 108. Stated only in the most general terms, the definitions of these types of library copying are susceptible to many interpretations.

The first is "related or concerted reproduction or distribution of multiple copies." This related or concerted copying by libraries is illegal, whether the library makes the copies all on one occasion or over a period of time, and whether the copies are intended for aggregate use by one individual or for separate use by individual members of a group (108(g)(1)).

The second type of library copying not authorized by 108 is "systematic reproduction or distribution of single or multiple copies." Because many librarians feared that this term might preclude a wide range of interlibrary lending systems, Congress amended this section of the bill to clarify that whatever may be meant by the term *systematic*, copying for purposes of interlibrary loan as specifically authorized by 108(d) is not illegal under 108(g)(2) as long as it does not substitute for purchases or subscriptions.

The wording of the statute places responsibility for copyright compliance on the library requesting the photocopy, not on the library filling the request (108(g)(2)).

It is important to remember that the copyright law does not establish licensing or royalty payment schemes for library copying. It focuses primarily on the kinds of copying that libraries can do without such schemes. Section 108(g) merely states the two types of library copying that are *not* authorized by 108.

### **Importation of Copies by Libraries**

In general, the law prohibits the importation of copies of works without the permission of the copyright holder. There are, however, certain exceptions to this general prohibition, one of which directly, relates to libraries. Section 602(a)(3) states that a non-profit scholarly, educational, or religious organization may import no more than one copy of an audiovisual work for archival purposes only, and no more than five copies of any other work "for its library lending or archival purposes, unless the importation of such copies or phonorecords is part of an activity consisting of systematic reproduction or distribution, engaged in by such organization in violation of the provisions of Section 108(g)(2)."

### **Infringement**

A person who violates the rights of the copyright owner is a *copyright infringer*. Remedies available to the copyright holder for infringement include damages (actual or statutory; the latter set by statute at from \$100 to \$100,000 per infringement), injunction, and recovery of court costs and attorney's fees. There is also criminal infringement (done wilfully for commercial advantage or private financial gain), which is subject to a \$10,000 fine and/or one year imprisonment per infringement.

There is a waiver of statutory damages for a library or non-profit educational institution when the institution, or one of its employees acting within the scope of his or her employment, "believed or had reasonable grounds for believing that his or her use of the copyrighted work was a fair use under Sec. 107 (504(c)(2))."

Librarians and media specialists have a professional responsibility to learn about provisions of the copyright law that relate to libraries and to frequently review their practices in light of such provisions. If current practices seem likely to constitute infringement, librarians should plan now for needed changes and make sure that library users understand the reason for such changes. Above all, it is important to take the time and trouble to master the basic provisions of the statute, so the library will

fully exercise the rights it has under the copyright law. Anything short of this would be a disservice to library users.

### **DMCA and Technology Issues**

Earlier we noted that the AMCA amended U.S. law to comply with WIPO treaties. It did more than that; it also addressed a great many of the technology aspects of copyright.

One of the education/library community's concerns about the decline of fair use rights related to 1201. This section prohibits gaining unauthorized access to material by circumventing any technological protection measures a copyright holder may have put in place. The implementation of this section is to begin two years after the legislation became law-about the end of 2000. During this two-year period, the Library of Congress is to conduct a rule making procedure to determine what, if any, exceptions would be appropriate. LC then must conduct similar proceedings every three years.

Section 1201 is not intended to limit fair use, but fair use is *not* a defence to circumventing technological protection measures. These other elements in the section have limited implication for collection development, at least at the time we wrote this chapter.

Section 1202 prohibits tempering with "Copyright Management Information" (CMI). The DMCA identified the following as constituting copyright management information:

- Information that identifies the copyrighted work, including title of the work, the author, and the copyright owner.
- Information that identifies a performer whose performance is fixed in work, with certain exceptions.
- Terms and conditions for use of the work.
- Identifying numbers or symbols that accompany the above information of links to such information; for example, embedded pointers and hypertext links.
- Such other information as the Register of Copyrights may prescribe by regulation, with an exception to protect the privacy of users.

One aspect of the DMCA that will probably be very important to libraries is "Title II: Online Service Provider Liability." The reason for this is that the DMCA defines "online service provider" (OSP) very broadly, and libraries that offer electronic resources or Internet access could be considered OSPs. The law creates some "safe harbors" for certain specified OSP activities. When an activity is within the safe harbor, the OSP qualifies for an exemption from liability. One should read the most current

material available about this title, as it is complex and legal interpretation of it is likely to evolve.

Title IV provides some clarification about library and archival digitization activity for preservation purposes. It allows the creation of up to three digital preservation copies of an eligible copyrighted work and the electronic loan of those to qualifying institutions. An additional feature is that it permits preservation, including in a digital form, of an item in a format that has become obsolete.

Distance education activities are also addressed in Title IV. The Register of Copyright is to provide Congress with a report on "how to promote distance education through digital technologies." Part of the report is to address the value of having licenses available for use of copyrighted works in distance education programs. (The DMCA was only six months old at the time we prepared this chapter.)

### **Enforcement**

Copyright holders are quick to enforce their rights. One of the early suits was instituted just four years after the 1976 legislation became law. A group of book publishers filed a complaint against the Gnomon Corporation for alleged copyright infringements. Gnomon operated a number of photocopy stores in the eastern United States, many located near academic institutions. The publishers claimed that the company encouraged copyright violations by promoting its Micro-publishing service with university and college teachers. By May 1980, publishers had their first favourable ruling and announced that their next target would be large for-profit corporations with libraries that did not use the Copyright Clearance Centre. Although the publishers won their case against Gnomon, many photocopy service firms continued to promote similar services. By the early 1990s, publishers and commercial copy services had worked out a system for providing academic institutions with custom readers. The system uses an electronic copyright approval procedure that permits a copying service or other company to quickly secure the requisite permission and legally produce the reader in the needed quantities. Many academic campus bookstores offer similar services, and most of them use the services of the Copyright Clearance Centre. However, issues regarding "course packages" and copyright remain. A recent case involved the University of Michigan.

In 1982, various publications carried announcements that the Association of American Publishers (AAP) had moved forward with infringement suits against several corporate libraries. The AAP had an out-of-court settlement with E.R. Squibb and Sons Corporation, a large pharmaceutical company, after filing suit. Squibb agreed to pay royalty

fees when copying articles from technical journals, including ones to which the corporation library subscribed. Before the Squibb suit, the publishers had also been successful in a suit against American Cyanamid Company. More recently, Texaco lost a copyright suit.

After their success against for-profit organizations, the AAP focused on the not-for-profit sector. On January 5, 1983, the *Chronicle of Higher Education* published an article about an AAP suit in the New York district court against New York University, nine faculty members, and a photocopy shop near the university. New York University settled out of court, agreeing to follow the 1976 guidelines and agreeing that faculty members who did not do so would not receive legal assistance from the institution if they were named as parties in a future copyright infringement suit. At about the same time, a Los Angeles secondary school teacher lost an infringement suit on the same grounds, namely, failure to follow the 1976 guidelines. In 1984, the National Music Publishers Association persuaded the University of Texas at Austin to stop allegedly illegal photocopying of music by its music department.

Though it is true copyright holders do have rights, the law clearly states that libraries and other users do too. As Scott Bennett wrote:

*We should respect the copyright law. This means understanding the law so that we can obey it and benefit from it. It means a refusal to wink at violations of the law, however widespread, just as it means advancing no untenable claims either to copyright protection or to fair use. Most important, it means acknowledging there are many genuinely debatable issues before us that will need to be resolved through negotiation, legislation, and litigation. Respecting the copyright law means making judicious use of these methods of resolving differences.*

*We should keep the Constitutional purposes of copyright in view; honour those purposes; and work to give them vitality.*

Without question, the most contentious issue is the electronic environment and who owns what, where, and how. The professional literature is full of articles exploring this or that aspect of the problem. Certainly, licensing of information, be it a CD-ROM, an online service, or an electronic journal, is at issue. Sometimes changes in the law assist in library operations, such as the amendment that authorizes libraries to make backup copies of computer programs (for example, programs on disks, which accompany more and more books). Then one reads articles asking: "Will electronic journals fulfill the current role of assessment that print-on-paper does?" and "How are electronic journal publishers to make money out of document delivery?" These articles leave one wondering how

the voice of the user can be heard. One speculates whether librarians ever read licensing agreements, much less ask the institution's legal counsel to review such documents. Some agreements come in wrapped packages, so that one cannot read the full text until after one has opened the package, but the package carries words to the effect that "opening this package constitutes acceptance of the licensing agreement." A particularly good article discussing these issues is Laura Gasaway's "Copyright in the Electronic Era." Both "shrinkwrap" and "click-warp" licenses have been deemed legal by the courts.

### **Contractual Compliance**

Following the various guidelines is one obvious way to achieve a limited form of compliance. (To date, there have been no suits in which the defendants claimed that they followed the guidelines; however, that does not mean there will not be such a suit.) For some libraries, the guidelines are too narrow and the cost of acquiring, processing, and housing the needed copyrighted material is high. Are these libraries and information centres cut off from needed information? Not if they have enough money.

The Copyright Clearance Centre (CCC) is a not-for-profit service designed to serve libraries and other users of copyrighted material by providing system; CCC does not copy documents, but functions as a clearing house. Several thousand organizations are members; many, if not most, of these are libraries and information services. The CCC handles both U.S. and foreign publications (it can grant permission to use more than 1.75 million publications).

The address/contact information for CCC is 222 Rosewood Drive, Danvers, MA 01923; telephone (978) 750-8400, and <<http://www.copyright.com>>. There is also a Canadian equivalent, the Canadian Copyright Licensing Agency (CANCOPY). Contact information for CANCOPY is 6 Adelaide Street East, Suite 90, Toronto, ON M5c1h6, Canada; telephone (416) 868-1620, and <<http://www/cancopy.com>>. Another service is the Television Licensing Centre, which assists in legal off-the-air video-taping, an area of concern for school media centres as well as other educational institutions.

The fees can be substantial when one realizes that the charge is for one article; however, the cost of a lawsuit would be higher, and if the organization lost, it could be forced to pay as much as \$50,000 plus other costs and fees.

When in doubt, ask for permission. The process can be complicated when one must go directly to the copyright owner, but that is often the

only option. Libraries can help make it easier in various ways. Tom Steele reported on a project at Wake Forest University that has helped make the process easier, if not painless. Two library staff members designed a Website with a list of publishers, a list of journals, a set of form letters for permission requests, and links to sites that provide information about copyright. (An online tutorial about copyright the LMU library suggests to users with copyright questions is <http://www.utsystem.edu/ogc/intellectualproperty/cprti/index.htm>). This site is to assist in securing permission; it does itself not grant permission.)

### Licensing Agreements

Licensing is another method to achieve compliance. The CCC offers an annual license for publications it handles. Robert Oakely suggested a potentially useful approach to some of the copyright and preservation concerns in terms of journals. His suggestion was based on the idea that many, if not most, publishers do not have significant backfiles in a digital format. (Perhaps one could go further and suggest that they do not want to commit too many resources to maintaining very-low-revenue material in either print or digital formats.) According to Oakely, this situation presents an opportunity for joint ventures between libraries and publishers. Libraries engage in what they have always done, preserve information, and publishers produce it. In return, libraries would receive access to the backfile materials. Such arrangements would probably be through a contact or license.

What is the relationship between copyright and licenses? Perhaps the best short description of the similarities and differences was written by Ann Oakerson:

- Copyright represents a set of general regulations negotiated through statutory enactment. The same laws guidelines apply to everyone in the country.
- Licenses are contracts.. [that] represent [a] market-driven approach to such regulation. Each license is arranged between a willing surveyor and willing licensee, resource by resource. The owner of a piece of property is free to ask whatever price and set whatever conditions the market will bear.

More and more producers and libraries are turning to contracts or licenses to handle access and use.

Typical licensing agreements outline the lessee's responsibility for such things as security, customer service, payment and delivery, limitations and warranties, termination, indemnification, and assignment. All of these

factors can affect the expected use. Though having to add attorney fees to the cost of building a collection is unappealing, the fact is that most of the producers will negotiate changes, and librarians should demand changes that benefit or at least do not create unreasonable demands on libraries and customers.

The library should maintain a master file of copies of all the licensing agreements and contracts. There should be a contact person who is responsible for knowing the terms of these documents as well as for being able to answer or secure answers to questions about the agreements. Compliance is a key issue, and the library or information centre must do what it can to ensure compliance. However, some licensing agreements contain language that places responsibility on the library (subscriber) to monitor what users do with material after they leave the premises. Such clauses are beyond any library's or information centre's ability to handle, and librarians should insist that they be deleted from the agreement.

The key is knowing what is in the agreement before purchasing. As with computer software, the licensing agreement often comes with the product that is, after the purchase. It is sealed in a package with a warning message to the effect that opening the package constitutes accepting the terms of the agreement inside the package. When considering a product from a new vendor, ask for a copy of the licensing agreement before making a final decision to purchase. This gives the staff an opportunity to review the document. It also provides an opportunity to request changes that the vendor may or may not be willing to make. In any event, it will give the library a chance to consider whether it can live with the conditions of the licensing agreement before committing to the purchase.

Because licensing is becoming a major and ever-growing issue for libraries, we include the "Principles" for licensing electronic resources as proposed by a number of library associations in North America in 1997.

### **Principles**

1. A license agreement should state clearly what access rights are being acquired by the licensee—permanent use of the content or access rights only for a defined period of time.
2. A license agreement should recognize and not restrict or abrogate the rights of the licensee or its user community permitted under copyright law. The licensee should make clear to the licensor those uses critical to its particular users including, but not limited to, printing, down loading, and copying.
3. A license agreement should recognize the intellectual property rights of both the licensee and the licensor.

4. A license agreement should not hold the licensee liable for unauthorized uses of the licensed resource by its users, as long as the licensee has implemented reasonable and appropriate methods to notify its user community of use restrictions.
5. The licensee should be willing to undertake reasonable and appropriate methods to enforce the terms of access to a licensed resource.
6. A license agreement should fairly recognize those access enforcement obligations which the licensee is able to implement without unreasonable burden. Enforcement must not violate the privacy and confidentiality of authorized users.
7. The licensee should be responsible for establishing policies that create an environment in which authorized users make appropriate use of licensed resources and for carrying out due process when it appears that use may violate the agreement.
8. A license agreement should require the licensor to give the licensee notice of any suspected or alleged license violations that come to the attention of the licensor and allow a reasonable time for the licensee to investigate and take corrective action, if appropriate.
9. A license agreement should not require the use of an authentication system that is a barrier to access by authorized users.
10. When permanent use of a resource has been licensed, a license agreement should allow the licensee to copy data for the purposes of preservation and/or the creation of a usable archival copy. If a license agreement does not permit the licensee to make a usable preservation copy, a license agreement should specify who has permanent archival responsibility for the resource and under what conditions the licensee may access or refer users to the archival copy.
11. The terms of a license should be considered fixed at the time the license is signed by both parties. If the terms are subject to change (for example, scope of coverage or method of access), the agreement should require the licensor or licensee to notify the other party in a timely and reasonable fashion of any such changes before they are implemented, and permit either party to terminate the agreement if the changes are not acceptable.
12. A license agreement should require the licensor to defend, indemnify, and hold the licensee harmless from any action based on a claim that use of the resource in accordance with the license infringes any patent, copyright, trade-mark, or trade secret of any third party.

13. The routine collection of use data by either party to license agreement should be predicated upon disclosure of such collection activities to the other party and must respect laws and institutional policies regarding confidentiality and privacy.
14. A license agreement should not require the licensee to adhere to unspecified terms in a separate agreement between the licensor and a third party unless the terms are fully reiterated in the current license or fully disclosed and agreed to by the licensee.
15. A license agreement should provide termination rights that are appropriate to each party.

### Public Lending Right

*Public lending right* (PLR) is a system that allows an author to be compensated for the circulated use of his or her copyrighted work from libraries. Many Americans, including librarians, are not fully aware of this right. Elsewhere in the world it is better known, and in most countries where it exists, it operates successfully. In view of copyright owners' increasing attempts to charge a fee for types of usage that were free in the past, it may not be too long before the public lending right will come to the United States.

Authors are compensated in some manner for the circulated use or presence of their works in a library. Where does the money come from? There are only three logical sources: the user, the library, or the funding authority. In most countries, the money comes from a separate fund established for that purpose by the national government. Does the presence of a lending right program have any negative impact on library budgets? No one really knows, but it seems likely that there is some spill over that ultimately reduces library funding. However, a 1986 report from England indicated no adverse effects on library budgets as a result of PLR. Collections built using the demand principle will increase the pressure on the PLR fund, and a self-feeding cycle may begin which makes less money available to buy low-use titles.

The PLR system started in the Scandinavia countries after World War II. Initially, it was considered a way to encourage writers to write in languages that had a small number of native speakers (for example, Danish, Finnish, Icelandic, Norwegian, and Swedish). For more than 20 years, the concept did not spread beyond Scandinavia. Starting in the early 1970s, the idea spread to the Netherlands (1972), the Federal Republic of Germany (1972), New Zealand (1973), Australia (1974), the United Kingdom (1983), and Canada (1986). Although some legislation contains the provision that all libraries are to be included, in most countries only public libraries are involved in data collection. Details of the systems vary,

but some form of sampling libraries by their books. A good but somewhat dated source of detailed information about PLR is a 1981 issue of *library Trends*.

In Canada, the system is called Payment for Public Use (PPU). A \$2.5 million fund was established by the national government to compensate authors for the circulation of their books by Canadian public libraries. In 1985, the Council of Writers Organizations was able to get U.S. Senator Charles Matthias of Maryland to submit PLR-enabling legislation. Nothing has happened in the intervening years. Does such legislation have much chance of becoming law? Assuming that the plan would copy other countries' practice of federal funding, and as long as the federal deficit and budget cutting remain congressional priorities, establishment of a PLR system is unlikely. However, this assumption may not be valid, for several reasons. First, two other sources of funding are possible: the user and the library. Second, the worrisome 106 of the copyright law lists as an exclusive right of the copyright owner "to distribute copies or phonorecords of copyrighted works to the public by sale or other transfer of ownership, or by rental, lease or *lending*" (emphasis added). Third is the attitude exemplified by a 1983 statement in *Publishers Weekly*: "The fate of a book after it is sold is an important one for the book industry, reflecting as it does the possibility of lost sales; pass-along readership of a book, unlike that of a magazine, does not translate into potential revenue." If publishers, authors, and others, such as music producers (audio collections) and motion picture producers (video collections), join forces, we might well see another cost imposed on libraries and their users.

### **Censorship, Intellectual Freedom, and Collection Development**

In every chapter of this text, we have discussed the impact of digitization and technology. By this point, some readers thinking, "At long last... here is a chapter where there will be no references to technology." That thought will have to be fleeting at best, as technology is in fact as large an issue in this chapter as it has been in all the others. The question of "filtering" Internet access for children is a matter of national debate and interest. Filtering is both a national and an international concern, as is evidenced at "The Net Censorship Dilemma-The Hazard: Privatised Censorship" (<<http://rene.efa.org.au/liberty/selfcens.html>>) Website from Australia. We will address this topic later in the chapter.

All of the collection development topics discussed thus far are complex, and some touch on a wide variety of social issues and concerns. However, none is more complex than intellectual freedom and censorship. *Intellectual freedom, free speech, freedom to read, and open access to information* are

alternative terms used for this topic. First Amendment rights are the cornerstones on which librarians and information managers build collections.

There is not enough space in this chapter to fully explore all the aspects of intellectual freedom and free speech. Although they are interesting and important concepts for anyone involved in collection development, they are so complex that each has been the subject of numerous books and articles. (The bibliography at the end of this chapter provides a starting point for exploring these topics in more depth.) All librarians must have an understanding of these areas, but it is essential that all selection personnel fully comprehend the issues relating to censorship.

Many library associations have membership-approved statements and public positions on the questions of free speech and intellectual freedom. The ALA's "Freedom to Read" Statement (available online at <http://www.ala.org/alaorg/oif/freeread.html>) is a classic example. Most of the statements contain fine-sounding phrases. The statements *look* useful when one is discussing the theory or philosophy of intellectual freedom in the classroom or in a meeting. However, on a daily basis, these statements provide little assistance in collection development and provide only limited assistance in fighting off a censor.

Usually, intellectual freedom and free speech controversies revolve around interpretations of points of law and possible violations of existing law. Therefore, the fight normally involves attorneys and judges rather than librarians and the community. We hear about the cases that reach the courts, but seldom about daily local problems. Cases often start as local problems between the library and an individual or group from the community and are usually settled quickly. Most often, the problem arises when some-one objects to an item already in the collection. Depending on the nature of the material, the level of emotional involvement, and the prior administrative actions (that is, policies), the library may be able to quickly resolve the issue, or the problem may escalate until it reaches the courtroom.

- Staff with an excellent background in interpersonal relations
- A lack of action for handling complaints
- A lack of strong feelings on the part of the person making the complaint
- A lack of concerted pressure from special-interest groups
- Available backup material from library associations.

If the individual making a complaint believes very strongly in the matter, it is likely that the library's attorney will become involved. From

that point on, depending on the emotional involvement and financial resources, the issue may go from the lowest to the highest court in the country before the problem is resolved.

The local issue usually is censorship. Charles Busha provided a satisfactory definition of *censorship* as it concerns the library: "The rejection by a library authority of a book (or other material) which the librarian, the library board or some person (or persons) bringing pressure on them holds to be obscene, dangerously radical, subversive, or too critical of the existing mores" (Beginning selection officers should read the Busha article.) Censorship has been a problem for librarians as long as there have been libraries. Generally speaking, librarians attempt to resist censorship. (No one knows how many times a librarians or information officer responds to a complaint by removing the offensive item because he or she agrees that it is offensive.) Evidence suggests a difference between librarians' attitudes toward the concept of censorship and their behaviour in handling censorship problems. An article by one of the gadflies of librarianship, Sandy Berman, outlined some of his ideas about "self censorship." Librarians' success in fending off censors' efforts varies—there are both notable successes and spectacular failures. The sad truth is that there are no rules or guidelines that ensure success. It is possible to forestall many complaints and quickly resolve those that do occur; however, there is always a chance that the procedures and processes will and a legal battle will ensue.

### Causes of Censorship

What causes or motives underlie the actions of a censor? Motives may be psychological, political, or social in nature. Psychological motives stem from the desire to restrain others from expressing ideas or creating works that the censor finds offensive. Political motivation underlies the actions of governments that attempt to maintain control over the communication systems that may threaten the government or its policies. Social motivations spring from a desire to preserve a wholesome social setting or to reduce crime, both of which the censor may consider related to the presence of objectionable material in the library. Frequently, the censor (government, groups, or an individual) claims to be acting for "protective" reasons. Censorship is a paternalistic act in that it limits the experiences of both adults and children and limits environments to influences acceptable to the censor.

Freedom and censorship exist in opposition. At one extreme, some persons believe there should be no controls; if they could, they would eradicate all laws, rules, and regulations. At the other extreme are those who think everyone needs protection and outside control. Between these

extremes lies the necessary balance between freedom and restraint. Freedom must be restrained so that social institutions can intelligently protect citizens' rights and ensure individual's free choice. Librarians work on a daily basis to achieve an appropriate balance in their collections and services.

The ALA adopted a Library Bill of Rights in 1948. ALA's Office for intellectual Freedom (OIF) vigorously promotes and publicizes the concepts contained in that statement. Because the Library Bill of Rights is not law, the statement provides no legal protection for libraries or librarians. What legal protection exists is primarily in the freedom-of-speech provisions of the First Amendment to the United States Constitution. The First Amendment grants every U.S. citizen the right of freely express opinions in speech, writing, or with graphics; to distribute them; and to seek information from public sources without unnecessary restraint. The Library Bill of Rights outlines the basic freedom-of-access concepts that the ALA hopes will guide library public service. It states that persons should be able to read what they wish without intervention from groups or individuals—including librarians. Since its adoption in 1948, the provisions of the Library Bill of Rights have assisted librarians in committing their libraries to a philosophy of service based on the premise that users of libraries should have access to information on all sides of all issues.

The Library Bill of Rights is an important guide to professional conduct in terms of intellectual freedom. It is a standard by which one can gauge daily practices against desired professional behaviour in the realms of freedom of access to information, communications, and intellectual activity.

Despite the Library Bill of Rights, there is pressure to limit or exclude certain types of material from a library's collection. Occasionally, someone suggests labelling material with warnings or some kind of rating system rather than removing it. This practice usually takes the form of placing special marks or designations (stars, letters, and so forth) on certain classes of materials. The practice of labelling is prejudicial and creates bias.

Labelling is a defensive method that says, in effect, "This item may not meet with full community approval". Labelling is contrary to the principles of intellectual freedom. It is not the librarian's duty to warn readers against such things as obscene language; descriptions of explicit sexual acts; or unorthodox political, religious, moral, or economic theories. Librarians are preservers and providers rather than censors. Librarians must always bear in mind that many intellectual advances, in all fields, involve controversy. A librarian's primary responsibility is to provide, not

restrict, access to information. The ALA statements provide a philosophical base for resisting censorship. However, in the long run, success or failure depends on the individual librarian's personal beliefs and attitudes. ALA's Office of Intellectual Freedom has a variety of publications and position statements that can assist libraries in handling issues of intellectual freedom, censorship, access to materials, and so forth.

### **Forms of Censorship**

A librarian or information professional may encounter three forms of censorship: legal or governmental, individual or group, and self-censorship. The first two are easier to respond to than the third. For the first type, there are two choices: comply or fight. Usually, fighting to change a law or interpretation of a law is time-consuming and expensive. Because of the time and cost involved, a single librarian or library seldom attempts it. Even at the community level involving a local ordinance, if there is to be a modification, there must be community-wide support. The library staff working alone has little chance of success.

Literary censorship has existed for a long time. The United States has seen an interesting mix of individual and governmental censorship. Anthony Comstock was a person of strong beliefs and personality whose efforts to control the reading materials of Americans were so vigorous and successful that his name is now part of the lexicon of intellectual freedom and censorship discussion—Comstockery.

Indeed, Comstock was so vocal in his efforts that, in 1873, Congress passed a law that attempted to create a structure for national morality. For almost 75 years, this law went unchallenged, with the U.S. Postal Service designated as the government agency primarily responsible for enforcement at the national level. At the local level, several elements were at work. State and local governments passed similar regulations, and, thus, local police departments became involved in the control of vice. Law enforcement agencies had ample help from two citizen groups: the Society for the Suppression of Vice and the Watch and Ward Society. The "Society for the Suppression of Vice" was the vehicle Comstock used to gain popular support and to show the depth of national support for his views. A primary activity of the society was checking on printed material available to local citizens, whatever the source (bookstores, newsstand, and libraries both public and private). Occasionally, when the society felt that local law enforcement officials were not moving quickly enough, it took matters into its own hands. Book burnings did take place, and the society applied pressure to anyone involved in buying or selling printed material to stock only items it deemed moral. The phrase "banned in Boston" originated as

a result of the society's activity. From 1873 until well into the twentieth century, the United States experienced a mix of all three types of censorship: official censorship because of the 1873 law; group pressure from organized societies concerned with the moral standards of their communities; and self-censorship on the part of publishers, booksellers, and librarians. A public or even a private stance by librarians against such censorship was almost unheard of; in fact, professional groups sponsored workshops and seminars to help librarians identify improper books. Most of the notable librarians of the past are on record (in ALA proceedings, speeches, or writings) in favour of this type of collection development. As E. Geller noted, Arthur Bostwick felt it was reasonable to purchase books like *Man and Superman* for the New York Library's reference collection (noncirculating), but not for branch libraries. Bostwick's inaugural speech as president of the ALA (1908) was about the librarians censor; as censor the librarian performed a positive act, if not an act of "greatness," Bostwick said.

An interesting situation arose with foreign-language titles. Many authors were available in their own language, but not in English. Apparently, if one could read French, German, Spanish, Russian, or any other language, one was reading a "moral" book-but that same work in an English translation was immoral. The censorial atmosphere caused a few American authors to live abroad, and some had a larger foreign readership than English-speaking readership. (Henry Miller is a prime example.) At the time, librarians were no more vocal in protesting this situation than anyone else in the country.

The period between 1873 and the mid-1950s exhibited all of the censorship problems one can encounter. From the 1930s to the mid-1950s, various federal court decisions, including several by the U.S. Supreme Court, slowly modified the 1873 law. The 1873 Comstock Act remains a part of the U.S. Code, but it is no longer modified as to be a completely different law. Most court cases dealing with censorship were between the government and publishers or booksellers. Librarians and their associations occasionally entered the suits as *amici curiae* (friends of the court) but seldom as defendants or plaintiffs.

Major changes in the interpretation of the law began with the U.S. Supreme Court's 1957 *Roth* decision. This decision established a three-part test for obscenity. First, the dominant theme of the work as a whole had to appeal to a prurient interest in sex. Second, the work had to be patently offensive because it affronted contemporary community standards in its representation of sex. Third, the work had to be utterly without redeeming social value. With that interpretation, more sexually explicit

material became available in the open market. Not unexpectedly, some people objected to the new openness, and in 1973, the Supreme Court, in deciding the *Miller* case, modified the three-part test. The court suggested a new three-part test. First, would an average person applying contemporary community standards find that the work as a whole appealed to prurient interest in sex? Second, does the work depict or describe in a patently offensive way sexual conduct specifically prohibited in a state's law? Third, does the work, as a whole, lack serious literary, artistic, political, or scientific mores by employing tests that emphasize local standards. This test is in place today.

Does the shift in emphasis matter? Yes, especially in terms of production and distribution of materials. One example of what the changed interpretation could do to distribution occurred in 1982. *Show Me: A Picture Book of Sex, for Children and Parents* (New York: St Martin's Press, 1975), a children's book by Will McBride, was taken out of distribution by its American publisher/distributor, St. Martin's Press. It stopped distribution because the U.S. Supreme Court upheld a New York state child pornography law. The book contained photographs of nude children. The New York law contained a strict provision barring the use of children in all sexually explicit films and photographs, obscene or not. St. Martin's had already successfully defended *Show Me* in Massachusetts, New Hampshire, and Oklahoma. However, the publisher decided that determining which of the 50 states it could legally ship the book to, as well as keeping track of individual orders, was much too difficult, so it stopped all distribution.

Perhaps the most interesting aspect of this incident is that the book was written by a Swiss child psychologist (Helga Fleischhauer-Hardt) and the photographs were taken by an American photographer (Will McBride). They prepared the book for a Lutheran church-sponsored children's book company in West Germany in 1974. The English-language edition appeared in 1975, and St. Martin's stated that it has sold almost 150,000 copies in hardback and paperback before it ceased distribution. Some distributors and book clubs started using labelling systems in an attempt to protect themselves from lawsuits. For example, one book club used labels that state: "Warning: explicit violence" or "Warning: explicit sex and violence." A few people speculated that the purpose was to increase sales rather than avoid a lawsuit. Perhaps it served a dual purpose. For a time, one of the library distributors that serves many school media centres included warnings with "problem" books it shipped. For example, in children's books acquired for courses in children's literature, librarians at Loyola Marymount University have found slips bearing the warning, "This book is not up to

our usual standards.” (The standards referred to do not relate to the quality of the physical volume itself.) Such labelling violates the ALA Statement on Labelling; however, it also reflects the growing concern on the part of vendors with social and with pressures to influence those values.

Today, just as during the period 1873-1950, most of the problems libraries encounter are with individual and group attempts to censor material. Although no active “Society for the Suppression of Vice” exists today, librarians increasingly face organized pressure groups. What may at first seem to be a person’s objection to one book can become a major confrontation between a library and an organized pressure group. Much depends on the energy and time that the would-be censor is willing to devote to the issue. Influential persons may be able to organize a group to generate even greater pressure than the average person could. A librarian may encounter organized pressure groups based on local interests and views (often, views that are religious or politically oriented), but seldom does a librarian face a challenge from a local group with broad national support. If such a group were to exist, it would be extremely difficult to avoid at least an occasional debate (if not an all-out battle) over some materials in the collection. Policy statements about controversial materials, the ALA’s Freedom to Read documents, and other support materials will help to slow the process, but they will not stop it. Local groups are particularly hard to resist, because they can have a fairly broad base of community support and their existence indicates some active interest in certain problems.

A few examples illustrate the problems that confronted many librarians in the United States during the 1990s. One example was found in a 1993 report about censorship in U.S. schools. The report, released by People for the American Way, indicated that in 41 percent of the 395 reported attempts at censorship, censors succeeded in having the objectionable material removed or restricted in some manner. The report indicated that the majority of the reported attempts were by groups identified as religious right or “pro-family.” It went on to report school personnel as acknowledging that they were being careful in what they added to the collections, a form of self-censorship. A 1983-1984 study indicated that school media centres resolved most challenges without removing the item or restricting access. In 1992, ALA’s Office for Intellectual Freedom recorded 653 incidents; however, it believes that libraries report less than 15 percent of all attempts.

Much of the censorship pressure arises from a concern about children, and the concern is not limited to sex. Some parents do not believe they are capable of judging the materials that their children are exposed to in

school or the library. As a result, several organizations review materials for worried parents. These groups include Educational Research Analysts, Inc.; Mr. and Mrs. Gabler; America's Future, New Rochelle, N.Y.; the John Brich Society; and Parents of New York United (PONYU). These reviewers are particularly active in the area of elementary school textbooks and required reading material, but they also assess what is in the general collections that support the curriculum.

Supporters of biblical creationism suggest that libraries are censoring Christian materials and especially creationism literature (or creation science.). Anyone thinking about going into school media centre work needs to be fully aware of what is taking place and to beware the dangers and pitfalls. Court, which limited the power of school boards to limit access to materials, did not solve all the problems.

Not all censors are concerned about children's welfare. Challenges to materials based on their racist or sexist content arise fairly often. One of the more unusual cases was "*The Incredible Case of the Stack o' Wheat Murders*" photograph incident in 1980. The case illustrates that censorship battles are not limited to public and school libraries. The Stack o' Wheat incident occurred in the special collections room at the University of California, Santa Cruz library. Ten 4- $\times$ -5-inch photographs, called "*The Incredible Case of the Stack o' Wheat Murders*," were taken by photographer Les Krims. The collection was a parody of theme murders intended for use in a marketing project. Each photograph showed a "gruesomely" murdered nude woman dripping blood alongside a stack of wheat pancakes. The dripping blood was chocolate syrup; the chocolate represented the "epitome of the series humour," according to the text that accompanied the photographs. A young woman who viewed the photographs demanded their removal from the library's collection on the ground that they represented the sexploitation of woman. When the library took no action, she went to the special collections room, ripped up the photographs and accompanying material, and poured chocolate syrup over the debris. The case quickly escalated into a significant problem for the campus, encompassing many complex issues, such as freedom of expression, censorship, status of woman, vandalism, and social justice.

Another, more recent case involving photographs, one that gained national attention, was the Robert Mapplethorpe controversy. This case went to trial and led to the resignation of a museum director, as well as an individual who had once won ALA's intellectual freedom awards.

A variation on the censorship/intellectual freedom issue occurred in 1999 when the National Endowment for the Arts (NEA) withdrew funding for a book publishing project. The publisher was a small press in El Paso,

Texas, which had applied for and won a grant from the NEA to help cover the colour publishing cost of \$15,000 for 5,000 copies, *The Story of Colour* is a children's book based on a Mexcian folk tale about the gods that remade a gray world into one many colours. The "problem" was the author, Subcomandante Marcos. Marcos is one the major leaders of the Zapatista guerrilla movement in Mexico. According to the newspaper article, William Ivey, chairman of the NEA, cancelled the funding after learning about the book from a reporter. His decision overturned many levels of approval for the funding. The reason given for the reversal was concern that some of the funds might eventually reach the Zapatistas. "There was uncertainty about the ultimate destination of some part of the funds," according to Mr. Ivey. If nothing else, these cases illustrate how deeply a censorship issue can divide a community. When local pressure groups exist, the librarian may ask, "How will they react if I buy this item?" Thinking along these lines allows one to deal with one's worries. The real danger in the situation is when the thought is unconscious. At that point, the pressure group has almost accomplished its purpose, that is, control over what goes into the collection. Further, the group has accomplished it through the librarian's self-censorship.

Self-censorship is our greatest problem as librarians and information professionals. We all believe that we would never censor ourselves, but it is difficult to prevent. A few librarians would agree with Walter Brahm; it is better to retreat and fight another day. He reasoned that censorship falls victim to the times; that public opinion can only dampen censorship; that over time, no one can lead society's mores in directions the population opposes. Certainly, libraries and librarians cannot accomplish this alone, and generally, libraries are not the main battleground of intellectual freedom. Most librarians would take a public stance against Brahm's position, when stated in a theoretical sense and when it does not affect them directly. When it becomes a real issue and there is personal involvement, it becomes another matter.

The following are but a few of the hundreds of attempts at censorship in libraries and information centres in the United States. ALA's *Newsletter on Intellectual Freedom* provides an ongoing source of news about this field.

## Examples of Censorship

### *Journals*

In the late 1990s, two periodicals, *Ramparts* and *Evergreen Review* (*ER*), caused libraries and librarians to confront the censorship issue head-on. These confrontations illustrate the variety of ways libraries deal with

controversy. In Los Angeles, the public library had to fight a city councilman's efforts to have *ER* removed from the library. The councilman was unsuccessful, but the library removed the current *ER* issues from public areas while the controversy raged. Eventually, the journal was returned to the open shelves after the parties reached a final decision. This was a short-term victory for censorship, but in the end, a victory for free access.

Not all librarians were so lucky. Richard Rosichan lost his position as director of the Kingston Area (New York) Public Library because he fought to keep *ER*, despite both library board and Johan Brich Society pressure to drop it. At the same time, the American Legion demanded that he remove *Ramparts* because of what the Legion considered its un-American stance. Groton (Connecticut) Public Library managed to retain its staff but lost its subscription to *ER*; after a four-month fight, the library's board of trustees ordered the removal of all issues from the library and the subscription cancelled. This was done under the threat of fines and jail sentences for both the library board and staff. Head librarian John Carey issued a statement to the effect that this decision would affect the general acquisition policy. One can only hope that he was wrong.

Between keeping an item on the shelves and removing it is the compromise position to which librarians sometimes resort—restricted availability. The Philadelphia Free Library used this approach for *ER* when pressure began to be applied. The library renewed the subscription for the main building one under the age of 18 could examine the title. Emerson Greenaway, who was at that time the director of libraries for the Philadelphia Free Library, said this was done because *ER* was “important sociological.” Who was the winner here, the censor or the librarian?

The foregoing are a small sample of the problems that arose with *Evergreen Review* and *Ramparts*, and they are only two of hundreds of periodicals that have been attacked over the years. In fact, groups frequently question *Newsweek* and *Time*. Some other journals that have been questioned by an individual or group during the 1990s are: *Not-for-Profit* (a school magazine), *people*, *Playboy*, *Playgirl*, *Reader's Digest*, *Rolling Stone* (students under the age of 17 attending Kettle Moraine High School, since December 1998, must have written parental permission to read the library's copy), and *Young Miss*.

### **Books**

The list of books that have caused trouble over the years is immense. The short list included at the end of this section illustrates the range of titles while indicating that one can never really tell what will cause

trouble. Some topics are more sensitive than others, and one might expect difficulty with certain acquisitions but not encounter any. However, sex, religion, and politics are always potential problems.

Several school districts and public libraries faced complaints about *I Know Why the Caged Bird Sings* (Maya Angelou), because of passages dealing with child mole station and rape. In most instances, the objectors were successful of forcing its removal or restricting its use by requiring parental approval in writing.

*The Adventures of Huckleberry Finn* (Mark Twain) has a long history of complaints. The complaints are a perennial problem. The usual charge is that the book contains racist material. Complaints are also frequently field over J.D. Salinger's *Catcher in the Rye*. Here the usual issue is profanity; occasionally, someone objects to sexual references. Another book that people claim contains inappropriate language is *One Hundred Years of Solitude* by Nobel prize-winner Gabriel Garcia Marquez.

Other books draw complaints because of the point of view they present—for example, Dee Brown's *Bury My Heart at Wounded Knee*. Still others encounter problems for reasons that are hard to understand. Try to find the offending nudity in *Where's Waldo?* or determine why some school media centres have *Snow White* on the list of books that may be read only with signed parental approval.

Some of the late 1990 "problem" titles are equally hard for many people to understand:

- *Twelfth Night* (due to a school district's ban on alternative lifestyle instruction)
- *Origin of the Species* (once again the Tennessee legislature attempted to limit the teaching of evolution)
- *Little Red Riding Hood* (because the basket of goodies included wine)
- *My Brother Sam Is Dead* (too much violence in a story about a family split apart by the American Revolution)
- *The Chocolate War* (due to language and Sexual content—this book is beginning to catch up to *Catcher in the Rye* in terms of challenges)
- *My Friend Flicka* (due to cruelty to animals).

According to an ACLU survey in 1997, the most frequently challenged authors between 1995 and 1997 were Judy Blume, Robert Cormier, Christopher Pike, and R. L. Stine. ALA's OIF indicated that the 1998 list of most challenged authors included all of the above, except Pike, and added Maya Angelou, James Lincoln Collier and Christopher Collier,

Robie Harris, Lois Lowry, Katherine Paterson, and John Steinbeck. One early 1999 case involved a Wisconsin school district's banning of four books dealing with gay themes-*When Someone You Know Is Gay*, *The Drowning of Stephen Jones*, *Body Be-Bop*, and *Two teenagers in Twenty*. What is interesting about this case is that the complaint that led to banning was filed by a parent of a former student in the school.

### **Music and Recordings**

Although in the past there have been fewer problems with music than with other formats, that is no longer the case. Rap music, hard rock, and music lyrics in general now generate controversy quite regularly. In the late 1990s, 2 Live Crew recordings and performances draw national attention, and the concern continues to grow. Early in 1990, the recording industry instituted a labelling program similar to the motion picture rating system. This occurred after years of debate, even in Congress, and opposition from a variety of groups, such as the ALA. Anna Thompson's article, "Lyric Censorship," provides some good insights into this area. One older musical recording that still raises problems from time to time is *Jesus Christ, Superstar*. Some years ago, Rockford High School (Michigan) was the location of one such disagreement over both the music and the text. At the end of the debate, the school removed all materials relating to *Jesus Christ, Superstar* from the school system-both the library and the music department-because the musical was deemed "sacrilegious. A good article that gives one a sense of how long people have been trying to censor music in the United States is Edward Volz's "You Can't Play That."

### **Games**

Nothing in the collection is immune from challenge, as several libraries have learned the hard way. Aurora Public Library (Colorado) had to deal with controversy over *Dungeons and Dragons* (D&D) players' books. (D&D is a popular role-playing game with an estimated 3 million players, mostly young people.) A woman presented an official complaint and a petition with 150 signatures supporting the complaint. She claimed the game promotes "violence, Satanism and blasphemy of Christian terms." The complaint was withdrawn a short time later because the woman said she feared reprisals against her and her widowed mother. However, the publicity sparked a rash of complaints about other items in the library, and a local evangelist began checking area public library collections for D&D players' books. He tried to pursue the Aurora complaint, but because he did not live in the community, he could not file a complaint. At about the same time, in Hanover, Virginia, the parents of a 16-year-old who committed suicide sued a public school system. The parents alleged that the suicide was a direct result of his playing D&D in a school building. Wrongful death

lawsuits related to games, movies, and television programs have been increasing. None has involved libraries, but there is no reason to suppose that libraries will be immune from such a suit, particularly when many collections have materials about suicide. The November 1983 issue of *American Libraries* published some responses to the ALA Ethics Committee question, "Should you give a student a copy of *Suicide Mode D'Emploi*?" The book is said to be linked to at least 10 suicides. If one believes in freedom to read, what should one do?

### **Film and Video**

As library collections of theatrical videos grow, so do the odds that some-one will demand the removal of one or more titles. Educational videos, especially those dealing with reproduction, abortion, and alternative lifestyles, also present problems. Even foreign-language videos, such as a Portuguese language film, can draw protests. During the Gulf War, some libraries rejected an antiwar video, raising the question of whether the librarians were acting as censors and not providing both sides of an issue. A short but informative article about issues of accessibility to video collections is by John Hurley.

LMU's large video collection has drawn several complaints. None of the challenges have been serious enough to warrant attention outside of the library, as no one from the university has raised the issue. To date, the complaints have been from community users who think the collection should only contain "Christian if not solely Roman Catholic" materials. Films such as *Jesus Christ, Superstar* and *The Last Temptation of Christ* have drawn highly negative comments from several community members. What might happen is a student's parents or major donor were to complain is difficult to say. We rather expect the issue would go beyond the walls of the library.

Some years ago, librarians put on an amazing performance of self-censorship. The situation surrounding the film *The Speaker* includes almost every element one is likely to encounter in any censorship case. To fully understand all of the paradoxes that this event represents, one must review the background of the situation and view the film.

The problem with *The Speaker* began when ALA's Committee for Intellectual Freedom received funds to produce a film about the issues of censorship and intellectual freedom. Shown for the first time to membership at the June 1977 annual convention, the film generated one of the longer debates in ALA history. Seldom has there been as long or as bitter a debate within the ALA about an issue that is, presumably, an article of faith in the profession. Many of the African American members labelled the film

racist. Many other members agreed that the film was a problem for that or other reasons. An attempt to have the ALA's name disassociated from the film failed, but not by much. Is that a move to censor? How does that differ from the definition given at the beginning of this chapter? Does that really differ from a publisher's deciding not to release a title because the work is found not to be in the best interest of the owner of the company?

As with every other problem of this type, we have no objective data on which to base a judgment. Not all African Americans or other persons of colour who viewed the film saw it as racist. Just because one (albeit large) group claims that an item is this or that, does the claim make it so?

Is this really different from the Citizen's Committee for Clean Books saying that *The Last Temptation of Christ* is sacrilegious, or the John Birch Society claiming that *Ramparts* and the *Evergreen Review* are anti-American? One hopes that most librarians will agree with Dorothy Broderick regarding *The Speaker*:

Let librarians across the country decide for themselves: If they find the film boring, let them not buy it. If they feel that using it will stir up trouble in their community-as if they had invited "*The Speaker*"-let them ignore its existence. If the film is as bad as its opponents claim, it will die the natural death of an inadequate work in the marketplace.

Many persons believed that if the ALA removed its name from the film, the association would have taken the first step toward suppressing the film, thus practising censorship, the very thing it tries to avoid.

Happily, the ALA has produced, or taken part in the production of, an excellent video, *Censorship vs. Selection: Choosing Books for Public School*.<sup>33</sup> Though the focus is on public schools, the issues covered are broad enough to make the film valuable for use with any group to generate a discussion of intellectual freedom and censorship.

### Special Cases

Sometimes there are unusual circumstances surrounding a book or other item of controversy, and there are major efforts to suppress the distribution of the item by governments or order groups. An extreme example was that of Salman Rushdie's *The Satanic Verses*. Although Rushdie was alive and still in hiding at this writing, several translators and publishers around the world who played some role in publishing of the book are dead. Bookstores stocking the book received threats, as did those involved in distribution of the book. To the best of our knowledge, no library received threats for adding the title to the collection. OCLC holdings statements in 1995, when there was still significant concern,

showed that only 218 OCLC libraries held a copy. As of April 1999, a check of OCLC showed that 2,334 libraries held the title.

A good review article about the Rushdie situation and why *The Satanic Verses* was condemned is John Swan's "Satanic Verses, the Fatwa, and Its Aftermath," which describes the major events through mid-1991.

One rather different situation came up in 1996 in a rather unexpected place—medical libraries. *Pernkopf Anatomy: Atlas of Topographic and Applied Anatomy* was a critically acclaimed anatomical atlas containing more than 800 detailed paintings of dissections that doctors, especially surgeons, used for many years. The first volume was published in Vienna in 1937, part two was printed in 1943, and the final volume appeared in 1952.<sup>35</sup> Urban & Schwarzenberg of Baltimore issued a two-volume set in 1989; later, Wavery Inc. acquired the rights to the title. Both the original and reissue volumes were (and still are) widely held by medical libraries. Reviewers in 1990 used phrases such as "in a class of its own" and "classic among atlases." Anyone thinking about the date and place of the initial publication probably can guess why the controversy arose. Dr. Eduard Pernkopf was a Nazi Party member from 1933 forward, and was named dean of the medical school at the University of Vienna after the Anschluss of 1938. He also spent three postwar years in Allied prisoner of war camps, but was never charged with any war crimes. Some doctors in the 1990s wanted medical libraries to withdraw or at least not allow access to the work until there was an investigation into whether concentration camp victims had been used for the dissections upon which the paintings were based. To date, there is no word on the outcome of the investigation and, as might be expected, there were differing responses in medical libraries to requests to restrict access.

### Librarians and Censorship

Realistically, all the situations discussed so far are of the type that one can easily identify and choose to fight or not. Given the foregoing sample of the problems that one may encounter, it should not be surprising to find librarians acting in a self-protective manner. Will knowing who the most challenged authors are in some way influence selection decisions? How great a problem is this? Several researchers have studied this phenomenon, but this discussion will explore the findings of only two of the more widely known studies, those of Fiske and Busha, and a recent study done in southern California.

Marjorie Fiske shook the library profession some years ago when she reported that a high percentage of librarians decided not to buy an item because it might cause a problem. Some titles are likely to cause trouble,

for example, *The Joy of Sex* or Madonna's *Sex*, and these are easy to identify. However, an examination of the sample list of titles that have caused trouble makes it evident that some problematic items are not easy to identify. After establishing the habit of not selecting a title that has the potential for controversy, it will be difficult to break the habit. Unfortunately, as with so many other habits, it is easy to slip into a behaviour pattern without recognizing it.

Reasons like "lack of funds," "no demand," or "poor quality" may be true, or they may be rationalizations for not selecting an item that might make life troublesome. Other excuses, such as "I will buy it when someone asks for it" or "I don't like that author or producer; he or she never has anything worth-while to say," clearly signal danger. Just because a librarian does not like an author or a subject does not mean that he or she has the right to keep others from access. This may not be self-protective in terms of one's own psyche. In any case, the result is the same-censorship.

One way to raise the level of self-awareness is to periodically check one's holdings against various lists of problem items. How many does the library have? Holdings of less than 50 percent should cause one to question what is happening in the selection process. There may be perfectly good reasons why there are so few of these items in the collection, but until the librarian can give good reasons, he or she cannot complacently say, "I am not a censor."

Charles Busha's study examined librarians' attitudes toward censorship and intellectual freedom. He compared his findings to scores on a standardized test that is an indirect measure of anti-democratic trends. His concluding sentence is probably a reasonable picture of all librarianship in the United States: It is evident, as a result of opinion research, that Midwestern public librarians did not hesitate to express agreement with clichés of intellectual freedom but that many of them apparently did not feel strong enough as professionals to assert these principles in the face of real or anticipated censorship pressures.

The data from a 1982 survey by Woods and Perry-Holmes indicated that the pattern of self-censorship continued, at least for small and medium-sized public libraries. A 1996 study of selection practices in five southern California public libraries suggested that little has changed since Fiske did her study more than 40 years ago.

### **A Sampling of Problem Books**

It seems as if almost any book or other format can cause some person to complain. A list of the most frequently banned books in the 1990s,

actually most-banned. Some of the titles from that list also appear on the following list of books that have been attacked for a host or reasons:

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Catcher in the Rye	Of Mice and Men
Daddy's Roommate	Limerick
Changing Bodies,	
Changing Lives	The Nancy Drew Series
<i>Exposing the AIDS Scandal</i>	<i>Rabbit Wedding</i>
Forever	<i>Robots of Dawn</i>
The Hardy Boys Series	<i>Tom Sawyer</i>
Intimacy Between Men	The Wizard of Oz
The Last Picture Show	Little Red Riding Hood
James and the Giant Peach	The Learning Tree
The Colour Purple	In the Night Kitchen

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### What to do Before and after the Censor Arrives

Knowing the dangers of censorship and having a commitment to avoid it is not enough in today's world. Information professionals must prepare for the censor long, long before there is a perceived threat or before the threat becomes real. The first step in preparing for the censor is to expect to have to face a censor. Prepare a policy statement about how the library will handle complaints, and have the policy approved by all the appropriate authorities. There is nothing worse than having no idea of what to do when facing an angry person who is complaining about library materials. Even with policies and procedures, the situation may escalate into physical violence; without procedures, the odds of violence occurring increase.

A typical procedure is to have the individual(s) file a formal complaint or fill out a form that specifies what is at issue. In English, have recommended forms that are equally effective.

After the library develops the policies and procedures and they are approved, everyone working in public services needs to understand the system and receive training in implementing the system. (Sometimes role-playing is helpful in reinforcing the training.) ALA's Office for Intellectual Freedom has an excellent manual that provides details about what to do before censors arrive. Another good source is Frances Jones's *Defusing Censorship: The Librarian's Guide to Handling Censorship Conflicts*.

The ALA's organizational structure for dealing with intellectual freedom concerns is somewhat confusing. The Intellectual Freedom Committee (IFC) is responsible for making recommendations to the association regarding matters of intellectual freedom. The Office for

Intellectual Freedom (OIF), which has a full-time staff, has the charge of educating librarians and others about intellectual freedom and censorship matters. It also is the support service for the IFC, and it implements the association's policies related to intellectual freedom. As part of its educational function, the OIF produces several publications: *Newsletter on Intellectual Freedom* (news and current developments relating to intellectual freedom), *QIF Memorandum* (addressed to local library association intellectual freedom committees), and the *Intellectual Freedom Manual*.

Although the OIF does not provide legal assistance when a library faces a complaint, it does provide telephone consultation (occasionally with the addition of written statements or names of persons who might be able to testify in support of intellectual freedom). Very rarely, the OIF comes to the library to provide moral and professional support. Often, librarians are surprised to learn that the OIF does not provide legal aid. Legal assistance might be available from the Freedom to Read Foundation (FRF). The FRF is not part of the ALA (it is a separate legal entity), but the two are so closely affiliated that many people have difficulty drawing the line between the two. The executive director of the FRF is also the director of the OIF; with such an arrangement, it is not surprising that people think the FRF is part of the ALA. Be aware that there is no assurance of receiving financial or legal aid from the FRF; there are too many cases and insufficient funds to assist everyone.

Anyone interested in becoming involved in intellectual freedom activities should consider joining the Intellectual Freedom Round Table, which is the general membership unit of the ALA related to intellectual freedom. Although the ALA offers a variety of support services for handling censors complaints, the best support is preparing before the need arises.

### **Filtering**

We decided to place the discussion of filtering here because it is, in many ways, a very different concern than that of challenges to items that are part of one's collection(s). Filtering access to the Internet has been a recent "hot topic" for the general public, government officials, and libraries. As we enter the twenty-first century, libraries appear to be "caught between a rock and a hard place" on this issue, as long as they offer Internet access to the public. Some of the general public, governing boards, and elected government officials want libraries to use filter software that will deny access to certain types of sites. Others, believing in free speech (First Amendment), do not want filtering. The primary reason for filtering is to keep children from having access to "unacceptable" sites. An excellent article that describes how filtering works is Paul Resnick's article in

*Scientific American*. Some of the cases involving libraries and filtering in 1999 reflect the problems that occur no matter which option is selected (filter or no filter). In Loudoun County, Virginia, the Public Library Board of Trustees adopted a policy in 1997 calling for the installation of filtering software on all public access computers that connected to the Internet. A citizens group (Mainstream Loudoun) filed suit against the board in 1998. Their basic argument was that (1) filters on all computers reduced everyone to the status of children, and (2) filters cannot block access just to sites deemed inappropriate for children. (As an example of the limits on filtering, some filters would deny a person access to sites relating to breast cancer, because the word *breast* is considered a "stop" word.) Although the court held in favour of the plaintiffs in late November 1998, the board may appeal the decision. A former board member, now a Virginia state legislator, said he would introduce a bill that would require all public libraries to install filters.

On the other side of the country the other side of the issue was also in court. The Pacific Justice Institute, an "organization dedicated to the defence of religious freedom" (<<http://www.pacificjustice.org>>), filed a lawsuit in 1998 against the city of Livermore, California, and its public library on behalf of a mother, because it did not have filtering software in place. According to the complaint, the woman's son had, on at least 10 occasions, downloaded images of nude women using library computers connected to the Internet. The suit was dismissed in January 1999, for the second time in a few months, on the basis that filtering was too restrictive of free speech and the right to receive free speech. Michael Millen, the attorney for the plaintiff, announced that he was appealing the decision. Thus, by mid-1999, there was no clear trend as to which way the issue will be decided.

Not everyone in the ALA agreed with this statement, and by March 1999 there was some suggestion that ALA's policy might require modification. A meeting was held in March 1999 at ALA headquarters; it was a first-time meeting of filtering software producers and ALA officers and members to discuss the issue of filtering. Ann Symons, then ALA President, suggested that perhaps the IFC should reconsider the policy. A February 1999 *Library Journal* report on library filtering indicated that less than 20 percent of public libraries were using filtering software. How all these forces will play out is impossible to predict with any hope of accuracy. We suspect that by the time we prepare a new edition of this book, the issue will still be in the courts, as both sides challenge the presence or absence of policies or laws regarding access to the Internet and children.

## Bibliography

A common statement used when defending a book or other library material is that there is no definitive cause-effect relationship between reading or viewing and behaviour. The ALA's Freedom to Read statements and the Educational Film Library Association's Freedom to View statements support this view. However, there is a body of literature about the use of reading in the treatment of illness. Some medical professionals believe there *is* a cause-effect relationship. In addition, a variety of lawsuits allege that reading or viewing caused someone to do something.

John Berry explored this area in a 1992 *U* editorial:

*If words don't incite action, I'm in the wrong line of work.... [I]f they don't motivate people to act, antisocially or otherwise, then our First Amendment is of little value and less importance. This is a tough contradiction for those of us who must argue the case against censorship.... We can't support free expression by saying it won't do any harm. It is obvious that action triggered by words and pictures can do harm and often does.*

Librarians frequently do not spend enough time learning about the circumstances in which reading or viewing may cause someone to harm a person or property. Perhaps a course or two in bibliotherapy should be required of any professional working in public service areas of a library or information centre.

A standard definition of *bibliotherapy* is the "use of literature to bring about a therapeutic interaction between participant and facilitator." Some believe that a healing process takes place through reading, that is, that "thoughtful suggestions provide a reader with just the right book, a book that triggers a significant and growth producing feeling in response to some need." Most bibliotherapists operate on the basis of several assumptions:

- The process is interactive; it involves both participant and facilitator.
- Literature encompasses all forms of writing.
- The process is both clinical and developmental.
- The process can be one-on-one or group-based.
- The outcome is improved self-esteem and better assimilation of appropriate psychological or social values for the participant(s).
- The process is a therapy but draws heavily on the healthy aspects of the mind.
- The process depends on the facilitator's ability to select the appropriate material for the participant to read and consider.

To date, data about the effectiveness of bibliotherapy is inconclusive. (As a library intern in a Veterans Administration hospital while in library school, Dr. Evans took books and magazines to the locked psychiatric ward for patients to read. Before delivering the books, a psychiatrist examined every item on the book truck. Often, the doctor removed some items. One wonders: was this an act of censorship? Was this violating the ALA's Freedom to Read statements?

There is much we do not know about reading or viewing and behaviour. Perhaps when we know more, our freedom-to-read statements may need revision. In many ways, the issues of filtering are rather like this as well. If we need to protect children from Internet materials, is it not also likely that we need to protect them from printed materials as well? (*Note: it is not just about "protecting children from pornography," despite what some people say.*)

Determining the effectiveness of bibliotherapy, or the effect or lack of effect of reading, viewing, and listening on behaviour, should be a high priority. The field makes the case for free and open access to all material for anyone at any time, yet there is some evidence that reading, viewing, and listening to certain items by certain people at certain times does affect behaviour in a positive or negative way.



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## Using Output Measures to Monitor Children's Use of Reference Services

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Since the late, 1980s, public libraries have increasingly tried to adopt a marketing approach to their service delivery, surveying community needs and then responding with targeted programmes and services to meet those needs, finding the market niche for which they are uniquely suited. This effort has been a response to growing fiscal constraints and has been bolstered by the publication in 1987 of two important documents, *Planning and Role Setting for Public Libraries* (PRSPL) and *Output Measures for Public Libraries*, second edition (OMPL). In this article, I will show how these documents have contributed to our understanding of reference services in public libraries. I will also show the potential of a subsequent document, *Output Measures for Children's Services in Public Libraries*, for contributing to the development of better information services for children.

### **The Public Library Planning and Role Setting Process**

As part of the ongoing Public Library Development Programme, the Public Library Association and the American Library Association presented a revised planning process in 1987. *Planning and Role Setting for Public Libraries: A Manual of Options and Procedures* was based on the assumption that library services should reflect the needs of specific communities and should be based on planning and decision making done at the local level. The manual presents a process for reviewing the existing levels of service and defining the mission of the library based on community needs.

One of the key elements in developing the resulting library plan is the selection of a limited number of roles which the library intends to fill in its community. The authors of the manual explain that the roles are"...

profiles of library service emphases." Eight roles are presented as a menu from which public library decision-makers may select:

1. Community Activities Centre: The library is a central focus point for community activities, meetings, and services.
2. Community Information Centre: The library is a clearing-house for current information on community organizations, issues, and services.
3. Formal Education Support Centre: The library assists students of all ages in meeting educational objectives established during their formal courses of study.
4. Independent Learning Centre: The library supports individuals of all ages pursuing a sustained programme of learning independent of any educational provider.
5. Popular Materials Library: The library features current, high-demand, high-interest materials in a variety of formats for persons of all ages.
6. Preschoolers,' Door or Learning: The library encourages young children to develop an interest in reading and learning through services for children, and for parents and children together.
7. Reference Library: The library actively provides timely, accurate, and useful information for community residents.
8. Research Centre: The library assists scholars and researchers to conduct in-depth studies, investigate specific areas of knowledge, and create new knowledge.

The authors point out that no library can fulfil all eight roles with excellence. Therefore, they encourage library decision-makers to prioritize possible roles and place them into one of three categories: primary, secondary, or maintenance. Libraries, depending on size and resource, should select one or two roles for the primary category and one or two for the secondary category. They recommend that approximately 80% of the library's efforts and resources be channeled into the primary and secondary roles. Roles relegated to the maintenance level are not necessarily dropped; they simply receive much less emphasis and support.

*Output Measures for Libraries* was the companion volume to *Planning and Role Setting for Public Libraries*. It provided specific techniques for measuring a library's progress towards achieving quantifiable objectives in the fulfillment of its selected primary and secondary roles. For example, if a library had selected Popular Materials Centre as its primary role, PRSPL suggested that it consider Turnover Rate, Browsers' Fill Rate,

Subject and Author Fill Rate, Title Fill Rate, Circulation per Capita, and Registration as a Percentage of the Population as possible output measures that might usefully help to determine how successfully the library is fulfilling that role. OMPL provides detailed instructions for collecting the data and analysing and interpreting the results for each of those output measures.

### **Limitations of the Planning and Role Setting Process**

It is difficult to know exactly how many public libraries have adopted the planning and role setting process, but there are at least some indicators. Of the 562 libraries reporting data for the *Public Library Data Service Statistical Report 91*, for example, only 228—less than half—included information on role selection. A qualitative study of the adoption of the planning process in smaller libraries showed that the directors of the six case study libraries were all aware of the PLA planning process and that 2/3 of them had implemented some form of role setting.

Regardless of how many public libraries have formally adopted the planning and role setting process, the eight roles have become part of the common knowledge of most public library directors. Recently, some library leaders, including Charles McClure, one of the architects of the original role menu, have suggested that the roles should be revisited and revised to reflect new realities, particularly the implications of the latest information technology which suggest the possibility of an "Electronic Networked Library" role. Nonetheless, the original eight roles create convenient frame of reference for understanding and talking about what public libraries do, and the output measures provide some standardized ways to monitor the results.

There are some limitations to the output measures, which comprise the evaluation tools for the planning process. They are strictly quantitative and only measure how much of something in comparison to how much of something else. They only measure tangible outputs and do not attempt to assess the quality or the significance of those outputs. They are not "outcome measures" which David Osborne and Ted Gaebler define as measures of quality and the effectiveness of production.

The measures for reference services, for example, do not attempt to assess the accuracy of the information given or its value to the user, two dimensions of reference service which have sometimes been determined through unobtrusive testing or patron surveys. The output measures are, nevertheless, useful tools for monitoring progress towards quantifiable goals and hold out the promise of standardizing data collection definitions and techniques in public libraries throughout the United States.

### **Output Measures for Public Library Service to Children**

Almost as soon as PRSPL and OMPL were published, there were concerns expressed about the relative invisibility of service to children in these general documents. Some advocates for public library service to children were concerned that literal-minded library directors would spot the one role which targeted children, Preschoolers Door to Learning, and assume that this was the only role which could be applied to children. Managers of children's and youth services were concerned that the general output measures did not allow a library to pinpoint and monitor specialized services for children. A joint committee of ALSC and PLA, chaired by Kathleen Reif and Clara Bohrer, began immediately to develop a set of specific output measures for public library service to children. In 1990, the ALSC/PLA Output Measures for Children's Services Committee submitted a grant request to the U.S. Department of Education for a project to develop evaluative measures for library services for children age 14 years and under and their care givers. The request was funded, and Virginia Walter was hired as the principal investigator responsible for developing and field testing these measures, as well as writing the new manual, *Output Measures for Public Library Service to Children* (OMPLSC). Before publication, these new measures were protested in three Southern California libraries and field tested in four sites across the country. In addition to the members of the ALSC/PLA Output Measures for Children committee, another thirty readers reviewed the final manuscript.

Before presenting detailed instructions for implementing the output measures, OMPLSC revisits the eight public library roles and shows how each of them could be used to focus on a particular aspect of public library service to children. For example, the library with a primary role as Popular Materials Centre would provide high demand, high-interest materials for children as well as adults. The library would highlight materials reflecting the current popular culture as children perceive it, including mass market items, as well as the more traditional "quality" materials found in most children's collections.

The Children's output measures differ from the more general output measures in a number of ways. They focus on children age 14 and under as a segment of the total service population of any public library. They take into account the seasonal nature of public library service to children, with the different use patterns typically found during the school year and during the summer. They also take into account the fact that adults are often the intermediaries between children and the library. Teachers, child care providers, parents, and scout leaders are all adults who frequently find materials at the library and check them out for children to use

elsewhere. Library staff may never see the children who are the end users of the materials. Whenever appropriate, OMPLSC directs data collectors to count care givers, or adults acting on behalf of children, as well as the children themselves.

### **Accounting for Public Library Reference Services**

As noted earlier, PRSPL designated Reference Library as one of the eight public library roles. The role description specifies that the library.

*...actively provides timely, accurate, and useful information for community residents in their pursuit of job-related and personal interests... Information provided may range from answering practical questions (how to remove garden pests, what to feed a guinea pig, how to apply for a job, what is the name of a poem that starts with...), to specialized business-related research (finding patent information), to answering questions about government (locating regulations for a grant programme), to providing consumer information.*

The role description for Reference Library neither mentions children nor gives any examples of a typical children's reference question, unless one is to presume that only a child wants to know what to feed a guinea pig. It does, however, indicate that the collection emphasizes information materials which are available for all ages and reading levels.

So many public libraries adopt Reference Library as a primary or secondary role that some people have suggested that it has become a de facto universal public library role. A study by Nancy Van House and Thomas Childers showed that public librarians ranked Reference Library as the most important role that their library plays. Van House and Childers find that Reference Library clusters with three other roles-Popular Materials Centre, Formal Education Support Centre, and Independent Learning Centre-to form a composite definition of the traditional public library role. This contrasts with an emerging alternative role definition which is made up of the four remaining roles-Community Activities Centre, Community Information Centre, Research Centre, and Preschoolers Door to Learning.

The suggested output measures for Reference Library are Reference Transactions per Capita, Reference Completion Rate, and In Library materials Use per Capita. OMPL defines a reference transactions as :

*... an information contract which involves the knowledge, use, recommendations, interpretation, or instruction in the use, of one or more information sources by a member of the library staff. It includes information and referral services. Information*

*sources include printed and nonprinted materials, machine readable data bases, catalogue and other holdings, records, other libraries and institutions, and people inside and outside the library. The request may come in person, by phone, or mail, from an adult or child.*

Specifically excluded are directional questions, questions about rules and policies, and telephone requests for known items, which are counted instead in Materials Availability Measures.

Reference Questions per Capita is the total number of reference questions asked in a year divided by the total population of the library's service area. The data is collected by reference staff through tally of reference questions during a one-week sample period. The directions do not specify that tallies should be taken at the children's services public desk, but one presumes that this is the intent, that questions asked by children in any part of the library will be included in the overall count. In the "Further Possibilities" section, the final suggestion is to measure reference transactions separately for children's and young adult services.

The Reference Completion Rate is "... the proportion of reference transactions successfully completed on the same day that the question is asked, in the judgment of the librarian." It is computed from the same data collected for the Reference Transactions per Capita measure. Again, a further possibility is to measure separate Reference Completion Rates for children's and young adult services.

In-Library Material Use per Capita measures the number of materials used in the library per person in the community served. It is categorized as one of the Materials Use measures, along with Circulation per Capita and Turnover Rate. It may be linked with a high Reference Transactions per Capita rate in a library that is focusing on the Reference Library Role, indicating a large usage of in-house reference materials. The data is collected for this measure by asking users not to reshelve materials for one sample week and then counting all materials used and left unshelved. The directions do not specify that unshelved children's materials be counted as well as adult materials, but presumably that is the intent. OMPL does not suggest any "further possibility" for applying this measure to children's services.

### **Output Measures for Children's Reference Services**

In discussing how the Reference Library role could be applied to children, OMPLSC points out first that the library should be certain that children have access to all information resources, including referrals and

on line data bases. The author cautions that all library staff, not just the children's specialists, should be trained to answer children's questions and to use the specialized reference tools available in the children's collections. The children's collection should emphasize information materials in all formats and at all reading levels. The staff must learn to adapt their reference interview techniques to the special communication styles of children. They help children formulate research strategies and retrieve information.

The output measures suggested to help monitor a library's performance in filling this role are parallel to the general output measures, segmented to focus on children: Children's Information Transaction per Child, Children's Information Transaction Completion Rate, and In-Library Use of Children's Materials per Child. The ALSC/PLA output Measures for Children Committee and the author of OMPLSC decided to use the more generic term information Transaction instead of Reference Transaction. There was some concern that the label "Reference Transaction" might lead some librarians to assume that readers advisory questions, traditionally a large part of public service to children, are not included. A children's information transaction is defined as "... contact between a library user who is 14 and under or an adult acting on behalf of a child and a library staff member who provides help with or knowledge, interpretation, or instruction in the use of an information source." Examples given are similar to those in the general output measures with two additions: "general or specific requests for something to read" and "requests by adults on behalf of children.

Data collection for Children's Information Transactions per Child and Children's Information Transaction Completion Rate is similar to the methods outlined on OMPL, with two crucial differences. First, for the children's measure, data is collected during two sample weeks during the year, a typical week in summer and a typical week during the school year, in order to account for the difference in children's library usage during those two seasons. In computing the measure, the count for the typical week during the school year is weighted by a factor of three because the school year is three times longer than the summer. Second, the children's measure counts only those questions asked by children and by adults asking questions on behalf of children. The librarians taking the tally must make an assumption about the age of the library user and the intended user of the information if the question asked is an adult. The manual gives advice about how to handle both of these issues, and, in fact, libraries who have implemented this measure have not found either to be particularly difficult. The Manual does point out that for every young-looking fifteen-

year-old who is counted in error, there is probably a mature thirteen-year-old who is missed. The assumption is that this evens out in the long run. Context Provide many clues about the ultimate use of the information, and a good reference interview will elicit this information as well.

As with the measures of information services for children In-library Use of Children's Materials per Child requires some adjustments to target just the use of children's materials. The method for data collection is exactly like that of the general output measure, except that only children's materials are counted and the count is taken in two sample weeks, one during the school year and one in summer. Further possibilities include calculating the In-Library Use of Children's Materials per Child for particular parts of the collection or types of materials or calculating the measure for particular times of day, such as the notorious after school rush.

In spite of the fact that the output measures relating to children's reference services are relatively easy to implement, they have not been widely adopted by public libraries. This information is not among the data elements required by the federal government. The Federal Centre for Educational Statistics is now collecting statistics on children's circulation and children's programming, but not on children's reference transactions. This may limit the incentive to collect the data.

The Public Library Data Service collected some statistics on children's output measures in 1991, before OMPLSC was published, but they too did not request data on children's reference use. (The 1994 survey will include this information.) A recent survey of public library service for children conducted by Keith Curry Lance and Barbara Immroth showed that only 62% of the respondents reported data on children's information transactions and only 33% had statistics on in-library use of children's materials. Rosemarie Riechel found in her survey of reference services to children and young adults that many librarians serving young people in schools and public libraries felt that they were doing a good job but just didn't have time to document their efforts.

There is much to be gained from a more widespread implementation of children's output measures relating to reference services. The information that results from implementing these three measures of library service to children is extremely useful to a children's librarian. For example, a high Children's Information Transactions per Child probably indicates that patrons rely heavily on the staff for assistance. This may mean that the staff is friendly and approachable and successful in attracting young users. On the other hand, it could also indicate that the library is unreasonably difficult to use or that patrons lack basic library skill or that patrons have

been kept unnecessarily dependent on professional staff for help. While a library that is focusing its efforts on the reference function would presumably aim for relatively high Children's Information Transactions per Child rates, other libraries, such as those whose primary role is Popular Materials Centre or Community Activities Centre might not be interested in this. Professional judgment is thus necessary in interpreting the results.

The output measures are all particularly well-suited for monitoring progress towards quantifiable objectives. A library might aim, for example, to increase its Children's Information Transactions per Child from 3.6 to 5.0 during the next year. Then the children's services staff could play attention to promoting reference and readers' advisory services that the library provides to children and their care givers. They could increase the visibility of the children's public service desk or make a single service desk more child-friendly. They could encourage staff to offer assistance rather than waiting for shy or reluctant library patrons to ask for help. They could monitor the quality of information transactions between children and staff to be sure that children are made welcome. The comparison of annual Children's Information Transaction per Child measures will confirm or deny that these efforts have been successful.

Library administrators should also be interested in the information to be gained from these measures of children's use of information services. It may be that staffing is poorly allocated between the adult and children's reference desks, reflecting old assumptions about usage. One library director in Southern California was astonished to learn that children's reference transactions accounted for more than 66% of all reference transactions in the branches of her system. Only the Central Library was used more by adults for information services. When the County Administrator asked for budget reduction packages, the director revised her original plan to reduce children's staff and suggested cuts in the adult reference staff instead. A high Children's Information Transaction per Child coupled with a low Children's Information Transaction Completion Rate may indicate a need for more cross-training of the adult staff in the special techniques and resources needed to answer children's questions effectively.

A close monitoring of children's use of a public library's information services may even indicate the need for more sweeping policy changes. In California, school libraries have been neglected for years and now rank 50th in the nation in funding. Public libraries have finally begun to take a Proactive approach to the information needs of school children and are providing Homework Centres with resources especially designed to support the curriculum. As Formal Education Support Centres, they are paying

more attention to children's roles as information seekers and information users. The output measures described here could help monitor how well California public libraries are making this shift in emphasis and perspective.

This is a different perspective than that which sees young library users primarily as story hour attendees or Summer Reading Programme participants. Research which I completed recently on the information needs of ten-year-olds in Southern California indicated that children are lacking some of the most basic information which they need to thrive, and in some cases, to survive.

The world they live in is increasingly complex, and the traditional providers of some of this basic information—parents and schools—are no longer capable of doing so, for a variety of reasons. Public libraries are not filling the gap. Perhaps because they have not yet perceived children as active consumers of information.

Since the publication of *Output Measures for Public Library Services for Children* in 1992, librarians have had access to standardized easy-to-implement techniques for measuring the quantitative results of their reference services for children. There are a number of convincing reasons why children's librarians and library administrators should look more closely at the evaluation of age-level reference service. The data can help librarians and library administrators achieve objective goals, improve service, and allocate resources more effectively.

There is also some evidence that focusing on informational service to children might produce good result in the political arena. A recent Gallup poll showed that 90% of the general public rates the role of Formal Education Support Centre "very important" for a public library. Eighty three percent rated the Independent Learning Centre "very important." Preschoolers' Door to Learning won a "very important" rating from 82%. The role with next highest percentage of people rating it "very important" was Research Centre, with 67% responding favourably.

The pollsters had limited the Reference Centre role to Reference Library to Community Businesses, and this more limited reference role received a "very important" rating from only 54% of the respondents. The very high ratings from Formal Education Support and Independent Learning suggest a high public support for the information functions of the library that are related to education. While this hopefully means lifelong learning, it almost certainly means support for information services for school age children, particularly when coupled with the high support for Preschoolers 'Door to Learning. Even if they don't use libraries themselves, adults support public library services for children.

### **Women Library Users and Library Users of Traditional Women's Subjects**

Women's information needs and Library use are not the specific and predictable sort that are associated with groups whose information needs have been studied. As a group, women's needs and interests are broad and varied. In many library use situations, most usually in academic and corporate libraries, there is little useful purpose in looking at women as a category of library user.

But women are the majority of public library users. Subjects which are traditionally associated with women: cooking, needlework, home-making activities of all sorts, returning to school or work after a break as a mother/homemaker, female health issues, and child care are the kind of practical lifestyle information that makes up much of public library reference.

There are two critical issues which women library users as a group and use of women's subjects in libraries have in common. While the users and topics make up the majority of information requests in public libraries, they are seldom covered in the professional literature of librarianship. They are not considered to be important enough or scholarly enough to be the subject of user needs research.

The problem is aggravated because public librarians are not routinely expected to do research and publish as are many academic librarians. The second critical issue is that women's information needs and the resources to meet those needs are little covered in the education of librarians. The lack of published literature on these users and their information needs makes their inclusion in the education and training curriculum difficult. There is not a body of theory that can be presented nor written materials to support teaching.

There are also significant current issues which make women library users and library users of women's subjects in timely topic for the attention of professional information workers. Discussions of the demise of the public library in light of the "Information Highway" and potential electronic information access in all homes appear in the popular press as well as in library journals.

Yet little attention is given to exactly what information the average citizen needs nor how best to deliver that information and make it useful. The issue of fee or free access to information, already difficult to resolve, is complicated by the new technology. Transaction and use fees versus public subsidies; access for the culturally, physically, and economically disadvantaged; and copyright and legal ownership issues are all currently much discussed, but with no resolution immediately in sight.

### **The Public Library and Practical Information**

Through the first half of the twentieth century, public libraries were thought of primarily as educational and cultural institutions. Many public libraries in this country were established to help educate and prepare new immigrants for employment. Reference service was geared to assisting people with intellectual and cultural pursuits. After World War II, public libraries began to take on an informational function. Recognition of the public library as a place where the average citizen could find information useful to his everyday needs began to appear in the professional literature with the "Information & Referral" movement in the nineteen sixties. This movement in librarianship can be traced to the Citizens Advice Bureaux often developed or housed in public libraries in Great Britain during and after World War II. Subsequently there has been some literature on the public library as a place where people go for other practical information they need to use in their daily lives such as consumer product and service information of various kinds, recipes, nutrition information and house cleaning techniques and products, do-it-your self auto and appliance repair, parenting and child behaviour information, medical, drug, and legal information for the layperson, various kinds of information for the woman who wishes to resume education or employment after a period of full-time child rearing, etc.

This paper will attempt to survey the relevant publications on information needs of women and use of women's subjects and sample responses to the perceived needs. Because the potential number of topics which could be discussed in this paper is so large, the following criteria were established to limit the material to a manageable amount:

- I. neglect of the topics in the professional literature and in research,
- II. the need for discussions of the issues for educational and training materials.
- III. frequency of requests at public library a reference desks.

### **Public Library Use Studies**

In the studies of general public library use in this century, women have always used libraries more than men. When use studies of particular subjects are done, women nearly always are more likely to use libraries for information on whatever subject than men.

The most recent of the general use studies, the 1978 Gallup Survey, the 1987 "Life Style Profile of the Public Library User and the 1990 Equifax-Harris survey also found that women use libraries more than men although the spread between the two seems to be narrowing. The 1990

survey reported that 68% of the women used the library as compared to 63% of men.

Merchant (1991) analysed "motivation" for adult public library use. His motivation categories were home and family life, vocational growth, religion, and politics. Among the many demographic characteristics which he included in his study was sex so that he was able to compare male and female motivation factors. Findings from this study will be mentioned as they are relevant to the various topics.

Words written in the popular library press in 1982 by Parikh and Broidy are just as true today: "The population of the U.S. is over 50% female, the library profession over 80%, yet analysis of and attention to women's issues and needs both as library users and library workers lags far behind our majority representation," and "Library doors have traditionally been open to help immigrants, cultural minorities, and the economically disadvantaged gain a toehold in American society. Women in this society are an economically disadvantaged cultural minority. Today, as in the past, it is the responsibility of the public library to open its doors and extend its resources to these immigrants in a man's world.

### **Women's Information Needs and Use**

One of the few studies of women's information needs is Bates "Library and Information Services for Women, Homemakers, and Parents" published in 1974. At that time, she wrote, "The library literature appears to be devoid of information on the needs of these three groups as groups." Bates looked at information needs found in Extension Service surveys, women's movement organizations, and general studies of the public's information needs. Bates categorized the information needs of these groups as survival related-crisis, survival related-general, and self enrichment and growth. The first category is the library role as an "information & referral" centre for social services and various experts such as physicians, psychologists, lawyers. The second and third categories are subjects for which information can be acquired from usual public library materials.

The next significant addition to the analysis of practical information needs is Dervin's 1976 chapter: "The Everyday Information Needs of the Average Citizen: a Taxonomy for Analysis." While not limited to women, her taxonomy covers many of the same subjects which Bates associated particularly with women's information needs. Dervin's complete list of subjects is neighbourhood; consumer; housing; housekeeping and household maintenance; employment; education and schooling; health; transportation; recreation and culture; financial matters or assistance; public assistance and social security; discrimination and race relations; child care and

family relationships; family planning and birth control; legal; crime and safety; immigration, migration, and mobility; veterans and military; and public affairs, political, and miscellaneous. Dervin concludes by saying "The clearest generalization which emerges from this discussion is that huge gaps exist in the knowledge base relating to average citizens and their information needs.

A few studies of specific groups of women or of specific women's information needs have been published. One of the earlier ones is Turock's (1975) description of the establishment of a Women's Information & Referral Service in the Montclair, N.J., Public library in the 1970's. Initially, "agencies and organizations working with women were consulted to see what their primary areas of concern and assistance were." This led to an initial data-bank on legal rights and aid, career and other counselling, family planning, self awareness, educational opportunities, day care and nursery facilities, women's organizations, and sexism in the media. However, once the service was in operation, "Most of our queries have to do with job information... the large majority of our patrons want to know how they can get into or return to the job market, where they can get help for writing a resume or upgrading job skills, where they can get day care for their young children."

Chatman has done two studies of information needs of specific groups which are relevant to the information needs of women: one on the "working poor" (1985) and one on "older women" (1991). Both of her studies found interesting perceptions about libraries. The women urban poor in CETA training in the earlier article did not see the library as a source of useful information specific to employment, and the older women seemed to see the library as a place to get recreational reading, but not as an information source. One of the older women had a clear picture of what she thought the library should provide:

I thin a library can help older people by providing them with good books and things to assist them to learn. They could put out pamphlets about general tips on aging. Plus, put books on crafts in large print. They should have a newsletter for older people telling them about meetings of interest to them.

If they request something special, the library should be willing to get it. I wanted a book to read so I call my daughter to pick it up for me at the library. It would be nice though if they would send it in the mail. If they weren't willing to pay for it, I would have. There are a lot of people here who have had heart attacks or are crippled. They can't get to a library. People assume that everybody can drive, and they can't. Plus older people are afraid to a lot of traffic.

Whitt. (1993) studied the information needs of lesbians. The subjects of this study went to the library "for lesbian fiction, for poetry, both popular and research-oriented psychological and sociological materials and for information on ethics and sexual behaviour."

"The library figures very prominently in the initial effort to locate information," but less frequent library users expected the material to be outdated or not positive. One respondent remarked that librarians should "at least have the ability to conceal surprise about alternative lifestyles."

### **Library Users of Traditional Women's Subjects**

There are few use studies of stereotypical women's subjects. When such subjects are written about in library literature, the articles are nearly always on collection development, not on use or users. Traditional women's subjects, such as cooking, needlework, sewing, and gardening are rarely treated in library literature except for papers on cataloguing of fiber art or preservation of textiles or in books reviews or articles on collection development.

*Library Journal* has done a series on collection development of popular public library subjects including crocheting and knitting and garden design. Chatman picked up an information need in her study of older women when one of the subjects mentioned the need for craft books in large type. In addition to the technical information needs evident in the literature of these fields, there is much evidence of the need for sources of creative inspiration. For example, a much discussed topic in many of the current publications on needlework is the use of pictorial sources for design. Monitoring relevant subject lists on the Internet provides additional examples of information needs: source for unusual materials, lists of continuing education, workshops, and conferences, information on institutions, organizations, museums, etc. For the information professional this remains an unexplored area of information need and one which would prove fruit full to study.

### **Library Users in Need of Practical Information for Their Home**

This category is the broadest and most basic one for this paper. It includes homemakers of either sex; do-it yourself repair persons including repair of appliances, automobiles, utilities (home improvements, generally); people seeking consumer product ratings, etc.

In Merchant's (1991) categorization of adult use of public libraries, men and women were equally involved with his category, "home and family affairs," but "women were twice as likely as men to use the library for this purpose."

In a study of library use for practical information, Harris and Mitchell (1988) related attitudes about bibliographic instruction to male and female sex-types topics. They found that "The standard that seems to be operating in this study is that when patrons know little about a topic (as is apparently assumed when a patron makes a cross-sex query), the librarian is obliged to teach; yet when a patron makes a sex-consistent request, library instruction should not be given." Female topics were day care, planning a wedding, choosing a diet, selecting a knitting pattern, and flower arranging; male topics fixing a washing machine, obtaining a patent, trout fishing,, joining the armed forces, and getting a home electrical permit.

Searches through the professional literature of librarianship for practical topics frequently yield no more than one article per topic. While auto repair is a stereotypically male topic, not only are more women now repairing their own cars, but anecdotal literature tells us that women have been sent to the public library to get information on auto repair to be used by the male members of their family. The one article on auto repair, Pankl (1992), considers some aspects of information need as well as collection development. Sources of needs information outside of library literature are included. "Provision of repair manuals in public libraries is not a subject to which the professional literature of librarianship has given significant attention. An online literature search revealed no postings. A manual search of *Library Literature* back to 1980 was almost equally fruitless. An Infotrac search revealed, however, that articles do appear in popular periodicals from time to time." Those articles in the popular do-it-yourself literature do provide information on users (e.g., surveys of which models are most worked on by owners), and state motor vehicle licensing departments can provide the number of each model licensed in the state. In preparing his discussion of the auto repair reference service at Tulsa Public Library, Pankl also surveyed nine public libraries, finding that questions on auto repair averaged 25% of total reference transactions. Commercial vendors of auto repair information apparently have noticed this market, the Ford Motor Company Technical Publication Department was an A.L.A. Midwinter exhibitor in 1994 with special show prices for technical manuals.

Examples of other articles related to practical information for the home have less information needs content. In a collection development oriented article, Langstaff (1991), "Meet Mr. and Mrs. Fixit," quotes marketing statistics on the increase in home improvement activities by do-it-yourselfers prefatory to a discussion of the increase in publishing in this area. The one article in library literature on appliance repair manuals deal with the acquisition of those materials.

### **Library Users Who Need Information for Re-entry to Education or Work**

While this is clearly not a topic confined to women nearly every study of women's information needs finds this as a major, if not the highest, priority information need. Those studies include Javelin (1976) on information needs of local community organizations (women's vocational organizations), Chatman (1985) on urban poor women, Glass (1990) on minority women, and Merchant (1991) on general adult library use. Furthermore, this appears to be an area where the library is often the most frequently used information source. The many special sections on job or career information in public libraries have increased public awareness of the library as a job information source. However, the Chatman study had less promising results. Only 36% of the subjects "considered the library as a likely source of this specific type of information. A few respondents felt that the library may have some employment-type information such as Civil Service listings and general information about a career field but no information about how one goes about pursuing a job in a specific field." A general concern was "libraries are not up to date"

### **Library Users of Information on Women's Health Issues**

This topic is also one on which the articles in the library literature uniformly deal with collection development. However, information needs on this subject have been much written about in the feminist literature; currently both the popular literature and health-care literature are very concerned with women's health research and information needs. An example of a recent library article is Bible (1993) "Consumer Health Information: a Selected List of Reference Sources for the Lay User." The Medical Library Association has published many similar collection development lists. With the present emphasis on health care reform, there is likely to be much more information published, both on information needs and on resources to meet those needs.

### **Library Users Wanting Information about Parenting**

Parenting also is an issue which has been covered extensively in recent years in the non-library press-both popular media and sociological/psychological journals. The publishing industry has responded to this concern and many materials are available in public libraries. This topic is also one which is included in the *Library Journal* collection development series mentioned above. The ERIC Clearing house on Assessment and evaluation announced in March 1994 the addition of fifty full-text essays on parenting to their resources.

A different parental function is the frequently described practice of parents doing their children's homework in the library. While this is a common discussion topic whenever public library reference librarians are together, there has been no apparent attempt to analyse the associated information needs, and very little has been written on the topic.

### **Current Trends**

Much of the practical kinds of information resource discussed in this paper are available for various transaction and use fees from commercial and non-profit organizations other than libraries. Those other vendors of practical information for the average citizen market their services far more extensively than do public libraries. Many people, and particularly those less able to pay, know of the fee-based services and not of the free fax-supported services. This has been a less significant issue in the past because there were not so many or so well-known fee-based alternatives. Computerization and the various network services, CompuServe, America Online, Prodigy, etc., are now making a big difference. Many more people know of and use the fee services. Far fewer know of an use the public library services. Low -income parents peak proudly of their children accessing encyclopedias to do their homework via compuServe or Prodigy when there are comparable encyclopedias available for free computer dial-up from their local public library. Among solution to this marketing problem touted in the library press are cooperation and collaboration with other public agencies which provide information to the general citizen like Extension services and social agencies. Maciuszko (1990) describes two kinds of organizations which go a step further, the community online systems like the Free-Nets and community online information systems organized by public libraries. The report on the Equifax-Harris Survey, *Using the Public Library in the Computer Age* (1991) also describes library-originated community computerized information systems. Without the expense of initiating a local network, some public libraries are now providing access to online information systems via the Internet. In the 1980's public libraries provided many adults with their first lessons in computer literacy when card catalogues were converted to OPACs; they are now continuing this educational mission with providing first access to information networks for many patrons.

### **Needed Research**

Library information service has always tended to rush to provide the answer before finding out the questions. Electronic information sources have not changed this sequence. Studying and analysing the everyday information needs of women-for recreational, educational, vocational, health

and family—as well as the needs of all people, regardless of sex or age or other demographic characteristics, for practical and lifestyle information has been little done. Public library administrators and jurisdictions should require research and publication on information needs of women and users of women's subjects for librarians' promotion and provide the opportunities for this research. Public libraries and librarians need to publicize their mission of responsibility for research and publication on information needs of the average citizen rather than their popular mission as purveyors of video movies and romantic novels. Forty hours a week of frantic reference work is no longer the best way to serve the public's information needs. Perhaps the impetus provided by commercial services and home electronic access will excite librarians about pursuing such research.

In 1976 Dervin concluded with "The clearest generalization that emerges from this discussion is that huge gaps exist in the knowledge base relating to average citizens and their information needs." Sill true.

### **An Option for Meeting the Information Needs of the Business Community**

Businesses large and small operate in competitive environments. Work smarter not harder is the new business motto. Many of the day to day information needs of business can be filled by the informal information networks of colleagues, government agencies and friends. Eventually every business reaches a point where they need "library" information. "Library" information for businesses has expanded from the standard directories and business periodicals to include full text CD-ROM, real time electronic SEC filings, and government information on the Internet. "The ability to access and process information on competitive intelligence, new product information, research and development, market trends, and environmental and regulatory impacts is critical to a company's future," observed Robert Muir in his recent article on marketing library or information service to businesses.

All libraries must continually market their business information resources if they want to provide service to the business community. While the corporate information centre or law firm library may be physically a part of the company, the services offered must still be marketed to potential users. If the public, college, or university library wants to serve the information needs of the business community, then a commitment to marketing the resources is just as important as the commitment to purchase, catalogue and shelve the resources.

In order to serve the information needs of businesses the library must become an active partner. The role of the librarian or information

professional is changing. As Barbara Quint observes in a recent editorial in *Searcher*, “information professionals must know the value of the information they supply, how it supports the institution’s activities, what new or external clients might pay for it and the cost of supplying the information.”

Briefly discussed here are the various responses to the information needs of large and small corporations, professional firms, and small business. While some companies have the advantage of in-house libraries or information centres, all businesses to some extent depend on the collections of their local public, college or university libraries.

### **The Corporate Information Centre**

The information needs of large corporations are usually handled by the Corporate information Centre. Staffed by a professional librarian, these centres order, catalogue, circulate, interpret and research the books, journals and technical reports needed by the various divisions of the company, marketing, research and development, legal, etc. Intimately knowledgeable about the details of the company, its products, markets, competitors, the librarian becomes an information partner of every staff member in the company. The challenge is to keep current with the information tools needed to stay on the fore front and at the same time market the library as an important function in the company.

Left to their own devices, business managers and researchers would rely almost exclusively on their informal information networks—friends and colleagues in other departments of the company. One role of the librarian is to educate company employees in the value of using the resources of the corporate information centre. Some centres use weekly newsletters of hot topics or new acquisitions to keep potential library users informed and interested in using the library. Other centres may circulate the table of contents of key journals and reports received by the library. Electronic table-of contents routing is now easier with company networks linked to the Internet and such services as Uncover’s Reveal, a table-of-contents electronic mail service available on the Internet. Once again, however, it is the librarian who alerts the company to the availability of these new services.

In his article on marketing information services to business, Muir list three key elements the information centre needs to be able to sell to be successful:

- the ability to alert customers to the presence of the information service;

- the information products and services needed by the company;
- the value of the service to the company.

The challenge facing businesses today is to make informed decisions faster. The role of the corporate information centre librarian is to assist this by becoming an active information gathering partner. In many instances this includes scanning relevant literature, keeping managers up-to-date on competitive markets, preparing "briefing packets" on hot topics, and synthesizing data from a variety of sources. As Jack Borbely, the director of a corporate information centre for a firm in New York observed in his paper, "This new role has required that corporate libraries increasingly act as the 'information interpreters' for the clients they support." The library fulfills its mission as the provider of information allowing the company managers to devote their time to acting on the information.

An additional challenge for the corporate information centre is harnessing the power of the Internet and the sources available on the "information superhighway." The responsibility for evaluating the usefulness, accuracy and appropriateness of the hundreds of Internet sources falls to the corporate information centre librarian. Managers and research personnel from a variety of business divisions want access to the government, university and private information resources available via the Internet and various gateway services. Knowledge of the existence of these resources is not sufficient. The corporate information centre librarian also trains end users in the research and retrieval protocols used by the variety of sources on the Internet as well as evaluates the pertinence of the sources to the information needs of the business.

### **Professional Corporations: Law firms, Accounting Firms, Architectural Firms**

To stay competitive, professional corporations must maintain a viable client base, provide quality services and keep current with all legal and regulatory changes affecting the firm and its area of specialization. The role of the information centre is critical to the successful completion of these tasks.

Because of the specialized and narrow focus of the professional corporation, the librarian's role is more clearly seen as an information partner of the firm. The specialized legal, financial, or architectural information required by the firm often demands an additional master's degree or hands on experience with specific research tools and electronic databases. In addition the librarian collects, organizes, retrieves and interprets the specialized collection of books, journals, and reference

materials required by the firm. The use of electronic information sources including the Internet has increased the role of the librarian to include evaluation of electronic resources and end-user searching training.

The librarian must also be aware of external sources of information which can be used on an as needed basis. These sources include trade and industry associations, experts and consultants, translators, university library collections, and other specialized information "brokering" agencies.

### **Small Businesses and the Sole Proprietor**

The small business and the sole proprietor does not enjoy the advantage of having an in-house library or information centre. As Raymond Paolino of the New York State Department of Economic Development observed in his article on economic development, "the small business must depend upon outside resources to supply its particular information needs." While information gathering may have taken place when the original business plan was formulated, small businesses often work in an information vacuum. Owners are too busy to do the research themselves and don't know where to go to get help.

Agencies, such as the Small Business Administration, local chamber of commerce or local small business development centres often have library collections and pamphlets on various business topics. Public libraries have special business collections created for the needs of the small Business owner and entrepreneur. The challenge again is marketing these services to the business client. In his research on information services and the business community, Doug Ernest concludes, "libraries everywhere may not be receiving heavy external use of their business resources simply because business people do not visualize libraries as sources of information in their decision-making processes."

Some of the marketing techniques used by public libraries to overcome the perception that libraries do not have resources for the business community have included participation at local 'business-to-business' exhibitions, public service announcements on the radio, information columns in the local business newspaper or on the business page of the local newspaper. Others have participated in joint sponsorship of programmes with the Small Business Administration or local chamber of commerce on specific topics such as trademarks, patents, government contracting, census information, etc.

The key is being committed as a library organization to meeting the information needs of the local business community by doing more than subscribing to business journals and directories. A committed effort requires

staff dedicated to listening to the needs of the business community, working toward fulfilling those needs, and an active marketing plan to reach out to the business community, Libraries wanting to serve the needs of the business community must also be willing to invest in the electronic resources currently available as well as those just on the horizon and promote them to potential users through demonstrations or seminars.

### **Fee-For Service Option**

All the information needs of a large corporation or professional firm cannot be answered by the in-house information centre. The local public, college, or university library is often used as a back-up resource for seldom used reference sources, electronic databases, journals and books. For the small business owner the local public, college or university library may be the only source of business information.

However, the local public, college, or university library may feel overwhelmed by the increased demands of the business community for information and rapid access to journal articles. One solution to this problem is to establish a fee-based information service to handle requests from the business community and other external or non-primary users.

Fee-based services are found in a variety institutional settings including public, academic and special libraries. The fourth edition of *The FISCAL Directory of Fee-Based Research and Document Supply Services* lists 445 services in public, academic and, special libraries world-wide. The Directory also includes 61 commercial document delivery suppliers not affiliated with a library.

In some instances library policy may dictate that some services remain free while others may have a fee attached. Careful review of the local business community, potential donor partnerships, staff expertise, current funding for core services and the overall mission of the library must take place before initiating a fee service.

After determining that a fee service might be useful to the business community and beneficial to the library, then a working proposal for the service should be developed. The areas to consider include:

- full or partial cost recovery,
- target date for cost recovery (three, four or five years),
- startup funding for new equipment or share current equipment,
- new staff required or share current staff,
- Current levels of service offered at no charge versus enhanced or expanded service offered on a fee basis.

For further discussion and approval by the library administration or other governing body, a business plan for the service should be drafted. The plan should include projected first year revenues and expenditures, equipment needed and proposed staff. A separate marketing plan with expenditures for advertisement, brochure design and exhibit costs should also be prepared.

Surveys of local business will provide the information needed for determining the types of services the fee-based service could offer.

### **Typically these Include**

- document delivery of articles, books government documents, technical reports, patents from the home institutions collections;
- expedited interlibrary loan from the network of other feebased services in public and academic libraries;
- computer database searching of commercial databases, CD-ROM indexes and Internet resources;
- custom research including computerized retrieval, manual research, and fact checking with expert or trade associations;
- consulting on information resource purchases or data organization;
- training and seminars on information topics and electronic sources.

Only after information on the needs of the business community is gathered and analysed can planning for fee-service take place.

Partnerships with other state or local agencies involved with small business development or state-wide economic development may provide additional start-up funding for a fee-based service for the business community. Certainly joint programming with these agencies will expose the library's fee-based service to a wider audience of potential clients.

Any new service offering designed for the business community will need to take into account the business requirements for speed reliability and accuracy. In addition marketing efforts must overcome any negative stereotypes of the library as difficult to get to, difficult to use and not worth the effort. An "image" audit of the library and its services, while potential painful, will yield valuable information about how the business community views the library and its resources. For example selected businesses could be asked to rate the library in regard to: types of resources, availability of resources, staff helpfulness and staff expertise.

An open ended question asking for comments on one area for improvement should also be added. Even if one area over which the library has no control consistently comes out on top, such as parking, just asking

the question and acknowledging the response increases communication between the library and the business community. A frank and open discussion of the needs of the business community is the goal; especially if the library is intending to market a fee service to the business community.

Information needs of the business community will continue to grow. Libraries have the option of struggling to meet those demands with limited staffing and resources or establishing partnerships with the business community. These partnerships can include funding for specific business research tools, especially electronic access and computer equipment. At the same time businesses can be asked to pay their fare share for expedited and custom service by establishing a fee for service to meet the specific information needs of the business community. In his article on academic libraries and feebased information services, Doug Ernest concludes, "fee-based services offer an alternative whereby academic libraries can serve the needs of the local business community without having an impact on the needs of their primary clientele."

As members of the larger community, libraries have an obligation to support the economic health of the community by contributing information resources to help large companies remain competitive and small businesses get started. The new electronic sources currently available and those promised on the information "super-highway" make the role of the librarian as an evaluator, interpreter and supplier of information even more crucial. The resources available in libraries are not instinctively known to those who need them. A strong marketing plan which highlights all of the library's services, fee and free, is an important element in serving the information needs of the business community.

### **The New Avenues for Reference Librarians and Education**

A suburban newspaper article prominently highlights a training session for teachers about the Internet. These middle school teachers, according to the news report, are excited and enthralled with this new resource. One teacher states "Instead of having to go to the library and in the conventional way look up resources on shelves of books, you do research with this programme and it's at your fingertips." Is this teacher in-service workshop sponsored or taught by any local school, public or academic librarians? No—a representative from the local telephone company!

Libraries, in order to survive, must change and evolve before the next millennium arrives. Reference services can no longer stay behind a desk or within a building's walls. It is no longer sufficient for libraries to unlock their doors at their posted opening hour, have a professional at the Reference Desk and wait for patrons to appear. The ever expanding "information

superhighway” provides alternatives and options for many patrons. Instead, libraries, like other organizations, must more closely examine who their various clients are, determine their information needs, behaviours and desires, then develop and market appropriate collections and services, and finally assess the effectiveness of their services.

As the opening paragraph indicates, libraries must re-examine their services for the education community: education faculty, student teachers, classroom teachers and school administrators. Neglecting to do so diminishes or eliminates the Library’s role in the information society and hurts educators at a time when they need more information and skill due to the changes occurring in the profession and the classroom.

American educators are shifting their paradigm. Instruction is gravitating toward a learner centred environment where individual student learning style, knowledge, and background are incorporated into a meaningful learning experience. The individuals comprising the class will require differing methods, strategies and examples to achieve academic success.

Consequently, classroom instructors will need to become “teacher-researchers.” While school administrators are more prone to seek information, they too must become more skilled and adept. As the classroom environment changes, so too must individual schools and school districts. Education faculty and student teachers must be exposed and encouraged to explore and incorporate new information sources and technologies. In short, all members of the education community will need more information literacy than in the past.

This paper will examine the issues and opportunities academic libraries face in the provision of reference and information services for education faculty, student teachers, classroom teachers and administrators. A brief discussion highlighting present knowledge about information and library use by educators will be followed by examples and suggestions for new overtures to this patron community.

## **Background**

Research through the years have documented the lack of use of a variety of information sources—including libraries—by educators. Several factors contribute to this lack of use: the sources themselves, teacher training, teacher autonomy, and the old, disintegrating paradigm. Teachers, like others, make judgments about the net benefits of time, convenience and applicability of a source for their needs. Not surprisingly, ease of access and use directly affects source utilization. Consequently, classroom

teachers in K–12 “prefer close–at hand, traditional sources of information such as text books, curriculum guides, and other school based materials.” The literature also indicates that “many teachers, especially those who did little research in college, do not have a good foundation in even the traditional information skills.”

Another writer states that teachers often receive “inadequate” preparation for finding information; they often are unfamiliar with the system of a library, the wide range of resources published, and the strategies for locating desired information. The result of this lack of library and information literacy directly impacts selected information sources. Library or more research oriented sources are underutilized in favour of more internal, traditional sources.

A 1991 user survey of the ERIC database illustrates this point. Over a thousand college and university professors, librarians, school administrators, classroom teachers, policymakers, education researchers, graduate students, parents, counsellors and journalists answered a 21 item questionnaire.

The survey project’s goal was to “access the education information needs of respondents, as well as the extent of their use of ERIC, their evaluation of ERIC services and products, and their suggestions for system improvement and expansion.” Fourteen percent of the respondents were classroom teachers compared to librarians–25%, professors–27% and school administrators–17%. Most respondents sought journal article citations for research purposes. Classroom teacher respondents, who were most likely to be ERIC non–users, stated little interest in research, but preferred items on “practical ideas of teaching.”

Teachers, whether at the K–12 or college level, generally exercise great autonomy in their work. While frameworks, course descriptions, and curricular statements exist, instructors command their classroom as they see fit. This “expectation” is created during the professional preparation for the field. Educators are not generally taught to “look outward” for assistance–or even to work in teams.

Consequently, the expectation of autonomy and self-reliance erects a barrier toward cooperative ventures with colleagues as well as professionals other than teachers. A school librarian writes, “One reason is that teachers don’t know or don’t see the need for librarian–teacher partnering. Few teacher credential programmes include team–teaching models, particularly including librarians as the collaborators. High school teachers, in particular, tend to be credentialed in a specific subject area, and they consider themselves experts in their field. How could a librarian know more about

their subject than they—how could a librarian tell them how to teach their courses?”

The sole reliance on traditional and practical sources may have worked in the old teaching paradigm, but the dependence on them may well be detrimental to effective teaching in a learner centred classroom. “The role of the teacher is changing from that of a “dispenser of knowledge” to that of a “facilitator of learning.” Why? The increasing diversity of America’s population and a greater understanding and recognition of different learning styles may be two very important factors.

Newspapers, magazines and television whether via news programming or advertising are a constant reminder that America is a multiracial, multiethnic, and multicultural country. America’s schools reflect its population. In the Fall of 1986, 70.4% of the country’s students enrolled in public elementary and secondary schools were white, 16.1% Black, 9.9% Hispanic, 2.8% Asian or Pacific Islander, and 0.9% American Indian/Alaskan Native.

The percentages a mere five years later in Fall 1991 were: 67.4%, 16.4%, 11.8%, 3.4% and 1.0%. The population changes in particular states such as California and New York are even more impressive. The resulting heterogeneity in student language, cultures, background, values, and opportunities requires alternatives to past methods. When Limited-English-proficient students comprise 34.2% of all California public school students, educators must adapt.

Recent recognition of different learning styles and aptitudes has also contributed to the need for teachers as teacher-researchers. The research of Gagne exposed five different kinds of learning outcomes—verbal knowledge, intellectual skills, cognitive strategies, attitudes and motor skills. These categories are similar to the three major strands of Bloom’s taxonomy: cognitive, affective, and psychomotor domains. The research by Gagne, Bloom and others has “substantial use in the planning and design of instruction.”

Therefore, a more adaptive learning environment is necessary. As two researchers write, “The majority of students will need more aptitude support than conventional teaching provides, and different kinds of specialized support will likely be needed for different kinds of students.”

Educators will need access to information which assists them in fulfilling the individual instructional needs of their diverse students.

Teachers need to see that information skills are the tools needed to be the “facilitators” of learning which the new paradigm requires. Further,

teachers “need to know that information skills are part of everyone’s curriculum, not just a subject taught in elementary school or in language arts class.”

### **Opportunities**

The paradigm shift and changing technologies offer new opportunities for developing or expanding services to all educators by academic librarians. It is no longer sufficient to encounter only education faculty or student teachers at the Reference Desk or through Bibliographic Instruction presentations.

Further, technology frees librarians from facilitating information needs solely at the Reference Desk. Electronic resources and accompanying technology can permit librarians to model the teacher–researcher ideal. All members of the education community—faculty, student teachers, classroom teachers and administrators—must be actively recruited to become not only information users, but also information producers, disseminators and evaluators.

Tried and true practices, however, will not achieve the desired goals. Since educators generally “do not come to us,” Librarians must reach out to them. Examples of this perspective are already evident. The 1991 ERIC survey results mentioned earlier suggested “...not only a need for better marketing of existing products and services but a potential shift in system resources in order to disseminate practitioner oriented information to a new target audience.”

Hence, the AskERIC Service for K–12 Educators was developed by the ERIC Clearinghouse on Information and Technology at Syracuse University.

The AskERIC Service debuted in 1993 after pilot testing. The service already is more heavily used than anticipated. A January 1994 flyer for the service states it is “an Internet–based question–answering service for teachers, library media specialists, administrators and others involved in K–12 education.

The hallmark of AskERIC is a human intermediary who interacts with the information seeker and personally selects and delivers information resources within 48 working hours. AskERIC staff use an array of relevant resources, both from the ERIC system and from the vast resources of the INTERNET, to respond to information requests.” Interested persons simply send an e–mail message with their question to *askeric@ericir.syr.edu*. The system facilitates users in their information quest by providing an average of ten items related to their topic. AskERIC is a means of introducing and

encouraging forays into the ERIC database for traditional non-users; it also promotes remote access to information.

Another example of a well-researched, expansive project to connect teachers to information is the Eisenhower National Clearing-house for Mathematics and Science Education (ENC). E-mail correspondence with Nancy O' Hanlon, Associate Director for Library and Information Systems for the ENC has supplied the authors with facts about both the mission and products for this new resource.

This Centre's stated mission is "to provide better access to resources for all who are interested in creating a better learning environment. The Clearinghouse will accomplish this by creating and maintaining a comprehensive, multimedia collection of materials and programmes which will be distributed in a timely manner through a national system using both traditional formats and advanced computing and telecommunications technologies."

The ENC is developing a number of products to accomplish its mission. One product is the catalogue of mathematics and science curriculum materials from Federal agencies and other sources which will be available via INTERNET and a toll free number sometime in 1994 and CD-ROM in 1995. This catalogue will include information not usually found in library catalogues: abstract, evaluations, grade level(s), target audience, geographic focus, standards, availability and ordering information, cost category, sample pages or photos, materials type, physical and pedagogical formats, and funding information. It is hoped that making this vital information available to the teacher-practitioner will entice him or her back to the ENC resource as a repeat user. Becoming a repeat user changes the practitioner into a teacher-researcher. The ENC is yet another illustration of efforts to reach educators regardless of their location or position in the education community.

Efforts in the cataloguing arena also demonstrate a desire to make relevant materials of interest to educators easier to locate in library online catalogues and other databases. MARC format has long been the standard for databases records, yet its usefulness for curriculum materials is lacking due to the vagueness about which fields should contain which item details and the absence of some pertinent fields altogether! The Curriculum Enhanced MARC (CEMARC) proposed standards would, for the first time, permit effective searching for curriculum materials via characteristics pertinent to educators in online catalogues and databases.

In a 1992 paper *National Curriculum Enhanced USMARC Standard or What Information Should a MARC Record Contain?*, Roger W. Minier,

Educational Technologist at Bowling Green State University, states that due to variations and inconsistencies in how the MARC Standard is applied, a new MARC Standard that helps meet curriculum objectives is needed. This enhanced record will include fields and information not currently in standard cataloguing records: learner characteristics, state curriculum objectives linked with media resources, grade level indicator for interest, and grade level indicator for content.

In addition, some fields which are currently in use have been targeted for modifications: curriculum specific terms not included in Library of Congress Subject Headings, minimum of five subject headings, etc. At the 1993 annual conference of the American Library Association, the CEMARC proposal was approved by the Machine Readable Bibliographic Information (MARBI) Committee and sent to the Library of Congress as a recommendation for adoption. Again, standardizing the MARC format will allow more precise and pertinent searching for characteristics which are essential for effective use of education materials on large electronic databases such as library online catalogues and OCLC for both educators and librarians.

Cooperative and collaborative efforts are emerging as effective means of facilitating information use and exchange. San Jose State University is an example. The Library's Curriculum librarian also serves as the Director of the College of Education's Learning Resources Display Centre. This centre acquires and organizes the instructional materials being considered for adoption and those materials already adopted for use in California public schools.

The interaction between the education faculty and the librarian is a mutually enlightening experience. The faculty learn more about the Library's resources from a person with firsthand knowledge and expertise in their field of study. The librarian develops a more intimate understanding of the needs of the faculty and students in the programme. Librarians are no longer perceived to be merely "book readers" chained to an immobile Reference Desk. Instead, faculty begin to view reference librarians as professionals and peers. This occurrence also encourages faculty to consult with the reference librarian for advice and recommendations about information needs and library resources—a desirable situation given the new instructional paradigm.

Often school librarians promote the teacher/librarian collaboration as an effective method of bringing research and technology to the classroom. Adding academic reference librarians to the loop enhances the collaboration. While school librarians often see their primary mission as bringing advanced technology and teaching research to their school colleagues library

collections or electronic services may not always provide the scope or extent of desired materials for either the school librarians or, hopefully, more and more classroom teachers. Academic library collections, services and staff could be tapped—especially in these days of shrinking resources for all types of libraries and the trend toward remote access.

One example from the literature illustrates a nice collaborative effort with respect to secondary school student use of academic libraries. University, school and public libraries in the Waterloo, Ontario, Canada region collaborated on a programme which lessened the disruption for the academic libraries, improved student use of library resources in all types of libraries, developed a manual and skills chart checklist, enhanced the consultative role of the teacher librarian at the secondary school and created a greater awareness and skills in secondary school teachers about library and information resources available in the region. Collaboration efforts benefited all libraries.

Academic reference librarians with designated liaison roles with the secondary school librarians was a component of the successful venture among the Waterloo libraries. Liaison relationships can be quite beneficial to the information needs of educators in other ways too. For example, reference librarians at some universities are assigned liaison roles for particular academic departments or colleges. Often the liaison is a member of the college or school curriculum committees. This participation benefits both parties.

It aids librarians through advance notice of new courses and changes in the curriculum; it aids the teaching faculty by the early connection between their changes in curriculum and available resources. For example, the SJSU College of Education recently developed a distance education programme for secondary science and mathematics teachers. No provisions in the programme plan were made for access to library and research materials except a course reader. Upon discussion with the library liaison, the Curriculum Committee and the programme proposers were amazed to discover how much access and instruction the Library could provide in this area—despite the fact that the students would probably never come to the campus!

Reference librarians throughout academia are integrating e-mail and INTERNET resources into their repertoire of tools. Such technology and resources can easily be incorporated into liaison responsibilities. E-mail lists can be created for College of Education faculty, students in targeted courses, various school administrators and district personnel. Messages about new resources and services can be disseminated. Similarly, school and district information and questions could be relayed back to the academic

liaisons, thus improving reference librarian knowledge about community resources. This *exchange* between librarians and educators encourages facilitation and cooperation between all players in the local education community—even academic librarians.

Broader facilitation could occur through other electronic avenues. Particularly good gopher sites, directories and files could be linked to local library gopher as well as details describing them such as the ERIC Clearinghouse on Assessment and Evaluation at the Catholic University of America. Contributions could be consistently submitted to present related electronic discussion groups or bulletin boards, or locally-mounted listservs could be created for discussion, instruction and assistance of educators. With heightened interest in using and developing multimedia instructional materials, keeping educators abreast of image, sound and animation files available on the INTERNET for retrieval using MOSAIC or other software is important as well.

Through the use of these emerging technologies, academic reference librarians could contribute not only to the information literacy of their local educators, but to educators anywhere in the world! Such assistance and “exposure” to the education community may very well lessen the likelihood that money making corporations will be viewed as the “only” experts or “information professionals” in the decades ahead; collaboration and outreach may well insure that academic reference librarians are “librarian-teachers” during future inservice workshop.

Such liaison activities may seem like pipe dreams to already overworked and stressed reference librarians. Much of the information disseminated to a new, broader clientele would need to be unearthed anyway in order to provide good traditional reference desk service. Emerging technologies allow broader distributions with minimal investment of time, supplies and money. The bottom line is that reference librarians, as information professionals, must play a role in ensuring the information literacy of the education community. Traditional methods and definitions of library clientele are no longer sufficient.

## **Conclusion**

Learner centred instruction represents a major attitude change on the part of educators. The change will not happen overnight, and not all educators will immediately embrace it. Those who do will need more than their files of handouts, adopted textbooks, office collections and media sources—they will need information in order to tailor their instruction and professional endeavours to the individual needs of their students.

Experience has shown that educators often will not actively seek information in libraries no matter how strong the services or extensive the collections. Increasing efforts in remote access of information resources and human facilitation or coaching are strategies to explore in the years ahead. "The concept of off-hours, off-site availability of information will become the norm and more providers of information will seek methods of offering their indexes, abstracts and texts whenever, wherever and however users will require. The successful providers will be those who heed the need of the customer by offering the best service at the best cost in the best way." Access is important, but quality, personalized human service is essential, too. Just ask American business.

Reference librarians in academic libraries cannot stay static or traditional in their services or outreach to educators. To do so is to run the risk of becoming a dinosaur in the next millennium! Instead, librarians must harness technology and its capabilities in order to move via "warp speed" to provide the information and literacy skills needed today by the next generation of American educators.



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## Limitations on Library Management

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### **The Role of Committees of Members in Provision of Library and Information Services**

“The ultimate responsibility for the policy, efficiency and management of a library does not lie with the chief librarian. Whatever the type of library there can hardly be found a case in which the librarian is in complete control. Almost without exception the librarian is the servant of a higher authority; he may be very powerful, with immense freedom to carry out the day to day management of a library, yet he is always acting as a professional executive who exercises his skill and expertise as the employee of his governing body...”

It is the governing body of an institution which has the overall responsibility for its library provision, and this body is always the holder of the purse strings. Whichever body controls the financial resources given to the library has the ultimate authority over it. Therefore although librarians manage or control, they do not govern.”

At the IFLA Conference held in Copenhagen in 1997 the question of the role of Library Committees-or equivalents-attracted considerable interest. Annalise Quistorff, Head of the Library of the Danish Parliament, distributed a paper based on a questionnaire which the Library of the Folketing had sent out with the assistance of the ECPRD to parliamentary libraries in Central, Eastern, and Western Europe and in the USA. This questionnaire sought information on the extent to which Members of Parliament (MPs) were involved in the administration of the Library or on other ways in which they followed the work of the Library. Unfortunately the questionnaire did not reach the Hungarian Parliament, where there is both an old tradition of Library Committees and great interest in the subject because of current developments.

The author therefore distributed an *ad hoc* questionnaire to those present at the Workshop of the Section on Library and Research Services held in the Folketing. The *ad hoc* survey asked which parliaments had a Library Committee and some questions on the status of the committee (standing, advisory, etc.).

### ***The Story of an Old-fashioned Library Committee or the Renaissance of a Traditional Model***

The traditional Hungarian model was based on the following three axioms:

Axiom No.1-The Library Committee supervised directly the Parliamentary Library.

Axiom No.2-The Library Committee had its own competence.

Axiom No.3-The Library Committee held its meetings on regular basis.

The first Library Committee was established by the Parliament in 1867 in order to supervise its library. The committee members were originally delegated by the Speaker, but from 1875 they were freely elected when the new parliament set up. The post-1875 Library Committee was established as a standing committee. The number of permanent members varied: it worked optimally with 5-11 MPs, but since the 1930's the participation rate had grown to 33 members. After World War II until abolition in 1950, the Committee had 17 members. The Library Committee had its own president or chairman: at first he was elected from its members, later-probably as a consequence of its growing power and competence-the Speaker officially presided.

The Library Committee had the right to intervene in all matters of importance in the library's activity. This right was based on Rules of Procedure and on other parliamentary documents. The Committee's powers included the establishment of the statutes of the library, which defined the obligations and tasks of the institution, the limits to the actions and competence of the Librarian and the staff, and other regulations such as lending rules. Depending on current duties the Library Committee established subcommittees *e.g.* on statutes, on acquisition etc. The supervising of the acquisition policy was particularly stressed, for example from 1878 the library began to gather the documents of foreign parliaments on an exchange basis and the parliament legislated for legal deposit of published materials (first in 1922).

Examining Library Committee responsibilities of that time shows some similarity with the present practice of the German Parliament

(Bundestag) or the Turkish Parliament (Türkiye Bülük Millet Meclisi) where a Library Committee is responsible for matters of policy concerning the use of the library, catalogue systems, store rooms, book lending etc. The Statutes of the Hungarian Library Committee enacted in 1909 provided that any measures concerning the out-building storage of the holding was subject to the Committee's approval because the speed of service could have been at risk. The Library Committee made cataloguing rules, decided exchange policy and practice, as well as the composition of the staff by qualifications, age etc.

### **How did the Library Committees Work?**

The Library Committees were working to a regular schedule: meetings were held monthly, then quarterly, and later once in a year at minimum. The committee controlled the status of the library, the implementation of the planned task and *ad hoc* duties. It laid down the next year's financial framework and professional obligations on the basis of the figures and information gathered about the previous session(s), knowledge of the essential legislative requirements and the information needs of legislators. At the end of each sessions the Committee had to report to the Parliament on the activity and the main figures (holdings, expenditure, purchases, exchanges, lending, etc.) of the library-at first in each parliamentary session but later annually. These regular reports were very valuable because the committee members changed session by session, a new Speaker/President and members were elected and the staff of the library changed too. For all those involved in committee proceeding the best source for retrospective orientation was the minutes of the Library Committee, which served as the written collective memory.

The Library Committee submitted its reports to the plenary session, where the Parliament debated, passed or modified or voted against them. When the report as proposed was passed and promulgated, it was enacted and its enforcement was obligatory.

From 1920 the preparatory work of the Library Committee meetings was one of the duties of the Librarian (Chief Librarian/Director General). As the secretary of the Committee, he collected the previous reports, the future plan and the problems to be discussed. Then he agreed a date for the meeting with the Speaker, and sent an invitation letter to the committee members.

### **Typical Agendas**

The meetings of the Library Committee had their own agenda prepared by the Librarian and distributed among the members in advance. The standing items of the agenda show the continuity of the auditing and

controlling work of the committee and of the different library activities. The standing items were the following:

1. Librarian's report on the activities of the Library during the previous year
2. Librarian's proposal on the next year's budget
3. Librarian's report on the ordering and shipment of next year's periodicals and newspapers
4. Librarian's report on the lending, on the status of claims
5. Librarian's report on the status of the international exchange

Further ordinary agenda items included:

- Report to be submitted to the parliament on the role of the library
- Proposal on the framework of the library budget
- Auditing and supervising the expenditure and income
- Review of the requests of users (MPs noted in a book their demands and the titles of required but missing documents they had needed during the plenary debates)
- Decisions on the titles to be purchased
- Decisions on gifts (if the Library Committee accepted documents as gift, it sent a letter of thanks to the donor and registered the fact for the minutes)
- Decisions on allowances of the staff

Other items discussed were:

- Personal issues (staff or committee related)
- Establishment of a new reading room for outsider researchers
- Inventory control
- Establishment of new cataloguing rules.

The Librarian's role was to serve as rapporteur. The proposals and reports submitted on the basis of the agenda were discussed by the committee members who accepted them or in some cases modified or voted against them. Each committee member had the right to propose an initiative. These proposals concerned mainly purchasing or cancelling documents, often linked to the particular information needs of one MP. When the Speaker agreed that the proposal was for the general good the demand was voted. Some proposals submitted by MPs were hopeless projects-all the proposals were commented upon by the Librarian before the decision was taken. All meetings were minuted and the minutes signed by the president of the Library Committee and the secretary, and confirmed by

the committee members elected at the beginning of each meetings. These confirmed committee minutes became very important sources of the library's history.

### **The Composition of the Library Committee**

The criteria for nomination as a committee member were not formally defined, nevertheless the MPs came generally from literary or scientific career. Election to the Library Committee brought a cultural recognition for an MP. This changed later, and from the middle of the 1930's partisanship and the party point of view became predominate. The composition of the Committee reflected distinctly the party balance of parliamentary power and cultural or scientific merits became secondary.

A few examples of the characteristics of the qualifications or profession of Library Committee members: they included lawyers, philosophers, economists, sociologists, judges, writers, poets, journalists, archaeologists, art and literary historians, editors, translators, ethnographers, landowners, priests, teachers and professors, geographers, sculptors and painters-with just one common attribute: they were all elected representatives.

### **What was the Level of Influence of the Hungarian Library Committees on the Parliamentary Library?**

- a) The senior management of the library was more stable than the membership of the Committee. The length of service of each Librarian was far longer than the period of each parliamentary session: two of them directed the library for 20 years, three of them for one decade. Their knowledge had an important role in the continuous development of the institution. They acted as standing rapporteurs of the Library Committee meetings, providing continuity through their duties. The MPs acknowledged their professional standing.
- b) The standing rules of the meetings of the Library Committees were also important. The rules on frequency of meetings guaranteed regular committee activity, and provided for the annual survey of the implementation of the previous Committee's decisions and how the most important problems were handled.
- c) The change of members happened gradually. At the beginning of a new session only a few new members were elected, the majority remained from the former committee. Usually at least a third the Library Committee members did not change which allowed transmission of experience, and professional and local knowledge, from one Library Committee to the next. The member who recorded

the longest service in the acquisition subcommittee was reelected four times.

- d) The relation between the Speaker and the library was continuous and the executive power of the Speaker/President of the Committee ensured that library activity continued between committee meetings.
- e) Recording the actions and decisions of the Library Committee for the minutes, and archiving them was important, as was the annual report of the Committee submitted to the plenary session.

The participation rate of members varied, meetings were characterized by a rate of 50%. On some occasions almost all committee members were present, but sometimes the quorum was threatened (the required quorum was one third of the members). In all parliamentary sessions there were some committee members who did not participate at any meeting of the Committee. Perhaps they were not interested, or they could have had other more important duties or they were acquainted with neither the library's nor the Library Committee's activities. On the other hand a number of MPs attended all committee meetings.

### **The Present Situation**

The Library of the present Hungarian Parliament has a double function: like the Finnish parliamentary library, it is also open to the public and has a specialized holding of the literature published in the legal field and in political science. In 1991 it became again the responsibility of the Parliament and since 1997 its staff are again civil servants. The library reports directly to the Speaker.

In the Autumn of 1996 the Speaker established a Library Advisory Board consisting of MPs delegated from each of the parliamentary party groups. The independent MPs are not involved, their interests are only indirectly represented. The Speaker is the President of the Library Advisory Board and the Librarian is the secretary. The Board consists of 8 members. The professions of the Library Advisory Board are: lawyers (3), historians (2), librarian (1), teachers (2), and engineer (1). (6) The Secretary General, the financial and the computer system managers, and the library directors participate regularly in the meetings.

This board has its tradition in the earlier committees of the Hungarian Parliament. After its renaissance in 1996 it adopted a number of important resolutions. The Board has advisory and initiative competence without a supervising right. It has approved annual plans and reports, increased the acquisition budget, submitted a proposal for legislation on the legal deposit of materials published in the Parliament's jurisdiction, and founded a special library prize.

The Hungarian Parliament ended its sessional activity (1994-1998) in the middle of March 1998 because of the general parliamentary elections to be held in May. It is not yet clear how the Advisory Board will continue to fulfil its role, in principle we can expect the reestablishment of the Library Advisory Board or a new (standing?) Library Committee with a faster legal framework.

### **Concluding Comments**

#### ***Why do Parliamentary Libraries Need a Library Committee?***

Like a typical nonprofit organisation, parliamentary libraries should have their sponsors. What does 'sponsoring' an institution mean? Sponsoring is one of the most fashionable magic expressions of our globalised and market-oriented world, it means basically to assist or to support somebody for a special purpose. The sponsorship can take various forms and can embrace the activities of a Library Committee. Then both parties, the library and the committee/board have to have their own interest to make the arrangement work. The need for sponsorship could come from other requirements: to establish a new strategy for the library; to launch new initiatives in information services and to get them adopted by the parliament; or, if there is a lack of adequate funding, to deal with the resulting difficulties. Another reason for sponsorship is the need for goodwill or PR activities, and keeping the attention of users regarding library services is also a very important factor.

Everyone will realize that the competence of the Library Committee has a close connection with its composition. On that competence depends the achievement of a consensus between MP's and the parliamentary administration. A Library Committee can be a policymaking and oversight body, it can provide strategic guidance and goals for the library. At the same time it can offer practical assistance in order to ensure timely and correct information services to MP's, for instance in relation to the extension of copying rights and the particular application of copyright in a parliamentary library. The Library Committee can help to ensure the legal deposit of materials published via traditional ways or in electronic form. The Library Committee's activities can be very positive for the library, because the results and benefits will derive from the common experience of the library and of its users. Questions remain after this analysis and case study: "How do parliamentary libraries which do not have any kind of Library Committee function?"; "To whom does the Librarian in this instance report?"; "What is the experience of parliamentary libraries whose supervisory body has been abolished?". This paper is unlikely to be the last word on legislative library committees.

### Comparing Library Resource Allocations for the Paper and the Digital Library

Since electronic materials are becoming more prevalent in libraries, there has been discussion and interest in identifying and comparing the costs of providing print and electronic materials [California State University, 2002; Lawrence et al.; Mackie-Mason et al.; Montgomery and King; and Sanett]. With the current world economy, budget restrictions, and librarians' current challenge of planning and integrating the digital library [Carlson], the study of resource allocation costs is a timely and practical endeavour. An exploratory study of the resources needed for the selection, acquisition, organization, and dissemination of paper materials and electronic materials was done in Boulder, CO, in May 2002. Eleven Association of Research Libraries (ARL) librarians were selected to identify the resources required for providing an all-paper library and an all-digital library and to complete an interactive electronic spreadsheet [Survey].

The digital library or the library of the future may have materialized sooner than projected and reflected in today's libraries. There have been numerous digital library projects and initiatives developed by libraries and educational institutions. These projects may have been sparked by the acceptance of and reliance on electronic journals, the wide acceptance of the Internet for scholarly communication, and the need for access to materials from locations outside of the traditional library setting.

A recent article in the *Chronicle of Higher Education* identifies major university library building renovation projects [Carlson]. The author of this article highlights university libraries that are devoting space to special collections, multimedia stations and instruction rooms, information commons, group study rooms, and computer labs. At the same time, these libraries are installing compact shelving and are moving lesser-used and older collections to remote storage locations.

In regard to these initiatives and the growing interest in electronic materials and communication, there have been several recent studies addressing the use and costs of electronic journals. The introduction of electronic journals and databases to libraries began in the 1980s; therefore, cost data are available for the comparison of print bound and unbound journals and electronic journals (ejournals).

The Institute of Museum and Library Services (IMLS) funded a project "...to evaluate the economic implications of converting the current journal collection of a university library to an all-digital format" [Montgomery]. This study documented the costs of acquiring and maintaining print bound and unbound journals and electronic journals using overhead and fixed

costs of Drexel University's W. W. Hagerty Library [Montgomery and King].

Since electronic books (eBooks) have only been introduced to libraries within the past four years, there is little available cost and usage data. Consequently, there have been very few studies that include the costs or resource allocations associated with the inclusion of eBooks in the collection. The research reported in this article is an attempt to identify resource allocations for an all-paper library and the all-digital library that provides ejournals, eBooks, electronic maps, and digital audio, video, and images, based on information gathered from a group of ARL librarians. The results of this study provide a foundation for future digital library costing studies—only with follow-on comparative research can the results reported here be generalized.

### **Literature Review**

Research examining library costs has been ongoing for some decades. Rapidly evolving information technologies and media options provide substantial motivation for librarians to understand library cost structures so as to make informed decisions about acquiring and utilizing new technologies. Martin M. Cummings notes that "Analysis of costs in meaningful detail is essential to management, *i.e.*, answering the question, 'Are there alternate, less costly ways to do the same thing?'" [Cummings]. Richard E. Quandt provides an overview of the determinants of journal pricing and the issues relating to pricing that includes an extensive literature review of the topic [Quandt]. Lawrence, Connaway, and Brigham provide a recent review of the library costing literature [Lawrence et al.], so this review is restricted to research involving digital libraries that directly relates to the current article.

For those interested, Stephen A. Roberts provides a good general discussion of library costing issues [Roberts].

The California State University Library System recently participated in an eBook pilot project that studied several different methods for acquiring and accessing eBooks [California State University, 2003]. The study reported usage statistics and patron satisfaction, and investigated the economics of eBooks. A cost model for the acquisition of each type of eBook and paper book (pBook) purchased by the libraries was developed. These costs include the purchase price of the books and the cost of processing and cataloguing the books. A comparison of the break-even points for pBooks and eBooks was also included. The study concluded that eBooks are most economical for materials that receive high use over a short period of time, but did not estimate resource allocations required for the selection, acquisition,

cataloguing, maintenance, circulation, storage, and deselection of pBooks and eBooks.

Mackie-Mason, *et al.* examined the different pricing and bundling models of electronic resources in terms of usage and publisher revenues [Mackie-Mason *et al.*]. The authors compared their data with “those established for the bundling of information goods in the economic literature.” Their research did not examine the costs associated with the selection, acquisition, organization, and dissemination of electronic resources.

As previously mentioned, Montgomery and King documented costs for space, systems, supplies and services, and staff by function for print bound and unbound journals and for ejournals [Montgomery and King]. These costs were calculated for a twenty-two week period at Drexel University’s W. W. Hagerty Library. Montgomery, Dean of the W. W. Hagerty Library, had access to all of these costs and was able to initiate a study that required staff to document their time during a specified time frame. The results of the Drexel University library study support the findings of this exploratory study of the resource allocations associated with the print library and the digital library.

Shelby Sanett proposed the development of a cost model for preserving authentic electronic records [Sanett]. Using existing digital preservation processes and cost models, Sanett identified the elements that should be included in a cost model for preserving electronic records. Her proposed cost model includes capital costs, direct operating costs, and indirect operating costs (overhead) for both the preservation and use of electronic records. Although Sanett’s terminology varies from that of this article, her cost elements are the same as those identified in this study, including labour, space, materials, and equipment required to select, acquire, catalogue, maintain, circulate, store, and deselect materials.

### **Basic Assumptions**

This study was based on several assumptions developed during discussions with practicing librarians during a three-year period and on librarians’ responses and reactions to two pre-tests conducted prior to the distribution of the formal cost allocation spreadsheet to the study group.

The first pre-test conducted with catalogue, collection development, acquisition, and reference librarians provided sufficient feedback to warrant a major revision of the cost allocation interactive spreadsheet. The pre-test of the revised cost allocation instrument demonstrated that the interactive spreadsheet accurately portrayed the functions associated with providing print materials and electronic materials, but also indicated the need for discussion before and after the completion of the cost allocations.

It was then determined that it would be most beneficial to distribute the cost allocation interactive spreadsheet to a group of librarians who were together in the same location. The assumptions are:

1. Fewer *labour resources* will be needed for all-digital libraries, based on the assumption that the materials in the all-digital library do not require the same hands-on maintenance of the materials that is required in the paper library. In the all-digital library, there is no need for marking, checking-out, checking-in, shelving, mending, binding, storing, or searching for the materials. There is no difference in the selection, acquisition, cataloguing, and deselection processes of the all-digital library and the paper library.
2. Fewer *space resources* will be needed for all-digital libraries, based on the assumption that the space required to select, acquire, catalogue, maintain, circulate, store, and deselect in the all-digital library are less than those needed for the paper library. Physical space for computer workstations is included, but digital storage capacity (*e.g.*, hard drives, optical storage, etc.) is included with equipment resources.
3. Fewer *material resources* will be needed for the all-digital library, based on the assumption that the materials needed to select, acquire, catalogue, maintain, circulate, store, and deselect in the all-digital library are less than those needed for the paper library.
4. *Equipment resources* will be approximately the same in both all-paper and all-digital libraries, based on the assumption that the equipment needed to select, acquire, catalogue, maintain, circulate, store, and deselect in the all-digital library remain the same as those needed for the paper library. Computers, workstations, and telecommunication lines used in the paper library will still be needed in the all-digital library.

### **Methodology**

To gather current thinking and experience regarding the potential benefits and costs associated with the paper and the digital library, a study group of librarians was convened. The group was comprised of eleven ARL librarians who have experience with the selection, acquisition, organization, circulation, maintenance, storing, and deselecting of both paper and electronic materials.

There were ten academic librarians and one public librarian who represented different types of library services including two access services librarians (one public and one academic librarian), two collection development librarians, two reference librarians, two technical services

librarians, one acquisitions librarian, one catalogue librarian, and one electronic resources librarian. The group met on the campus of the University of Colorado at Boulder in early May 2002.

The librarians were asked to consider two hypothetical types of libraries:

1. A “paper” library comprised completely of paper books with no electronic or digital media.
2. A “digital” library comprised completely of electronic books with no paper media.

While no library of the recent past, of the present, or of the foreseeable future will match either of these hypothetical libraries [Sanett], considering these extremes helped focus the participants so that they could better evaluate anticipated differences in the resource requirements for paper materials versus electronic materials.

Participants were instructed that both hypothetical libraries were presumed to require the same set of operational functions needed to acquire and maintain its collection of paper materials or electronic materials.

Principal functions include selection, acquisition, cataloguing, maintenance, circulation, warehousing and storage, and deselection. Clearly, the resources required to execute these functions will vary significantly between a paper and a digital library.

Each of these functions was subdivided into constituent subfunctions as shown in tables, which will be discussed later. Resources consumed by library functions were categorized into four major classes or categories; labour, space, materials, and equipment.

### **Labour**

Labour allocations include professional, paraprofessional, and technical staff. Participants were instructed to evaluate labour using a metric of total labour hours consumed, not monetary expenditure for labour.

### **Space**

Space allocations include workspace, private space, and public space. Participants were instructed to evaluate space using a metric of square feet of floor space consumed.

### **Materials**

Participants were instructed not to include the purchase price of print materials or electronic materials in their comparisons, but only to consider the monetary costs of ancillary processing, maintenance, and security materials. The reason for this instruction was two-fold. First, the business

model for selling and distributing electronic materials is rapidly evolving, so credible cost comparisons between print materials and electronic materials are difficult to estimate.

Second, the purpose of this study is primarily to compare the life-cycle costs of ownership between print materials and electronic materials. The previous work of Lawrence, Connaway, and Brigham indicates that the purchase costs of eBooks are a relatively small fraction of the life-cycle costs of ownership [Lawrence et al.]. Montgomery and King report that the largest total expenditure for electronic journals is for publishers' packages, but "...the largest cost per title is for electronic journals that are subscribed to individually" [Montgomery and King]. The researchers also report that bound journals are the highest cost per use, although they do not represent the highest purchase cost per title. These findings indicate that the need for accurate purchase cost comparisons between paper materials and electronic materials are not critical to cost allocations since the costs of selecting, acquiring, organizing, maintaining, circulating, storing, and deselecting represent the highest costs associated with providing print and electronic materials. An implicit assumption of the study is that the total purchase cost of print materials and electronic materials are essentially equivalent, whatever the business model (single title or article purchase or licensing, per use fee, bundling, publisher packages, etc.).

### **Equipment**

Equipment resources included equipment for both library staff and patrons. Examples of equipment include bookshelves, tables, chairs, carts, network connectivity equipment, terminals, printers, and so forth. Participants were instructed not to include equipment necessary for digitizing materials, or for servers to store digitized materials. The reason for this instruction is that business models for in-print, copyrighted electronic materials are evolving toward one where third-party vendors undertake the digitization, storage, and network distribution of the materials, and where libraries are responsible for the network connectivity costs and for providing terminals, computers, printers, and other reading devices in the library itself. Participants were instructed to evaluate and compare equipment resources based on the monetary value of the equipment.

### **Paper Library Estimates**

Given these preliminary instructions, participants were instructed to consider how resources would be allocated among the six principal functions of a paper library. For example, participants were asked to estimate the

percentage of library operating space that would be allocated to selection, acquisition, cataloguing, maintenance, circulation, warehousing and storage, and deselection.

Participants were next instructed to consider the subfunctions *within* each major function and to allocate resources among the subfunctions. For example, participants assigned resources to the subfunctions *authority control*, *catalogue*, *classify*, and *maintain database* that comprise the principal function of *cataloguing*.

The aggregate allocations of resources for all library subfunctions were subsequently determined by multiplying the overall allocation of each major function by the allocation of resources to each of its subfunctions. For example, if 20% of equipment resources were allocated to the *cataloguing* function, and within cataloguing, 25% of cataloguing equipment was assigned to the *classify* subfunction, then 5% (20% of 25%) of all library equipment resources were assigned to *classify*.

Results from this analysis are summarized. These results provide estimated resource allocations for operational functions and subfunctions of a paper library.

### **Paper Libraries**

The estimated allocation of resources in a paper library. Figures show the range of resource use estimates (minimum to maximum) as thin lines, while the solid bars represent the limits of the first and third response quartiles—50% of responses fell within this band. These data provide information for estimating the resource requirements of an all-digital library.

### **Paper Library Labour**

On average, the results indicate that *cataloguing* and *circulation* consume almost 50% of labour resources in the paper library, followed closely by *selection* and *acquisition*. Participants estimate that these four functions consume about 80% of labour resources in a paper library.

### **Paper Library Space**

Not surprisingly, *circulation* and *warehousing* are estimated to be the dominant consumers of space, accounting for almost 60% of the space requirements in a paper library.

### **Paper Library Materials**

Material requirements are estimated to be more evenly distributed among library functions, with *cataloguing*, *maintenance*, and *circulation* consuming about 64% of material resources in a paper library.

### **Paper Library Equipment**

*Acquisition, cataloguing, and circulation* are estimated to be the dominant consumers of equipment in a paper library, accounting for about 61% of equipment requirements, followed by *maintenance* and *warehousing*.

### **Digital Libraries**

The participants' comparison of resource requirements of an all-digital library to an all-paper library. As with illustrate maximum and minimum responses as well as the first and third response quartiles.

### **Digital Library Labour**

On average, participants estimated that labour requirements generally will be reduced in a digital library compared to a paper library. The largest labour savings are anticipated in *circulation* and *warehousing*, followed by *maintenance* and *deselection*.

The smallest labour savings are anticipated for *selection* and *cataloguing*, and in fact, several participants forecast increases in the labour requirements for these functions. Also of interest is the large dispersion (0 to 145%) of estimates for *cataloguing* labour in a digital library, indicating that the role of the *cataloguing* function within an all-digital library is highly uncertain.

### **Digital Library Space**

Participants estimated that space requirements in a digital library will be less than those in a paper library for all library functions. Space savings, not surprisingly, will be largest for the *warehousing* function, followed by *deselection, circulation, and maintenance*. Most participants forecast substantial space savings for *selection, acquisition, and cataloguing*; however, several participants forecast *no* savings for *selection, acquisition, and cataloguing* in a digital library.

### **Digital Library Materials**

On average, participants estimated that materials requirements in a digital library will be substantially lower than for a paper library. The greatest savings are forecast to occur in *maintenance, circulation, warehousing, and deselection*. In contrast, one participant forecast a significant (254%) increase in the materials requirements for *selection* and a modest increase (126%) in materials for *cataloguing*.

### **Digital Equipment**

Estimates of equipment requirements in a digital library provide the greatest degree of variation and disagreement among participants. On

average, participants expect equipment savings in all library functions except for the *selection* function. Small savings in equipment resources also are forecast for *acquisition* and *cataloguing*. The largest equipment savings are anticipated for *warehousing*, *circulation*, and *maintenance*.

Weighted average resource use for each of the principal resource categories. These weighted averages were obtained by multiplying the relative use of a resource in each subfunction of a paper library by the forecast relative use of that resource in the same subfunction of a digital library. For example, if the *jobber list maintenance* subfunction is estimated to require 2.1% of all labour in a paper library, and a digital library is forecast to require 173.6% more labour for this subfunction, then the equivalent labour use in a digital library (as a percentage of labour in a paper library) would be 3.6% (2.1% of 173.6%). By summing the labour percentages in each subfunction category, function subtotals, and digital library totals can be obtained for each resource category.

The assumption that an all-digital library will require less labour is supported by the forecasts of the participants. All participants estimated that aggregate labour requirements will be less for an all-digital library, with estimate ranges from a low of 39%, and high of 81%, and a mean forecast of 59%. The assumption that an all-digital library will require less space was strongly supported by the participants' estimates. As with labour, all participants estimated that aggregate space requirements would be smaller for an all-digital library. The mean of the estimates is 29% with a high estimate of 65% and a low of 6.5%. The assumption that material resources will be smaller in an all-digital library is also strongly supported by the results of the participant forecasts. The mean estimate for materials use was 34% for a digital library compared to a paper library. The minimum forecast was 0.2%, and the maximum 78.2%. In contrast with the first assumptions, the fourth assumption is that an all-digital library will require the same amount of equipment as does an all-paper library.

The results of the study group suggest that aggregate equipment use in a digital library will be less than for a paper library: the mean forecast for equipment use in a digital library is 70% with a high of 119% and low of 26%. However, the large range between maximum and minimum (93%) suggests significant uncertainty among participants in eventual equipment requirements in an all-digital library. Given this uncertainty, it is difficult to forecast equipment requirements for an all-digital library with any assurance, except to say that equipment requirements will probably not increase significantly.

**Discussion:** This study used librarians, who are experienced in the functions required to provide both print materials and electronic materials,

to estimate future resource requirements in a hypothetical all-digital library compared to an all-paper library. This contrived dichotomy served well to focus analysis and discussion on the most salient differences in resource consumption between paper and digital libraries, and by extension, between print materials and electronic materials. The transition from paper to digital media is far more complex than this dichotomy suggests, as reflected by the comments of participants both during the study group discussions and in a subsequent debriefing. In this section we report on some of the concerns and questions raised by participants as they completed the cost allocation exercise.

**Labour:** Several participants expressed concern that while overall staffing levels may decline; the knowledge level and technical skills needed by employees in a digital library may need to be significantly greater than in a paper library. This could cause the overall expense of labour to increase, even if total labour hours decline. For example, although cataloguing records may be distributed with the electronic content, concern was expressed that libraries will need to hire more sophisticated staff to track and monitor outsourcing. There was also discussion on the allocation of time spent on maintaining the security of electronic content and rights management and licensing of electronic content. Staff and patron training and instruction, as well as marketing the digital library, may require more time from reference and instruction librarians. The participants suggested that more reference librarians be involved in future studies and that training and instruction be included when allocating labour resources to the all-digital library processes. This is supported in the Drexel University library print and electronic journal cost study. The highest staff-related cost for either format was reference support, with the higher costs reported for ejournals [Montgomery and King].

**Transition:** Another concern expressed by participants related to the pace of transition from paper to digital media. While an all-digital library may require fewer resources than an all-paper library, it is plausible that a mixed paper-digital library may be more costly to operate than *either* an all-paper or all-digital library since a mixed library requires most of the resources of both. Participants expressed concern that the transition to predominantly digital media may burden libraries with significantly increased costs in the short-to medium-term, and that it may be some time (years, decades) before the full cost benefits of digital media are fully realized.

**New Services:** The discussions and cost allocation exercise undertaken in this research explicitly limited the comparison of paper and digital libraries with the assumption that both library types provide the same

scale and scope of services. A number of participants noted that the arrival of digital media is providing opportunities and pressures to increase the variety of services that libraries offer, such as Internet reading rooms, printing services, and new reference services. While such new services are needed and desirable from a service perspective, they will put additional pressure on scarce library resources.

**Conclusions:** As addressed in the literature review, there is a current need to examine the costs associated with providing library resources and services, yet there are few published studies that examine and compare the costs of providing these resources and services. Librarians need to have data points to make informed decisions. This is especially critical in a flat or declining economic environment where librarians are acquiring more materials in digital format, yet continue to maintain physical materials. The findings of this study indicate an agreement among the participating librarians that labour, aggregate space requirements, and material resources are estimated to be less in an all-digital library than in a paper library. Although the results suggest that aggregate equipment use in a digital library will be less than for a paper library, the greater range between maximum and minimum suggests an uncertainty among participants in equipment requirements in an all-digital library.

The participants also expressed uncertainty and concern about the possibility of higher salaries needed to hire and retain a more knowledgeable and skilled level of staff to effectively manage an all-digital library. There is also an expressed concern for managing the costs of maintaining both the digital and paper library simultaneously, which seems to be the current scenario. Participants believed that this will not only manifest in the selection, acquisition, cataloguing, maintenance, circulation, storage and warehousing, and deselection of materials, but also in the demand for more and different reference services, bibliographic instruction, and technology support. The latter were not addressed in this study, but should be considered for further research.

These uncertainties and the lack of available resource allocation data warrant the continued study of the resources needed for the transition from a paper to a digital library. This study provides a list of resource allocations by library function that can be used to monitor the resource allocations required to offer content in the paper library and the all-digital library. Since this study is exploratory and does not include a representative, random sample of librarians, its results cannot be generalized to all libraries. In an effort to provide information for library decision-making, researchers should continue to collect and compare data to the results generated by this study.

### **Enhancement of the Library Profession: An Asian Perspective**

**Scope of Paper:** Daunted by the vastness and variety of the ASIA listed in the World Geographical Encyclopaedia and hampered by the lack of information on the library profession in the component countries, this paper will not provide details of any one country unless they are relevant to the issues raised in the discussion of the topic. The focus of this paper is the library profession, particularly the enhancement of its image and status. The topic will be discussed in the following manner: (i) Scope of paper (ii) The Asian Background (iii) Defining the Library Profession (iv) Enhancement of the Library Profession (v) The Library Profession in the Virtual Library environment.

**The Asian Background:** In many countries in Asia, libraries have existed for thousands of years although very little has been written about them. Even in India “a nation known for its ancient and medieval, as well as more modern library establishment”-accounts of libraries in the Vedic, Buddhist, Medieval and Muslim periods of Indian history have yet to be accomplished.

In China, the earliest libraries existed in the form of “an aggregate of documents” or book collections in the keep of royal families, temples and scholarly institutions. In Southeast Asia, libraries in most of the countries are the product of the 20th century, with the exception of Philippines where the National Library owes its roots to “the fewer than 100 volumes of books gathered in the Museo Biblioteca de Filipinas established on 12 August 1889”.

But modern library movement in Asia really took root in the 1970’s with greater impetus in the 1980’s, followed by a growth in professional literature.

A survey of the literature reveals great diversity in the library development among Asian countries, reflecting the vastness and variety of Asia itself. However, underlying this diversity are some common features that characterise library development in Asian countries:

- Inequitable distribution of libraries. Libraries are not well distributed throughout the country, with some parts being more well endowed than others.
- The earliest libraries are scholarly libraries or religious collections.
- Most of the modern libraries are dependant on Government resources.
- University and special libraries are more developed and privileged than public libraries.

- Libraries operate under decentralised management systems.
- There is often lack of cooperation, coordination among libraries, giving rise to duplication of materials as well as incompatibility of operating systems.
- Library development is spurred by economic growth, especially in cases of agricultural countries that need to industrialise quickly.
- Tendency to liberalise library use whereby closed access collections are subsequently open to public.
- Libraries become direct victims of wars or political upheavals in countries that suffered such tragedies.
- Library development is seen in connection with other aspects of national development social, cultural, economic, etc.
- Greater awareness of importance of libraries among governments in recent years.
- There is access to library education, with some more established than others.

Although as a whole, library development in Asia is impressive, enhancing the image and status of the library profession has been a matter of concern to most librarians over the last two decades. It has been discussed and written about in seminars and conferences in most parts of Asia since the 1970's. And so it should be—because the process of professionalisation should be continuous. Professional literature on professionalism has shown that no profession can be completely professionalised it can only be more professionalised as the profession treads along the path of professionalism. The process of professionalisation can also be applied to various aspects of the profession at different levels and pace so that at any one time certain aspects of the profession can be more professionalised than others.

The need to enhance the library profession has assumed greater urgency in the 1980's because of:

- greater competition posed by the proliferation of information services that are not library based.
- acceleration of IT use in library functions.
- increased professional awareness of issues related to librarianship because of greater networking among librarians.
- increase of library schools resulting in better educated librarians who opt for a career in librarianship by choice.

Altogether the 1980's saw some immediate reaction, manifested in the change in nomenclature. "Librarians" became "information professionals"

or “information specialists”, “library science” became “information science” and “Department of Library Science” became “Department of Library & Information Science” or “Department of Information Science”. The only term that has not suffered a name change seems to be “library profession” as we witness today. Seen from a positive viewpoint however — these changes reflect the ability of the librarians to react to change and adapt to changes.

But the enhancement of the library profession entails more than just a change in nomenclature. It entails having a deep understanding of what constitutes the library profession, what aspects of the profession should and can be enhanced and how they can be enhanced, bearing in mind that the goal of enhancement is increased professionalism. Professionalism in turn breeds excellence.

***Defining the Library Profession:*** What exactly is the library profession? Is librarianship a profession? Can we call the work we do— acquisitions, cataloguing/classification, indexing, abstracting, information retrieval (with or without technology), user education, reference — professional? Is library work “nothing more than the application of sets of skills and techniques” or just “a study of systems”?

It cannot be denied that the term “profession” is difficult to define. It has been given various definitions by various people at various times. It is an elusive term and various people have attempted to define it using their occupations as a basis, result in definitions that are coloured by occupational bias and vested interest. When Melvil Dewey stated that:

“The time has at last come when a librarian may, without assumption, speak of his occupation as a profession” little did he realise the struggle for professionalism that he had begun would continue today.

Contemporary understanding and usage of the term can be said to date from 1915 when Abraham Flexner suggested some criteria as the basis for determining whether or not social work could qualify as a profession. He suggested that a profession is:

- Intellectual and carried with it personal responsibility for the exercise of choice and judgement.
- Learned because its exercise was based on a substantial body of knowledge which could be passed on from generation to generation from practitioners to students.
- Practical in that its corpus of knowledge is put to a practical use of benefit to others.
- Organised into associations of practitioners.

- Characterised by an idealism which in theory, if not in practice, puts the aims and practice of the profession above mere money making.

Since then, Flexner was followed by several other exponents of the “traits” or “attributes” method of defining a profession, such as Carr Saunders & Wilson (1933), Morris L. Logan (1953), T. Parsons (1959), G. Millerson (1964), etc.

Together the attributes that they had put forward as worthy of a profession themselves could fill a thesis but the recurring attributes could be summarised as below:

1. Possessing a corpus of professional knowledge comprising theories and techniques/skills, preferably of a multidisciplinary nature.
2. Formal system of education and training, sufficiently long to enable the mastery of theories and techniques. This system should incorporate continuing education programmes and emphasise research and publication.
3. Possess a service principle that places the welfare of society above personal gains.
4. Be governed/regulated by a Code of Ethics, to ensure accountability in the performance of duty.
5. Maintain standards in all aspects of professional activity, such as work standards, educational standards, personal integrity, etc.
6. Be represented by a professional association.
7. Possessing legal and public recognition of professional status.

These attributes of course are not listed in order of priority and one is not more important than the other. A profession may have all or some of the attributes, depending on the level of professionalisation. The ‘attributes’ above correspond to a large extent to the attributes of other professions, and in general have been accepted as a popular means of assessing the level of professionalisation that a profession has undergone. In the same manner, these attributes will serve as a basis for the discussion of the topic — enhancement of the library profession. On the assumption that these are the attributes of the library profession, how could they be used to enhance the profession? In the language of management today, these attributes can be said to be the Critical Success Factors (CSF’s) of professional development.

### ***Enhancement of the Library Profession***

***Expanding and Developing the Corpus of Knowledge:*** Every profession needs its own body of knowledge (theoretical foundation and

specialised skills) to be exclusive, such that it sets it apart from other professions and establishes its identity as a profession. Medicine, Law, Engineering, Education, etc. have their own core of knowledge and mastery of their specialised core set them apart from each other and from the para professional group within their own category.

This core makes them so exclusive that, as an example, even if the doctor were to sit under the coconut tree with his stethoscope, he can still practise his profession. Can we say the same for the librarian? Can a fresh graduate without library qualifications undertake cataloguing and classification, indexing, abstracting after being trained for a week? I say yes! All he needs is intelligence, subject knowledge, general knowledge and the ability to look up AACR II and LCSH. Now with OCLC and Bibliofile CD ROM databases, why does one need the librarian? And if the fresh graduate can do what any librarian is trained to do, what then, is so special about librarianship?

The lack of the intellectual foundation has long been the weakness of the library profession. This has to be rectified if the library profession is to be enhanced. If we were to scrutinise the intellectual core of other professions, we will realise that they are generally multidisciplinary in nature and that they comprise theories and skills. In education for example, the theoretical basis is very broad encompassing psychology, sociology, management and administration, development, history, while at the same time pedagogy provides teachers with specific skills in teaching.

What about librarianship? Would it not be sensible for us to broaden our intellectual base to include Psychology (to study user behaviour, educational psychology, research psychology), Sociology (to understand the cultural/social environment/framework within which the library operates) Philosophy, Local History, Fine Arts, Communications, Languages, Law, Management, Computer Science/IT (including programming) while Research Methodology, PR, Indexing, Classification, Information Retrieval are examples of the professional/technical skills that could be taught.

The intellectual core in any profession does not merely provide facts but trains the person to reason, rationalise, solve problems — in other words, to think. Independent thinking is one dimension that, for now at least, the computer has not been able to substitute. Taking for example, the study of History, it is not the facts that are so important but the lessons learnt from the past. One learns to reason out the causes and events, understands how people think and behave at that particular moment in time and evaluate, with the wisdom of hindsight, whether or not certain events could have been avoided.

Expanding and developing the corpus of professional knowledge would place the library profession competitively with other professions. Mastery of it would provide librarians with identity, authority and autonomy — no one else could encroach into their domain.

The lack of recognition that librarians in Asian countries suffer from is partly because they are constantly being compared with the more prestigious professions, such as medicine and law and engineering. In most parts of Asia, the status of librarians suffer vis a vis doctors, lawyers, engineers. Even at universities, librarians have not been granted parity vis a vis the academic staff although India has been somewhat fortunate albeit not without a struggle. In Philippines, the status of librarians is safeguarded by legislation but these are only two out of the numerous others. In Japan, although libraries have had a long history, “librarianship has never been viewed as a professional in the European sense. Such is the case even now.”

Enhancing the profession through the expansion and development of the corpus of professional knowledge is tedious but if medicine can survive the years of development, why can't librarianship? The fastest way of developing the corpus would probably be through the educational system, particularly through research and publication.

***Upgrading Library Education and Training:*** If librarianship is to be accepted at par with other professions, library education must be undertaken at tertiary level. Advocating librarianship as a university discipline, at least in Asia, is not for snob appeal. It is a pragmatic and logical step to take because in most Asian countries, the salary scale is tagged to the qualifications obtained. Another reason why librarianship should be taught at universities is because research and publication activities are part of the lecturer's contractual obligations.

Through research and publication the profession will be developed and enhanced. Yet another reason is the opportunities provided for continuing education at universities, such as postgraduate programmes (Masters, Ph.D.), seminars and conferences, study leave, etc. University education could enhance the profession by controlling the entry qualification and providing the accreditation so crucial to maintaining standards within the profession. Library education in India, China, Japan and the ASEAN countries has developed tremendously over the last decade. Mainly conducted at universities, they undertake curricular reform to keep up with the latest developments. As example is China, where “traditional subjects [were] being deleted and new ones such as Information Theory, Library Automation and Cybernetics [are] being introduced”. If developing the corpus could enhance the profession, upgrading library education and

training would provide librarians with the means to propel the profession to greater heights.

***Review the Service Principle:*** The altruistic “no profit” service ideal that has governed library services for far too long is obsolete. It will be replaced by another the “cost effective” principle. For the idealists, it will be the end of a scholarly tradition for the pragmatists, it is not too soon.

In countries where libraries are heavily dependent on the Government Treasury for every cent, it would seem logical to not only find alternative funding but to introduce fee based services as one alternative. While to the purists or idealists levying charges for library services is tantamount to blasphemy, most library managers must realise that the exorbitant cost of maintaining good collections and service for free cannot be justified.

***Enforcing the Code of Ethics:*** Most professions are regulated by the Code of Ethics but unless enforced, the Code of Ethics will not achieve its objectives. Will the Code of Ethics enhance the library profession? If it succeeds in helping the profession to gain the respect and confidence of the public at large and its clients in particular, then the Code of Ethics will help to enhance the profession. But the difficulty with the library profession is that information work does not have the same “clout” as medicine or law.

It is logical to assume that, using medicine and law as role models, accountability hinges on the protection of life and property. We do not protect life or property and who bothers about wrong information? Especially if given free! However, in the event users are charged for services/information rendered, then library clients would presumably demand value for his money. Librarians would then have to be accountable.

***Setting and Maintaining Standards:*** Standards are crucial in the process of professionalisation because they represent quality and excellence. Like in other professions, standards for the library profession should not be static but should be upgraded as the profession becomes more professionalised. Standards are expressed in various ways. The mission statement of any institution itself is a standard. Standards can be set for work, behaviour, services, productivity, management, education, etc. Standards breed excellence, trust and respect and eventually earn librarians public recognition and confidence.

***Professionalizing the Professional Association:*** The role of the professional association in promoting the profession is well documented in the professional literature. It serves as the mouth piece of the profession, its representative and depending on its strength, provides leadership. However, whether or not the association can effectively undertake its role

depends on several factors — level of professional awareness and support among its members, legal and public acknowledgement of its role, its political clout and most important — its ability to influence members of the profession as well as the public of its authority and ability to control matters of professional interest. One way of assuming control and authority is to establish systems of control such as accreditation or qualifying board. In most countries in Asia however, the professional associations do not have the ability or capability to assume a leadership role and this renders the association incapable of enforcing the standards it may want to impose. Another weakness is the inability to command loyalty from its members because the institution employing librarians usually expect and do get their loyalty from their employees. If the association is not in the position to command loyalty and assume leadership, can it be effective in the enhancement of the profession? In Asia, the strength of professional associations lies in its promotional role. They have been very successful in promoting continuing education (courses, seminars, talks, training) as well as producing publications. In some countries, despite the dynamism of the associations, they are not able to provide leadership. The Malaysian Library Association is one such example. Dynamic though it is, registered as a society, under the purview of the Registrar of Societies, it has to function as a society unlike the Malaysian Medical Association, the Malaysian Bar Council or the Malaysian Institute of Accountants.

***Attaining Legal and Social Recognition of Professional Status:***

Attaining legal and social recognition of its professional status would definitely enhance the library profession. However, except for Philippines, thus far the only country in Asia that has achieved legislative status, it has remained elusive for the others.

While legal recognition is clear cut, social recognition depends on how society views the contribution of librarians and library work. In this aspect a lot would depend on how librarians project their role.

Currently, librarians call themselves “information professionals”. To get society to recognise this role, librarians will have to prove that they actually undertake information work. The onus is thus on the librarians to show what they are capable of. This is where librarians must use whatever tactics they have to project themselves, based on ability and quality. There is evidence of the librarians’ willingness to change and adapt to the challenges posed by developments. Many have adopted new concepts from other professions and applied them to librarianship. “Strategic Planning” is one, “Performance Measurement” is another. Both have currently become part and parcel of library management.

## Computer Science Education for Library Services

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### Background

Early computers lacked any form of operating system. The user had sole use of the machine and would arrive armed with programme and data, often on punched paper and tape. The programme would be loaded into the machine, and the machine would be set to work until the programme completed or crashed. Programmes could generally be debugged via a front panel using switches and lights. It is said that Alan Turing was a master of this on the early Manchester Mark I machine, and he was already deriving the primitive conception of an *operating system* from the principles of the Universal Turing machine.

Later machines came with libraries of support code, which would be linked to the user's programme to assist in operations such as input and output. This was the genesis of the modern-day operating system. However, machines still ran a single job at a time; at Cambridge University in England the job queue was at one time a washing line from which tapes were hung with different coloured clothes-pegs to indicate job-priority.

As machines became more powerful, the time needed for a run of a programme diminished and the time to hand off the equipment became very large by comparison. Accounting for and paying for machine usage moved on from checking the wall clock to automatic logging by the computer. Run queues evolved from a literal queue of people at the door, to a heap of media on a jobs-waiting table, or batches of punch-cards stacked one on top of the other in the reader, until the machine itself was able to select and sequence which magnetic tape drives were online. Where programme developers had originally had access to run their own jobs on the machine,

they were supplanted by dedicated machine operators who looked after the well-being and maintenance of the machine and were less and less concerned with implementing tasks manually.

When commercially available computer centres were faced with the implications of data lost through tampering or operational errors, equipment vendors were put under pressure to enhance the runtime libraries to prevent misuse of system resources. Automated monitoring was needed not just for CPU usage but for counting pages printed, cards punched, cards read, disk storage used and for signaling when operator intervention was required by jobs such as changing magnetic tapes.

All these features were building up towards the repertoire of a fully capable operating system. Eventually the runtime libraries became an amalgamated programme that was started before the first customer job and could read in the customer job, control its execution, clean up after it, record its usage, and immediately go on to process the next job. Significantly, it became possible for programmers to use symbolic programme-code instead of having to hand-encode binary images, once task-switching allowed a computer to perform translation of a programme into binary form before running it.

These resident background programmes, capable of managing multistep processes, were often called monitors or monitor-programmes before the term OS established itself.

An underlying programme offering basic hardware-management, software-scheduling and resource-monitoring may seem a remote ancestor to the user-oriented OSes of the personal computing era. But there has been a shift in meaning. With the era of commercial computing, more and more "secondary" software was bundled in the OS package, leading eventually to the perception of an OS as a complete user-system with utilities, applications (such as text editors and file managers) and configuration tools, and having an integrated graphical user interface.

The true descendant of the early operating systems is what we now call the "kernel". In technical and development circles the old restricted sense of an OS persists because of the continued active development of embedded operating systems for all kinds of devices with a data-processing component, from hand-held gadgets up to industrial robots and real-time control-systems, which do not run user-applications at the front-end. An embedded OS in a device today is not so far removed as one might think from its ancestor of the 1950s.

The broader categories of systems and application software are discussed in the computer software article.

## **The Mainframe Era**

Early operating systems were very diverse, with each vendor producing one or more operating systems specific to their particular mainframe computer. Every operating system, even from the same vendor, could have radically different models of commands, operating procedures, and such facilities as debugging aids. Typically, each time the manufacturer brought out a new machine, there would be a new operating system, and most applications would have to be manually adjusted, recompiled, and retested.

This state of affairs continued until the 1960s when IBM developed the System/360 series of machines which all used the same instruction architecture. Because there were enormous performance differences across the range, a single operating system could not be used and a family of operating systems were developed.

OS/360 evolved to become successively MFT, then MVT, SVS, MVS, MVS/XA, MVS/ESA, OS/390 and today's z/OS, that includes amount of new functions required by modern mission-critical applications running on the zSeries mainframes. It is worth mentioning, that IBM maintained full compatibility with the past, so that programmes developed in the sixties can still run under z/OS with no change. Although z/OS runs UNIX applications, it is a proprietary OS.

Control Data Corporation developed the SCOPE operating system in the 1960s, for batch processing. In cooperation with the University of Minnesota, the KRONOS and later the NOS operating systems were developed during the 1970s, which supported simultaneous batch and timesharing use.

Like many commercial timesharing systems, its interface was an extension of the Dartmouth BASIC operating systems, one of the pioneering efforts in timesharing and programming languages. In the late 1970s, Control Data and the University of Illinois developed the PLATO operating system, which used plasma panel displays and long-distance time sharing networks. Plato was remarkably innovative for its time, featuring real-time chat, and multi-user graphical games.

UNIVAC, the first commercial computer manufacturer, produced a series of EXEC operating systems. Like all early main-frame systems, this was a batch-oriented system that managed magnetic drums, disks, card readers and line printers. In the 1970s, UNIVAC produced the Real-Time Basic (RTB) system to support large-scale time sharing, also patterned after the Dartmouth BASIC system.

General Electric and MIT developed General Electric Comprehensive Operating Supervisor (GECOS), which introduced the concept of ringed

security privilege levels. After acquisition by Honeywell it was renamed to General Comprehensive Operating System (GCOS).

Digital Equipment Corporation developed many operating systems for its various computer lines, including TOPS-10 and TOPS-20 time sharing systems for the 36-bit PDP-10 class systems, the simple RT-11 system for its 16-bit PDP-11 class machines, and the VMS system for the 32-bit VAX computer.

Prior to the widespread use of UNIX, TOPS-10 was a particularly popular system in universities, and in the early ARPANET community.

### **Minicomputers and the Rise of UNIX**

The beginnings of the UNIX operating system was developed at AT&T Bell Laboratories in the late 1960s. Because it was essentially free in early editions, easily obtainable, and easily modified, it achieved wide acceptance. It also became a requirement within the Bell systems operating companies. Since it was written in a high level language, when that language was ported to a new machine architecture UNIX was also able to be ported. This portability permitted it to become the choice for a second generation of minicomputers and the first generation of workstations. By widespread use it exemplified the idea of an operating system that was conceptually the same across various hardware platforms. It still was owned by AT&T and that limited its use to groups or corporations who could afford to license it.

Many early operating systems were collections of utilities to allow users to run software on their systems. There were some companies who were able to develop better systems, such as early Digital Equipment Corporation systems, but others never supported features that were useful on other hardware types. In the late 1960s through the late 1970s, several hardware capabilities evolved that allowed similar or ported software to run on more than one system. Early systems had utilized Microprogramming to implement features on their systems in order to permit different underlying architecture to appear to be the same as others in a series. In fact most 360's after the 360/40 (except the 360/165 and 360/168) were microprogrammed implementations.

One system which evolved in this time frame was the Pick operating system. The Pick system was developed and sold by Microdata Corporation who created the precursors of the system. The system is an example of a system which started as a database application support programme, graduated to system work, and still exists across a wide variety of systems supported on most UNIX systems as an addon database system.

Other packages such as Oracle are middleware and contain many of the features of operating systems, but are in fact large applications supported on many hardware platforms. As hardware was packaged in ever larger amounts in small packages, first the bit slice level of integration in systems, and then entire systems came to be present on a single chip. This type of system in small 4 and 8 bit processors came to be known as microprocessors. Most were not microprogrammed, but were completely integrated general purpose processors.

## The Case of 8-bit Home Computers and Game Consoles

### Home Computers

Although most small 8-bit home computers of the 1980s, such as the Commodore 64, the Amstrad CPC, ZX Spectrum series and others *could* use a “normal” disk-loading operating system, such as CP/M or GEOS they could generally work *without* one.

In fact, most if not all of these computers shipped with a built-in BASIC interpreter on ROM, which also served as a crude operating system, allowing minimal file management operations (such as deletion, copying, etc.) to be performed and sometimes disk formatting, along of course with application loading and execution, which sometimes required a non-trivial command sequence, like with the Commodore 64.

The fact that the majority of these machines were bought for entertainment and educational purposes and were seldom used for more “serious” or business/science oriented applications, partly explains why a “true” operating system was not necessary.

Another reason is that they were usually single-task and single-user machines and shipped with minimal amounts of RAM, usually between 4 and 256 kilobytes, with 64 and 128 being common figures, and 8-bit processors, so an operating system’s overhead would likely compromise the performance of the machine without really being necessary.

Even the rare word processor and office suite applications were mostly self-contained programmes which took over the machine completely, as also did video games.

Finally, most of these machines didn’t even ship with a built-in flexible disk drive, which made using a disk-based OS *impossible* or a luxury option.

### Game Consoles and Video Games

Since virtually all video game consoles and arcade cabinets designed and built after 1980 were true digital machines (unlike the analog *Pong*

clones and derivatives), some of them carried a minimal form of BIOS or built-in game, such as the ColecoVision, the Sega Master System and the SNK Neo Geo. There were however successful designs where a BIOS was not necessary, such as the Nintendo NES and its clones.

Modern day game consoles and videogames, starting with the PC-Engine, all have a minimal BIOS that also provides some interactive utilities such as memory card management, Audio or Video CD playback, copy prevention and sometimes carry libraries for developers to use etc. Few of these cases, however, would qualify as a “true” operating system.

The most notable exceptions are probably the Dreamcast game console which includes a minimal BIOS, like the PlayStation, but can load the Windows CE operating system from the game disk allowing easily porting of games from the PC world, and the Xbox game console, which is little more than a disguised Intel-based PC running a secret, modified version of Microsoft Windows in the background.

Furthermore, there are Linux versions that will run on a PlayStation or Xbox and maybe other game consoles as well, provided they have access to a large mass storage device and have a reasonable amount of RAM (the bare minimum for a GUI is around 512 kilobytes, as the case of the Commodore Amiga or early ATARI ST shows. GEOS however ran on a stock C64 which came with as little as 64 kilobytes).

Long before that, Sony had released a kind of development kit called the Net Yaroze for its first PlayStation platform, which provided a series of programming and developing tools to be used with a normal PC and a specially modified “Black PlayStation” that could be interfaced with a PC and download programmes from it. These operations require in general a functional OS on both platforms involved. In general, it can be said that videogame consoles and arcade coin operated machines used at most a built-in BIOS during the 1970s, 1980s and most of the 1990s, while from the PlayStation era and beyond they started getting more and more sophisticated, to the point of requiring a generic or custom-built OS for aiding in development and expandability.

### **The Personal Computer Era: Apple, PC/MS/DR-DOS and Beyond**

The development of microprocessors made inexpensive computing available for the small business and hobbyist, which in turn led to the widespread use of interchangeable hardware components using a common interconnection (such as the S-100, SS-50, Apple II, ISA, and PCI buses), and an increasing need for ‘standard’ operating systems to control them. The most important of the early OSes on these machines was Digital

Research's CP/M-80 for the 8080/8085/Z-80 CPUs. It was based on several Digital Equipment Corporation operating systems, mostly for the PDP-11 architecture. MS-DOS (or PC-DOS when supplied by IBM) was based originally on CP/M-80. Each of these machines had a small boot programme in ROM which loaded the OS itself from disk. The BIOS on the IBM-PC class machines was an extension of this idea and has accreted more features and functions in the 20 years since the first IBM-PC was introduced in 1981.

The decreasing cost of display equipment and processors made it practical to provide graphical user interfaces for many operating systems, such as the generic X Window System that is provided with many UNIX systems, or other graphical systems such as Microsoft Windows, the RadioShack Colour Computer's OS-9, Commodore's AmigaOS, Level II, Apple's Mac OS, or even IBM's OS/2. The original GUI was developed at Xerox Palo Alto Research Centre in the early '70s (the Alto computer system) and imitated by many vendors.

### **New Trends in Library Management**

This article is a continuation of the subject matter initially dealt with in "Wybrane problemy organizacji pracy w bibliotece" ("Selected problems of the organisation of library work"), *Poradnik Bibliotekarza* (Librarian's Guide), Nos. 10/81, 11-12/81, 1/82. The presentation of several theoretical aspects of management science, based on examples taken from work in libraries, is intended to give interested individuals a better understanding of these important issues. They certainly deserve to be taken up, because many people still believe that management and administration are easy and do not require special training, that to be a good superior it suffices to be well versed in the domain of activities of the institution to be directed, and finally that it is quite enough to be a good professional in the particular field, so that the better the professional, the better prepared he is to occupy a managerial post.

In a large organisational unit, the post of director requires mostly managerial qualifications. On the other hand, the lower one goes down the official hierarchy, that is, the smaller the organisational unit to be directed, the greater the importance of technical qualifications in the sense of professional expertise, and the lesser the degree to which managerial qualifications are needed. Those who occupy non-supervisory working positions do not have to display any managerial abilities, except in so far as such abilities are useful for the organisation of their own work.

Hence the often derided view that management is a profession does not deserve blanket condemnation in all instances. To be a professional

manager is very difficult and requires extensive training. It does not work well when managerial posts are filled by people who do not have the right preparation, who are not experts in the given field (even this happens, and not infrequently!), or who do not even have the necessary education, but who “have to” occupy such a post, for some reasons that often are not even made public.

The ability to manage people is a difficult art and responsible work, requiring thorough preparation. For this purpose, many post-secondary institutions have established departments with the task of conducting research and dispensing education in the science of administration and organisation. We also have active institutes and departments devoted to the subject of work organisation and administration, but can we truly assert that we are training managers appropriately, can we pride ourselves on having the right managerial cadres trained to work and manage in various settings and in various professions? In particular, do we train managers and directors for libraries?

One last introductory remark. No worker, even one with no-one to supervise, but with a carefully specified set of tasks and responsibilities, can possibly become a good worker if he is unable to organise his work, and his own personal actions within the establishment, if these actions are not well planned, goal-oriented and economically implemented.

### **Management and Administration**

Management is the art of influencing subordinates to act as desired by the managing superior.

From this definition we see that there can be no question of management if a specific individual, the manager, is not assigned at least one worker or a team of workers as subordinates. One cannot be a manager if one does not manage people, that is, if one has no subordinates.

The encyclopaedia definition states (*Encyklopedia organizacji i zarządzania* (Encyclopaedia of organisation and administration), Warsaw, 1981, pg. 207): “Manager-superior or individual directing a given team of people, which constitutes a formal organisational unit...”

J. Kurnal (*Zarys teorii organizacji i zarządzania* (Outline of the theory of organisation and administration), Warsaw, 1969) asserts: “In the event that the object being guided is a single person or team of people, the guiding individual should be called a manager, whereas when the object being guided is neither a single person nor a team of people, the guiding individual should be viewed as a driver”. Thus the statement that someone “guides” or “steers” (in colloquial Polish) something, does not at all mean

that the person in question is a manager. A bus is steered by its driver, while a book-lending outlet with a one-person staff is run by the librarian.

I have often been confronted with the view that one can manage a substance or material resources, such as a book-lending institution. This view is even held by some librarians.

It bears stressing yet again that one cannot be a manager if one is not a superior, that one cannot be a manager if one administers only material resources (resources are objects used to achieve goals: people, materials, tools, machines, energy, etc.).

Thus we see that administration pertains not only to people, but also to material objects, premises, furnishings and materials contained in such premises, including library collections. The encyclopaedic definition of this term runs as follows: "Administration-action based on exercising control over resources" (T. Pszczolowski: *Mala encyklopedia prakseologii i teorii organizacji* (Short encyclopaedia of the practice and theory of organisation), Wroclaw, 1978).

It must also be stressed that management is possible only within the framework of official relations between a superior and his subordinates. A craftsman delegated by an university's maintenance department to repair, for example, library shelves, is not a subordinate of the school's library director; he is only carrying out specific instructions. This craftsman can become a subordinate of the library director if his post is transferred to the library, and the individual placed under the authority of the director.

There is yet another concept, that of tour guide, that requires precise explanation. A mountain expedition may be led by a guide; the participants are not bound to him by any employment contract or official relationship, but rather by a specific agreement for services to be rendered by the tourism organisation employing the guide. It is characteristic of this sort of situation that the participants subordinate themselves to the guide voluntarily, through an agreement which they can themselves terminate under certain conditions.

Various styles of management are distinguished:

The paternalistic style, consisting in treating subordinates like family members, is essentially a thing of the past (although it can still be encountered in Japan); it obliges the superior to organise not only the place of work, but also the subordinates' outside lives, by making sure that they have places to live, food to eat, etc.

The autocratic style is one whereby the worker has his working method dictated from above, he is not allowed to question or discuss the

instructions he receives, their implementation is carefully verified, and all the subordinate's actions are supervised. The autocratic director imposes his point of view on subordinates, requiring that his orders be followed unquestioningly.

The democratic style or integrationist style consists in the manager giving his subordinates a sense of common interest, trying to influence them so as to make them feel co-responsible for the results of the unit's operations.

A manager with a consultative style is one who acts more as an adviser than in any other role with respect to his subordinates.

A manager with a liberal style is one who gives his subordinates a free hand, not interfering in their work unless there is some particular justification for doing so.

It is difficult to indicate which course is best. The superior's actions essentially depend on the circumstances; he sometimes has to be an autocrat, although in the long run it is no doubt better to adopt a democratic style, a democratic-consultative style, or in certain situations, with respect to specific groups of workers, a liberal style. It is important to take into consideration who the subordinates are. In a library they are usually colleagues with similar professional training, who understand well their own tasks and the institution's goals. Therefore libraries should be managed primarily in a liberal fashion, in conjunction with aspects of the democratic (our common professional goal is the promotion of culture) and consultative styles.

A library director is responsible for the overall operation of his institution. The principle of one-person management consists in concentrating in the hands of a single individual full responsibility for fulfilment of the organisation's tasks, and for the smooth functioning of all its organisational units. It assumes that there exists one superior for each team of workers carrying out common tasks.

The principle of one-person management is closely connected with measures to promote team decision-making; the institution's director works with a specific team to resolve the difficult issues, complicated situations and important problems.

He should take into consideration the opinions of experts, professional colleagues and representatives of users or clients. The team should not be encumbered with simple matters, requiring immediate reaction; such matters must be left to the one-person administration of the director. Team decision-making is justified only for matters that are important, complicated and have long-term consequences.

A library director must take into account the opinions and decisions of such teams, and he must be able to co-operate well with them. Under no circumstances is he permitted to make light of team members or their views as specialists.

Trivial matters must not be passed on to the library board, commission or council, or any other statutory consultative body acting within the library. Each library is a state institution, providing services to users as specified in the Libraries Act. Hence the director and librarians must pay attention to the opinions of the library's consultative bodies, modifying their decisions and actions on the basis of these opinions, and ensuring that users are represented on such bodies.

## **Library Management**

### ***Principles of Managing the Work of Subordinates***

***Centralisation and Decentralisation:*** These terms, usually associated with organisation on a large scale, also apply to the management of human beings. From the work organisation point of view, centralisation means setting up units based on communality of tasks. This facilitates specialisation, and ensures economy of operations as well as the development of centres of specialisation within the organisation, but at the same time it results in the formation of an unwieldy pyramidal power structure. Managerial decisions are taken mostly at the top of the pyramid, and then distorted as they percolate through lower levels of the hierarchy. Rigid decision-making, not based on consultation, make sit difficult or even impossible to adapt flexibly to special local conditions. Managers of subordinate organisational units are accountable only for precisely carrying out tasks assigned to them. This dampens their initiative and has a negative influence on the work flow.

Decentralisation provides more independence, allowing for adaptation of the organisational unit's internal structure to its character, to local conditions and operational needs. In a decentralised system, the superior determines only broad indications and guidelines, leaving it up to managers of hierarchically lower units to fill in the details of instructions.

It is difficult to imagine the Ministry of Culture and Arts deciding in detail how to allocate financial resources for library purchases to all public libraries, on an equitable basis of some mechanical indicator, such as the population of the service area, and going even further, deciding what the acquisitions should be, which would be typical of a centralised administration. In a decentralised mode of administration, individual community libraries are granted the right to fashion their own acquisition

policies, building a library collection that meets user needs (and of late, unfortunately, that does not exceed budgetary limitations).

As part of the same topic, it is important to understand the principle of democratic centralism. It is based on the need to adapt each institution's activities to general planning principles, while leaving individual organisational units with as much independence as possible for the selection of their operational ways and means.

### ***Single-source Direction***

The principle of single-source direction states that each subordinate receives instructions from only one superior, and is accountable for following them only to that superior. It is a violation of this principle when a library director gives instructions to a worker over the head of that worker's direct superior, such as a department or section manager. This can lead to the worker receiving two different sets of directions on the same matter, with the immediate superior not knowing what his subordinate is doing, or what tasks were assigned to him.

### ***Differentiation***

Every superior must be aware of the fact that his subordinates have varying qualifications and different character traits. A library director must treat individual department managers differently, and they too must not deal with all their subordinates the same way. The principle of differentiation applies both to evaluation of work completed, and to the manner of giving directions.

### ***Limiting Interference***

The manager who wants to know and decide about everything spends too much time on details, and has too little left over for the most fundamental and important matters. Thus he has to be able to choose the problems that he ought to solve himself. Most of his interventions should be related to his supervisory function, and it is not desirable that intervention appear on his regular agenda, as an activity planned in advance. Intervention should always be used to incite workers to improve, in specific situations, such as following justified complaints by users, entries in the library's book of recommendations and complaints, information from librarians, etc.

### ***Taking Economic Factors into Account***

This is very important for directors of autonomous organisational units, and hence for public library directors. Rational economic activity consists in taking economic factors (in a very broad sense-not just financial savings) into consideration when choosing optimal solutions. Economical

activity involves, for instance, deciding to purchase expensive equipment only when it is needed and will be fully utilised. It would be uneconomical to decide to buy a machine for copying index cards for a small library that uses only two copies of the catalogue.

Economy of operations can be achieved in direct ways, through economical analysis of present and planned circumstances, and also in indirect ways, for example by appropriately influencing subordinates, by taking advantage of their individual abilities, by paying careful attention to working conditions and staff qualifications.

### ***Striving for Progress***

Every institution needs progress in its activities. Regular incitement to progress is one of the responsibilities of every manager. Active efforts to achieve progress require adopting the following assumptions:

- a. everything that is being done can be done better;
- b. everything used in the workplace can be made more efficient;
- c. everything considered worthwhile must be imposed.

One of the superior's duties is to create conditions in which new ideas will be generated, in which workers will suggest innovations. Attempts to progress and improve are often manifested by reorganisation efforts. But one must not forget that every reorganisation has some negative influence on the institution's operations ("constant reorganisation is disorganisation"-Tadeusz Kotarbinski). Only after workers become familiar with a new operational system does productivity rise back up to the previous level, and some time is needed for this level to be surpassed.

It can even happen, and not infrequently, that progress runs into worker resistance. Sometimes a great amount of energy must be devoted to overcoming such resistance, either by persuasion, or by introducing innovations gradually, following a period of experimentation and training.

The achievement of organisational and economic progress must always be one of the fundamental goals of every manager. Decisions taken in this regard must be carefully thought out, discussed with workers and implemented consistently.

### ***Listening to Subordinates' Advice***

To be well prepared for his supervisory functions, a library director should be a qualified professional librarian. This does not mean that he has to be the worker who best knows all the aspects and operational details of his profession and his institution, or even that he has to be an outstanding library scientist. Department managers have to know certain details better

than the director, and therefore it is sensible in specific situations to hear their opinions and to take advantage of their advice.

Managers on hierarchically lower levels should also listen to and take into account the opinions of their subordinates. In matters concerning workers, one should also listen to the views of representatives of political organisations, trade unions and professional associations. It is also necessary to maintain good relations with the advisory bodies associated with the library, such as library boards, commissions or councils, consisting in part or in whole of professional librarians.

The wise director values independence of worker opinions, and makes appropriate use of views expressed by the "institution's opposition". Criticism stimulates his reflection, and very often shows him the way to the best solution of a difficult problem.

### ***The Correct Way to Approach Subordinates***

A superior must not undermine the authority of middle managers in the eyes of their subordinates. Any critical remarks or assessments should be made on a one-to-one basis, or in the course of a managerial meeting. When pointing out errors, one must never wound the personal dignity of the worker under fire. One may offend a subordinate by explaining things that are obvious to him, by expressing doubts about his ability to deal with a specific matter, by treating him as an inexperienced beginner, etc. Even a new worker, who is in fact inexperienced, should be treated correctly, with all due respect. One expression of respect for those who work with a library director is careful preparation for meetings of the library management team, and attentively listening to its members' remarks. A director must also be able to write appropriate critical reports about the work of individual organisational units of the library, and about that of the managers of these units.

### ***Managerial Functions***

Three levels of management can be distinguished:

1. overall management, which in a library is the responsibility of its director;
2. intermediate management, carried out by individuals who help the director to administer a large institution, for example deputy directors; other examples of intermediate managers are managers of large departments in a library, of large institutional libraries (such as directors of departmental libraries in post-secondary institutions employing a substantial number of people), of large public library branches. etc.

3. direct supervision of productive work, carried by managers of small organisational units, small departments, small institutional libraries, and library branches with a small staff, by individuals who combine their personal work, involving direct service to users and the institution, with managerial and supervisory functions.

The distinctions among these three levels are not clear-cut; in some libraries they become quite blurred, especially with respect to intermediate management and individuals entrusted with direct supervision of specific workers.

The activity of workers occupying managerial positions consists of the following functions:

### **Setting Operational Goals**

The range of activities of any institution is determined by some legal document. This may be a statute (*e.g.* 'Statute of 9 April 1968 on libraries'), an administrative directive or decree of a body of the national government (*e.g.* 'Directive of the Minister of Higher Education, dated 18 March 1961, in the matter of organisational structure and action guidelines for university libraries...'), a library charter (*e.g.* a municipal public library charter, certified by the head of the municipality, in accordance with 'Directive No. 103 of the Minister of Culture and Arts, dated 30 November 1973, in the matter of a model charter for municipal public libraries'), or organisational regulations (as issued, for instance, to a university library by the rector).

The library's operational mandate determines its permanent goals (*e.g.* providing access to learning aids such as textbooks and course notes for students). A particular permanent goal gives rise to specific, interim goals; for instance, the task of organising a library network within an institution of higher education gives rise to the specific goal of organising a small library in a particular institute or for a particular department.

It is the task of the overall superior to move in the direction of fulfilling his institution's basic goals. It is his responsibility to assign partial, intermediate tasks whose total realisation constitutes a basic goal. These tasks are entrusted to workers of particular organisational units, that is, managers on hierarchically lower levels; they, in turn, carry out these tasks personally, or assign them to their own subordinates.

### **Analysis of the Current Situation**

In order correctly to determine intermediate tasks leading to achievement of the institution's basic goals, the person in charge must first analyse the institution's current and future situation. This situation consists of the means and resources available to the institution, and of the conditions

under which the institution must function. In analysing the means and resources available to a library, its director must determine above all:

- the number of workers, the professional levels of the librarians, and hence their potential output, the institution's organisational structure, and any other personnel considerations affecting library operations;
- the quantity and quality of the library collections, which determine the possibility of satisfying user needs;
- the technical conditions affecting library operations (premises, equipment, furnishings, etc.);
- environmental (local) conditions affecting library operations;
- expected user needs.

In drawing conclusions from this analysis, the director must determine how best to take advantage of the team of librarians, as well as other workers, employed by the institution, and of the library's known collections, while operating under specific conditions and for well-defined users, so as to fulfil the library's tasks as completely as possible.

### **Planning**

Determination by the director of the library's way of achieving its goals makes it possible to formulate details of the institution's plan of action, aimed at systematically carrying out the library's tasks. Specific details of the plan of action constitute the basis for drawing up tasks to be entrusted to particular organisational units of the library, as well as the functions of individual librarians and other operational workers.

The document allocating tasks to the various organizational units, as drawn up by the library director, is binding upon each team of workers for a substantial period of time, until something is reorganized, for example in connection with the institution taking on new tasks, or on the basis of new and more complete experience acquired by the library management, director, council, commission or advisory committee.

The job description, as signed by each worker, is a document containing directives that bind him for a long period, in principle for several years, and often throughout the time he spends working at a specific post in a specific department. The newly hired librarian, assigned for example to the Processing Department, will undergo some introductory training, and will then work on alphabetical processing of the library's acquisitions this will be his basic task. However, each worker, in addition to his permanent regular functions, will receive, from his superior, occasional tasks or short-term instructions, depending on the library's current tasks and functions-

for the next day, for a few days or for a week. This is usually allowed for in the job description (“Carrying out such other tasks as may be assigned to him from time to time by the department manager”).

As we see from the above, the superior’s function consists in planning tasks that his subordinates are to work at, and in determining the regular and occasional goals they are to achieve. In planning tasks and assigning specific functions to subordinates, the superior should apply the principle of the right man for the right job. Therefore he must have a good idea of what work his subordinates are trained for, in which fields they are specialists, and the type of work they like to do.

Acquiring such knowledge is part of the managerial function of analysis of the current situation. When deciding about assignments of workers to public library branches in a large city, it is well also to take into consideration personal relationships among co-workers, the distance from the worker’s residence to his place of work, and even a seemingly unjustified desire to change one’s place of work. The library director should never underestimate the importance of informal ties among workers, taking advantage of them to improve the working atmosphere, to raise productivity, to enhance efficiency, and he should also show understanding for any particularly close friendships, drawing appropriate conclusions from such observations. A superior should always try to make sure that his subordinates are as satisfied as possible with their work, and he should take into account as much as possible their suggestions and recommendations, whenever there are no strong grounds for rejection.

### **Organisation**

Work organisation consists of two groups of functions:

*The first involves preparing subordinates for their work, so that they can, are able to and want to carry out their assigned tasks. Each worker must be given the tools he needs, and his working conditions must conform to prevailing safety and hygiene regulations. Each work station must be carefully designed and adequately equipped, so as to make it possible for the worker efficiently to carry out his assigned tasks. It is advisable first to test his professional capabilities; it may be necessary to give him additional training, but one must not exaggerate in this respect, for fear of demotivating, boring or even offending the worker.*

Each employee must be convinced that his work is meaningful and needed, that without his contribution the institution’s goals would not be fully achieved; he must be psychologically prepared and motivated for his

assigned functions. At the same time, the worker should be aware of the fact that if he does not make an effort, if he does not work well, if he is negligent or commits some offence, then there will be consequences, for the superior will be obliged to mete out a condign sanction. The superior is responsible for generating a good atmosphere in the institution. He must remember that a good worker cannot be efficient under disorganised conditions, that nobody thrives in disorder and chaos.

Workers should be given clear and definite instructions' and they must be treated seriously. The superior has the responsibility of showing understanding for the worker's problems and personal difficulties, and he must also express recognition for the worker's efforts. Neither is he allowed to become too close with his staff; this is necessary for the maintenance of discipline in the institution.

The second group of organisational functions of a superior involves providing material resources and working conditions. In a library, these functions include arranging premises, with appropriate furniture and equipment, and especially acquiring whatever library materials are needed, as the basic raw material for the institution's operations. Providing good working conditions includes paying attention to the hygiene, cleanliness and aesthetics of premises.

These two groups of functions are equally important for good work organisation. The superior must also be able to organise irregular operations, he must be prepared to set up an appropriate procedure for unexpected situations, emergencies, when atypical tasks have to be carried out, etc.

### **Implementation**

Managerial functions include both organising one's own work and managing the work of subordinates.

In organising the activities of subordinates, the superior directs the institution's entire work flow, he decides to start work, he may decide to introduce changes in obsolete procedures, working methods or organisation of tasks, he directs work in progress and decides to terminate it.

The decision that an institution is to start working is not just a formality; it must be preceded by verification that the staff and materials are ready. Once commenced, work should continue smoothly, without interruption or disturbance, and under conditions conducive to careful execution. Every librarian knows that, for instance, the daily opening of a lending library must be preceded by a number of preparatory actions, that cannot be executed once the users are inside and waiting to be served; once the lending library is open, customers should be served continuously

and efficiently. In the course of the institution's everyday activities, the superior follows the progress of work, by listening to regular reports submitted by managers hierarchically below him. He should not intervene if everything is taking place in accordance with the plan and his expectations; it is his task to supervise the flow of operations, always ready to intervene, but only if the need arises.

Intervention by a library director in the work of the Processing Department, for example, should be limited to cases when he observes an excessive concentration or backlog of work, or when he obtains information suggesting that the department is not functioning smoothly. Unjustified intervention or "interference" in the work of a department is pointless and can be harmful, because it undermines the department manager's authority, and gets in the way of good, systematic completion of tasks. The role of the director is to coordinate work among departments, and to promote harmonious operation of the institution as a whole. The director must always be "visible" in the library, the workers must sense his presence, knowing that he pays attention to their work, that he cares about it, and that he is ready to intervene.

A good superior should not look as if he is overworked. His actions should be well organised, and he should be able to intervene, to explain or to give advice at any time.

It can happen that the work of an institution departs from the established plan because of some disturbance. In such cases the superior must take appropriate action to eliminate the disturbance, by deciding to change or reorganise something. For instance, a library director may decide that a worker dealing with acquisition processing should do duty temporarily in a reading room, in order to take up slack caused by another worker being absent for health reasons.

When deciding to stop the day's work, the superior is responsible, among other things, for making sure that the premises and collections are adequately protected. It is also very important that the library's work be organised in such a way as not to cause, as a result of library closing, unnecessary problems for readers. For instance, any library materials they are currently using in the reading room must not be sent back to storage, lent out or even temporarily made accessible to another reader; conditions must be such that each reader can continue his work on the next day with no problems or loss of time.

Library closing must also be accompanied by a number of regular activities (switching off the lights, keeping the keys safe, etc.). It is the director's responsibility to hand down corresponding decisions and

instructions, and then to make sure that workers carry out their assigned tasks in accordance with these instructions.

### **Supervision**

Every superior must supervise continuously, both on a regular and on a spot-check basis. Regular supervision by a library director includes checking the list of those present every day; this will show him to what extent the various work stations are staffed, and whether it is necessary, for example, to reinforce one part of the organisation, to avoid difficulties in the form of "bottle-necks", etc. A library director also analyses regularly the employment records, reports from library branches and other such documents, as informational input for his decisions.

Spot-checks usually involve personally verifying the institution's state of operations. The library director carries out his supervisory functions during visits to individual work stations. One of the most important forms of regular supervision in a library is stocktaking, or comparing the actual collection with listings in inventory registers or other documents. In small libraries full stocktaking is carried out at times set out in the regulations; in large ones, partial stocktaking constitutes a significant aspect of "collection control".

The results of stocktaking are very valuable for the director, giving him a good sense of the state of the library's collections, and allowing him to draw conclusions and form opinions about the work of individual departments, satellite libraries or branches.

The supervisory functions of a library director are different from those of managers of departments, sections, branches or satellite libraries. A high priority in the director's plan of work is allocated to regular supervision, through analysis of documents, reports, complaints and suggestions he receives. Any spot-checks by the director should be the result of conclusions he draws from such analysis.

Managers of organisational units are obliged to control and supervise work in progress, while at the same time personally carrying out the responsibilities flowing from their range of activities, and from the work plan of their department or section. The supervision they do is connected with the responsibility of reacting to signs of negligent work, but also of making an appropriate assessment, when they observe that one of their subordinates is particularly diligent and effective in his work. Naturally, they should also react to remarks by readers and users of the institution.

When carrying out supervisory functions, it must not be forgotten that some workers are offended by having their work checked. The most

appropriate reaction to this sort of attitude is for the superior to state that the reason for the supervision is not lack of trust, but rather the great importance of the subordinate's work, a desire to become more familiar with his range of activities, recognition for his professional abilities, and the superior's own thirst for knowledge. There are also workers who like to be observed, and to hear the positive results of their work talked about; praise and recognition stimulate them to work even better. Supervision is the superior's most important function. It is meaningful only if the results are carefully analysed, and if conclusions drawn lead to improving the institution's work.

## **The Library Manager**

### **Why Libraries Need Management**

Libraries need management because they are organizations. Like other organizations libraries have certain goals to fulfil in society and they have people to enable them to accomplish those goals. To neglect the knowledge of management would be tantamount to rejecting the management theories and practices being applied in other organizations which are striving to meet the changing needs of society and to improve their performance.

Libraries are not dead or inanimate things. They are organic; they evolve and they exist for a purpose. Because service to society is the purpose of libraries, because libraries employ people who have to be managed to provide that service, not in any manner but with design and commitment, the knowledge of management becomes a must. As libraries grow continually in size and complexity, human relations, staff consultation and participation will be a sure means of securing a more contented and cooperative staff (Jones 1971). Lack of motivation which is one of the most serious problems of management in industry is evident in libraries (Simon 1976). A look at the work of a library manager reveals that he handles responsibilities similar to those of other managers hence the need for the knowledge of management.

### **The Library Manager's Work**

The use of the terminology 'manager' in library administration implies that a chief librarian of a public library system, a national library system or a university library system should see his role as comparable to that of a company chief executive. Just as a company chief executive has people and other resources to manage and goals and objectives to be realized, so has a library manager. Libraries employ people who use other resources available to fulfil certain purposes. A library manager, therefore, consciously

or unconsciously always wrestles with the problem of how best the resources of his library should be utilized to accomplish its mission.

The work of a manager is to set aims and objectives, organize, communicate, motivate and to develop people (Drucker 1968). These are not the only functions but it is true that a manager's main responsibilities have something to do with the organization and human aspects of management.

### **Setting Aims and Objectives**

Any organization which is well managed will have defined aims or goals towards which all its activities and the energies of its personnel are directed. A library manager has therefore an obligation to spell out the aims of his library in relation to the aspirations or the role of the parent body in society. For a public library system, its aims must be derived from the long-term state goals particularly in education, information and culture. Its aims could be formulated as follows:

- i. to support formal education, that is, providing for the needs of those pursuing primary and secondary education
- ii. to contribute to non-formal education, that is, providing for literacy programmes, vocational training and professional education
- iii. to encourage reading for knowledge and information
- iv. to cultivate reading habits and to sustain literacy in society, etc.

The aims of a university library, a college library, a school library or a special library, should be defined on the basis of what the library must do to further the work of the organization to which it is a part. The prime goals of a university library, for instance, are to contribute to the teaching role of a university, to support learning and research activities, and to stimulate creativity and intellectual development among staff and students.

It is however not enough to define the aims of a library. The aims should be known by all the staff so that they may relate their work and devote their time to the fulfilment of those aims. Secondly, the manager must involve senior staff in setting the objectives or targets of their own departments in the light of stated aims of the entire library. The objectives of a department such as the lending department arise directly from the aims. Objectives are the basis of the day to day operations of a department and a measure of its performance.

At this juncture it is important to distinguish between "aims" and "objectives". We would define "aims" or "goals" as statements about the purpose or the mission of an organization or statements which spell out the business an organization is engaged in. "Objectives" spring from "aims"

and they are the targets and tasks of an organization or its part; they are, to an extent a measure of an organization's effectiveness in the fulfilment of its aims.

For example, some of the objectives of the acquisition department of a library whose aim is to support formal education would be to acquire W books for primary level and X books for secondary level; to acquire Y books for adult literacy and Z books for vocational education. The task of the cataloguing department would be to catalogue a certain number of books within a short time and to produce catalogues useful to readers. The objectives of the lending department would be to provide reading material to the user groups of the library; to maintain efficient catalogues and stocks; to prepare statistics of usage regularly; to educate readers on the use of the library, etc.

Allowing participation of staff in setting objectives of their departments is accepting the principle of management by integration and self-control (McGregor 1960) where staff are given a chance to decide what to accomplish, by what method and within what time, in pursuit of the organizational goals. The benefits are that such staff will be more committed to the mission of the library because they will seek to achieve the objectives they have themselves set.

They will also be more willing to commit and to guide their juniors to the realization of overall aims. The reverse would happen if the aims and objectives were conceived and set at the top and imposed on the departments. It is, of course, not possible to involve them in everything. The important thing is to allow a fair latitude of departmental participation. Quite often the morale of good staff is eroded where setting aims and determining policies are the preserve of the top management. If staff have little say in their work and if they have no room for initiative, they will go to work only to fill in the day.

### **Organizing**

This involves analysing activities, classifying tasks and dividing those tasks into manageable jobs which can be allocated to people. The exercise leads to the establishment of an organization structure which facilitates division of responsibilities into departments and coordination of their activities. Organizing means fitting, people into the right places, that is ensuring that they are in jobs which they can do well and which satisfy them. It also means cultivating and sustaining the initiative and the cooperation of all the people in the organization.

When establishing a structure necessary for coordinating and integrating the responsibilities of various departments, it should be

understood that such a structure must facilitate good communication, delegation of authority and definition of group and individual autonomy over certain responsibilities.

We can see one danger however, in organizing. It results in division of labour which may cause intergroup competition where each department or section tries to excel over the other thus defeating the unity of purpose of an organization. Although the work of a manager as a coordinator may deter the conflict, the suggestions mentioned below are worth bearing in mind.

- i. The performance of departments should be measured and rewarded on the basis of their contribution to the total effort rather than their individual effectiveness.
- ii. Interaction and frequent communication should be promoted between groups.
- iii. There should be frequent rotation of staff among departments to stimulate mutual understanding.
- iv. Any win-lose situation should be avoided and emphasis always placed on pooling resources to maximize organizational effectiveness (Schein 1959).

### **Communication**

The essence of communication is to foster understanding and harmony among the people in an organization (Katz and Khan 1966). It is necessary to establish and maintain proper communication to facilitate effective exchange and transmission of information. Ideally formal communication should take place at three levels-down the hierarchy, up the hierarchy and horizontally between people on equal status.

Information flowing down the hierarchy will come from the manager to his subordinates and their juniors and it could be about new policies, directives, or routine matters. Upward communication emanates from subordinates. They could talk to their superiors about themselves, their work or seek clarification and guidance about certain directives or policies. Horizontal communication among peers is mutual exchange and sharing of information about their experiences and common problems at work. It is obvious that a fault in communication in any side can easily cause misunderstanding, friction and discontent among people and will no doubt, ruin cooperation. An example of such a situation is given below.

The chief librarian of a certain library system once disregarded the right channel of communication. He sent a letter of transfer to a library assistant in a branch, without informing the branch librarian. When the

library assistant received the letter he showed it to the branch librarian who expressed great surprise because he was completely unaware of the transfer. Because the transfer was with immediate effect, the library assistant told the branch librarian that he was going to move to another branch the following day. The branch librarian replied that he could not release him until he had clarified the matter with the chief librarian. It was a serious matter because the person being transferred was an assistant to the branch librarian and the only trained library assistant in that branch. The assistant said he could not wait. He disobeyed the branch librarian and left the branch immediately. When the branch librarian spoke to the chief librarian, there was a battle of words and total disagreement. It took months for the branch librarian to reconcile with the chief librarian and the library assistant.

Certainly the chief librarian was the cause of the problem which was really avoidable. His instructions were communicated in the wrong way. He should have first informed the branch librarian that he was considering transferring his assistant to another branch for certain reasons. He should then have sent the assistant's letter of transfer through the branch librarian thus making vertical communication complete and effective.

### ***Motivating Anti-developing People for Effectiveness***

The theory of motivation and the strategies of staff development have been discussed in Studies in management with reference to libraries (Wambugu 1982). Motivation and staff development are important and obligatory functions of a manager. Whether a manager adopts McGregor's theory X that the average human being dislikes and avoids work and has to be coerced and directed, or theory Y that the average human being does not inherently dislike work and exercises self-direction and self-control, a manager is duty-bound to motivate and develop staff for organizational effectiveness. An organization without motivated people and without the right capabilities cannot be effective and cannot hope to fulfil its goals in society.

What is effectiveness? We know that effectiveness has been associated with statements like 'the organization produces high quality goods, 'it makes very good profit' or if it is a service organization people would say 'the employees are pleasant, the service is very efficient', etc.

Effectiveness is the extent to which a manager achieves the output requirements of his position. Managerial effectiveness should be defined in terms of output rather than input, that is, by what a manager achieves rather than by what he does (Reddin 1973). It is quite possible for a manager to work efficiently and still remain ineffective. An effective

organization is the one which fulfils its purposes in society adequately and continues to meet the changing needs of that society as best as possible.

The way a library manager deals with the vital resource of human beings will, in a large measure, determine the effectiveness or the ineffectiveness of his library. Favourable attitudes and motivation to work are related to effectiveness. High producing managers do the following:

- i. They exercise control through group participation and decisions are made by groups.
- ii. They strive to satisfy the major motives of people.
- iii. They strive to create favourable attitudes.
- iv. Their subordinates are highly motivated and their activities well coordinated by proper linking of overlapping work; groups.
- v. They maintain a group pattern of working as opposed to man-to-man pattern.
- vi. They encourage communication in all sides.
- vii. They serve the interests of the employees as well as those of the organization (Likert 1971).

Because an organization could be fulfilling multiple goals hence the dilemma in judging effectiveness and because an organization may exist within an unpredictable environment, its effectiveness should be measured by its capacity to survive, adapt, maintain itself and grow (Shein 1959) An organization's capacity to grow lies mainly in its employees' ability to sense changes, and to scope with those changes by improving its services or products. Are libraries and other public organizations coping? Is the human side of these organizations being managed to meet the existing and the changing needs of their communities effectively?

## **Management and the Information Service**

### ***Organization: in General and in Principle***

The term 'organization' can mean many different things. In us there is formal and informal organization, functional organization and military organization. Sometimes it means an undertaking, sometimes again it refers to organizations of interests. In what follows, the meaning of the concept of organization is restricted to its administrative sense. From this point of view, what is generally meant by organization is a system whereby work and the right of decisions are divided up among the employees and whereby they communicate with one another, as well as the work required to establish and maintain that system. In every organization, people work towards a common goal, using for this purpose the organization's three

components: personnel, instructions and equipment. Technically, the term 'organization' has two meanings. The first sees an organization as a network of precisely defined relationships between certain individuals. This is the static definition of organization. The second sees an organization as a process or an administrative function in which change and growth as well as the dynamics of the organization are central features. Both meanings are important in the study of administration. It should perhaps be emphasized here that the need for organizational co-operation is not something that arises only in large undertakings but is equally important for small organizations, in fact as soon as an undertaking has more than one employee.

### **Types of Organization**

In the classical theory of organization, as represented by Henri Fayol and Frederick W. Taylor, there are three different types of organization: line organization, functional organization and line-staff organization. In practice, however, pure examples of these types are rarely encountered. In addition, the principles associated with these types have naturally been criticized by modern experts on the theory of organization. The three types can, however, be defended from various points of view. They can be helpful in simplifying complicated organizational problems, thus bringing out certain fundamental connections.

#### **Line Organization**

Essentially, line organization is based in part on the principle of the horizontal division of labour, and in part on that of the vertical division of responsibility and authority. In line organization, each employee always has only one supervisor. In a given work unit, the work is directed by a single person. In this way, the responsibilities are clear and unambiguous.

#### **Functional Organization**

In functional organization, an attempt is made to exploit the advantages of specialization more effectively than in line organization. Every employee, in this type of organization, can have a number of supervisors. It could almost be said that, in functional organization, the employees can have as many immediate superiors as there are specialists. This has been seen as a weakness, leading to uncertainty and confusion as to authority and the division of responsibility. It can be a source of conflict and clashes of interest. This type of organization has seldom been used in practice.

#### **Line-staff Organization**

Finally, line-staff organization is a compromise between the two previous types. As in line organization, it is based on the principle that

each employee should have only one supervisor while at the same time applying the principle of functional organization with regard to specialists. The latter, who might almost be called consultants, nevertheless have no direct right to give orders but only advice and service. Line-staff organization is the most commonly used type of organization.

Line-staff organization can, if necessary, be divided horizontally in either a goal-oriented or method-oriented direction. The first implies that tasks related to an independent, clearly defined goal are brought together. In turn, method-oriented division implies that tasks requiring the same approach, methods, etc., are brought together.

According to the original definition, 'organization' means that work and the power of decision are divided up among the employees, generally in terms of related functions, in accordance with the nature and content of the work. The groupings may include individuals, working groups or departments within the organization. Work may be divided up in terms of area (horizontally) or of levels (vertically).

#### **Horizontal Division of Work**

When a library reaches a certain size, some degree of specialization among the staff becomes inevitable. The commonest type of specialization relates to work in the purchasing and cataloguing departments, which may be entrusted to certain staff specialists, qualified in those fields, who are also given an opportunity to further develop their special skills. Specialization, however, has not only advantages but also certain obvious disadvantages, and particularly psychological ones. When work is felt simply to be monotonous, this can easily lead to a poorer adaptation to work and therefore also to poorer results. Specialization or organizational subdivision in accordance with a particular system must therefore not be an end in itself.

#### **Vertical Division of Work**

As already pointed out, the various tasks in a library can also be divided up vertically, *i.e.* between employees at higher and lower levels. In principle, the chief librarian may be said to be responsible for the entire library. To be able to perform this task in practice, the work is divided up between groups, each of which has its own supervisor. The number of such groups will depend on the size of the library. It is important that the supervisors operate at the correct level and that the work is divided up in accordance with their guidelines. The work can also be divided up on a purely individual basis, depending either on the library's size or the nature of the task.

In the vertical division of work, the division between the various levels is governed by the power of decision. It must also be emphasized that there are different degrees of power of decision. The employee must be able to exercise the power of decision delegated to him which, in turn, presupposes a certain degree of independence. Training and education will, of course, increase the possibility of such subdivision of the power of decision.

### **Decision-making**

Decision-making or decision is here taken to mean all taking of decisions in the library, from those on obviously important matters to routine decisions in daily administration. It is clear, therefore, why decisions have to be taken at different levels and in principle at the lowest possible level. The decision-making process is initiated, as a rule, when a particular problem arises. The final decision, which involves a choice between the proposed alternatives, constitutes an attitude in favour of one of them.

While line-staff organization, with its division into decision levels and areas of responsibility is increasingly taking the form of a pyramidal structure, the chief librarian being ultimately responsible for the activities as a whole, modern management has nevertheless been influenced to a very high degree by the concept of decentralization. This finds its strongest expression in the ever-increasing demand and need for decisions to be taken at lower levels. Delegation of the power of decision is therefore equally important in both large and small libraries.

### **Delegation of the Power of Decision**

Delegation under these conditions means a transfer of both the power of decision and of responsibility wholly or partially to the employees. There may be many reasons for such a greater or lesser degree of delegation. It may be a flexible way of subdividing the power of decision so that decisions are taken at the correct level, *i.e.*, as close as possible to those who will be directly affected by them. It may also be a conscious attempt to take advantage of the employees' useful skills in a particular area and thereby ensure that the correct decisions are taken. In both cases, delegation, correctly carried out, can increase job satisfaction.

Delegation can be limited in time or by the nature and scope of the task. It can also be withdrawn at any time by the supervisor, if he finds it necessary to do so. One of the many preconditions for successful delegation is that the boundaries must be clearly defined in so-called authorization.

It must also be emphasized that the supervisor can never escape from his responsibility for the final result of the delegation of decision-making. While it is clear that delegation as an organizational principle has many

advantages, many factors nevertheless impede this attempt to achieve such an ideal division of tasks, the power of decision, etc. The most serious obstacle to delegation is usually the library management, which may be inclined to delegate responsibility only sparingly as far as the most important tasks of the chief librarian are concerned, so that responsibility is delegated only in respect of the more routine ones. In addition, the chief librarian may take far too negative a view of the employees' competence, which will stand in the way of any delegation of responsibility. Finally, it is possible that the library management may well consider that a greater degree of delegation is desirable, but it is not put into effect because of the limited possibilities of providing the necessary supervision.

As far as so-called further delegation is concerned, the Swedish Local Government Act is increasingly placing certain formal obstacles in its way. In practice, however, further delegation can be arranged in such a way that the decision takes the form of an implementation decision.

The need to delegate both the power of decision and responsibility arises, as previously pointed out, even in comparatively small units. Delegation of the power of decision and of responsibility is therefore a functional assessment which, in the long term, can be of great importance to the successful future operation of library systems and at the same time a major factor in job satisfaction. Even if it is possible, in a library, to establish, once and for all, guidelines as to how tasks, the power of decision, and responsibility shall in principle be divided up, and how supervision shall be effected, daily contact at the workplace nevertheless provides the best conditions for ensuring that this is done in the most satisfactory way possible. The most important conditions for successful delegation can therefore be summarized as follows:

*Continuous guidance i.e., inter alia, frequent coordinating, creative and forward-looking conferences;*

*On-the-job training in the daily contacts with the employees;*

*Confidence in the employees' ability to manage increasingly difficult tasks;*

*Possibilities of checking the results of delegation, whether more or less successful or unsuccessful;*

*Truthful information on problems and conditions at the workplace;*

Concrete goals communicated to all staff members, clear organization, budgeting and good planning are other measures that facilitate successful delegation.

## Collection and Library Administrators

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### *Why Train?*

Training is defined in the Concise Oxford Dictionary as bringing a person to a desired state of efficiency by instruction and practice. All libraries aim to have efficient staff in order to provide a good library service to the public they hope to serve, whether that readership is using a public, university, school or private library. Training, therefore, is of the utmost importance in the library field, although each library organization must decide for itself what it means by a desired state of efficiency, as requirements will alter from library to library and country to country.

However, the training should be designed to ensure efficient performance to the dual benefit of the library system and the users. Training of staff is crucial both in developed and developing countries. It is appropriate in an extremely sophisticated library system using the most up-to-date computer methods and equally appropriate in a library system that may only recently have been established. Both kinds of library need to get value for monies expended on staff salaries and it is clearly more advantageous to employ well-instructed and trained staff regardless of the location of the library. An effective and informed staff will mean an efficient service to the public and will also promote a good library image. When considering training in libraries there are two factors to take into consideration. The first is the need of the organization to provide a good service and the second the needs of the individual member of staff.

Taking the first point, it must be recognized that libraries are labour-intensive and that staff are an expensive commodity, usually taking up to 60% of the budget in the form of salaries, which represents a sizeable amount of public or private expenditure. The motivation of staff and the efficient organization of a library system are two of the primary functions

of a good library manager and should involve the proper use of training. It is also an economic necessity to have staff fully operational as soon as possible. Staff training should therefore be orientated towards the libraries' needs and services but should not ignore the requirements of the individual member of staff, either for the present or the future.

A trained staff able to exploit the book stock means a more satisfied readership at all levels. The readers must be able to feel confidence in the member of staff who may be dealing with them. This confidence means that readers will return again to borrow books and to ask for information from the library staff. Here the knowledge of the individual staff member plays an important part, for the staff, even if they have only a basic education, must be knowledgeable about the tasks they perform on a daily basis and must have a sound understanding of the organization in which they are working. Training will enable them to participate more intelligently in the work of the library. They must know why they are asked to operate certain procedures and what will happen if they make mistakes.

Libraries must continually strive to improve usage and readership levels and this will not happen when staff themselves appear disinterested or uninformed. Library surveys carried out over a period of years have illustrated that after the book stock one of the most critical factors that can affect library usage is the attitude of the library staff. In effect the staff, by their attitudes, can be a critical feature in either encouraging or discouraging library users. Those responsible for training library staff should be aware of the low percentage of the public using libraries and be constantly on their guard in case readers are discouraged by unthinking and badly trained members of staff. Staff need to be trained not only in library techniques but also in public relations. The reception and handling of the individual member of the public is of the utmost importance and library staff should not forget that they are there to serve the public readership.

Good, well-trained staff, at whatever level, will only serve to enhance the reputation of the library service. Training, therefore, must be an integral part of the library management's plans. It is no good whatsoever to have a marvellously stocked library that remains underexploited because of poorly trained staff.

### ***Who should be Trained?***

Training is equally important for all library staff from senior management to the newest junior. It is essential to remember that in a good library system, training of one kind or another will never stop. It should be a continual process if it is to keep staff up to date and aware

of innovations and changes in the library world. Library systems do not remain static, new ideas and policy changes are mooted and adopted. Training, therefore, should be aimed at keeping all staff aware of whatever is happening in the library.

Manual staff may well need some kind of basic instruction about the library that they work for, the geography of buildings and locations of offices. This is often a group of employees that tends to be overlooked as they are not professionals or potential professionals. This can be a mistake, for their contribution to the library service is of enormous importance and as a group of people they should not be ignored or forgotten. It is almost impossible to think about running a library system without the invaluable assistance of the library porters, attendants or pages. One would obviously be at a great disadvantage without them, and a basic introductory course to the system will help assimilate them that much more quickly than otherwise.

All new staff will need some kind of induction training, its length and content being dependent on the level of new staff recruited. Staff involved in on-the-job training of new recruits may well need training in how to explain routine tasks to their staff. It is a well-known fact that although someone may be excellent at their job it does not necessarily mean that they will be able to communicate the basic details of it to another person, let alone give clear instructions. These people will need help in imparting their knowledge. However, training for long-standing members of staff should not be aimed at making them feel inadequate and needs tactful handling.

Newly qualified staff will need to be trained in the house style of the library for which they work. They may well have learnt all the new library techniques at library school but in most cases will have had very little experience or opportunity to put theory into practice. Many young people are now entering librarianship without much idea of what the job is like on the shop floor and no amount of book learning can replace the real thing. In these circumstances education and training become complementary as new librarians are trained to maximize their library education on a daily basis.

They will certainly need management training to enable them to adapt as quickly as possible to their new role of being in charge of other staff and of being a manager themselves. The earlier this kind of training starts, the better it is, both for the library and the member of staff. In-service training is part of the management function and it is important to get these new librarians participating in in-service training courses for more junior staff, as this not only helps them to assume the role of manager

but also involves them as part of the management team from the start. Training is not just the prerogative of the professional librarian. Library assistants will also need to be drawn into the training net, whether or not they hope to eventually qualify. These are the people who are in close contact with the public and whose daily dealings can make or break the reputation of the service.

Training is also needed for pre-library school trainees who may be sponsored by the library during their time at library school. It is clearly more advantageous to give them a good basic grounding in the practicalities of librarianship prior to going to library school, as this will enable them to perform better as students, and to derive more benefit from their course of study. Training should also be made available to professional librarians who may need refresher courses; these can be of enormous value in brushing away some of the cobwebs that might have accumulated over the years. Finally, the training officer will need to go on training courses too, in order to keep up to date with new moves in the profession and to learn about training methods and personnel work.

#### ***When should they be Trained?***

Training should be a continual process and even a chief librarian will wish to be trained in new ideas and practices throughout his career. Generally speaking though, training is taken to mean fitting a person into a new job and making sure he understands the work he has to do or the role he has to play.

In large library systems training should be used to assimilate as quickly and effectively as possible the large number of candidates that are employed at certain times of the year, for example, Autumn and New Year. Authorities which employ staff on a short-term basis will also have to consider training and although here the training will not need to be so complex or lengthy as for the staff that are employed on a permanent basis, it is in the interests of the library user, as well as to the employer's benefit, that some kind of training should be organized.

In the interest of efficiency, assimilating one new member of staff can be as important and crucial to a small system as assimilating twenty will be to a large system. In both cases it is important to get those staff into the libraries and fully functional as quickly as possible. Therefore, staff need to be inducted and given basic training as soon as they join the library system on their first day. The amount of induction will vary from library to library. There is certainly no ideal induction course as each library must determine for itself what information it wishes to impart during induction. Certain basic guidelines are given later in this book, but they are only

guidelines and each library will want to change and modify them according to its own requirements and the requirements of the readers.

Training is not only necessary for the new member of staff but also for long-standing members of staff moving from one section to another, who will need instruction in the new tasks they may be asked to perform. It is never safe to assume that because people have been on the staff for years they will automatically know everything about the other sections. They won't and will need just as much instruction on these occasions as a new person. The difficulty with long-standing members of staff is that they themselves may assume they know all there is to know and might resent being told. In the interests of getting it right they will need careful and sympathetic handling. I am sure we have all encountered the member of staff who knows everything and cannot be told anything. Staff must be trained to a consistent standard. This is not the responsibility of the training officer alone; it is also the responsibility of all senior staff, who must be encouraged to regard training with a positive attitude. After all, training attitudes start at the top and work their way down.

#### ***The Advantages of a Well-trained and Highly Motivated Staff***

The reputation of each library service will be made or broken by the reception of the individual reader by the individual member of staff. In these days of highly complex and diverse services it becomes more essential than ever to ensure that staff are well trained to provide a more than competent service to the public. Encouraging the staff to feel involved in the running of the library, to feel responsible for their job and to feel part of the organization, however small that part may be, is the job of a good manager and trainer.

The advantages are various: to the employer there is improved efficiency, accurate but difficult-to-measure output, and a skilled workforce. To the employee there is job satisfaction, greater opportunity and also personal development, all of which result in an improved service to the public. Well-motivated and interested staff are less likely to become disenchanted with their jobs, less likely to make mistakes and more likely to take pride in what they are undertaking. The staff will be less dissatisfied if they feel part and parcel of the organization and the tendency towards absenteeism will be reduced.

The person who takes the odd day off here and there without really being ill is a person who is basically dissatisfied with his Job. I am not suggesting that training will always provide a solution, but proper training carried out to integrate the staff and involve them in the work of the library, will in the long run help to alleviate these problems. A high staff

turnover at any library costs that library a lot of money in recruitment and interviewing time. This is a large investment in library terms and a good employer should not only aim to realize the full potential of his staff but should also aim at making this investment in staff a successful enterprise. In libraries where staff turnover is high it may well be worth while looking at the staff training programmes to see if they can be used to help reduce the number of resignations. Of course there are always factors affecting the number of resignations which are quite beyond the scope of any training course to resolve: factors ranging from difficulties in finding accommodation to the high cost of fares to and from work. Conversely, one should never aim at having a completely static staff as this could result in a stagnation of ideas and enthusiasm, but the reader will certainly feel more confidence in the library if there is at least a steady core of familiar faces behind the counter.

### **Job Satisfaction**

Any good library manager should endeavour to ensure that his staff derive some satisfaction from the job they are asked to do. It stands to reason that if staff are enthusiastic and responsive about their Job then they will perform better and therefore give an improved service to the readership. How can one make sure that one's staff receive some job satisfaction? There are many things that will affect staff morale, such as salaries and conditions of service, that may be well beyond the direct responsibilities of the immediate library supervisor. As far as these factors are concerned, training can play no remedial role other than that of explanation. But there is a more positive approach to staff motivation, and that is to use training to ensure that every member of staff, at each service point, becomes involved in the activities of the library and becomes part of the library team.

Being shown how to do a particular task, being told why it is necessary and being told or 'rewarded' when a job is well done, all contribute towards a member of staff taking pride in his job and working conscientiously. His work and efforts should be recognized by the supervisor and he should be told when his work has helped and been appreciated. In other words, a member of staff should never be taken for granted. The supervising librarian will need instruction in managing personnel as well as the ability to impart on-the-job training clearly and succinctly. Knowing how to manage people and staff and how to encourage them to give a good performance by being appreciative and thanking them for a job well done, is a talent that does not come naturally to all supervisors. All this may sound like common sense or common courtesy but it is quite amazing how often these points can be forgotten or overlooked in a day to day work situation.

If a member of staff knows why he has been asked to do a certain job, and has been shown how to do it efficiently, he is more likely to do the job willingly and effectively than a person who has had a task badly explained and doesn't understand why it is necessary anyway. Making sure that a member of staff understands the job he is doing is therefore very important for job satisfaction. Systematic training of staff will help to ensure this, and at the same time will benefit the readers using the library, who will be served by a knowledgeable and helpful staff.

In the long term job satisfaction may help reduce staff turnover and therefore help reduce staff advertising costs and the amount of senior time taken up with interviewing and staff selection.

### ***Improved Service to the Users***

Having training courses in any library ensures that the staff who are participating in the courses, teaching or talking about their jobs, have actually to think positively about the job they are doing and what their aims and objectives are or should be. The training officer who organizes these training courses can not do all the training or give all the instruction himself. He must use specialist librarians to instruct in their own subjects.

The specialist librarian cannot give instruction about his job unless he has sat down and written a job specification with written procedures, written routines, and clear, easily understandable statements of policy. Having done this and crystallized his own ideas, it becomes easier to teach the subject or to train someone else in that speciality.

Training should not be undertaken solely for training's sake. It should meet a specific need, either of a member of staff or of the library system. Training courses must have aims and objectives. Increasing staff involvement is only one side of the coin, and it is important to remember that the ultimate objective must be to maintain a library service of a reasonably high standard and constantly to try to improve that standard. This small but vital point should not be forgotten, The library exists to make information and materials available to the public; it does not exist simply for the pleasure or otherwise of the librarian. Bearing this in mind, training courses must be run to teach staff not only how to exploit the stock but also how to deal with the great variety of people who will be using the library.

### ***Training Responsibilities in Libraries***

It is important to develop a training mentality in the library system. Any training officer appointed to a new post may have an uphill Job, for initially he must prove the value of his training courses to the rest of the

senior staff, some of whom will be extremely sceptical about the value of training and may, for example, try to prevent their staff attending training courses or refuse to attend themselves. A training attitude or mentality must be nurtured and developed until training is acknowledged as being beneficial to the library and the staff. However, most good library systems now recognize the need for internal as well as external courses, and certainly most recognize their responsibility to accept students on fieldwork attachments.

Libraries in the developed world have this responsibility to receive students on fieldwork attachments for practical work, either from their own country or from abroad. These attachments can be of the utmost value to students in giving them some practical experience of library and information work and by giving them an opportunity to discuss library problems with a wide variety of practising librarians. The benefits of these attachments are not entirely one-way. There is bound to be some interchange of ideas between the librarian and the visitor which can only be a good thing, but in addition the host librarian must have made some effort to present the visitor with a short synopsis of his job. He may even have worked out some kind of brief training programme for the student to follow, rather like programmed learning, and to have done this that member of staff must have sat down and thought clearly about his own job before attempting to describe it to a third party.

Training of staff must be accepted as part and parcel of the library routine. It should never be regarded as an optional extra which is vulnerable to be cut back in times of economic stringencies or when the work load is particularly heavy. Training is a service-enhancing necessity. Its benefits must be made obvious and training must be valued by the organization. Therefore training courses themselves must be viable, important and relevant to the organization.

In times of economic stress it becomes more desirable and essential to have well-trained staff as more pressures may be put upon them. In developing countries, with limited library resources, it is even more important to have well-trained staff. In both situations few staff may be available, vacancies may be difficult to fill or left unfilled, and a greater interchange of staff between departments or general mobility may be required. At times like this, unless there is a real commitment to train, it becomes very tempting to refrain from organizing training courses altogether, since this tends to take the staff temporarily away from work or service points. In fact this is a time when training becomes more crucial than ever, as the staff must be able to continue to give a good service to the readers. Training officers, or those librarians with training

responsibilities, must be very wary of this situation developing and insist on people being spared from service points to attend relevant training sessions.

Many well-organized library systems have a responsibility to prepare young people before they attend library school. This can either be through some formal trainee scheme or informally, by encouraging staff to qualify. In this context no library can afford to ignore its training responsibilities and must accept that it has a duty to help these young people prior to their attendance at library school. This help can take various forms depending on the facilities available. Visits can be arranged to other libraries, specialist librarians can talk to them about their jobs or, more simply, a well-stocked staff library can be made available to them.

### **Identifying Training Needs**

Identifying training requirements need not be a difficult task and there are two simple ways of looking at the problem. These are the needs of the organization and the related needs of the individual. The requirements of both can sometimes be met by the one training course and need not be diametrically opposed. For example, all new staff should undergo an induction course to introduce them to their new job. They will need certain basic instruction ranging from knowing the opening hours of the library to knowing when pay day is. The library needs to get these new recruits operational as soon as possible, as effective members of staff, so this type of course can serve both types of need.

The librarian or training officer should know the standard of work required by the organization and a training need is immediately apparent if not everyone is of the required proficiency level. Training can be of all types and the training officer should look at all staff levels to ascertain training needs. There are, as mentioned above, induction courses for all staff regardless of the level at which they enter the library service. Then there is operational training, or on-the-job training to teach and improve job performance. One can look further ahead and consider development training, which means not training staff to do a particular job but preparing them for possible future promotion. Whilst not wishing to encourage people to have aspirations above their abilities, it is good managerial planning to have a pool of people who are capable and trained to take on a job at a higher level.

The introduction of a new technique or a new service will highlight the need for training to ensure that all staff know about the new event, and it must be obvious that staff will need training and instruction in the use of new techniques. The need for both induction and this sort of training

is fairly simple to identify. New legislation or a new policy decision by the governing authority, will necessitate further training for library personnel. Again, in cases like these staff will need to be trained to meet new statutory requirements, whilst new policy decisions may often create a change in the system, underlining the need for retraining. Here it will not be adequate to explain a change, but one must explain the scheme, indicate how it will work, and how it will affect the service, in a clear and concise way, allowing plenty of time for questions.

If a library has a high staff turnover, the training officer may well consider it worthwhile to institute a system of exit interviews to find out if there is a problem and if training could help resolve it and so reduce the turnover. Resignations may be coming in for a variety of external reasons, but if staff are leaving because of low staff morale, or disenchantment with the job, these may well be problems that reveal a training need. Staff may, for example, be resigning from one particular branch library and the cause could well be the individual in charge of that library, who may not be managing it effectively, or who does not have the ability to motivate his staff. This highlights a very pertinent training need for that senior member of staff. Other training needs will be brought to light by complaints from readers. If one has a well-trained staff these should not be all that common, but a genuine complaint should be investigated and efforts made, through training if necessary, to rectify the situation and to make sure it will not happen again.

Much of the training will not be undertaken by the training officer, who may simply be responsible for the more formal organization of the courses. On-the-job training is undertaken by the senior staff at each library, who may therefore encounter more day to day problems and training needs than the training officer. Communication must be regular between supervisors and the training officer, who ideally must maintain close contact with these supervisory staff. Training needs may also become apparent on talking to the senior and junior members of staff. This may be in the form of feedback on courses already held or just by a chance comment in a conversation. The training officer needs to be sensitive to the moods of the staff and their implications, in case they reveal a hidden training need. Training cannot be static. It must be capable of change and alteration to meet new situations and therefore training itself becomes a continuing process.

Some libraries operate a Career Progression Scheme, which automatically means that each member of staff is assessed annually by his supervisor and also given an assessment interview by a more senior member of staff. These interviews will prove invaluable for assessing

individuals' work performance abilities and will also highlight any personal training need, as well as becoming a forum for discussing training needs of individual members of staff.

Identifying training needs is a fairly straightforward process. But one must take into account the various human differences of age, ability, experience, educational background and so on. There are different levels of training to suit different abilities and the training officer has a responsibility to assess the level of training required by each individual or group of individuals. On the practical side, the training officer should never go cold into a training session. He should allow himself time to become susceptible to atmosphere, modify his training course around the needs of the moment and adapt himself to the needs of his trainees.

There is, then, training for those within the library system, those new to the system and library workers at all levels. There is also the organization of training courses for visitors from overseas, for students, and for the training of library users, plus organization of possible training modules for committee members, governing bodies or visitors from other library authorities.

### ***In-service Training Courses versus External Courses***

The obvious and immediate advantage of internal training courses is that they can be directly related to the libraries' needs. Other advantages are that library experts and lecturers are already on site and courses can be run reasonably cheaply, as accommodation and equipment, heating, lighting and stationery do not have to be paid for directly. The cost of these items will be absorbed in the general library budget. There are other hidden costs, such as the amount of staff time taken up by the training course, but items like these will be difficult to charge to the training budget. So on the face of it internal training costs are relatively low.

In-service training is most beneficial as the trainers know the library and the organization and know exactly what is expected from the course. An outside lecturer will not automatically have this knowledge and may spend precious time trying to assess the requirements. If he has not been properly briefed the course could misfire completely. Internal training courses must never be allowed to become stereotyped and dull as they will lose their impact and fail in their objectives. Here external lecturers provide that extra bit of stimulus to an internally organized course and, with some careful planning, it need not be expensive to arrange for an outside speaker. For example, one's own authority, school, college, university or organization must have some experts who could be asked to lecture, perhaps on management, finance or computers. The choice can be wide.

It is especially beneficial to use an outside expert to address more senior members of the staff as they are more likely to listen with an unbiased ear to whatever he is lecturing about. He may well be saying exactly the same thing as the training officer or another member of the staff would have said, but he will perhaps hold their interest just that little bit more and give more impetus to the programme for the very reason that he is the 'outside expert'.

Internal training courses held *in situ* in the working environment are liable to all kinds of interruptions, from either the telephone or the general public. For this reason it is essential for all internal training modules to be held in a separate room away from the hustle and bustle of the library, which can be distracting. This will help the staff to have a chance to think objectively about the job rather than subjectively.

Externally organized courses score here as they are held well away from the work place and the staff are not subjected to endless interruptions. Sometimes, because of the subject content, an external course may be the only answer if there is no one on the staff who can help. External courses can indeed be very stimulating, not only because of the course contents, but also because they enable the staff to mix socially with other professionals working in similar libraries and to discuss joint problems informally. Therefore, these professional external courses have a hidden value in encouraging professional communication. After all, we are in the business of communication.

The main problem is that external courses must be paid for in hard cash, and this factor can limit the number of staff that can be trained in this way. In addition to the cost of the course itself, there will be further expenditure on travel, accommodation, and subsistence, which can make the whole thing prohibitively expensive. In certain cases it might be cheaper to hire the outside expert to come in to the library, especially if there are many staff who need to attend the course. In this way one will have the advantages of an on-site training course, plus external expertise and will still only be paying one person's travelling expenses, hotel and subsistence, as lecturing accommodation, lighting etc., will be provided by the library. If even the cost of this looks prohibitive, the training officer should look around at neighbouring libraries, as they might well have the same training needs and might be willing to share the cost of an on-site course.

Whether an internal or external course is finally decided upon, the trainee should be properly briefed as to why he has been selected, what is expected of him and whether he will be required to write a short report.

## **Open Journal Systems and Research**

### ***The Public Knowledge Project's Open Journal Systems***

This presentation focuses on the activities of the Public Knowledge Project, particularly on developing country applications and issues. A federally funded research venture at the University of British Columbia, Canada, the project's driving principle is that knowledge should be free, hence, their mission to promote a world where knowledge is free. Over the last four years the project has involved research on ways to improve the scholarly and public quality of academic research through the use of online technologies. We have been gathering data on the impact of open-access publishing in Cameroon and South Africa, as well as on policy makers and professionals in Canada.

In addition to political, economic, legal, and social analysis of open-access publishing issues, the Public Knowledge Project just completed an open-source software system, Open Journal Systems, for managing and publishing e-journals. The system has been designed to be installed and run locally by journal editors with minimal technical skills and technology access.

The system will support open-access, peer-reviewed publishing with international collaboration among editors, and offers precise metadata indexing of published materials on a global scale through the use of Open Archives Initiative standards. This free system is intended to reduce the cost and raise the quality of publishing in ways that make open-access publishing a realistic alternative to the traditional model. Open Journal Systems also includes tools that support greater public and professional use of published research.

A research project is being carried out in Kenya focusing on possibilities of using new publishing technologies to enhance research capacity development through publishing and sharing of information related to research findings in the public sector, particularly in African universities and government departments.

This research will establish the prospects of greater participation in the international network for the creation and distribution of knowledge by exploring the prospects, processes, issues, and hopes involved in initiating an online scholarly journal.

Specifically, the ongoing research project is investigating whether the Open Journal Systems can be used to boost research capacity through sharing of knowledge and information, locally and internationally. The ongoing study is guided by the following objectives:

- Establish from the perspective of the scholarly community-teaching staff, students, librarians, and policy makers-the potential for electronic journals to contribute to both information exchange and research capacity development.
- Explore the technical and economic feasibility of supporting electronic journals that can contribute to knowledge circulation and sharing among scholars and other stakeholders.
- Find out whether such an electronic journal can facilitate local knowledge creation within a global exchange of knowledge, as well as foster networking among peers.

The hypothesis is that from technical, economic, social, and intellectual perspectives, new publishing technologies can provide a means of improving Kenya's research capacity by contributing to local knowledge development, as well as to a larger global exchange of knowledge.

The expected outcomes of the research project are:

- an informed analysis of the challenges, possibilities, and obstacles in pursuing online scholarly publishing in African universities as a means of improving the universities' research capacities and of providing greater participation in global knowledge systems. This analysis will serve as a guide for establishing new online journals in different fields, as well as for building better publishing software.
- an informed body of scholarly researchers actively participating in knowledge creation, sharing, and dissemination, as well as professional debates and discussions in the relevant fields of knowledge.
- improved networking among faculty, professionals, and policy makers, emphasizing use of scholarly and local works in education.
- greater global visibility for African scholarly publishing, particularly Kenyan knowledge products and scholarly contributions. It is hoped that the e-journal will give the stakeholders the means and voice to be heard.

### **Online Publishing**

Although the research is in its initial stage, the findings are quite encouraging. A baseline survey has been done to find out whether there have been attempts to apply the new technologies for publishing and sharing research findings, identify the challenges and successes in this area, and establish possibilities of networking. There are various organizations in Kenya involved in online journal publishing. Currently several journals (about five) are publishing online with the help of Bioline

International. Their field of specialization is mainly the sciences-biotechnology, medicine, insect science, food technology, and nutrition. The host organizations receive manuscripts from authors in hard and electronic formats, edit them, and organize them for peer review. After corrections are made the editors of the various journals send them to Bioline for posting on the Bioline Web site, where the abstracts can be accessed freely. Access to full articles requires a subscription.

The African Journal on Food, Agriculture, Nutrition and Development, formerly known as the African Journal of Food and Nutritional Sciences, has struggled to publish in both print and online even with the support of well-wishers and friends. It was established in Kenya to provide a platform from which issues and scientific information concerning Africa could be effectively addressed and shared. The journal was established largely as a capacity-building initiative.

The impetus was for professionals in nutrition, agriculture, and development, who were native to or living in Africa, as well as non-Africans with an interest in Africa, to have an opportunity to come up with practical and sustainable solutions to the continent's problems. It would also encourage adoption of the writing culture among budding professionals in these fields. The title of the journal was changed because it was shared with two other journals; they also wanted a title that would reflect their main goals of linking research to development. The journal is peer-reviewed and has an editorial board, along with a secretariat composed of recent graduates from the university in the areas of food science and technology. It has its own Web site, and publishes full articles in English and abstracts in both English and French. Access to full articles and abstracts is free. For translations into French the journal relies on friends.

The Kenyan research study has identified several benefits of online publishing for the journals surveyed. Online publication increases visibility for the journals, their authors, and the research findings and discussions. Researchers feel that the online journals have given them a voice to be heard outside their borders. Publishing online also increases readership and exposure to more sources of information through the Web site links. It has encouraged partnerships and collaboration among authors in related fields locally and internationally. Works can be published and accessed faster than before.

Several challenges facing online publications were also identified. Funding, especially for printing costs, is a big problem. Some journal editors interviewed saw no hope of surviving if alternative funding sources were not found. Distribution is another problem, for mailing costs are quite high. Sluggishness on the part of some editors, their assistants, and

reviewers can lead to delays. The editorial and reviewing jobs were voluntary in all journals visited, and there appears to be a lack of incentive. There is also a lack of training for some reviewers, especially on scientific writing and research methodology.

Other challenges identified include the poor means of communication and lack of access to technology. Readers in rural and small urban areas in Kenya cannot enjoy the benefits of online publishing systems directly. If print copies are not also available there is less readership of the journals. There was also a lack of awareness of the new publishing technologies and the way they work. Some journals may not understand the potential of these technologies, which in some cases are viewed as a threat to their survival.

The Kenyan journals found many ways to cope with the challenges. In terms of funding, most journals rely on the proceeds from subscriptions and advertisements to cover their operating costs. A few rely on the goodwill of friends, well-wishers, and donors. In terms of access to technology most of the journals depend on the sponsoring organizations to publish online.

These organizations are located in the capital city, Nairobi, where communication is not a big issue. All of the organizations visited produce both print and online copies to ensure that the technologically disadvantaged get access to the journal. Journals rely on the efforts and networks of their editors-in-chief and the goodwill of their editorial boards to overcome editorial and review challenges. Some journals are organizing in-house training sessions to coach inexperienced editors and editorial assistants. Lastly, seminars and workshops on open access journal publishing are being conducted with assistance from donors to expose stake-holders to the new technologies.

### ***The Situation at the Universities: The Case of Kenyatta University***

A visit to Kenyatta University was made to observe and interview academic staff and librarians about developments in new technologies and library resources. During the visit it was found that the university had made great strides in embracing new technologies, and use of information and communication technologies was also increasing. The university has constituted an ICT board under the deputy vice-chancellor to oversee implementation of ICT policies. The library has a seat on the board.

The university has been the recipient of many ICT-related donor projects that have boosted its ICT base (*e.g.*, the World Bank's African Virtual University, the Institute of Continuing Education through distance learning, and the electronic Supply of Academic Publications (eSAP) project).

The university is also the depository of World Bank publications, both print and online. Kenyatta University also has many Internet cafes where staff and students can access all the information they need, and the library is being automated and computers have been purchased to facilitate the process. The library is working on a retrospective conversion of its catalogue. It also has a few computers connected to the Internet to which postgraduate students and staff have unlimited access.

Kenyatta University publishes the East African Journal of Science: An International Journal of Pure and Applied Science, Chemchemi: International Journal of the School of Humanities, and the Kiswahili Journal. The latter is published sporadically because journal publishing is seen as very demanding and less rewarding. As such, academic staff would rather engage in writing school textbooks that earn better money. Journal subscription has decreased since the 1980s due to reduced budgets among university libraries.

The acquisition librarian said at times the budget could not purchase even five journals and felt that equipping the library to be the centre of research capacity development was not given priority. However, it was noted that there is slight improvement in the 2003 financial year; budget allocation for journals has gone up to K Sh. 1.1 million (about US\$14,000). Even with this improvement the library can only subscribe to core journals, at times only one per department. The limited budget requires the university to buy journals in single copies through an agent. Other journals are acquired through donations, though these have decreased over the years. Online Resources. The university library's focus is to expand its electronic resources.

The library has Internet connectivity and allows postgraduate students and academic staff unlimited access. It has access to electronic and online journals (close to 8,000) and bibliographic databases with abstracts, including Dissertation, Psychlit (psychology), TEEAL (environment and agriculture), POPLINE (population), EBSCO, Humanities Index, Education Index, Medline, and Elite. Most of these databases are available on CD-ROM. The library offers online publications by the International Network for the Availability of Scientific Publications' (INASP) Programme for the Enhancement of Research Information (PERI), including EBSCO online, Blackwell Synergy, AJOL, and the IDEAL library. It also offers electronic books, primarily World Bank publications. INASP/PERI has been helping in paying for the licenses of the databases.

Another new project in Kenyatta University is eSAP, whose mandate is to train library staff, faculty members from various departments on Internet, publishing, and Web design. The project also aims at facilitating

electronic publishing of resources from the university, starting with business and development studies. The project is still at the infancy stage and has no editorial board. Initially the software was to be installed at Kenyatta University, but due to infrastructural (communication mainly) problems, inadequate articles to publish in the targeted disciplines and editing and reviewing problems, they shifted the base to the Netherlands.

Donors funding the Kenyatta University's electronic journal initiative include the World Bank, INASP/PERI, the Rockefeller Foundation, and Cornell University (host to the TEEAL databases).

Building research capacity through online publishing has encountered many challenges, including inadequate exposure to and training in computer applications, especially the Internet, even among the library and academic staff; inadequate infrastructure, including equipment (computers and their accessories are few), furniture, and communications (reliable telephone connections); lack of a technical support staff; and low morale of likely authors due to low salaries paid in an ever-rising cost-of-living environment. The dilemma for these potential authors is: devote time to research and writing or to looking for means of survival? The challenges related to editing and reviewing stem from the incentive structure related to these activities and the lack of financial resources. There is also a concern about the sustainability of the resources after the donor has left.

### **Recommendations Regarding Online Publishing**

There is a need to create an awareness of the Online Journal Systems project and its long-term benefits. There is also a need for capacity building for would-be editors and reviewers, especially in scientific writing and research methodology, even at the university level, as well as for technical staff and library staff.

Budgets must accommodate the purchase and maintenance of equipment, especially computers and communication gadgets. There is an urgent need to look for ways to motivate authors, editors, and reviewers, such as training, experience-sharing workshops, and networking opportunities.

### **Library Networks : Myth and Reality**

#### ***Evaluation: Specific Examples***

Most librarians participate in a number of management or system studies in the course of their careers. Some conduct the studies, others are subjects, most implement the recommendations or use the findings in decision making. Even if one's involvement is limited, every professional

should understand the principles and objectives of a scientifically conducted management study and know when a study is worth undertaking, who is most qualified to do it, and how best to act on its recommendations.

### **Who Should Make the Study?**

Until recently, few librarians had a sufficient knowledge of scientific management to feel comfortable in the role of systems analyst. For many years it was customary to import consultants from business and industry. Although these consultants were usually proficient in the use of analytic tools, they often did not understand library operations. They approached problems as though in an industrial setting, with a tendency to view activities solely in terms of cost. The importance of service objectives were minimized, misunderstood, or ignored.

This situation has changed somewhat in recent years as several management firms have strived to overcome these shortcomings. At the same time, more librarians have become competent in the use of analytical tools. It is now common for a large library to retain systems analysts as full-time staff members. Smaller libraries may rely on the skills of staff who also perform other responsibilities—for example, a children's librarian, cataloguer, or department head who may be asked to double as an analyst whenever the need arises. Some libraries, however, still prefer to employ outside consultants.

There are advantages and disadvantages to each alternative. Regular staff members can harbour personal biases or be so caught up in internal politics that their objectivity is imperiled. Outside consultants can speak more candidly on controversial issues since they can leave the scene once the project is completed. On the other hand, staff analysts will be available to assist in the implementation of a study's recommendations after the outsiders have departed, and the ability of an organization to follow through is vital.

The ideal combination of talents is a librarian well versed in the fundamentals of systems analysis. Trained librarians are best prepared to understand what scientific-management techniques can accomplish and to recognize the limitations of these techniques in a library setting.

### **The Steps of a Management Study**

The strategy one employs in making a management study is basically the same whatever the level of complexity. There are six steps: 1) defining the problem; 2) gathering the data; 3) analysing the present system; 4) designing an improved system; 5) implementing the new system; and 6) evaluating the new system.

### **Defining the Problem**

An organization usually does not contemplate a management study until it has identified a problem or deemed a change in the system necessary. It may be a member of the library staff, such as a library assistant, a department head, or the director, who brings the situation to light. In many cases the systems staff member points out the problem, often before it becomes apparent to other employees. Regardless of who first identifies the need for a study, someone in a position of authority must authorize it.

The analysis must have clearly defined boundaries: the operations (people, tasks, processes) to be studied must be clearly distinguished from those to be excluded. One should define the problem in the context of the library's overall objectives, otherwise one is liable to diagnose the problem incorrectly. For example, in recent years the profession has gradually shifted its emphasis from acquisition and organization of collections to exploitation of a library's resources. A library that is apparently able to acquire and organize its collections efficiently may not achieve its primary objective if those materials are not also readily accessible to its readers. Incidents of such imbalances are common in libraries.

**Selecting an Area for Study:** There are several guides that an analyst can use to identify problem areas most likely to produce worthwhile results. Special attention should be given to: 1) production bottlenecks; 2) jobs that are frequently performed; 3) jobs that require frequent movement of people, forms, or equipment; and 4) jobs that require large budget expenditures.

**Production Bottlenecks:** Bottlenecks in any procedure should always receive prompt attention. A breakdown in even a seemingly minor link in a work-flow chain can be a serious matter. For example, adhering call number labels to book spines is a mechanical task; nonetheless, it is a necessary prerequisite to circulating a book. From the point of view of a user it is just as serious if a delay occurs in labelling as in cataloguing, for in either case the book is delayed and the user must wait. A bottleneck can be symptomatic of several problems—staffing shortages, poor supervision, cumbersome procedures, and so on.

**Jobs That are Frequently Performed:** The more often an operation is performed, the better a candidate it becomes for analysis. Even a small savings could be significant because of the high frequency. For example, suppose a public library orders 10,000 books a year; suppose further that by introducing a simple work-flow improvement one were able to reduce the average time needed for ordering by one minute per book.

This seemingly insignificant adjustment would produce an annual savings of 10,000 minutes, 167 hours, or a month's labour by a full-time employee. Searching, typing book orders, classifying and cutting books, reproducing catalogue cards, filing cards, charging and discharging books, and shelving are obvious examples of high-frequency processes. In contrast, a project such as expanding a card catalogue is not undertaken very often. Even though a systems study would no doubt save some time and expense for any process, a study of more frequently performed processes would produce more tangible benefits.

***Jobs That Require Frequent Movement of People, Forms, Equipment*** : "Movement" is not necessarily limited to movement between two distant points. Short distances multiplied by high frequency equal long distances. Materials, forms, and equipment should be placed in the area where they will be used. Related library routines should be located so as to reflect the natural flow of the work and thereby minimize the total steps.

The increase of a few steps for one person might save thousands of steps for others. This analysis of movement is inextricably tied to the study of functional library architecture. What is the optimum physical arrangement between acquisitions, cataloguing, reference, the public catalogue, and the major bibliographical tools? One must analyse such factors as who on the library staff uses the public catalogue? How often? How far do they have to travel to consult it? How long does each trip to and from it take? And so on.

***Jobs That Involve Large Budget Expenditures***: A job that is expensive is an obvious candidate for study. High cost alone is insufficient reason for elimination or even partial curtailment. Reference service in a large library is expensive, yet who would suggest not offering it? It is reasonable, however, to seek ways to reduce a high-cost centre if savings can be made without reduction in the service. For example, some libraries, upon analysing the nature of reference questions, have concluded that many are directional and need not be answered by a professionally trained librarian. Less-costly personnel would not necessarily lower the quality of service. In today's library, computer-based systems are prime candidates for study because of their sizable operating costs.

***Distinguishing between Symptoms and Problems*** : In defining a problem an analyst should take care not to mistake a symptom for the problem. To illustrate this point, consider how people from different levels of the organization can view a problem from different perspectives. Two examples:

### **A Case of Uneven Work Flow**

**Division Head's Perspective:** The work flow in the department is uneven and there is a need to redesign jobs.

**Section Head's Perspective:** The people in this section do not work at the same speed; some are very fast while others barely work up to minimum. These individuals are not carrying their share of the load.

**Worker Number 1's Perspective:** Some of my co-workers just do not care.

**Worker Number 2's Perspective:** All was going well until Joe started cutting out. You know, Joe doesn't give a damn about the rest of us.

### **The Departmental Bottleneck**

**Division Head's Perspective:** This section is not as productive as one has a right to expect; I wonder if a procedural bottleneck has developed somewhere within the unit.

**Section Head's Perspective:** The staff do not take time to check the accuracy of their own work, so I must cover for their carelessness.

**Workers' Perspective:** The Section Head has a compulsion to check all our work. The Section Head is a real [expletive deleted]; we are all fast, careful workers.

The manager who authorizes an investigation, on the advice of an analyst or colleagues, may decide to redefine the problem in light of additional information or terminate the investigation altogether once the problem is identified. An analyst, too, may also recommend a change in or termination of a study as a result of learning that what was first believed to be the problem was in reality only a symptom.

### **Gathering the Data**

One must gather data in order to document a procedure or a system. Moreover, it is this information, organized and analysed, that will expose deficiencies and help one design, develop, implement, and evaluate an improved system. The nature of the data to be collected will vary depending upon the problem: in technical services many tasks can be described in quantifiable terms; that which is performed at a reference desk will be more difficult to measure.

What vexes an analyst is not scarcity but rather overabundance of facts, facts that must be sifted through, evaluated, and arranged. Often the crucial task is to develop a methodology that discriminates between needed and unneeded information. There is a limit to how much can be

derived from a given body, of data, and one should resist the temptation to generalize beyond its usefulness. One must also consider the costs in time and effort to collect the data. More than one analyst has been chagrined to learn that it had cost more to gather the facts than was saved by adopting the recommended system.

One should consider the following points:

1. Time-how much time is available to complete the study;
2. Money-what is the size of the budget available to the analyst; and
3. Current records-what data are already available.

An analyst will learn from experience to judge when enough facts have been collected and the time has arrived to begin analysing the present system.

### **Analysing the Present System**

Once the data are gathered an analyst should be able to model the process, problem, or system under investigation-that is, describe it precisely and understand the interrelationships among its elements. The analyst should be so familiar with the system that it could be replicated elsewhere given sufficient time and money,

The data collected will usually describe the work that each staff member performs or the flow of forms or materials as they proceed from one work station to another. One should become accustomed to asking questions beginning with the words *why, what, where, when, who, and how*.

1. Why. Why is a process formed? Is it necessary to achieve the unit's objectives?
2. What. What is the purpose of the process in relation to the objectives of the library? What does it contribute to the overall system?

The what and why questions can sometimes be combined. For example, why is a given set of files maintained and in what way are these files employed?

3. Where. Where is the job performed? Where else could it be done? If work stations involving related jobs could be grouped together, time-consuming problems of transportation might be reduced or eliminated.
4. When. When should a job be done? Could a job be performed at a different time to better advantage? For example, circulation-discharge routines might be performed during slack periods rather than during rush hours.

5. Who. Who should perform a job? Who possesses the best combination of qualifications? Can the work be performed by a person with less training? The who question involves the separation of duties among personnel classifications and between people and machines.
6. How. How is a job performed? How might it be done better?

One can use these questions to examine almost any managerial problem. A checklist will buttress this simple approach. The analysis of data allows the manager to better understand the Current situation. Questioning assumptions and traditional practices may spark one's creative processes. Some libraries, in order to facilitate creativity, appoint task forces of qualified staff members to review the data collected during the course of a study. This provides staff with an opportunity to contribute, particularly those who may not have been directly involved in the study and who may not harbour unusual biases, but who do possess an understanding of the present system.

#### **Operation Checklist**

1. Can any steps be eliminated?
2. Can any steps be subdivided?
3. Can any of the operations be combined?
4. Can the sequence of steps be altered?
5. Is there any unnecessary transportation?
6. Can part of the operation be performed more effectively as a separate operation?
7. Could a lower-paid employee do the operation?
8. Can another person do the job better?
9. Can a machine do the job better?
10. Are work loads balanced?
11. Can peak loads (if activity be eliminated)?
12. Can delays be eliminated or used for other operations?
13. Can "bottleneck" operations be eliminated, rescheduled, etc.?
14. Can the operation be done in another department to save time?
15. If the operation is changed, what effect will it have on other operations in the system?
16. Can spot checks (or inspections based on sampling techniques) be employed instead of 100-percent inspections?
17. Is work being unnecessarily duplicated?
18. Can a patron, vendor, etc., be consulted to make operations easier and more economical?

**Problems**

1. What are the pros and cons of hiring an outside management consultant?
2. Give some examples of frequently performed library tasks. Why are they good candidates for management study?
3. Describe some typical library work situations that may require frequent movement of people, forms, or equipment.
4. Give some examples of typical procedural bottlenecks in libraries.
5. Management, professional, and clerical personnel often see a given work situation from differing points of view. Illustrate this with a typical library-example.
6. What are the six key words to use in analysing a procedure?
7. Describe some common examples of government and professional constraints upon library systems.
8. Why is a clear understanding of organizational objectives a necessary prerequisite for successful management studies?
9. State three or more appropriate objectives for a given library circulation department.
10. What specific approaches are suggested for developing an improved system?
11. Describe typical peak and slack periods of activity for various types of libraries. For each case explain how the library might or does try to accommodate this variation.
12. To avoid overcomplexity library systems should be designed to accommodate the normal transaction. Special subroutines should be designed to handle the exceptions. Illustrate this principle in terms of some typical library procedures.

***A Cost-analysis of Cataloguing at the Universiti Sains Malaysia Library for 1975***

There have been studies on the cost of cataloguing in the developed countries, but these have been done more than a decade ago (1, 2). In recent times, reports tend to be comparative studies of the manual cost of cataloguing to the cost of automated cataloguing for the purpose of the library automation (3, 4). In the case of Malaysia, no cost-analysis of cataloguing has been reported in the literature.

It is therefore in this context that this study will primarily provide a guide to cataloguing cost in university libraries, with special reference to the Universiti Sains Malaysia Library. Secondly, in view of the fact that

computerised cataloguing may be a distant possibility, this cost-analysis will provide a basis of comparison of the cost of manual and automated systems.

The Universiti Sains Malaysia Library was established in June 1969 with fifty books. At the end of December, 1975, the number of accessioned items stood at 139, 440, indicating an average annual intake of 21,500 volumes. Daily cataloguing statistics have been kept on various aspects of the cataloguing process, such as number of titles catalogued, number of preliminary checking of catalogue entries, number of catalogue cards filed, etc., by all categories of staff in the Technical Processing Division since April 1971.

In 1975, the cataloguing output was most encouraging. This is attributable to the fact that most of the new Library Officers, namely, the professional staff, having received sufficient experience and training in cataloguing began to show increasing competence in their work. Moreover, at this time, the number of staff members in the Division had almost reached the optimum level, comprising one Assistant Librarian, six Library Officers, six clerks, four typists, two junior technicians and two attendants. It was thought, therefore, that this would be an opportune time to study the cost of cataloguing in a newly-established institution and compare it with the cost of cataloguing in a more established institution.

Before attempting to provide an analysis of the cost of cataloguing, it is necessary to describe briefly the process of cataloguing in this Library, namely, the functions of the various levels of staff and the workflow in the Division. This is essential to the understanding of how the cataloguing cost is derived.

As in most university libraries in Malaysia the *Anglo-American Cataloguing Rules, 1967*, the *Library of Congress Classification* and the *Library of Congress Subject Headings* are used as tools in cataloguing. In this Library, the provisions of AACR are adhered to quite closely. With respect to the classification process, changes are automatically made to topical, name and geographic subdivisions of the class number, and the book number according to the Cutter-Sanborn table. Classification changes are also made in certain well-defined areas to suit local needs. However, these are kept to a minimum.

In the cost of cataloguing, it is realised that a major cost is attributable to the salaries of professional staff and any reduction in their clerical chores would reduce the cost of cataloguing. There is also the need to avoid duplication in the preliminary checking process and cooperation with the Acquisitions Division of the Library has enabled us to eliminate one step

in the cataloguing process. It is also essential to have a systems analysis of the work procedure and flow in order to eliminate duplicative and non-productive work.

The workflow in cataloguing involves the transcription of catalogue entries found in the *L.C. National Union Catalogue* onto workslips by clerical staff. The transcribed entries are then edited by the Library Officers who would make classification and subject heading changes where necessary and Cutter the book number. This is followed by the assigning of the number of catalogue cards to be printed. The main entry and added entries are verified by the clerical staff in the main catalogue to ensure consistency in the form of heading. Subject to the checking by the Head of the Technical Processing, the catalogue entries are sent for typing of the catalogue masters, after the book cards, book pockets and call numbers for the spine of the books have been typed. After the typing of the catalogue masters and proofreading by the Library Officers, they are sent for offset printing. The main entries for the two dictionary catalogues of the Library, one serving the Main Library at Minden and the other the Branch Library at Gelugor, are extracted from the printed cards. The balance of the catalogue cards is sent for overtyping of the added entries and the adding of the accessions number onto the shelflist. The catalogue cards are then sorted, arranged in filing order and filed by clerks. In the meantime, the book pocket with the inserted book cards and the date due slip are pasted and the processed books sent for recent acquisitions display or to the bookstacks for shelving.

In the case of original cataloguing, the process of descriptive and subject cataloguing are done by the Library Officers while the rest of the procedures are somewhat similar.

Two main aspects of cataloguing cost will be analysed, *viz.* the cost of cataloguing per title and the cost per added copy for items already catalogued. In analysing the personnel cost of cataloguing, the cost of each cataloguing activity is apportioned according to the percentage of time spent in each particular function.

As for the cost of materials, the costing is based mostly on actual 1974 prices. However, any increase in price for 1975 would not significantly alter the overall cost of cataloguing. Other cataloguing-related costs, such as time spent in supervision and training of staff, solving of cataloguing problems, and meeting on cataloguing and classification changes, have been taken into consideration although these costs would vary from institution to institution and would also be dependent on the stage of development of a particular institution. No overhead charges have been taken into account as these are not easily computable.

The total number of volumes catalogued in 1975 was 29,951, comprising 14,999 titles and 14,952 added copies, including 4956 bound periodicals. Of the 14,999 titles catalogued, an analysis of the preliminary checking of catalogue entries record indicated that 78.1% of entries were from the *L.C. National Union Catalogue* whilst the remaining 21.9% consisted of original cataloguing.

### **Cataloguing Cost Per Title**

In the analysis of the cost of cataloguing by title, it is useful to know the cost attributable to each specific group of cataloguing activities. The various cataloguing activities will therefore be grouped under the following headings: Preliminary checking and cataloguing, Card preparation and production, Book processing, and Filing. The following is an analysis of the cost of cataloguing per title based on 14,999 items:

### **Cataloguing Cost Per Volume**

Overall, the cost of cataloguing per volume based on 29,951 is derived as follows:

*Cost per title + Cost per added copy*

From the above cost-analysis, it is apparent that the following are pertinent factors in considering the cost of cataloguing:

1. Personnel cost is the single most important cost in cataloguing, especially the cost of professional staff.
2. With the yearly increment of staff salaries, the cost of cataloguing would increase.
3. Although cataloguing productivity would increase with newer professional staff, the cost of cataloguing would be offset by the salary increase of these staff until a stage of optimum output has been reached, whereby the cost of cataloguing would rise again.
4. The cost of cataloguing is directly related to the work productivity of the staff.
5. The rate of original cataloguing and non-original cataloguing would affect the cost of cataloguing. Generally, original cataloguing would cost very much more than non-original cataloguing.
6. The cost of materials should not alter significantly the cost of cataloguing unless abnormal price fluctuation of materials takes place.

It is concluded, therefore, that the cost of cataloguing per title at the Universiti Sains Malaysia Library during 1975 was \$7.18¢, the cost of

adding an already catalogued item to stock was 53¢ and the overall cost of cataloguing on volume basis was \$3.86¢.

## **Preservation Metadata for Digital Collections**

### ***What we Need to Know-metadata for Preserving Digital Collections***

Documentation has always played a key role in preservation practice. This is not just a matter of academic interest: to manage collections or individual items one needs to know what one is dealing with. There are many instances where documentation provided the only information about processes that had been applied and might need to be corrected.

In managing digital collections and items the need for information or metadata that will support effective and efficient decision-making is even greater than with traditional collections – there is less opportunity to recognise and understand problems just by looking at the object. Often one can only recognise and manage the material itself through its associated information. There is also likely to be a much larger amount of material to be managed, with much shorter preservation cycles, so management processes need to be automated as much as possible, based on easily interpreted metadata.

There have been a number of efforts to develop metadata specifications and sets to support preservation of a variety of digital resources. Because of its pressing business needs to manage both ‘born digital’ and ‘digital surrogate’ collections, the National Library of Australia has tried to find, or if necessary develop, metadata models to accommodate both.

In the absence of other satisfactory models that seem to achieve this objective, the NLA has invested in drafting its own model: a statement of the information it believes will be needed to manage the preservation of its digital collections. An exposure draft for comment is attached.

The draft Preservation Metadata Set draws on our corporate experience in a range of relevant fields:

- preservation, and preservation documentation, of library collections
- management of archives of online digital publications, physical format digital publications, and analogue and digital audio collections
- management of digitisation projects for text-based and image-based collections
- development of logical data models for a specific digital archiving implementation
- website database design.

This means that the draft Preservation Metadata Set is built on considerable relevant experience and thinking about the issues involved. However, we are very keen to subject the draft to critical scrutiny from specialists in all of these fields and others with an interest in managing digital collections over time, especially in a library context.

This proposed preservation metadata framework has been informed by many models. Some are of broad relevance, (e.g. the *Reference Model for an Open Archival Information System (OAIS) Draft Recommendation for Space Data System Standards*), while some came to us as results of data modelling exercises for particular projects (the NEDLIB project and the NLA's own PANDORA project). Some were more refined metadata specifications developed for particular programmes or projects (the Library of Congress-CNRI Experiment Project; The Making of America II Project; the CEDARS project; the National Archives of Australia's Recordkeeping Metadata Standard). One particular starting point for our exercise was the metadata set proposed by the Research Libraries Group (RLG) PRESERV Working Group on Preservation Uses of Metadata, which mainly addressed digitisation projects. RLG invited us to adapt this set to describe a wider range of materials.

While we have learned a great deal from all these models, we accept responsibility for the metadata set we are proposing.

### **What the Preservation Metadata Set is?**

It is most important to realise that our proposed Preservation Metadata Set is intended to be a statement of the information we believe is needed to manage preservation of digital collections. It is meant to be a data output model, not a data input model. It indicates the information we want out of a metadata system, not necessarily what data should be entered, how it should be entered, by whom and at what time; nor does it concern itself with how the metadata should be associated with what it is describing. We believe this model should be applicable to many implementations that may decide to record this information in a variety of ways. This model simply says: 'however you do it, this is what you have to deliver so we can manage preservation.'

It is also important to note that we are focusing solely on preservation requirements. The proposed metadata set does not attempt to deal with anything else. We recognise that in any implementation system there is likely to be an overlap between metadata recorded for different purposes. By focusing on the information we need out of the system to manage preservation, we put aside the question of whether particular elements may already be included in, say, other administrative or resource discovery

metadata. Different types of digital materials, and different archiving systems, will need different metadata support. There may be types of material and processes that are not adequately accommodated by our proposal despite our intentions, and we would welcome feedback.

### **Granularity**

The metadata set is based on the need to manage and describe collections, objects, and sub-objects (which we have called “files”). We have tried to show where we expect the elements in the metadata set to be relevant to these different levels. We expect to make pragmatic decisions about the level at which records are needed, based on the level at which collections, objects and files are managed separately. This model assumes that the digital object is the primary focus of management and description. File and collection descriptions are created when appropriate.

### **Change History**

Maintaining a history of what is being described is one of the essential objectives of any preservation documentation system. We looked at two options:

- maintaining a single record over time, which records all changes and processes applied to the item being described; or
- creating a new record each time the item changes to something different, maintaining a history by maintaining a sequence of linked records.

We chose the latter approach. Managing digital objects and collections over time will mean creating and managing considerable amounts of information about them. We believe that the creation of a new record for each new manifestation will organise this information more clearly and conveniently.

### **Supporting Alternative Preservation Strategies**

It is impossible to determine unequivocally what we will need to know in order to manage digital preservation in the future, so our set of metadata elements necessarily reflects assumptions about our future requirements. Our aim with this proposed metadata set is to support both migration and emulation approaches.

Just what is needed for these approaches will become clearer as we gain more collective experience with them.

### **Some Key-terms**

To minimise confusion, we need to explain some of the terms we have used in the draft proposed Preservation Metadata Set:

- *'Work', 'Manifestation'* – we have distinguished between a work, as a concept, and the physical or virtual manifestations that instance it. Most preservation processes involve managing manifestations. However, we found it useful to recognise that archiving decisions could be made for the work (e.g. 'we will maintain this work in perpetuity'), with different archiving decisions applying to particular manifestations of it (e.g. 'we do not need to keep this copy of it').
- *Repeatability* – because of the approach we have taken (a 1:1 relationship between each manifestation and its metadata record), our comments about the repeatability of information in any element do not refer to a sequence of changes, but to the possibility of multiple bits of information that may be true at the same time; for example, two agencies may collaborate in an archiving decision.
- *Obligation* – we have avoided terms like 'mandatory', 'conditional', and 'optional', because they are so closely associated with data input models. Instead, we use the terms 'essential', 'essential if appropriate', and 'desirable', in their common usages. *Essential* information we believe will definitely be required. Some elements are more relevant to some materials or processes than others, so they may be *essential if applicable*. *Desirable* information will not be critical, but is expected to be helpful.
- *Examples* – we have provided examples wherever they are applicable. In some cases we have found it more useful to give generic examples, which appear in square brackets.

### National Consultative Meeting

The National Library recently convened a meeting of invited publishers and content providers of Australian publications on CD-ROMs and floppy disks, and representatives of the National and State Libraries. Forty people attended the two day forum held at the National Library. The purpose of the meeting was to seek agreement on key principles and an understanding of responsibilities related to the provision of long-term access to digital publications in physical-formats. It was acknowledged early in the day that to ensure continued access to information originally published in this form, long and short-term strategies must soon be agreed upon and implemented.

Through a series of presentations and group discussions, issues including legal and voluntary deposit, copyright, access, licensing, collection development, cataloguing, and preservation paths were grappled with. Information from surveys conducted in the months prior to the meeting provided a basis for the discussions. Summaries of the survey results and

copies of the presentations are available on the National Library website. A common thread throughout the meeting was an exploration of the roles and responsibilities of content providers, software developers, publishers, librarians and others bodies. A major outcome was the recognised need for cooperation and collaboration between these groups.

Following the discussion with publishers and content providers, the library representatives met for a second day to formalise the outcomes of the discussions into a plan of action for libraries. The aim of this action plan is to progress the development of strategies for the long-term preservation of access to significant Australian publications. While the meeting recognised that many publications currently in a physical-format are likely to become online publications in the future, the management implications of this for libraries is unclear. It seems likely that information will continue to be published in some kind of digital physical-format and there will be a continuing need to manage these. The much bigger issue of management and preservation was not tackled at this two-day meeting. The National Library is planning a forum to be held towards the end of 1998 which will cover all aspects of access to networked information.

#### ***Day One: Issues Arising from Discussion***

Need for a standard agreement covering the use of physical-format digital publications in deposit institutions: Concern was expressed by publishers over the commercial implications of how access is provided to deposited materials. There was general acceptance for the provision of single-user, standalone access. If networked access is to be provided, it was widely thought that network licenses should be purchased. An alternative view is that if libraries can guarantee single user access, it is not important if this access is via a network.

The need for a standard, national agreement covering acquisition and use of legal deposit physical-format materials was identified. It was recognised that there may be different access provisions for deposited and purchased copies. This common agreement will be developed by a taskforce consisting of representatives of publishers, the multimedia industry, copyright holders and libraries. Library representatives expressed the need for this agreement to allow reformatting data for management and preservation purposes. Given the number of parties involved, a single agreement may be difficult to achieve. An early issue identified by the publishers was the dependency of the creators of the physical format materials on third party software. The flexibility of publishers in negotiating deposit and access agreements could be affected by the terms of their software license.

**Promotion of Legal Deposit**

Participants generally accepted the need for legal deposit but recognised that there was unlikely to be uniform legislation throughout Australia. Consequently, it was proposed that legal deposit be accompanied by a common agreement on the use of deposited copies.

Librarians pointed out the potential value of legal deposit to publishers. The presence of publications in legal deposit institutions makes them accessible to a wider audience, and to markets that the publisher may not have targeted. Publishers noted that this can be reflected in increased sales. Consequently there is an opportunity to promote the concept of legal deposit to publishers of physical-format materials. When promoting legal deposit, acknowledgment of the depositing organisation via library catalogues is another benefit that can be highlighted.

**Cooperation with Other Partners**

The meeting operated on the assumption that state libraries and the National Library would take prime responsibility for preserving physical-format digital publications. Participants valued the opportunity for collaboration afforded by the meeting, and acknowledged the need for ongoing cooperation. There was agreement on general principles that any strategies and standards developed should not have a negative commercial impact on publishers.

Suggestions were made to enlist interest from other partners such as the printing industry, research centres, universities, cross format publishers, educational sector publishers, software developers, Governments, producers of products associated/included with print publications, experimental publishers, and public relations/marketing groups. In some cases, such as the printing industry, a benchmarking partnership may be helpful. The danger of focusing on commercial publishers as represented by the publishers' associations was noted, because in the area of physical-format digital publications there are many non-commercial publishers and a range of other producers such as government departments and small independent publishers who produce large numbers of CD-ROM products for specialised markets.

**Definition of the Relationship between Libraries and Publishers**

It was recognised that the interests of publishers and libraries converge. Both groups acknowledged that there is a role for long-term preservation which does not threaten the commercial viability of publishers. As Australian citizens, publishers pointed out that they have the national good at heart so are willing to cooperate in the preservation task while

it does not have adverse commercial impact on their business. They also hoped there would be a genuine follow through on the promises of consultation, cooperation and collaboration.

While publishers were interested in the management task facing libraries, they noted that libraries must first articulate their requirements. The suggested outcome of the meeting was a document that clarified the libraries' position on the various issues considered at the meeting, particularly those that impact upon publishers, to serve as the basis for further discussion on specific issues.

It was noted that the publishing model is changing. Information is now bypassing libraries and being disseminated directly to users. Libraries then face the task of identifying and retrieving this information. Where Australia's documentary heritage was once held in libraries and archives, it is now more widely distributed. An option to enter into partnerships with those that create and promote the heritage until they choose to be no longer involved in this role was canvassed. However, publishers are not libraries. Publishers present indicated strongly that they have no charter to preserve access to their information and will do so only for as long as it remains commercially viable. This model also raised the question of what happens to their information when publishers go out of business.

The possibility of publishers providing library-friendly versions of their publications was also raised. These may be copies without hard coding or logical devices that prevented reformatting. Publishers indicated that this was worth exploring but would depend on the ability of libraries to protect copyright. Further consultation would be helped by libraries explaining to a wider range of publishers, what they were trying to achieve.

### **Technical Issues**

There was recognition that many technical issues are important in themselves, but also in the way they affect libraries' ability to manage their collections. While acknowledging that technical issues should be seen in the light of what we are trying to achieve and should not be allowed to completely drive the agenda, many management questions such as how many titles and how much of each title we can afford to preserve have a technological edge. These questions cannot be addressed without a better understanding of the relevant technical barriers and possibilities. This requires more research effort and greater sharing of information. Much of the discussion focused on how this could be encouraged. A number of preservation paths were discussed-migration, emulation, use of standards to give backwards and forwards compatibility-and what would be needed to make them feasible.

All were recognised as complex and uncertain. Although difficult, migration by libraries was considered the most likely path at this stage. It could be supported by publishers supplying publications in preferred formats, providing more easily migratable versions, and supplying more technical information. Publishers indicated a willingness to help, especially in regard to supplying information required by libraries through their product labelling practices. They would be willing to collaborate with libraries in discussing how this could be achieved.

In such a context, the overriding issues coming out of the discussion were:

- the desire to preserve both the 'look and feel' and content of the publications; while acknowledging that for some categories of material (e.g. multimedia), the former may not be achievable-multiple preservation paths may need to be followed
- the complexities libraries face in dealing with large quantities of heterogenous data
- the need for libraries to find cost effective solutions-not all publications will justify the high costs of preserving them
- the need to be selective, to articulate the rationale for selection, and to share that information with others
- the need for further research in this area, both pure and applied, and both within libraries and wider.

Participants acknowledged that technical issues shouldn't be the driving force in the preservation task. There is a need to be clear about what we're trying to achieve before tackling the technical obstacles. Many of the technical issues need to be addressed at a management level first.

The comparative importance of look and feel against content must be considered in relation to resource issues. Emulation was seen as a complex option. Migration was considered a better alternative at this stage. It was noted that this is not just a library problem so should not be worked on in isolation. Publishers and library representatives agreed that publishers could not be expected to migrate their own information, although there may be the opportunity to obtain the information in a standard or preferred format, at no cost to the publisher.

Participants agreed that progress with research required identification of the problems and of potential partners such as universities, industry groups and other cultural sectors. The profile of the need for research also had to be raised, including raising the awareness at government level of the complexities involved in ensuring continued access to this material.

Because this not just a library problem, we should not work in isolation. There was a need to be aware of developments overseas. The need to identify some exemplar projects was also seen as a useful strategy.

***Day Two: Overview of Each Library's Strategic Directions and Initiatives in the Digital Area***

A representative from each library provided a short overview of their library's strategic directions and initiatives in the digital area. This revealed that there is considerable activity in digitisation. Although few institutions had developed programmes for preserving physical-format digital publications, they had planned to manage their own digital publications. It was noted that activities in this area were resource intensive.

It is intended that summaries of the information presented by libraries will be available on the National Library's website. Additional information is contained in the summaries of the surveys that are accessible via the same address.

***Day Two: Discussion of Possible Strategies for the Management of Physical-Format Digital Publications***

The range of people involved in publishing and preserving digital information in physical-formats is extensive. It was acknowledged at the meeting that there is not a clear picture of who is publishing in this format and what is being published. Self-publishers are becoming more common. It is therefore more difficult to determine what is being published. A study of the industry to determine who is publishing digital information in physical-formats was proposed.

The results of an analysis of holdings by the National and State libraries of Australian publications on CD-ROMs and floppy disks were presented at the meeting. These highlighted that deposit libraries hold only 35% of the publications identified in the analysis. This presents the challenge of how to identify and collect the considerable proportion of material that is not yet getting into libraries.

However, it was also acknowledged that not all publications would fall within the collecting priorities of libraries. Given that the task of preserving digital information is liable to be resource intensive, libraries need to clearly define what information is worth preserving. The possibility of examining the nature of the 65% of titles from the analysis that are not held by National or State libraries is being considered. This should provide information on whether the publications that are currently not being collected should be represented in the collection. The issue of identifying material that is currently held in library collections was raised. Different

institutions are cataloguing and storing this material in different ways. When asked in a recent survey to indicate the number of Australian CD-ROM and floppy disk publications they held, most libraries expressed some uncertainty with the figures they gave. A consistent way of surveying the collections of physical-format digital publications is required for any strategies to be effective.

### **Collection Development for Preservation Purposes**

Collection development for short-term use remains in the domain of the individual library. However, it was thought that the development of a coherent national collection for the preservation of Australia's documentary heritage requires further, and probably collaborative, efforts within the library sector. As most state libraries indicated that they would collect material that falls within their existing collection development policies, any agreements and cooperative arrangements would fall within these boundaries. Agreements need to be reached on what is to be collected as well as what won't be collected.

Decisions would ideally be made on content rather than technical issues. The need for selectivity was agreed. It will require considerable sharing of information to avoid duplication of effort. Consequently there is still a perceived need for the National Bibliographic Database (NBD) in some form. For example, it was suggested that the library accepting preservation responsibility for an item should record that intent on the NBD at the time of acquisition. However an overall strategy for ensuring a representative national collection to avoid unnecessary duplication of effort is required.

The issue of what commitments are given regarding legal deposit material was considered. Given the unpredictable nature of technology, some participants thought it was not possible to give a guarantee that deposited material would be preserved. It was only possible to notify that it was intended to preserve the information content of the item. Because of the resource-intensive nature of managing digital information, it may no longer be the case that all deposited material will be marked for long-term preservation. If this is to be the case, it must be articulated to publishers and to the community.

### **Research**

The questions of how publications can be preserved and what resources will be required still need to be answered in order to support decisions about what should be preserved and by whom. A research agenda needs to be developed, including at least:

- develop clearer costings of the preservation task as a management tool and to allow priorities to be established
- build a business case before taking action
- undertake a detailed mapping of the industry to identify what is being published, and who is publishing
- identify relevant research currently underway in Australia and overseas
- develop ways of sharing information within the library sector and between sectors
- preservation paths, looking especially at migration between carriers, migration across operating platforms (including migration to the Internet), and emulation.

### ***Action Items Arising from the Meeting***

#### ***Draft National Policy Paper***

Develop a position paper on a national policy for the management of Australian physical-format digital publications. A draft is to be circulated to CASL (Council of Australian State Libraries) for comment, input and endorsement. This position paper will then be used as the basis for further liaison with publishers.

#### ***Develop a Standard Agreement Covering Conditions of Use of Physical-format Digital Publications Deposited in all Deposit Libraries***

Participants in the meeting identified the need for a standard, national agreement covering acquisition and use. It was recognised that this may include different access provisions for deposited and purchased copies. This common statement will be developed by a taskforce consisting of representatives of publishers, the multimedia industry, copyright holders and libraries.

#### ***Study of Publishing Industry***

Publication in the digital world involves an extensive range of parties. It was acknowledged at the meeting that there is not a clear picture of who is publishing in this format and what is being published. A study of the industry to determine who is publishing digital information in physical-formats was proposed.

#### ***Research Agenda***

Discussions during the consultative meeting revealed gaps in knowledge. Before formulating strategies for the preservation of physical-format digital publications, there is a need to clearly define the issues.

Items for investigation include the feasibility of preservation paths including migration, building on the experience and interest of the State Libraries of NSW and Victoria and the National Library; developing clearer costings of the preservation effort as a management tool; and building a business case.

### ***Identify other Potential Parties***

It was acknowledged that libraries were not facing the preservation task in isolation. Other parties, such as those with an investment in information stored on CD-ROMs or floppy disks, may be interested in contributing to the task. It may also be possible to incorporate an investigation of technical issues into the plans of projects being funded through grant money.

Initial Responsibility: National Library (e.g. through PADI; to be put on the agenda of the next meeting of the New Technologies Working Party by Bruce Arnold, Department of Communications and the Arts) Completion date

### ***Identify Research being Conducted in this Area***

Undertake a 'literature' search to identify who is researching in this area, both nationally and internationally, and the topics of research. Disseminate via the PADI website. This will assist in defining the problem for which strategies need to be developed.

### ***Promotion of Legal Deposit Concept to Publishers***

Publishers who participated in the meeting indicated that the deposit of publications may be increased by promoting the concept of legal deposit, emphasising the services it can provide to publishers. For example, it was noted that the access to legal deposit publications in libraries has resulted in increased awareness, and subsequent sale, of the publications in non-target markets. The first task is to develop a set of messages for stakeholders (publishers, community, Cultural Ministers Council) and a strategy for their promotion.

### ***Promote the Use of NATSTATLIBs***

Encourage the use of NATSTATLIBs (a closed discussion list) as a focus of discussion on this issue by representatives of the National and State Libraries.

### ***National Bibliography***

There was a perceived need among participants of the meeting for a national bibliography to assist in sharing information about items that

have been selected for long-term preservation. If accessible to the public, such a bibliography would be a source for acknowledging publishers who have deposited publications in libraries via legal or voluntary deposit.

### **Investigate Partnerships with Cooperative Multimedia Centres**

Cooperative Multimedia Centres (CMCs) were identified as potentially being involved in research that may relate to the preservation of digital publications in physical-format. The initial task is to increase the awareness of CMCs to the issues, investigate the formation of partnerships with CMCs and identify any relevant research they are undertaking.

### **Cooperative Relationship with Large Institutional Publishers**

Participants in the meeting readily acknowledged the need for ongoing cooperation and collaboration within and between sectors. Initially, this task would involve the investigation of the development of cooperative relationships with large institutional publishers from government, universities and industry.

### **Alert Mechanism for Potential Loss of Information**

The notion of establishing a mechanism for alerting libraries to the potential loss of significant information was raised. However, given the currently ill-defined nature of the preservation task, it was considered too early to take action in this area yet. The information required may emerge from the research programme or migration trials.

## **A Draft Research Agenda for Digital Publications**

**Introduction:** In an ideal world deposit libraries might preserve everything, but operating in an environment of technical and resource constraints means that priorities must be set. Already there are enough indications of difficulty to recognise that it may not be possible to preserve access to everything, and that some options will be costly and/or ineffective for some materials. In order to make informed decisions about what we will seek to preserve, we need to know more about *what is preservable, at what cost, and how?*

The proposed research agenda aims to help us answer those questions by looking at unresolved technical and organisational issues. The point of this research is to support decisions on how best to manage these publications. It is not research for its own sake.

This proposed agenda is framed around three steps:

- Identifying what we already know or believe (sections 2 and 3 below)

- Identifying the issues needing to be resolved before we can formulate strategies for preservation (section 4 below)
- Using the research-identifying the issues to be resolved in formulating a national preservation approach (section 5 below).

***What Do We “know” already?:*** On the basis of experience at NLA and other places, we can say that we know or believe:

1. We have to organise or identify material in ways that make it easy to find and manage in our collections.
2. We need to obtain and record a range of information about the publications we are seeking to preserve, to support preservation planning.
3. Magnetic media such as floppy disks have a relatively short useable life span, so we have to slow down the rate of deterioration and/or move what we want to preserve to a more stable carrier. (We know quite a lot about the conditions of storage and handling that will maximise the useful life of magnetic media.)
4. We can fairly easily transfer data from floppy disks to more stable carriers such as CD-R without loss of functionality so long as we have retained access to necessary operating software.
5. Some publications can be transferred to print on paper, a very stable carrier, without loss of data but with possible loss of functionality. This makes it mainly suitable for “flat” data such as text and some still images.
6. We can also transfer data to other unstable but routinely refreshed magnetic media such as computer hard disks (offering random access), or to digital tape (offering only serial access).
7. Obsolescence of technology, both hardware and various layers of software, will make any machine-readable publication inaccessible. It has already made at least 125 physical-format digital publications published between 1983 and 1997 effectively inaccessible at NLA. (Some of these were probably always effectively inaccessible in that the Library may not have had the appropriate equipment or software to provide access.)
8. To maintain accessibility we will probably need to maintain archives of hardware and software, or migrate publications to new formats, or use emulation software to provide access. Each of these approaches will probably involve technical and resource difficulties. It is likely that we will need to use combinations of all of these and other approaches as well.

9. Many publications use software that may not operate in the same way in a different operating environment. If they are useable at all they will almost certainly lose some of their functionality and “look and feel” if simply copied to a new operating system.
10. Backwards compatibility often has a “sunset clause” – current versions of software will usually operate a few previous generations, but not all previous versions, of the same programmes.
11. Some physical-format digital publications incorporate intentional security features (such as hardware “dongles” or software prompts-PINs, passwords), or are hardcoded to be used on a particular drive configuration. These may make it difficult to copy the publications for preservation purposes.
12. Most publications require some software to support them – viewers, rendering software, etc. Sometimes this is supplied with the publication and sometimes it is not.
13. Many CD-ROM publications now include hypertext links to updated network sites requiring different preservation action.
14. Many publishers say they will “migrate” their physical format publications to networked sites, but we don’t know if they will change them in the process, and we suspect that many publications will not be transferred retrospectively.

**Options:** If we choose to preserve a physical-format digital publication, we currently believe the available options are as follows:

- to document and store the item, and look for some “rescue” technology in the future
- to “refresh” the item by transferring the data to another copy of the same kind of carrier – suitable only as a short term solution
- to “transfer” the item by copying the data to a more stable carrier such a CD-R or a more highly maintained system such as a backed-up tape archive
- to “freeze” the item by transferring the data to a very stable, probably human readable, form such as print, microfilm, or something like HD-Rosetta (being developed by the Los Alamos laboratories in USA)
- to “migrate” the item by copying the data to a currently accessible computer format, (with or without trying to maintain the “look and feel”)
- to find software that will “emulate” the original operating software and make it operate in a different, currently accessible operating environment

- to migrate the item to current operating environment, but maintain a “preservation” master copy of the data in its original format so it can be “emulated” when losses through migration become unacceptable.

How to achieve these, how to choose the most cost effective and appropriate combination of them, and whether there are other viable options, are the basic tasks of the proposed research agenda.

What We Need – Issues to Research before We can Formulate Strategies:

1. A standardised vocabulary and rules for describing physical format digital materials so they can be easily found and managed in collections
2. Agreed arrangements for recording metadata that will help us preserve publications

Note: *NLA intends to pursue within RLG PRESERV programme(1) and with the CEDARS Project(2) in UK, and report with proposal*

3. Cost effective ways of predicting and measuring deterioration rates across collections. This would include research on what is known to be happening overseas in this area.
4. Cost effective ways of predicting changes in technology likely to make collection material inaccessible and requiring preservation action
5. More information on the feasibility of “rescuing” currently inaccessible materials.

It is known that some materials have already become inaccessible due to a range of factors, including format deterioration and/or obsolescence; hardware and software obsolescence etc. It is necessary to identify the scope of the problem by first undertaking an analysis of these materials, and assessing their value against current collection development policies.

When a sub-set of valuable, but inaccessible publications has been identified, it would be useful to canvas available options for rescue from the international community. The working group could then undertake a cost-benefit analysis.

6. More information on ways of keeping materials accessible:
  - i. By keeping their original access pathways available and operational (technology preservation)

While it is generally acknowledged that it is neither desirable, nor feasible as a long-term proposition to maintain a museum

of hardware and software, there is merit in considering options for archiving some software, pending the development of more sustainable preservation pathways which may still be several years away.

- ii. By finding or developing software that will emulate their original operating software (emulation)

This is known to be a major research focus within Europe and North America. It makes sense to develop and maintain contact with these programmes with a view to seeking cooperation from publishers (via the Libraries/Publishers Working Group, and other appropriate mechanisms) in supplying information which will support emulation.

- iii. By transferring them and their supporting software to each new generation of platform (migration)

This is the strategy the NLA intends to focus its own research efforts on in the short to medium term. There is still much work to be done to test reliable, cost-effective migration procedures. A national working group is needed to work on further migration trials. It may be necessary to supply a modest budget to the group for the purposes of these trials. The Libraries/Publishers Working Group would be a useful mechanism for testing the response of publishers in supplying more easily migrated publications.

7. More information on issues in managing preservation

There are still questions we are currently unable to answer, but which will be informed by the outcomes of other proposed tasks. It is proposed that the working group of NLA and state libraries prepare a discussion paper on these issues when more information is available.

8. Outcomes of research-issues to resolve in formulating a national preservation model. The outcomes of this research activity should help Australian libraries to decide on appropriate preservation responses they can apply. The proposed national working group should report on a recommended national preservation model for physical-format digital publications, taking account of likely costs of preserving different levels of collecting and the overall objectives of the model.

### **Networked Government Services**

The aim of this paper is to examine how government is being affected by developments in the converging computer, communications and

multimedia industries: to trace some recent Australian developments in government policies and planning in this area; and to suggest some ways in which Australian governments might effect medium-term developments to the overall national benefit.

It may be reasonably argued that a very large proportion of technological developments over more than 3,000 years have been directed to one problem—that of enabling people to have influence over a larger area over a shorter period. Two quite distinct technological thrusts have been evident:

- Changes directed at moving people physically and more quickly over a greater distance.

From the domestication of animals for carriage, in particular the horse, we have progressed through to the railway, motor vehicles, and to ever faster means of air and space travel.

- Changes directed at increasing the influence of people to interact over a greater distance.

We have steadily increased our capability to interact with others over greater distances. The thrust for some of these developments was improved military capability, with the invention of the bow and arrow and the gun, but other developments related to pure communication. Methods such as writing, heliographs and loud hailer have been added to steadily, through analogue radio and television to the present converging digital communication which combines elements of virtually all previous methods of communication, written, oral and visual, and on a global basis.

In Naisbitt's terms, this seems to me to be the ultimate mega-trend, because it has affected everybody and every form of organisation, including governments. The effects of the latest leaps forward—that is, the combination of quality satellite-based broadcasting of TV and radio and low-cost global voice and data networking, remain unclear.

While trans-national communication and use of electronic-based services has been and still is very limited for the great majority of people, it has been possible for the 19th century model of the nation state, limited as it was largely by physical and linguistic barriers, to remain virtually unaffected. But it seems very likely that as trans-national electronic communications and services provision tends towards a zero marginal cost, the effect on national institutions and systems of organisation will be profound.

It is tempting for each age to regard itself as special, and those who talk about the current electronic changes as a “revolution” will, I believe, be proved wrong over the medium-term. Change has always been with us,

and major societal change occurs much more slowly than one might expect from the rate of technological change, as it is limited by delays in understanding, in the acquisition of new skills, and in behavioural changes. After all, print replacement has been predicted for at least five decades and it has not occurred. This is not the place to go into details of why electronic information has not yet taken hold-suffice to say that print replication could not be expected to occur until:

- Authors were all producing information in electronic form.
- The electronic information produced could be accessed globally, regardless of the particular way the information is stored.
- Communication networks had sufficient bandwidth and protocol standardisation for transmission of text and visual images at the rate required by users.
- Potential users of the information had the ability to access it effectively.
- Potential users of the information had the capacity to continue to store and manipulate the information locally.
- Electronic information could be preserved over a long period.
- Electronic text could be read over an extended period as easily as print.

Clearly, we are still some way from these conditions being achieved. But because no extensive replacement of print has taken place to date, it is tempting for sceptics to suggest that print is safe from electronic predators. In my view this would be unwise-the six critical technologies needed for widespread use of electronic information are reaching the stage at which they are now becoming available to a significant number of people:

- Multi-level user interfaces (including graphics).
- Substantial work station capability at user level.
- Fast retrieval from massive data stores.
- National and global inter-operability.
- Standard search and retrieve protocols.
- Transaction capabilities.

Few people have yet really understood the overall effects of global interactive networking.

These include the demise of local monopolies, from the corner store through to national governments, the rise of virtual organisations and greater empowerment of more junior knowledgeable staff, and role blurring

for all organisations in the information chain, including those in the educational sector.

But the “communications reach” mega-trend is associated with other significant economic changes relating to information use:

- *Information as a major economic driver.*

The increasing importance of information for commercial success and government policy development is leading to the ‘mainstreaming’ of libraries and other information services as commercially important, with the associated struggles over issues such as intellectual property rights and control of standards.
- *Leisure activities as a major marketplace.*

This magnifies the importance for information services of ease of use, convenience and home delivery, and leads to entertainment-related applications driving communications/information infrastructure investments.
- *Personal perceptions regarding the use of time as against cost.*

Increasing incomes and pressures on time are leading to demands for ‘one-stop’ services, self-service ease of use and higher standards of customer service in both private and public sectors.
- *Rise of consumer choice.*

Consumer expectations are rising and the mass customization potential of modern technologies are leading to niche products and services, with customers becoming regarded as essential feedback partners in the development of services.

This combination of technological and economic pressures is likely to lead to a very significant change in all information handling organisations, over the next ten years. I think that we can now reasonably assume that for Australia in ten years time, anyone who is in a position which involves any significant use of information on a day-to-day basis will have convenient access to a global network which provides information access, massaging and electronic publishing facilities as well as the traditional broadcast receipt capabilities of radio and TV-students, researchers, public servants, professional workers (e.g, lawyers, therapists) and a significant range of small business. (Note that this does not include everybody, and this fact will raise some significant issues of public policy).

### **Information and Communication Channels**

Before coming specifically to issues of government policy, I want to comment briefly on the mass media.

Most of us have led our lives in times in which we have been subjected to a very limited number of mass media channels. Many Australians read no newspapers at all, and of those that do, very few read more than the same newspaper each day. Until recently, no Australians had access to more than five television channels, and many still have access to only three or four channels. In few places are there more than about six acceptable quality radio stations, and in many country areas people are restricted to one or possibly two stations. It is arguable in any case whether any sizeable audience uses these broadcast media for more than pure entertainment plus, possibly, keeping in touch with happenings of major news interest (which is not the same as events of major significance nationally or globally!)

Until recently, libraries (and other information oriented services such as education) have operated quite separately from the major communication services used by the majority of people-the mass media of radio, TV and newspapers delivered directly to homes (including "home extensions" such as cars).

These channels have been considered as in a quite different category, as being under very limited individual control, and being broadcast. The economics of the mass media have been such that very few channels could be supported by a given population-hence the tendency to entertainment and lowest common denominator programming.

But we are in the early stages of moving from an era in which we have had only a relatively small number of broadcast channels controlled by a small number of organisations, to one in which people will be able to choose amongst a very wide range of sources of entertainment and information-sports channels, news channels, weather channels, talk show channels, etc., etc. While a small number of major media interests will attempt to continue to control the content across all channels, the move from broadcasting to narrow-casting is based on a continuing reduction in the costs of communication, a trend which is inexorable, as it rests on continuing advances in the efficiency of use of increasing cable capacity, and the ability for the radio spectrum to be split up digitally into many more non-interfering channels.

Given that this development is also just another example of the move to mass customisation and niche marketing for all products and services, i.e., a steady rise in consumer choice expectations, and given that content can now be created much more cheaply by small organisations and even individuals, I doubt whether the fragmentation of broadcast industries can be prevented in the longer run. Nevertheless, this issue remains a significant area for public policy decision in Australia, if an undesirable concentration

of media ownership and therefore policy influence is to be avoided. It clearly has significant implications for the diversity of multimedia outlets.

The move from broadcasting to narrow-casting can also be seen as resulting from one of the many current convergences resulting from the spread of communication and information technologies. The previous separation of mass media communications from information channels such as libraries rested on the fact that the entry capital required for running television and radio stations, newspapers and mass circulation journals was very high, thus limiting the number of publishers and broadcasters.

The significance of information networking, now that we have tools such as the World Wide Web, is not that it improves access to information (although it has a huge potential to do just that) but that it makes everyone a potential publisher.

For a cost of about \$A3,000, I can now personally transmit not only text, but hypertext documents containing images and sound (and soon, with Hot Java, animation and other programmed actions) to anyone on the Internet, a community of around 25 million people, doubling about every nine months. As television and radio stations start to use the same physical distribution channels as voice and data transmission, as long as there is a separation of ownership, or at the very least, influence, between carriers and content providers, current network developments will inevitably result in a massive proliferation of individuals and small organisations acting to provide information as well as share it.

The rapid moves by small groups in the pop music industry to articulate their music over the Internet, thus by-passing the major distribution organisations presently controlling the industry, is an example of what will happen in many other areas.

Governments have traditionally been comfortable with a limited number of communication channels which they can influence directly through government provision of the service, or indirectly through regulation of, or political influence on, a small number of service providers.

As digital division of an increasingly available communication spectrum allows more and more channels of "broadcast" capability at an ever lower capital entry cost, and as network access begins to provide network publishing capabilities for all organisations, and eventually individuals, then government influence on electronic content must inevitably decline as control becomes economically and technologically less feasible. This is likely to provoke, as it has already, continuing debate over issues of intellectual freedom and community standards, as one of many issues of public policy.

### **Public Policy**

In any society where a government has neither the will nor the power to act in an authoritarian and arbitrary way, the existence of that government rests on acceptance of its validity and utility by its people. But what is government for? Here I make a number of assertions, which some may wish to question:

- The purpose of the government is to add value to the lives of the people it serves.
- Government policy and services will be better if those making decisions are better informed about:
  - best practices
  - the effects on those served.
- Information is a public good: the more people have the greater the social benefit
- Governments should behave as if all information is open to the public, unless restricted for specific reasons of privacy or security.

In practice, in a modern economy, government and the commercial sector have become increasingly linked and interdependent. In many countries of the world there has been a move to reduce the scope of direct government activity. But paradoxically, this move to smaller government has in fact tended to increase the total interactions between the public and private sectors, as governments increasingly outsource the provision of services and development activities previously conducted within public services.

It is also the case that, in those countries which are experiencing a rapid move from subsistence agriculture-based economies to industrial and services-based economies, a substantial proportion of people are experiencing for the first time more direct transactions with government through contacts involving regulatory activities and various taxation and benefits transfers.

One of the problems of modern democracy has been the development of balanced public policy. In many countries, and certainly in Australia, most ongoing national public policy has had very little significant input to it from outside the relatively few active members of the governing political parties, senior business people, organised lobby groups and the public bureaucracy.

The feedback that government obtains through the mass media generally has significant bias, and an ad hoc nature to it, as the mass media inevitably tread a careful line between communication and

entertainment, with some penchant for the sensational, together with a wary eye on the views of both their proprietors and governments. The lobbying process is also generally unsatisfactory and biased.

I contrast this process with my experience on the Internet, where ideas and policy proposals can be posted at an early stage to a wide range of people, and through cross-posting to an open cross-section of interested individuals. Feedback is invariably sensible and helpful in building on the initial ideas, and if the nature of the process also attracts occasional diatribes or replies that are simply silly, this seems a small price to pay, and reflects the nature of the human condition.

It seems to me that for the first time we are beginning to have the technology available to link effectively governments and the people they serve. In the Internet, we have an open two-way interactive user-driven technology.

This may mean that we can move beyond primarily representative government, to forms of government in which specific policies are more directly based on feedback and input from significant (and valid) cross-sections of the public. Interaction can be initiated not only by the government simply as a provider of information, policy or educational opportunity to a passive public, but also by anyone with access to a networked work station and sufficient skill to be able to use it.

### **Government Objectives**

As I have said earlier, an interactive network of the Internet type is crucial in giving voice to everyone connected to it. It not only provides the power of the telephone to reach friends and colleagues anywhere in the world on a one-to-one basis, but it provides all of us with a narrowcast publishing capability.

But why should government take special notice of the Internet? What does the Internet offer which is attractive to governments? The Internet clearly represents the beginning of a global intercommunication network through which all remote voice, data and multimedia we will eventually travel.

The key to its success is its continuing development of field tested standards which are gradually increasing its range of functionality and interoperability, so that more and more applications can be used remotely from anywhere across the world.

Why should this be important to government? Within governments' broad public objectives there are several which seem obviously affected by interactive networking. These include:

- Improved/more participative government policy-making
- National competitiveness/industry building
- Rural/employment stimulation
- Quality of life, e.g, physically disabled
- Efficiency of government
- Effectiveness of government
- Equity/market reach.

However, I want to concentrate on the issues within the direct area of government operations:

- *Efficiency of Transactions.*

The use of the Internet as a communication mechanism relies on the facts that:

- almost all textual documents, and a rapidly increasing percentage of multimedia objects such as moving pictures and sound recordings, are now initially created in digital form;
- once the communication infrastructure is in place, the cost of transmitting any document anywhere in a country or around the world is tending towards zero;
- Much communication results in interaction and manipulation of documents-any system which enables remote manipulation without recreation of the original is likely to result in considerable cost savings.

This efficiency of government issue is certainly one which has been exercising our minds in the Commonwealth government, and no doubt this is true in other governments. To quote the United States' study on electronic delivery of government services "access to government is uncoordinated, cumbersome, complex, slow and confusing". Government has become increasingly complex, and some lack of trust in government in many countries can, I believe, be put down to this complexity. Traditional government bureaucracies have been organised for the purposes of efficient policy development and programme delivery in particular areas-that is, vertically, with each agency concentrating on its particular area, such as education, health, legal services or social security. Each department tends to have its own channels for distribution to the public.

But with the growth of the Internet, there is a need for government to reconceptualise its approach, recognising that as communication capabilities spread to local community access points and homes, and across government itself, there is an urgent need to enable individuals, business and government itself to obtain efficient interaction from a single remote

location to wherever in government is most appropriate to meet the requirement of the moment. It should not be up to an individual or even a commercial organisation to understand the complex structure of government agencies and programmes, but for the government to organise its electronic access system so that it permits the effective flow of information and conduct of transactions between:

- government and individuals;
- government and business;
- one agency of government and another.

In the Commonwealth government, we do not yet have even electronic mail across all government departments, let alone World Wide Web access to government documents and data bases. The number of interactions between the commercial sector and government is rising all the time, for reasons associated with taxation, government procurement, government incentives, research and development grants and many other factors. As in many ways information is becoming the business of both government and the commercial sector and as we move into information intensive economies, the efficiency of the interactions between government and its individual and corporate clients becomes a matter of national importance.

***Effective Public Information Flow:*** But the efficiency of government relates not only to transaction efficiencies. Governments are major collectors and creators of information on behalf of the public. Traditionally, a very large part of the information within government has not been available outside government, indeed often not outside the particular agency, or even the section of an agency, responsible for its collection or creation. Almost all government documents and databases are now created in electronic form in the first place. Once an effective access infrastructure is in place, in the form of Internet connections to and from each government agency, the marginal cost of making that information publicly available is very small.

While of course some government information needs to be restricted for reasons of privacy, national security or occasionally special commercial advantage, that is no reason to restrict access to the vast bulk of government information, collected at public expense. As I have said above, once Internet connections are in place, it is reasonable to expect a government to behave as if all information is open to the public unless restricted for specific reasons of privacy or security.

Certainly there is a very significant amount of government information which could be available for useful analysis to the benefit of the private sector. For government information to be usable conveniently and easily

will require most governments to think very carefully how related information created in different departments and agencies can be presented effectively, and a whole of government approach will be needed to the development of good resource discovery and retrieval mechanisms through the adoption of common standards. Government must have a leadership role in the promotion of standards which make information retrieval and government/business transactions as transparent and seamless as possible. Proof of concept pilots supported by both government and the commercial sector across a range of commercial applications are needed for this to occur.

Another aspect of public information flow is access to cultural materials. The role of governments as long-term keepers of our national heritage has been overlooked until relatively recently. In part this is because galleries, museums and research libraries have been regarded as elitist interests. In part this has been because such cultural institutions are often not perceived as organs of government, even though they are funded wholly or very largely by tax payers. Indeed, their staffs seldom see themselves as bureaucrats, as opposed to professionals in their cultural specialities, neither are the physical structures they occupy typical of government buildings generally.

Even the idea of cultural heritage being a focus of government policy is a relatively recent phenomenon (although long recognised as a tool of authoritarian regimes). The advent of interactive networking and government policy interest (partly fuelled by issues of national identity) means that the cultural content of government can for the first time be brought to a far broader audience, both in Australia and internationally. (The creative ways in which this may best be done is the subject of many other papers at this conference).

**Market Reach/Equity:** Until relatively recently, relative geographic advantage/disadvantage has been a significant factor in determining commercial success-the more remote customers are from the source of product and supply, the harder it is for the supplier to compete with other closer sources of supply. In the case of governments, delivery of services to people in smaller and more remote communities, in areas such as health, education and social welfare, has been costly compared with delivery in areas of dense population. But a national interoperable communications system, once in place, enables many services to be delivered to remote areas as cheaply as elsewhere.

For many governments, this market reach issue is seen as a totally different one, that of equity, i.e., that all citizens are entitled to have a similar standard of access to essential services. In Australia, in the past,

this “community service obligation” has been interpreted to mean basic telephone access. Now there is much deliberation as to whether this concept needs to be extended to include Internet access, and the Australian federal government has a whole series of initiatives in train to enable schools, public libraries, community centres, and other community organisations all to be connected within a very short time frame.

Governments equity objectives for their people are thus essentially the same as those of commercial organisations. Both are highly dependent on communications reach. If governments are to deliver services efficiently, and their citizens are to transact with government efficiently, Internet reach is required. Likewise for commercial organisations attempting to advertise, market services and enable efficient retail transactions. (The fact that neither government nor the commercial sector yet knows how to interact successfully with their clients over the Internet is another issue-but one which is the subject of other papers at this Conference).

This interdependence of government and commercial objectives means that there are a number of national objectives which could be met through greater Internet access, and the development of the necessary associated skills and applications. These include:

***National Competitiveness*** : The Internet not only extends market reach nationally, but also globally. This makes all our businesses vulnerable to external competition. Local monopolies are likely to become a thing of the past, when even small businesses situated anywhere in the world can sell directly into our markets. The balance of import and export is likely to be affected very strongly by Internet-based marketing, and unless our commercial sector is able to use the Internet effectively to market worldwide, local businesses are likely to suffer from external competition.

But the Internet also presents a wonderful source of current information of useful competitive intelligence and assessment of world best practices. In my own field, I simply could not keep up with the pace of advance in research and development without continual use of the Internet. Increasingly that is becoming true in every field-not only for the academic and research communities for whom the Internet was initially built, but for the whole of the commercial sector.

The Internet has also become the driver of the information and communication industries, for the same reasons referred to above-market reach. Unless software and hardware allow the applications running on them to be run remotely over the Internet, there is little chance of them now becoming widely used. The sheer size and vitality of the telecommunications, information services and information technology

industries now mean that overall national competitiveness is likely to hinge on Australia being amongst the world's leaders in research, development and innovative applications.

***Rural and Employment Stimulation:*** In Australia the problem of rural stimulation is a real one. How do we prevent the economic and social costs of the continuing drift to the cities from declining agricultural and mining areas? Extending Internet-type services offers the potential for business and government in rural areas to offer a similar level of capability as in urban areas.

For government this includes the cost associated with health and education, but there are many quality of life factors affecting groups like the disabled. If the disadvantages of distance are reduced through external communications, then perhaps the cost advantage of cheaper land in rural areas may actually allow some kinds of business to have a competitive advantage from outside city areas. There can be no conclusion on this issue at present, but it is certainly arguable that the apparently expensive extension of the Internet into rural areas at present represents a very sensible national strategy when total infrastructure costs are taken into account. Teleworking via the Internet may well be significantly cheaper for society as a whole than forcing workers to travel over ever larger distances into city locations for work purposes.

### ***Recent Australian Policy Developments***

In almost all the western democracies, there is a strong move towards a reduction in the scope of direct government activity. In part, this results from a belief in the merits of market-driven economies contrasted with the apparent failures of various communist and socialist models, in part it reflects the rise of a significant number of post-Keynesian trained economists to the higher levels of government bureaucracies, in part it results from the reaction of middle and upper-income sectors to the higher levels of taxation usually levied in systems of progressive income tax, and it also represents a realisation by governments of the long-term effects of deferred maintenance of infrastructure and generous unfunded superannuation schemes for government workers. The result is considerable pressure on all governments' ability to invest in infrastructure developments, and to sell off of utilities and other natural monopolies such as telecommunications.

It may therefore be difficult to persuade governments in Australia, of any political persuasion, to invest in the kind of communications and information infrastructures which are likely to be necessary to deliver the capacity of our people as a whole to participate fully in society and to have a real say in its directions. But can we afford not to have clear public

objectives in this area, as with roads, electricity and water? Are telecommunications developments really to be left to market forces to determine? Are we to have two or even three companies' cables laid down city streets? To have three incompatible pieces of home equipment to view the various pay TV offerings-with none of them also providing Internet access without extra equipment?

We can, I think, set two reasonable public objectives:

- The ability of all our people to know about, and use conveniently, a range of services provided by governments, and publicly accessible information generally.
- The ability of all our people to communicate with each other over a distance to gain the benefits of group interaction.

If this is to be achieved, then a key issue is the telecommunications architecture we develop over the next decade, what has been defined in the United States as the "National Information Infrastructure" i.e., the combination of public and private networks that connects people with people, and people with information. The challenge for the country is to shape the architecture of these networks so that it meets not just short-term commercial objectives but also long-term societal needs.

In practice, if effective interaction between government and the community is to be achieved, I believe that there are three key considerations:

- Coordination of government provider strategy.
- A balance of public and private sector interests in the development of communication channels.
- Effective delivery mechanisms at community level.

### **Recent Progress**

So how well are we doing in Australia? If I had asked that question in 1994, the answer could only have been "very badly". There was little realisation in the federal Government of the importance of interactive networking and its potential for providing real benefits to the community, there were no government policies regarding telecommunications development other than of a regulatory nature and commitment to an undefined "deregulation" in 1997, there were no government objectives regarding community or educational uses of networking, and no mechanisms in place to coordinate government developments as a whole.

Since then much has changed, or rather perhaps, there is now much potential for change. There have been a plethora of government enquiries in this area over the past year, and several are still in progress. Undoubtedly,

the major catalyst was the report of the Broadband Services Expert Group (BSEG) released in January 1995, which was accepted almost as a whole by the Commonwealth Government.

This had the effect of convincing the Government that policies were needed in this area, and fortuitously came soon after the Government's "Creative Nation" Cultural Policy Statement in October 1994, which projected multimedia as a potential major industry of the future, as well as indicating a government commitment to linking all public libraries to online networks.

Shortly afterwards the Government also received the report of its Information Technology Review Group (ITRG), which recommended much improved collaboration across the Government in the development of IT-based services.

### **Multimedia Initiatives**

The Commonwealth Government's multimedia initiatives, announced in the Cultural Policy Statement in October 1994, are well known and do not need to be detailed here:

- The Australian Multimedia Enterprise
- The Australia on CD Programme
- Cooperative Multimedia Centres
- Multimedia Forums programme
- Assistance for film agencies to move into multimedia.

The BSEG and ITRG reports also created a climate which resulted in government commitment in April 1995 to several major community oriented network developments, including:

- The Community Information Network (CIN)
- Education Network Australia (EdNA).

More recently in the December 1995 announcement of the National Strategy for Information and Communication Services and Technologies, these initiatives have been built on further with the announcement of several new programmes including:

- Australia's Story: Our National Collections Online. This provides funds for the development of an integrated electronic access mechanism to the national collecting institutions and funds to begin digitisation of collections for network access. Funds will also be available for development of the Australian Museum Information System (AMIS) to make information known about the collections of local and regional museums on the Internet.

- Accessing Australia. This brings together the earlier initiatives in a more integrated programme of access to online services through all public libraries and the Community Information Network which has been piloted by the Department of Social Security.

The final forms of these proposals were significantly modified in the light of feedback from the networking community. Indeed, the CIN and EdNA developments were amongst the first uses by the Commonwealth Government of network feedback techniques, in that proposals were made available over the Internet on World Wide Web sites established by the two government departments concerned.

The combined effect of these developments is likely to be significant over the next two or three years, not least for the Australian multimedia industry. Before the year 2000, we can expect that at least 10,000 points of public presence across Australia will exist-in public libraries, in schools, and in a range of other government supported local access points, quite apart from an increasing proportion of work places.

Access from Australian homes is harder to predict. While most personal computers sold to the public from now on will be network and multimedia capable, and while the introduction of the Microsoft/Telstra Consortium on Australia has been forcing down the cost of home network use, it remains to be seen how quickly Australians as a whole will embrace networking.

Much depends on government telecommunications policy, which has yet to be fully determined in detail, although announcements in August by the Minister for Communications and the Arts, following the Telecommunications Policy Review, suggests the government's intent to ensure both the interconnectivity and interoperability of carriers, and the open access for content providers that is needed to maximise the spread of access into the community. These announcements have been given greater weight by the 'Telecommunications Bill 1996/Trade Practices Amendment (Telecommunications) Bill 1996 Exposure Drafts and Commentary' paper released on 20 December.

The Optus/Telstra duopoly period has not yet resulted in reasonable pricing of data transmission, and in particular the ISDN capability needed for effective use of network services such as the World Wide Web. There are few signs at present of sensible arrangements regarding compatible technologies in the home to enable integrated access to both interactive use of Internet-based multimedia and broadband developments such as Pay TV and video on demand services based on cable roll-out and satellite access.

## Copyright Impediments to the Preservation of Documentary Heritage

Australia's history and heritage is documented in an increasing number of disparate formats. These include published and unpublished works; handwritten, typewritten, and printed works on paper; documentary photographs and works of art on paper, bark and other media; musical scores on paper, and sound recordings on magnetic tapes and compact discs; moving pictures captured on film and videotape; scientific, educational, cultural and artistic works 'published' on the Internet; and more. Nationally significant collections of documents are held not only in national repositories, but also by State, regional, local and community organisations.

The extent of the 'distributed national collection' has yet to be determined, but it is clear that it is vast, growing and in many cases vulnerable. National strategies and coordinated action to preserve this rich and valuable collection are essential to surmount the obstacles of limited time, and of inadequate financial, human and training resources. Often the most viable strategy is to copy, or reformat, collections. It would be unfair to say that the *Copyright Act*, 1968 does not recognise the need for preservation copying and reformatting, however it does so in a very limited way, providing further obstacles to preservation.

Ultimately, the aim of documentary preservation is to ensure continued public access to information, wherever possible through preventive action. Legal deposit legislation subsumed under section 201 of the *Copyright Act 1968* does contribute to ensuring access and preservation of certain categories of *published* works in Australia. If the Act required printed materials, especially government publications, to be deposited on permanent paper complying with international standards, and if the Act extended to ever more prevalent electronic publications it would better serve the preservation needs of Australian documentary materials.

Other measures under the *Act* serve to limit access to published and unpublished materials through applying tests of fair dealing. The rationale is that by protecting authors' commercial interests, the author has a financial incentive to continue to write and to contribute to learning. While this logic is reasonable, it is difficult to envisage how this incentive can be effective for fifty years *after* an author's death. In this situation, there appears to be no particular concern for the preservation of learning, but rather a bald concern for commercial interests. It is also difficult to accept in many cases where authors create works under public funding. There are a number of ways to avoid infringement of the *Copyright Act* when

dealing with the preservation copying of older and 'new' technologies. They include:

- complying with the special conditions in the *Act* for preservation copying;
- limiting preservation copying to material for which copyright has expired, material in the public domain;
- identifying the copyright owners and obtaining permission to photocopy, photograph, microfilm, digitise or refresh; and
- identifying the copyright owners and paying royalties or licence fees.

With each of these options, however, there are serious difficulties for preservation management. Some of these are explored in this article.

### **Complying with the Copyright Act's Preservation Provisions**

The *Copyright Act* affords libraries special privileges to copy certain unpublished materials, to copy for preservation or replacement purposes, to reformat to microfilm, and in restricted instances to make backup copies of electronic material. Wodetzki has outlined in detail these privileges and their requisite conditions. Most fall short of supporting best practice in preservation, which ideally is analogous to preventive medicine. Some require the documentary 'patient' to show significant damage or deterioration before preservation copying is permitted. What is preserved then is a surrogate of a damaged original, which will undoubtedly become more damaged through the copying process itself. In this paper, each of the special library privileges for collection maintenance will be reviewed and their shortcomings noted. Some recommendations for amendments to copyright laws will also be made.

**Copying Unpublished Materials:** Provisions for copying unpublished materials under the *Copyright Act* are not intended to address preservation needs of these materials, but rather the need for researchers, students and potential legitimate publishers to access old unpublished materials. Different copyright periods in the vicinity of fifty to one hundred years apply to unpublished works, sound recordings and films. For materials of this age, the making of a copy for access can represent a fortuitous preservation benefit, especially if the copy is made on a stable medium, for example on permanent paper.

It would certainly be a boon if the *Copyright Act* were to specify stable media and preservation best practices where copying privileges are afforded. Where the *Act* falls short of best practice in preservation is that after these long periods of time (fifty to one hundred years), some materials may have

deteriorated to the point that reformatting physically endangers the original and the resultant copy is of reduced quality. This is of particular concern for film and sound recordings. These materials would be better served under the copyright allowances for preservation.

***Copying for Preservation*** : A considerable proportion of the world's documentary heritage disappears through natural causes: many of the materials which are used in the creation of documents are inherently unstable. Acidified paper, common since the mid-nineteenth century, crumbles to dust; acidic inks eat through paper so that the words literally fall off the page; films fade and the magnetised particles which record information on magnetic tapes drop off.

These are but a few examples and in all cases, the storage conditions and amount of use will affect the rate of deterioration. While all materials deteriorate, in examples like those cited, deterioration is noticeable well within fifty years after creation. By the time the deterioration is evident, the quality of the information has degenerated and may in parts be lost so that a copy is unlikely to be totally satisfactory.

In many cases of published and unpublished materials it is already too late to make useful preservation copies. Consider the example of a letterpress book, also commonly referred to as a pressletter book. These volumes were commonly used to record copies of correspondence prior to the advent of carbon paper, photostats and photocopiers. The volumes usually contained an index of lined writing paper and 500 or so pages of thin translucent paper, commonly termed onion paper.

The letter would be written on whatever writing paper was available, often using iron-gall ink. While the ink was wet, the letter would be inserted between two of the thin pages in the book and pressed. Some of the ink would transfer onto the back of the page, and because the paper was translucent, the copied image could be read through the paper.

With the combination of acidic iron-gall ink and thin acidic paper the writing often eats through the page and crumbles away. The pages become so fragile that attempts to turn the pages often cause them to shatter. If left until these show signs of deterioration, the act of copying them will often destroy the original material, or cause so much damage that it can never be used: it is too late to get a copy of reasonable quality. In addition, as deterioration advances, the cost of conservation and repair and the limits on what can be done increase.

It is preferable to copy the material before it deteriorates. The materials prone to accelerated deterioration are known, so they could be identified for copying on receipt. Effective preservation requires: the original (which

will deteriorate even more rapidly if used) to be put away so that it lasts as long as possible; the production of a master copy to be preserved for posterity; and the production of working copies for day-to-day use.

In fact, the *Copyright Act* does allow a library or archives to make preservation copies of a limited range of *original* documentary materials: unpublished manuscripts, artistic works, first-generation sound recordings, first-generation films. These rare original cultural materials can be copied under two conditions. First a copy can be made, preferably on a stable medium, and stored in an appropriately controlled environment to provide insurance against the loss or deterioration of the original, that is for 'preservation' purposes. Second (as described above) a copy of these rare materials can be made for use specifically by researchers to reduce handling of the rare originals, that is for 'access' purposes.

It appears that these research copies cannot be removed from the premises, but under fair dealing provisions researchers are able to further copy a proportion of the research copy for research or study purposes. What is not clear is whether it is permissible to make one copy for 'preservation' *and* one copy for 'access', or if a choice between these two needs must be made so that only one copy *in total* is produced. One 'preservation' copy is of no use if access is not improved. Indeed, preservation professionals in the library sector find it impossible to disassociate the concepts of preservation and access. The co-relationship between the two concepts is reflected in preservation microfilming best practice where at least three copies must be made.

The restriction that legally produced access copies be used only on the premises of the owner of the original does not seem to pose many problems for preservation, but there are cases where problems may arise. Imagine, for example, that a small regional historical society donated a fragile and nationally significant documentary 'treasure' to its State Library. Some time later the society would like to display the item in an exhibition providing access to local heritage materials for the local community. The original is too fragile to travel, but a copy made for access cannot leave the premises of the State Library without violating the *Copyright Act*. In this case, it is difficult to imagine how the *Act* is protecting any public or private interests.

It appears that the *Act* allows any medium to be used for producing the preservation or access copies of materials in this category, that is original unpublished works, including preservation photocopying, digital capture and microfilming. Nevertheless, these provisions do not entirely meet the needs of preservation reformatting best practice. In the case of preservation microfilming, as forecast, it is considered standard practice

to produce three generations of film: a first-generation preservation master that should never be handled except under the most extraordinary circumstances and that is ideally stored off site, a second-generation printing master from which access copies can be produced as they need replacing, and the third-generation service film for use by researchers.

Hence, to achieve good preservation microfilming practice in dealing with the range of materials identified under the Act's preservation copying provisions, at least one illegal copy must be made. Obviously it is desirable that the Act be modified to remove this anomaly (there are further serious problems when it comes to microfilming published materials, and these are covered below). While there seems to be little scope for preservation best practices of this type to undermine any commercial interests, such practices greatly enhance prospects for learned research.

**Copying for Replacement Purposes :** Libraries and archives are permitted under the *Copyright Act* to produce replacement copies of *published* works and recordings in their collections that have been stolen or lost, or that are damaged or deteriorating. In the first case, if a replacement copy of a missing item cannot be purchased at an ordinary commercial price, a copy of the missing item may be borrowed from another depository to facilitate reproduction of a single replacement copy. In the latter case of damaged or deteriorating collection items that cannot be repurchased a replacement copy is also permitted under the *Act*, and it appears that there are no requirements for disposing of the damaged or deteriorating material once copied. As Wodetzki recently pointed out:

The fact that deteriorating material in published form can be copied to another format whilst at the same time retaining the original may provide some comfort to those involved with newspaper preservation projects. Rather than relying on the 'medium-shifting' provisions which require destruction of the original, it could be argued that after a number of years newspapers deteriorate and become brittle, thereby allowing a replacement copy to be made pursuant to section 51A(1)(b). Under this approach, the original newspaper could be preserved as a 'museum piece' and the replacement copy could be made available to users of the library or archives. It would, of course, be necessary to make declarations that the newspapers copied were not commercially available, before making any such copies, but this is unlikely to be a problem for old newspapers.

While these provisions permitting the production of replacement copies of lost, stolen, damaged or deteriorating material are welcome under the Act, they again pose barriers for preservation best practice. There appears to be no restriction on the medium used to produce replacement copies, nor a clear restriction on the number of replacement copies that can be

made, but given there *are* clear limitations in the Act restricting microform copies to one, in the case of microfilming the Act is again at odds with preservation best practice.

The question of how much damage or deterioration qualifies an out-of-print publication for replacement copying is also moot, and as stated previously, professional conservators naturally would find their professional integrity challenged if they advocated a 'wait until it's sick' approach to their documentary patients. Nevertheless, in the case of published materials, the Act is most accommodating when it comes to copying lost, stolen, deteriorating or damaged items.

**Reformatting to Microfilm :** Outside the provisions for copying for preservation (as conceived in the *Act*) or replacement purposes, it is permissible under the *Copyright Act* for an archives or a library to make a single microform copy of a 'work' held in its collection. This provision has almost no applicability since it requires the Draconian measure of destroying the original item no matter what its condition at the time of filming. As noted earlier, a single microfilm copy has almost no value as a preservation strategy, especially if the original has been destroyed. To reiterate, there are circumstances where copyright law needs to recognise the anathema that the unnecessary destruction of original materials represents for all repositories of Australia's cultural heritage. The National Plan for Australian Newspapers (NPLAN) is an initiative of the State Libraries which seeks to microfilm all Australian newspapers *and* to preserve original copies in their State of origin.

Ideally a newspaper is microfilmed within a year or so of issue and the original is stored under conditions that aim to minimise the rate of deterioration. Technically this contravenes current copyright regulations, which requires the original to be destroyed. In many cases the State Libraries are filming newspapers acquired under legal deposit legislation. Newspapers and other publications received under legal deposit cannot be disposed of. To avoid infringement of the *Copyright Act*, a second copy of the newspapers on the State Library's microfilming programme would have to be acquired for filming and disposed of afterwards. In most cases this would involve payment, adding considerably to the cost to the taxpayer of these programmes. To suggest that a preservation strategy such as NPLAN threatens the commercial interests of newspaper proprietors and journalists is ridiculous.

The problem seems to relate to the understanding of why the copy is being made. It is *not* to replace the original but to preserve the information content. In legal cases and in scholarly research, it is common to sight the

original, even if a copy exists. Copies can be tampered with so they cannot be regarded as a true record.

The situation is immeasurably worse for published audiovisual material as it is not possible to make *any* copy prior to damage or deterioration, even if converting from an obsolete to a modern format.

***Making Electronic Backup Copies*** : Modern formats including electronic and digital information and multimedia are particularly unstable. Unlike other formats, the major risk to electronic and magnetic media is not deterioration of the materials themselves. Rather, it is the pace of technological change and development that poses a risk. It has been said that within five years or less, 'hardware and software systems can change so radically as to render these recording objects totally unreadable because of physical and logistical incompatibilities'. Five years might be optimistic. Unfortunately, despite the high risk of loss, there is no general right to back up material held in digital or electronic form. According to Wodetzki the only exceptions are the preservation provisions previously mentioned, which allow a copy to be made to preserve an item against loss or deterioration, and a limited amount of backup copying for computer programmes. In the latter case, any person who has purchased a legal copy of a computer programme may make a copy to be used in the event that the original is lost, destroyed or rendered unusable. This seems to imply that unless the original is unusable, the backup copy is to be stored in a safe place and not to be used.

There are seemingly endless questions regarding copyright in a digital publishing environment, and they concern distribution, fair use, definition and preservation issues. Very careful consideration of these questions is required if any sensible strategy for protecting intellectual property *and* the national heritage are to be achieved. Getting bogged down in debates about whether a screen display constitutes a copy is as profitable as debating whether the opening of a book could give rise to an infringement of copyright laws.

It is heartening that the National Information Infrastructure (NII) Intellectual Property Working Group has advocated in its recently released White Paper that library exemptions in the US *Copyright Act 1976* should specifically authorise the production of two archival digital copies and a service digital copy for the purpose of preservation. This appears to apply to copying of digital and non-digital originals.

### ***Limiting Preservation Copying to Non Copyright Material***

The duration of copyright is usually for a fixed period which depends on the nature of the material, and often persists for several decades after

the death of an author. The fixed periods for certain categories of material. It should be noted that the periods vary according not only to the type of material, but also to events such as publication or the death of the author.

Material which is old enough to have lost copyright can be freely copied without legal impediments, but there can be complications. Because the duration of protection is linked to the date of publication, it can happen that an unpublished work never really goes out of copyright: if the author of a work cannot be identified, then the date of death, on which copyright protection may depend, cannot be established.

Intuitively it might appear that older documentary materials warrant a higher preservation priority by virtue of their age and perhaps rarity. However, there is a roughly inverse relation between the longevity of media and their recency. Although there are serious concerns about the preservation needs of paper-based materials, the situation is potentially graver for those in magnetic and electronic formats. In other words, the works that require more immediate attention may be those that are least likely to have lost copyright. Given the Commonwealth Government's cultural policy of promoting multimedia to create Australian cultural products, the number of these works is burgeoning.

Determining whether copyright in a work has expired is not always straightforward. For example, a printed volume written by one author might contain photographs or illustrations by another author. Presumably the two authors will die at different times meaning that the textual and graphic components of a work might be protected for different periods. This becomes more complicated again for works with several or many contributors. Consider newspapers and magazines, where copyright in the works contained therein is divided between the author of the work and the proprietor/publisher of the serial.

The proprietor owns copyright in cases where re-publication in newspapers, magazines or by broadcasting is sought. In all other cases the author or photographer owns copyright. Hence in the cases of copying for preservation, access, and replacement authors hold copyright. This is nothing short of a nightmare when it comes to reproducing newspapers and magazines in which material continues to be under authors' and photographers' copyright.

There are serious implications for nationally coordinated efforts to preserve Australia's heritage as recorded in newspapers such as NPLAN. Quite aside from the need to determine the copyright status of the material is the likely impossibility of being able to contact all relevant copyright

holders for all material contained in every issue of all Australian newspapers ever produced and being produced. Of course, one simply needs to wait until the original item begins to deteriorate and cannot be replaced through commercial channels to become exempt from this exercise! Ideally a revised *Copyright Act* will recognise the desirability of proactive preservation plans such as NPLAN and accommodate them accordingly.

Similarly, it could become an impossible tangle in the hypermedia environment of the World Wide Web if hypertext-linked documents are defined as part of the source document and are protected by copyright. However, if fifty years are allowed to elapse after the death of hypermedia authors before something is done about preserving their work, there will be little to do. The work will no doubt already be lost forever—partly due to obsolescence of the hardware or software necessary to access the work, perhaps due to deterioration of the storage medium, or to a range of other unanticipated possibilities.

The inadequacies of the present *Copyright Act* regarding authors' rights and public access rights in an electronic environment, and with respect to the preservation needs of Australia's electronic cultural heritage are well recognised.

As one of its terms of reference the Copyright Law Review Committee will consider the impact of technological developments on the ways works are created or used in new products. It is not clear, however, if it will consider the special preservation requirements engendered by new information transmission technologies, specifically the need to regularly 'refresh' electronic media to maintain compatibility with new technological developments.

The preservation of electronic works through regular refreshing can be viewed as serving authors' rights as well as public access rights. Few authors, whether publishing for profit or not, would be pleased for their electronically published works to become obsolete after a very few years. Yet this is inevitable if refreshing is left even until an author's death, let alone fifty years after it. In some cases, waiting five birthdays might be too long. We risk becoming what Paul Sturges has termed the 'amnesiac society'—a society that has lost the data that constitutes its memory.

### ***Obtaining Permission to Copy Copyright Material***

It is often suggested that we can surmount all obstacles to preservation copying of copyright material by seeking permission to copy the endangered materials. Wherever possible this is done. As stated in previous sections, however, the task is not always straightforward, especially in the case of multiple contributors to a particular item, such as a newspaper. Copyright

holders may be so numerous that even the best-resourced institutions will abandon the task as an overwhelming one. Copyright holders can be difficult to identify and difficult to locate. One author might not grant permission, while all others do, and so on. In the interests of preservation, exemptions in the case of multiple contributors to newspapers and magazines would favour preservation of our journalistic heritage.

In the case of identifying and locating authors, the Act would be more 'preservation friendly' if it permitted preservation copying where it can be demonstrated that sufficient but unsuccessful attempts had been made to identify and locate copyright holders for the purpose of seeking their permission to make preservation copies of their work.

In fact it would be even more straightforward for the Act to recognise that preservation of Australian cultural heritage material is desirable and to exempt all preservation copying done in accordance with preservation best practice (endorsed by preservation and conservation professional bodies) and for which there is no demonstrable financial gain to the copying institution.

### ***Paying to Preserve Copyright Materials***

The resources available for preservation activity in Australia are already seriously constrained. In the face of an accelerating need for preservation activity there is unlikely to be any scope for institutions to be able to pay for copyright privileges to make preservation copies. It is subversive to suggest that the creators and publishers of Australia's documentary heritage should *contribute* to the costs of preservation rather than extract payment for it?

The present *Copyright Act* can accommodate limited preservation activities, but is far from conducive to best practices. A new Act should reflect the fact that preservation of cultural heritage material is in the best public interest, and that preservation best practice serves this public interest. It should then be a simple matter for relevant institutions to adopt the best possible strategies and media to make such bona fide copies as are required to guarantee preservation *and* access for the foreseeable future.

### ***What we Need to Know-metadata for Preserving Digital Collections***

Documentation has always played a key role in preservation practice. This is not just a matter of academic interest: to manage collections or individual items one needs to know what one is dealing with. There are many instances where documentation provided the only information about processes that had been applied and might need to be corrected.

In managing digital collections and items the need for information or metadata that will support effective and efficient decision-making is even greater than with traditional collections – there is less opportunity to recognise and understand problems just by looking at the object. Often one can only recognise and manage the material itself through its associated information. There is also likely to be a much larger amount of material to be managed, with much shorter preservation cycles, so management processes need to be automated as much as possible, based on easily interpreted metadata.

There have been a number of efforts to develop metadata specifications and sets to support preservation of a variety of digital resources. Because of its pressing business needs to manage both ‘born digital’ and ‘digital surrogate’ collections, the National Library of Australia has tried to find, or if necessary develop, metadata models to accommodate both.

In the absence of other satisfactory models that seem to achieve this objective, the NLA has invested in drafting its own model: a statement of the information it believes will be needed to manage the preservation of its digital collections. An exposure draft for comment is attached.

The draft Preservation Metadata Set draws on our corporate experience in a range of relevant fields:

- preservation, and preservation documentation, of library collections
- management of archives of online digital publications, physical format digital publications, and analogue and digital audio collections
- management of digitisation projects for text-based and image-based collections
- development of logical data models for a specific digital archiving implementation
- website database design.

This means that the draft Preservation Metadata Set is built on considerable relevant experience and thinking about the issues involved. However, we are very keen to subject the draft to critical scrutiny from specialists in all of these fields and others with an interest in managing digital collections over time, especially in a library context.

This proposed preservation metadata framework has been informed by many models. Some are of broad relevance, (e.g. the *Reference Model for an Open Archival Information System (OAIS) Draft Recommendation for Space Data System Standards*), while some came to us as results of data modelling exercises for particular projects (the NEDLIB project and

the NLA's own PANDORA project). Some were more refined metadata specifications developed for particular programmes or projects (the Library of Congress-CNRI Experiment Project; The Making of America II Project; the CEDARS project; the National Archives of Australia's Recordkeeping Metadata Standard). One particular starting point for our exercise was the metadata set proposed by the Research Libraries Group (RLG) PRESERV Working Group on Preservation Uses of Metadata, which mainly addressed digitisation projects. RLG invited us to adapt this set to describe a wider range of materials.

While we have learned a great deal from all these models, we accept responsibility for the metadata set we are proposing.

### **What the Preservation Metadata Set is?**

It is most important to realise that our proposed Preservation Metadata Set is intended to be a statement of the information we believe is needed to manage preservation of digital collections. It is meant to be a data output model, not a data input model. It indicates the information we want out of a metadata system, not necessarily what data should be entered, how it should be entered, by whom and at what time; nor does it concern itself with how the metadata should be associated with what it is describing. We believe this model should be applicable to many implementations that may decide to record this information in a variety of ways. This model simply says: 'however you do it, this is what you have to deliver so we can manage preservation.'

It is also important to note that we are focusing solely on preservation requirements. The proposed metadata set does not attempt to deal with anything else. We recognise that in any implementation system there is likely to be an overlap between metadata recorded for different purposes. By focusing on the information we need out of the system to manage preservation, we put aside the question of whether particular elements may already be included in, say, other administrative or resource discovery metadata.

Different types of digital materials, and different archiving systems, will need different metadata support. There may be types of material and processes that are not adequately accommodated by our proposal despite our intentions, and we would welcome feedback.

### **Granularity**

The metadata set is based on the need to manage and describe collections, objects, and sub-objects (which we have called "files"). We have tried to show where we expect the elements in the metadata set to be

relevant to these different levels. We expect to make pragmatic decisions about the level at which records are needed, based on the level at which collections, objects and files are managed separately. This model assumes that the digital object is the primary focus of management and description. File and collection descriptions are created when appropriate.

### **Change History**

Maintaining a history of what is being described is one of the essential objectives of any preservation documentation system. We looked at two options:

- maintaining a single record over time, which records all changes and processes applied to the item being described; or
- creating a new record each time the item changes to something different, maintaining a history by maintaining a sequence of linked records.

We chose the latter approach. Managing digital objects and collections over time will mean creating and managing considerable amounts of information about them. We believe that the creation of a new record for each new manifestation will organise this information more clearly and conveniently.

### **Supporting Alternative Preservation Strategies**

It is impossible to determine unequivocally what we will need to know in order to manage digital preservation in the future, so our set of metadata elements necessarily reflects assumptions about our future requirements. Our aim with this proposed metadata set is to support both migration and emulation approaches. Just what is needed for these approaches will become clearer as we gain more collective experience with them.

### **Some Key-terms**

To minimise confusion, we need to explain some of the terms we have used in the draft proposed Preservation Metadata Set:

- *‘Work’, ‘Manifestation’* – we have distinguished between a work, as a concept, and the physical or virtual manifestations that instance it. Most preservation processes involve managing manifestations. However, we found it useful to recognise that archiving decisions could be made for the work (e.g. ‘we will maintain this work in perpetuity’), with different archiving decisions applying to particular manifestations of it (e.g. ‘we do not need to keep this copy of it’).
- *Repeatability* – because of the approach we have taken (a 1:1 relationship between each manifestation and its metadata record),

our comments about the repeatability of information in any element do not refer to a sequence of changes, but to the possibility of multiple bits of information that may be true at the same time; for example, two agencies may collaborate in an archiving decision.

- *Obligation* – we have avoided terms like ‘mandatory’, ‘conditional’, and ‘optional’, because they are so closely associated with data input models. Instead, we use the terms ‘essential’, ‘essential if appropriate’, and ‘desirable’, in their common usages. *Essential* information we believe will definitely be required. Some elements are more relevant to some materials or processes than others, so they may be *essential if applicable*. *Desirable* information will not be critical, but is expected to be helpful.
- *Examples* – we have provided examples wherever they are applicable. In some cases we have found it more useful to give generic examples, which appear in square brackets.



## A Strategy for Migration of Digital Information

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### Introduction

The National Library of Australia has been collecting Australian electronic publications in physical formats for some 15 years-the first floppy disks entered the collections in about 1983. There has been some active management of their acquisition, cataloguing, storage, and access over the years. A decision was made in the early 1990s to rationalise their storage by creating special runs for them, deferring further decisions on their long term preservation until later. Early in 1996 the Library decided to review the arrangements under which floppy disks and CD-ROMs are managed, especially with a view to long term accessibility.

Managing for long term accessibility is made up of many steps. In a complex library environment it is not simply a matter of focusing on an arbitrarily defined act called "preservation". Virtually everything that happens to this kind of material from the time it is created has a profound impact on its long term accessibility. Many of these influences affect the medium or the information directly-for example, the conditions in which it is stored, the way it is handled, the effectiveness of security arrangements.

However, we also recognised that many factors having a trivial impact on carrier longevity may significantly influence our ability to manage the survival of the information. If we cannot find, operate and transfer this kind of material easily, it may in effect be useless even while remaining in a good physical condition.

The discussion paper entitled National Strategy for Provision of Access to Australian Electronic Publications (1) has confirmed the commitment of the National Library to providing long-term access to publications in

electronic formats, both networked and in physical formats. It indicates that the Library will initiate and participate actively in national discussions and research in the management and preservation of these materials. This paper will refer to two particular activities which illustrate the Library's commitment in the area of publications entering the collections as floppy disks and CD-ROMs. The first is a case study of the research undertaken at the NLA on the migration of material from floppy disks to CD-R. Secondly, the results of this research and other NLA activities formed the basis for a national meeting held on October 27 and 28, 1997 and I will be highlighting in my talk the steps taken at this meeting towards the development of a national management and preservation model for physical format electronic publications.

### **The Issues**

Issues such as media instability and technological obsolescence are threatening to greatly reduce the longevity of these publications unless they are carefully managed.

Preservation includes all the actions taken to extend the useful life of these materials and particularly the information contained on them. Therefore control, storage, handling and security are involved, as well as copying and reformatting or migration. Overall this is a very complicated process and many issues must be addressed before libraries can effectively preserve this material, including:

### **Management Issues**

- preservation of electronic library materials requires knowledge across a range of disciplines and a great deal of cooperative work within and between institutions;
- these new formats require a new approach and attitude towards their preservation-in particular their treatment must be proactive because the useable life cycle is much shorter than for most traditional library materials;
- current copyright law is unclear regarding preservation roles and methods for electronic materials;
- we need more detail to be recorded for effective preservation management-for example, we need to be able to identify publications in the collection based on their particular hardware, software or operating systems;
- priorities for preservation must be determined on the assumption that we will be unable to preserve everything;
- resource implications have not been clarified but could be significant.

### **Generic Preservation Issues**

- appropriate environmental conditions for storage need to be defined and provided;
- special handling procedures and housing arrangements may be needed;
- security issues arise in storage and when providing access.

### **Media Deterioration Issues**

- the dynamic nature of electronic media means the rate of deterioration is largely unpredictable;
- the diversity of electronic media means managing the preservation response to the rate of deterioration is difficult.

### **Technological Obsolescence Issues**

- hardware or software required to operate particular publications may be unobtainable or unworkable;
- some material may be effectively unusable because the necessary hardware and/or software is not available on site.

### **New Preservation Pathways**

- there are no standard procedures for preservation of these publications;
- if migration of the information content to a new format is achievable, it will be an ongoing process that must be periodically repeated as the technology platform changes;
- the integrity of information may be endangered in the migration process-it may not work the same way, and it may not look and feel the same, even if all of the data is successfully migrated;
- emulation-the use of special software programmes to recreate a required operating environment-is a largely unexplored avenue.

### **The Research**

CD-ROMs are still a current and popular technology with relatively stable media, so the National Library of Australia has first focused attention on the floppy disks in the collection. It has been agreed within the Library that copying and migration of information on computer disks is likely to be the most useful preservation method currently available to us. In order to examine how we might implement these strategies a series of trials will be conducted. The results of the first trial are described below. The overall aim of this project was to migrate Australian publications that exist on floppy disks to CD-R (recordable compact disc).

It became clear that this was more an exercise in copying data from one medium to another, which is only a part of the process of migration, rather than completely addressing the problem of changing technology, such as the operating system or associated software dependencies. This has a valid purpose, considering the average life of a floppy disk is estimated at less than ten years.

### **Identifying and Locating Disks**

The ILMS (Integrated Library Management System) was recognised as the most useful source of information for identifying and locating disks in the collections. Searches were made for material with:

- a GMD (General Material Designation) of “computer file” (1023 records found)
- “disk” in the collation field of items without the GMD “computer file” (363 records found)
- “disc” in the collation field of items without the GMD “computer file” (146 records found)
- a GMD of “interactive multimedia” (7 records found).

This produced a total of 1 439 records and appears to have captured a majority but not all items. The only serials located in this search were those where the primary material was a computer file. Print serials with accompanying disks were not located.

Many of these records however were overseas publications which are generally outside our selection guidelines for preservation. It has become apparent that more information than is currently available in catalogue records must be recorded for the successful preservation management of this material.

Planning has commenced on including the extra metadata and information required for these physical format electronic publications in the PANDORA database which is being created primarily for online publications. To help simplify the management of databases and metadata in the NLA it makes sense to utilise the same database for all electronic collection materials.

### **Selecting a Representative Sample**

In order to determine the various complications that may be encountered in transferring publications to CD-R a representative sample of material had to be chosen for testing. A survey (2) was carried out of all Australian material located in the general collection to determine the range of material to be considered. The survey covered 469 publications,

405 of which contained computer disks, and 64 of these were chosen as a representative sample of material containing floppy disks. The sample of publications were chosen to represent a number of variables:

- operating system (*e.g.* DOS vs Mac OS),
- hardware requirements (*e.g.* processor speed etc.),
- software requirements (*e.g.* Word 1.1 vs Word 6 etc.),
- disk size (5 1/4" vs 3 1/2"),
- number of disks per title (*e.g.* 1 vs 6),
- age (up to 12 yrs old),
- proportion of publication on floppy disk (whole publication vs supplementary material vs set-up software for CD-ROM).

### **Copying**

Basically the copying process devised was to transfer the data from the original floppy disks to a network drive, download the data to the hard drive of the PC containing disk writing software and then write to CD-R.

The entire process (with the exception of file comparison) was carried out with hardware and software currently available in the Library.

A detailed description of the copying process is given below.

*a. Select appropriate computer hardware and operating system, i.e. PC vs Mac, with correct size of floppy drive.*

23 items could not be used at all due to a lack of the appropriate hardware or software. Another 1 item could not be used because a security tag had been stuck over the metal sliding cover on a 3 1/2" disk. This reduced the number of materials to continue through the rest of the trial to 42.

*b. Virus check of original floppy disk*

All 42 items were checked for viruses using the latest version of virus scanning software in the Library. No viruses were found.

*c. Physical disk scan of original floppy or similar process to check for media deterioration*

Scandisk was used on PC material, and Nortons Utilities Disk Doctor was used on Mac material to examine the disks for errors and deterioration. Only 2 PC disks had problems. One disk had errors which resulted in it no longer being operational so it was taken off the list for preservation, but the other had a second copy and could still be used. This reduced the number of titles for the remainder of the trial to 41.

*d. Install and run from floppy*

At this stage of testing one publication was discovered to have a blank disk although it was labelled as containing the appropriate files. Therefore it was also eliminated from the rest of the trial, leaving the final 40 publications.

When trying to run the files further difficulties experienced include:

- 12 publications were found to not have the appropriate software or hardware available, and
- inability to figure out how one other item was supposed to work, although the disk appears to contain information of considerable intellectual content which is worth preserving.

Twenty-seven items worked as they were supposed to when used from the original floppy disks.

*e. Copy contents of floppy disk to network drive*

This was successful for all 40 items.

*f. Run comparison software to check for differences between original and copy*

This was successful for all PC items. Mac items were not tested because appropriate software for the task could not be located.

*g. Set as Read Only*

This was tested for PCs only. It was not until after this part of the trials was completed that it was confirmed that “locking” a file on a Mac has the same effect as “read only” on a PC. This was mainly to test for the ability of the files to continue to function as required in a read only state as they would exist on the CD-R.

*h. Install and run from network drive*

Running files that had been set as read only did not cause any problems for these items.

All items continued to function after having been put on the network drive, although 4 items had to be copied back from the network to the root directory of a floppy in A: drive, and one of these required the renaming of the floppy disk, before these copies would work.

This is because the expected location for the files, A: drive, has been hard-coded into the item.

The amount of time required to process material to this point in the copying procedure (i.e. steps *a-h*) was measured for 18 items, and took an average of 40 minutes per item.

*i. Unset Read Only*

Files that had been changed to read only status were returned to their original state so that they would still represent the original as faithfully as possible.

*j. Organise titles in appropriate file structure using appropriate naming convention.*

In an effort to apply widely accepted standards to promote longevity the data was arranged into a file structure that applied the ISO 9660 standard (3). This entailed using only A-Z (all capitals), 0-9 and the underscore in the 8 character plus 3 character extension naming convention for creating the directory structure for storage. The depth of the directories can reach a maximum of 8 levels.

The original file names for many publications however introduced illegal characters and extended names which could not be changed because their own programmes would not recognise the new names and would cease to operate. Mac files in particular did not follow the basic ISO 9660 naming convention.

*k. Create and include documents with appropriate details such as installation instructions for each item.*

A general file was created in ASCII text to describe the contents of the CD-R, how files are arranged on it and refers the user to individual ASCII text files for instructions on how to use the individual items.

For this trial the individual ASCII text documents were created for only 4 items to test whether this is a successful method for carrying important information about each publication. In practice there would be one file each created for every item on the CD-R.

Apart from obvious details such as title, the ASCII files for the individual items include:

- hardware required
- software required
- notes to assist installation
- number of files
- storage size (Mb)
- original format and number of disks
- existence of accompanying materials
- content description (*e.g.* text, database, software)
- any copyright statement from the publisher

These in future should also include date the disk(s) was copied to a new format and what that format is. This may seem obvious now, but if this data is migrated several times it may be desirable to have the history recorded.

*l. Write to CD-R:*

This involved copying the files from the network drive to a computer set up with the software for creating CDs and a CD writer. During the process this software checked the file structure against the ISO 9660 file naming standard with Joliet extensions to allow for larger file names, e.g. for Windows 95. Four file names were rejected for containing illegal characters and had to be changed before the writing could continue. The rejected file names were all from Mac files which contained illegal characters according to the standard and extensions. This would most likely render the publications unusable.

Writing the 40 items to one CD-R (approximately 1,900 files, a total of around 164Mb) took 45 minutes.

*m. Run comparison software to check for differences between original and CD-R copy.*

Material for PCs compared favourably between the original and CD-R versions. Mac material could not be tested due to lack of comparison software.

*n. Install and run from CD-R;*

When the CD-R was used to install and run the material the PC files did not appear to have any further problems, but it became apparent that the Mac files did not work.

The final result out of 40 items:

- 22 items (all PC) were functional before and after copying to CD-R.
- 5 items (all Mac) were functional before but not after copying to CD-R.
- 12 items did not have the required software to function appropriately but were written to the CD-R, and some these items for PCs tested with other similar software to that required and tested by file comparison, still proved to have copied faithfully.
- And one item that could not be tested by installation and running showed favourable file comparison results.

Further investigation has shown that Mac files need to be written to a CD-R using the HFS file system, which will require different CD writing

software. This also suggests that copying Mac and PC files separately onto separate CD-Rs would be simplest.

### **Research Conclusion**

The testing has produced useful results. Not all the material in the sample was successfully migrated, however this was expected. We now have more informed views of the issues involved, the hardware and software required by the collection for use and whether it is available in the Library, and also the copying processes.

### **Further Action for Internal Consideration Flowing From this Trial**

This trial highlighted the need for the Library to:

- continue to investigate the best means of recording and managing the relevant metadata, including the development of the metadata archive associated with the PANDORA project;
- develop Guidelines for selecting material to be preserved and for subsequent procedures.
- determine what to do about currently held material which we are unable to operate or copy due to hardware and software deficiencies;
- continue tests for Macintosh materials;
- obtain the necessary support software for the transfer such as file comparison software for both PC and Mac;
- copy existing floppy disk publications selected for preservation to CD-R as soon as possible;
- establish ongoing copying procedures for floppy disks, probably on an annual batching basis (expected to be a short term commitment as the number of floppy disks entering the collection declines);
- continue trials on other forms of migration. The feasibility and value of migration across operating systems and other major technology changes will remain unclear without further testing;
- examine the possibility of emulation as an alternative to migration;
- recognise that these methods are not a guarantee of preservation but appear to be necessary steps to increasing the period information remains accessible;
- establish and maintain contact with others involved in similar research elsewhere in Australia and overseas.

### **Aims of the National Consultative Meeting**

The results of the trials just described were presented to the participants of the national meeting in October 1997. This meeting was coordinated

by NIAC (the National Initiatives And Coordination Branch at the NLA) and involved the State Libraries, National Library and invited publishers in discussion of issues relating specifically to floppy disks and CD-ROMs in deposit libraries.

The aims of the meeting were to:

- explore the methods used by publishers in producing, promoting and distributing their products;
- reduce any potential or perceived threat to the publishing industry by libraries;
- discuss the efficiency and effectiveness of current procedures for moving this category of material from the producers/publishers to National and State Libraries;
- discuss legal issues;
- improve cooperation and communication networks between all parties;
- discuss methods of cataloguing, preservation and access;
- explore methods of sharing the preservation responsibility nationally;
- develop an action plan setting out a timetable, resource implications, and responsible parties.

More recent details can be obtained by viewing this paper at the VALA '98 website.

### **Addendum**

Outcomes of the National Consultative Meeting 27-28 October 1997

Below is a summary of the main observations from the meeting:

- There appears to be a trend for many publishers of physical format publications to move towards using the internet as the new medium for their publications.
- There may be scope for the provision of customised copies of publications for libraries, which will be suitable for preservation purposes.
- It is clear that preservation and access are inextricably linked. Long term access cannot be provided unless preservation is achieved.
- Boundaries defining the processes involved in the management of the access and preservation of these materials are blurred. Practical experience gained through working with these publications at all levels will provide vital information for the preservation activities

required. Essentially, providing continued access to these materials is conducting the preservation of them.

- There are overlapping issues between the access and preservation of physical format and online materials, but the meeting required a focus on the physical formats.

The National Library will produce a more detailed position paper stating clearly defined aims and activities which will lead to the production of a draft national policy for electronic materials.

### **New Approaches to Access: Use of the WWW in Heritage Collections**

The National Library considers collecting and providing access to Australian library materials, both published and original, to be central to its role as a national library. To understand its current approach to these activities it is useful to refer to its Strategic Plan for 1993-1998. Three key priorities for the period are identified here. The first of these-and the one directly relevant to this paper-is:

*“[To carry out} activities which result in the Library collecting and preserving Australian documentary materials of national significance, and [in] those materials being known to, and used by, greater numbers of people.”*

The Strategic Plan goes on to say that one of the ways in which this priority will be achieved is by improving nationwide, individual access to Australian materials through the use of new technologies. Specifically, it states that we will exploit image and communication technologies to improve local and remote access, particularly to unique original materials. The Plan also makes it clear that the Library sees its Australiana collection as a component of a larger national collection from which its holdings gain context and significance. Consequently, the Library's access strategy will not be pursued in isolation but will involve national leadership and collaborative activities aimed at improving access to the whole national collection. This chapter outlines how the Library is attempting to improve access to Australian library materials by using WWW and digitisation to deliver information about collections and to provide access to digital copies of material in its own collections. It also outlines the main principles that guide decisions on what collection items to convert to digital form for delivery via WWW. Specific projects, some involving collaborative activities, are also described.

The paper does not cover access to Australian information published in electronic format, either online or on CD-ROM. Rather, it is concerned

with access to traditional Australian library materials both in their original form and in digital surrogate form. This focus is not meant to imply that electronic publishing is not of concern to the Library. In fact, quite the opposite is the case, as the paper by my colleague Margaret Phillips on the management of Australian networked publications at the National Library, which was presented earlier in the conference, testifies.

### **Background**

The National Library's access strategy has always been national in focus, in recognition of its responsibility to develop a collection for all Australians. Use of technology has been a key feature of the strategy for some years now as it has enabled the Library to make its collections known about and available to individuals without their having to visit the Library in person. For instance, we have been cataloguing on ABN since its inception and a large part of our Australian collections-both published and original materials-is now catalogued on the NBD. All the Library's catalogue records on ABN are downloaded to its OPAC which has been available via the Internet since 1992.

The WWW provides new and enhanced ways of providing access to our collections. It enables us to deliver information via our Web Server in more useful ways and to a wider group of people. The main advantages of using WWW to provide enhanced access include:

- the community wide penetration of client software which enables us to reach a larger and more diverse audience from that reached by traditional Library systems based on separate software and hardware. (People can now access information at the Library site using common software used for a variety of everyday purposes);
- html protocols which enable links to be made between associated documents and sites, thereby providing context for information and collection surrogates; and
- the multimedia capabilities provided by the http protocol which allow us to plan more innovative ways of providing access to the graphic and sound components of the Australian collections. We can also integrate different materials to highlight the Library's multi-format approach to documenting Australian life and achievement. For example, the transcript of an oral history interview could be linked to the spoken interview, which in turn could be linked to a photograph of the subject and to a list of his or her personal papers held by the Library.

Another major advantage of using technical specifications with wide availability and application is that it is possible to cooperate with a range

of partners from different sectors to pursue common objectives using the same technology. The National Library is interested in collaborating with other cultural institutions, libraries and collecting bodies to develop and be part of a national strategy to provide national access to Australia's cultural heritage regardless of its original format. Use of public domain technical standards is a positive step towards achieving this.

### **The National Library's WWW Server**

During the last two years the Library has made extensive use of WWW and digitisation to improve national access to its Australiana collections. The Library launched its WWW Server in March 1995 and since that time a large body of information about the Library, its collections and services has been made available on it. Information relating to the Australiana collections that is now available on the Server falls into the following categories:

- Descriptions of unusual and important new acquisitions by format
- Overviews of the collection by format, including strengths and subjects of particular interest
- Descriptions of important formed collections; such as the Ferguson, Petherick and Rex Nan Kivell collections
- The text of the Collection Development Policy for each format of material
- Indexed finding aids for manuscript collections
- Digital surrogates of pictorial items in the Images database; and Online exhibitions.

In addition to information about the collections, the Server includes information on how to access and use them including through Document Supply, and provides direct links to the Library's OPAC and Images database.

Other sources of information that will be made available when resources permit include the content of popular collection guides such as C. A. Burmester's *Guide to the Collections* and *A Full House: the Esso Guide to the Performing Arts Collections of the National Library of Australia*. It is planned to mount these guides as databases so content can be indexed and searched, and also to eventually link descriptions to digitised images and sound. In addition, it is intended to mount directories of national holdings of materials on the Library's Server. An oral history directory is planned and one for manuscript and archival materials is currently being developed which I will describe later. Also, over time, detailed guides to particular aspects of the collections which are designed specifically for WWW access

and which link to digital versions of collection items, will be prepared. One such guide that is currently being prepared will describe and list the Library's holdings of Aboriginal and Torres Strait Islander related material. This guide will be published on the Server and probably also in print format, in mid-1998. The guide will provide the basis for future digitisation of some of the material listed in it and will also link to other related sources of information as they become available on the server.

### ***Relationship of WWW Access to OPAC and ABN Access***

Provision of access to collection content via the Library's WWW server forms part of a broader strategy to provide a variety of access methods to enable people to discover what is in the collections. The strategy involves the Library's other collection control systems (ABN and the OPAC), takes advantage of the current capabilities of each system, and anticipates improvements in the technology on which each is based. It provides for an integrated approach (across formats and collections) as well as providing context for material described. For instance, ABN provides the context of other libraries' collections and the DNC, the OPAC the context of the Library's own collections and the WWW Server the context of a specific collection.

The strategy also provides for a hierarchical approach to collection access. For instance, collection level records are being made available on ABN for manuscript collections and groups of photographs while more detailed listings in the form of manuscript finding aids and caption data for individual photographs are indexed and made available through the Server. In the case of photographs, the caption data is also linked to a digital copy of the item itself. While the Library is currently following this model for the control of photographs and manuscript collections, its full potential cannot be realised yet as it is not possible to link from ABN or the OPAC. However, we are currently investigating the potential to use WWW software to provide a common user interface, or cross platform front-end, for uniform access to all the Library's information systems. This would allow the collections to be accessed at various levels and for linked objects to be displayed regardless of the entry point to the description of the collections.

### ***Standards Issues***

As well as facilitating access to its own collections, the Library is interested in promoting a coordinated and coherent national approach to accessing digital collections and collection descriptions across different sites. Essential to the success of such an approach is the development and use of common standards for data indexing, searching and presentation.

The Library has initiated discussions on this topic with a number of other collecting institutions and will explore the possibility of pursuing the objective through national initiatives such as the National Cultural Network and by working with relevant bodies such as the Distributed Systems Technology Centre at the University of Queensland. While a great deal remains to be done in this area, the Library remains committed to the national perspective and an objective of all its digitisation activity is to advance the development of appropriate standards and approaches.

### **Conversion of Collection Items to Digital Form**

So far, the Library's digitisation of material in its collections for networked access has been largely limited to pictorial material. A project to convert all analogue oral history recordings to digital form is also in place, driven primarily by the need to maintain future access to the collection given the pending obsolescence of analogue technology. The Library plans to provide networked access to some of the recordings eventually and trials in this area will be carried out soon. We also intend to experiment with the digitisation of manuscript material this year.

Digitisation of the collections will be an incremental process that builds on other projects that use WWW to enhance collection access. Before I describe some specific projects that demonstrate this approach, I would like to outline briefly the main principles we have established to guide decisions on what to digitise. The first of these relates to what we are aiming to achieve through digitisation.

### **Aim of Collection Digitisation**

The general aim of the Library's programme to digitise collection content is to develop over time a digital archive of collection surrogates of mainly unique material, that is representative of the richness and diversity of the Library's collections, and that can be used for a variety of purposes by a range of users. A more specific aim is to assist the research process by making access to the collections more immediate and the consultation of material-especially large bodies of material such as collections of photographs-easier and more efficient.

### **Approach: What Will be Digitised and How**

The size of the Library's Australiana collections and the cost of carrying out digitisation dictates that the Library must be selective in its approach. Also, for a range of reasons digitisation might not be the best way of achieving access objectives for some materials. Where conversion to digital format is considered appropriate, activity will be either project based or mainstreamed, depending on the category of material and the reason for

digitising it. Preference will be given to material that is used, as the need for access has already been established, and also because digitisation will divert use from the original thereby assisting with its preservation.

In addition, concentrating on collection material that is in demand can bring operational efficiencies such as online ordering of reproductions and use of the database instead of the collection for initial research. However, material that attracts no or very little use will not be ignored as digitisation could create interest in material that would otherwise remain (for whatever reason) unused. Judgement as well as advice from scholars will be used to determine what material in this category holds potential interest.

The preferred approach for digitisation projects will be systematic rather than random with preference being given to digitising groups of material that have some coherence; *e.g.*, the material is representative of a theme, topic, genre or some other unifying factor. An obvious advantage of a project based approach is that experience and knowledge can be developed more quickly and reinforced through concentrated effort.

### **Access to the Digital Archive**

The digital archive will be networked and data will be indexed for WWW access. Online access to the archive will be free but reproduction quality copies of items will be charged for. Digitisation of collection material that is carried out in the Library will occur only once and the resulting data will have as wide a utility as possible so it can be used for a number of purposes; *e.g.*, reference, exhibition, reproduction, publication. This means that digitisation will always be carried out to the standards necessary to guarantee this. Networked data will be provided at low and medium quality resolutions for reference purposes with high resolution copies being available on request, subject to reproduction and copyright conditions. Access to digital surrogates via the Server will form part of the integrated approach involving the Library's other collection management systems described earlier.

### **User Requirements**

The Library's digital archive programme will not be driven by or aimed specifically at any one sector or user group. Material that would be likely to appeal to a variety of sectors will be digitised. However, the needs of our traditional client base (the scholarly and research community) will not be overlooked and we will work with them to identify these needs. As mentioned earlier, a specific aim of the Library's use of WWW and digitisation is to aid the research process by enabling researchers to do some preliminary investigation before visiting the Library.

### **Presentation of Digital Data**

The Library will not enhance digital archive surrogates by providing interpretative or contextual material except where this can be provided by bringing out relationships that already exist between collection materials through the use of links. Data will be indexed to facilitate retrieval though. The general aim is to provide surrogates of items for others to interpret or package in whatever way they choose. However, the Library may link digital surrogates in its archive to interpretative data created by others and may work collaboratively to coordinate such an approach.

### **Copyright**

Permission to digitise and network items in copyright will be sought before digitisation is carried out. Where permission is denied the material will not be made available but in the event that the copyright owner cannot be established or located, the Library will proceed with digitisation once reasonable efforts have been taken to trace the owner.

### **Preservation Considerations**

While the Library's prime purpose in digitising is to improve access to the collections, the potential of digital technology to assist in the preservation of the Library's collections is also a consideration. As already indicated, at the most basic level, digitising high use collections will protect the originals from wear and tear caused by handling. The Library's current requirement that microfilm be the preferred long term medium will be assessed in the light of developments in digital technology and in strategies for managing digital objects. In the meantime, there could be some material in the collection for which digitisation will be considered adequate preservation treatment at this stage, based on a number of factors including research value, physical condition, and rarity of the item.

### **Collaboration**

Collaboration with a range of groups and institutions will be a feature of our digitisation strategy and will most likely determine most activity in the short-term. We will both initiate collaboration and respond to opportunities as they arise. The Library considers it important to be part of the national agenda in this area and to maximise opportunities for sharing costs, expertise and experience. Consequently, it is necessary for our approach to digitisation to be flexible and multifaceted.

### **Digitisation and WWW Projects at the National Library**

I will now describe some of the specific projects based on use of WWW and digitisation that are underway at the Library and which illustrate the different approaches being taken.

**Images 1 Pictorial Database**

The Images 1 pictorial database was made available on the Library's WWW Server in June 1996 following completion of a special project to digitise components of the pictorial collection. The database currently includes around 13,500 digital images of works from the collection which comprise water-colours, paintings, drawings, prints and photographs. Subject coverage is broad and includes contemporary and historical portraits, historical events, voyages to the Pacific, landscapes, bushrangers, and scenes of colonial life.

Images selected for inclusion had either been previously reproduced on videodisk-the Library's APOLLO Videodisk was produced in 1992-or are portraits. Portraits were selected as an area of special interest for the Library following its establishment of the National Portrait Gallery and also because we wanted to be systematic in digitising the collection, providing access to a coherent component of material. It was decided to convert the 12,000 videodisk images to digital format as this could be done relatively cheaply as part of the project but also because we wanted to provide networked access to the images and not support dual systems. Another factor influencing the selection of works to include was the availability of cataloguing data on ABN which could be used to provide the index entries to the digitised images. Images can be searched by title, artist/photographer and subject. All non-photographic works are described individually but most photographs that are not portraits have been catalogued as collections and do not have individual descriptions, although specific caption data will be added as resources permit and if it already exists on the originals.

Images were digitised using PhotoCD technology and are available online in two formats-as thumbnail and as medium quality resolution reference images. High quality reproductions are available on request, and for a fee, from the Library's Pictorial Section. Order forms and information are available at the Images site but we are not able to accept online orders yet due to the current requirement that orders and copyright declarations carry a signature.

For works in copyright, permission was obtained from owners to digitise and network their works for reference purposes. Each image carries a warning that permission must be obtained to reproduce images. For the past two years, Library policy has been to seek permission to digitise at the time of acquisition of pictorial works. If this is not granted, only in exceptional cases will we proceed to acquire the work.

From this month (January 1997) we will commence routine digitisation of new acquisitions of original works, items included in National Library

exhibitions and publications, and most commercial orders. These will be added to Images 1 on a regular basis so it will gradually become more diverse and representative of the subject scope of the Library's collection. We will also commence digitising images from two recent photographic projects conducted by the Library which depict Australian cities and major towns and aspects of life in Canberra.

However, progress with these will depend on budget availability. Planning for routine digitisation of pictorial images has raised many workflow and logistical issues, some of which have not yet been resolved adequately. While our objective is straightforward in this area, achieving it is not, and there are still several difficulties to overcome.

A document outlining the technical standards applied to the Images project is available on request to anyone wishing to follow up on this aspect.

### **Register of Australian Archives and Manuscripts (RAAM)**

With the assistance of a grant from the Towards Federation 2001 High Priority Cross Sectoral Fund, the Library is in the process of establishing a networked database of manuscripts and private archives held in Australian institutions, including the National Library. The register-called RAAM (Register of Australian Archives and Manuscripts)-will be made available on the Library's Web Server in early 1997, freely available to anyone with WWW access.

RAAM will replace the *Guide to collections of manuscripts relating to Australia* which the Library published from 1965 until 1995, and it is hoped that use of WWW to provide the service will enable some of the acknowledged weaknesses of the *Guide* to be overcome; namely, its limited and unrepresentative coverage, its microfiche format, its currency, and the effort and resources required to produce it.

The Library believes that, notwithstanding improvements in access to individual collections that have occurred in recent years due to use of technology, the need to assist research by providing a central directory of the locations of manuscript and archival collections remains. While the essential purpose of RAAM is the same as the *Guide*, its format will be very different in the interests of encouraging a wider range of contributions and making it easier for institutions to contribute. Description standards for entries will be minimal.

Only three data elements will be mandatory: the name of the person or organisation that created or assembled the records, the type of record, and the location of the records. However, in fact many entries will include

much more descriptive data than this as data elements included in the original source of the entries will be retained. Data is being collected from ABN, local databases, WWW sites and printed listings and it is expected that the register will include about 25,000 entries from a range of institutions at its launch. This is a significant increase on the 6,000 included in the Guide over the period of its thirty year life.

Advantages of using WWW to provide the RAAM service include:

- it will be less resource intensive to maintain and develop. Summary entries will be easier for contributors to compile and a self-reporting electronic form facility, as well as electronic file transfer, will streamline updating of the database and keep it current
- entries can be linked to finding aids available at Web sites which eventually could be linked to collection surrogates in digital form. (The National Library has mounted several of its finding aids on its Server and these are indexed and searchable by name and keywords.)
- the ability to link to other relevant sites will enhance the utility of the register and allow it to be flexible in how it meets its objectives; for instance, links will be provided to repository entries in the Directory of Archives in Australia which is available on the Australian Science Archives site so researchers can go here to find out information about the repository once they have discovered from RAAM that a collection exists. Also, sites with database access to eligible entries will be linked to rather than duplicating the data in RAAM. This is the approach that will be taken to cover personal papers held by Australian Archives.
- information about manuscript and archival holdings will be more widely and readily available.

### **Collaborative Projects**

During this year the Library will give priority to participating in three collaborative ventures aimed at improving access to national cultural heritage collections. These are currently at various stages of development.

### **National Cultural Network (NCN) Project**

The National Cultural Network is a Commonwealth government funded programme aimed at improving access to the collections of Australia's major cultural institutions. Funding of \$10 million has been provided over 3 years for the provision of hardware and software, and to enable training and digitisation to be carried out. Public access to the NCN will be via the Internet in schools, libraries and cultural institutions.

It is envisaged that the NCN will:

- fund the digitisation of cultural content in order to create multimedia databases representing key collections in cultural institutions. The preferred approach is likely to be thematic
- support and improve access to this content by providing a single entry point through a Home Page which links to relevant sub-networks and sites, and by supporting the ability to search across the databases of all participating cultural institutions. (The creation of indexing data will also be funded.)
- support collaboration between cultural institutions by establishing mechanisms for the discussion of issues such as digitisation techniques and costs, common standards for indexing data, search engines and copyright management.

The Department of Communication and the Arts which has responsibility for managing the NCN, is expected to issue guidelines for participation in the programme soon. It is likely that there will be a call for bids for projects and that these will be assessed by a panel. The Library has considered how it could participate in and benefit from the NCN and sees it as an opportunity not only to augment its digitisation problem but to meet other corporate goals associated with access to information. Ways in which we consider we could participate, depending on the guidelines, include:

- digitisation of material in our collection that relates to indigenous people or to the political and cultural development of Australia in the period leading up to Federation
- linking the single entry point of the NCN Home Page to the WWW resources relating to Australian libraries and their collections
- advising on standards for indexing and searching and piloting a project in this area.

***Centre for Cross-Cultural Research (Australian National University)***

The Centre for Cross-Cultural Research is a new Commonwealth Special Research Centre supported by an Australian Research Council grant of \$7 million over 9 years. The aim of the Centre is to explore the formation of cultural identities and cross-cultural relations in Australia and the Asia-Pacific region through three streams of research-cultural history, visual research, and contemporary art and culture. It is intended that the research programme will involve collaboration with major public cultural institutions on exhibitions, electronic colloquia, and print and multimedia publications.

The Library has met with representatives from the Centre to explore the possibility of a collaborative project involving the digitisation of the works of Augustus Earle and material related to the Cook voyages and also to discuss the possibility of holding a joint multimedia and cross-cultural research workshop. Considerably more discussion is necessary before the precise nature of a collaborative undertaking is decided, but the Library is enthusiastic about working with the Centre to assist them in meeting their research requirements in this area and sees the collaboration as an opportunity to gain more understanding of how digitisation can best support the research process.

### ***Australian Collecting Institutions with Documentary Heritage Materials***

As previously indicated, the Library is keen to work with other collecting institutions to develop a common approach to online access across all digitised collections of documentary heritage materials. Progress in this area is not straightforward due to the different rate at which key institutions are taking up digitisation and to a range of local factors. Nevertheless, the Library has commenced discussion with some interested institutions and hopes to make progress during this year. As the objective in this area of cooperation is similar to that of the National Cultural Network it is possible that a similar general strategy will be pursued.

At an informal meeting of representatives of most state and some university library representatives that was organised by the Library in October last year, in conjunction with the ALIA conference, it was agreed that it was a desirable long term goal to facilitate some form of coherent access across digitised collections. The value of establishing a national linking page which would allow easy referral of users between collections (and local Home Pages) was discussed, as well as developments with search engines. The meeting considered that recent work on an access architecture for government information could have broader applicability for digitised collections and the National Library agreed to prepare an options paper on approaches for searching across collections.

Indexing standards were also discussed at the meeting and it was agreed to conduct a survey of institutions represented at the meeting to determine the cataloguing, indexing and digitisation standards that are being used. It was also agreed that a national standard of subject description of digitised images should be based on the PICMAN thesaurus produced by the State Library of New South Wales. The possibility of establishing pooled funding to support any work of benefit to the entire group was also raised and it was agreed that CASL and CAUL should be informed of the meeting. A follow-up meeting will be held early this year.

The Library also meets separately with Australian Archives and the National Film and Sound Archives to discuss issues of mutual concern and options for cooperation. We are currently considering the possibility of carrying out a joint digitisation project with Australian Archives which focuses on Federation. If this is feasible we will seek National Cultural Network funds to carry it out.

### **Conclusion**

The National Library is responding actively to the exciting opportunities offered by digitisation and WWW to make the riches of its Australiana collections available to all Australians and also in order to establish its central role as a major national cultural and information services institution. The Library's WWW Server should be consulted for information on current activities and future projects in this area. Also, we would like to hear from institutions interested in collaborating on specific projects and welcome the opportunity to work with others on the development of common approaches and standards for enhanced access to documentary collections through use of WWW.

### **Transfer from Analog to Digital : Selecting a System**

Let me start by saying that for a place like the National Library of Australia the major shift from analogue to digital is probably in managing digital information, rather than reformatting our existing collections into digital form. Unless we manage the digital information that is being created we will lose a lot of it. So when I am talking about digitising collections, I recognise that it isn't the Library's only focus.

I approach this subject from a preservation background, but one that has been looking for some time at preserving information from a range of collection formats, using a range of reformatting and preservation management techniques. For the moment I want to bypass the question of whether digitisation is a useful preservation process-although ultimately I won't be able to avoid it.

What my experience leads me to are some principles that I believe should guide us. I then want to talk about a few specific projects and how we have tried to apply principles like these. I won't be presenting any technical information or comparing actual systems-it seemed too ambitious to take on what I want to talk about as well as the mass of available technologies in a relatively short paper.

What I have to say seems pretty obvious, but I hope it is still worth saying. It is very easy to believe there is one process called digitisation; very easy to assume that convergence means everything can be treated

in the same way, as if there were a truck called “digitisation” on which we can throw all of our dead and dying technologies to be carted away and turned into something new and useful. It is easy to believe we can choose one of many desirable outcomes and ignore the processes we have to go through to reach it. One very desirable outcome is the ability to make information from all of our collections available to anyone anywhere, with rapid and thorough retrievability, and with seamless access so that data from all over the place can be put together in ways that are simply not possible with different analogue formats.

Although parts of that vision are achievable right now, as a whole it is a long way off, and there are many issues to resolve, many dilemmas along the way. (I keep thinking of a drawing by Lord Baden-Powell, of a boy scout paddling a small canoe between rocks towards a beautiful sunrise emblazoned with the word “happiness”.)

This paper talks about some of the issues and dilemmas, and some of the approaches we are taking at the NLA.

### **Some Guiding Principles**

So, let’s start with some principles. Most of them should be familiar to anyone involved in preservation management, or library management, or public administration, just about anywhere.

- We must be accountable—we are going to be spending lots of someone else’s money, so we had better be sure that we can justify it, both in terms of what we digitise and how we do it (we also remain accountable for our existing collections and for what is going into them, so we have to do a good job of managing competing demands for our attention and resources).
- There are a lot of things we don’t know, so we had better remain flexible. It is hard to predict costs, technologies, storage capacities, bandwidths, what people will want to look at in a digital form, how they will want to use it, what the community will be willing to pay, what users will be willing to pay. (Already some of these look complicated. I hope I can convince you, if you need convincing, that we need to be mindful of all of these, but not debilitated by them.)
- We need to be both cautious and decisive. We need to step forward, and there is generally no point waiting until everything is perfect. While it is tempting—and foolish—to rush in, it is also tempting to wait, discuss, agonise, until everything is stable and understood.
- There are different ways of doing things, so we have to choose between alternatives. How do we choose? If I put accountability

and flexibility together, I come up with pragmatism-by which I mean a commitment to solutions that work, and realism about what is likely to be possible, and about what may get in the way. Like other speakers, I am struck by the similarities and the differences between the old and the new. There is/was? an idea that everything would be different-everything had to be done differently because everything has changed. A truly pragmatic approach says: “we will apply what still seems applicable from the past-we will not assume that it must be wrong because we have done it that way before. If a model is useful, we will use it.” It also says, “if it isn’t useful, we won’t use it, we will do it differently.”

- Reflecting that pragmatism, I would say that we need to be experimental. We need to give ourselves room to undertake some cautious projects that bring expertise together, and address some clearly defined objectives. We should seek to discover information that we need on specific issues.

These are general principles that apply to digitisation projects as well as elsewhere. There are a couple of other principles of particular relevance to digitising collections of the National Library:

- There is no one “system” applicable to all of our collections-at the most we may find a system that works well for a particular part of the collection. Even when different kinds of collection material have been digitised, there are likely to be differences in the way groups of primary users want to use them, and certainly differences in the storage capacity and network bandwidth needed. These are likely to be significant enough to keep them apart in the near future, even though highly selected bits will be brought together when someone wants to produce a multimedia package.
- We also believe we need to be systematic, rather than digitising bits and pieces, and to be comprehensive rather than selective. (By “systematic” I don’t mean we start at item one and work our way through to item 23 million, and by “comprehensive” I don’t mean that we will digitise everything.) The Library serves a number of roles. It is an educator, and a creator of what I might call recreational or entertainment products. In those roles it has an interest in packaging information. But it also has fundamental roles as a very significant research resource-we would say a pre-eminent resource-and as a major archive of documentary heritage. Digitisation must support our business, and we think it can do that best if we digitise systematically rather than *ad hoc*.

- And as a final starting principle, it's worth saying that digitising always costs more than you think, and raises more issues that you thought of (and in this it is very much like microfilming only more so!)

### **Applying the Principles-Some NLA Projects**

How have we have tried to apply these principles? I will talk about a few projects selected to suit my purpose of trying to draw out some of the learning that has gone into and come out of those projects.

The ones I want to talk about are:

- a project to digitise the Oral History collections;
- a project to make digital copies of some of the original portraits in the Library's Pictorial collections;
- the Australian Cooperative Digitisation Project that Ross Coleman [Collection Management Librarian, University of Sydney Library] has spoken about [in his paper *The Ferguson, 1840-45, collection proposal: adopting the hybrid approach* at the same conference]; and
- the digitisation of current Australian serials.

This does not account for a number of important proposals regarding maps, manuscripts and microfilm. It doesn't even mention our publications, education and exhibitions programmes. And it doesn't pretend to articulate the Library's main digitisation strategy, which is currently being finalised. There are significant larger issues associated with that digitisation strategy that are beyond the scope of this paper. Here I mainly want to use projects for the way they illuminate certain principles, not as case studies, and certainly not as a definitive statement of what the Library will seek to achieve in digitisation. What do these projects illustrate? The first principle I mentioned was accountability. Trying to be accountable we recognised a kind of chain of understandings:

- i. we can't digitise everything, at least not all at once, and maybe never. This is partly a matter of resources, but also a matter of priorities.
- ii. we have to start somewhere.
- iii. we need to base our priorities-our starting points-on two related things:
  - areas of the collection where there is a demonstrated imperative to digitise or we will lose access; and
  - things that clearly address the Library's strategic directions.

The first of these-demonstrated need-led us to the Oral History collections. Being a tape-based collection, we are dependent on supplies of professional quality analogue tape. When we became aware that suppliers were planning to stop making it in the next few years, we realised we had to look at a digital system or else lose our ability to preserve and give access to our collection. Having made a decision about priorities, we have looked at what benefits we could get from the project, what we can integrate into it. I will discuss the project in more detail a little later. For now I would ask you to note this theme in our priority setting-working out what needs to be done for a primary purpose, then looking for opportunities to get the maximum benefits out of it.

The other projects I mentioned are not being driven by the same operational necessity, although they are based on some strategic necessities.

The portraits exercise came out of a concern that we had a major documentary resource that is not as widely known as it should be, partly because it is difficult to provide safe and easy access to a collection of oil paintings, watercolours, prints, photographs and 3-D objects. The Library's support for and involvement in the National Portrait Gallery has led to increased collecting and increased demand for access to our portraits.

There were other advantages to this project. It addressed an identifiable component of the collections that are stored in one place, are already under consistent and good intellectual control, and where much of it is not encumbered with copyright restrictions. It was also a small enough project to be achievable in a short time frame, large enough to be significant, and it matched the available funds quite well.

Of course, there were also problems-quite a lot of the material is still covered by copyright; we had concerns about the technical and preservation difficulties in scanning original works of art; and we had been told that scanning technology for handling large colour images was still at a fairly immature stage of development.

We have sought to take advantage of these problems. We want to know about the copyright challenges-how artists will respond to requests to copy and give networked access to their works; what measures we can put in place to protect their intellectual property rights while providing the level of access we want; even just the administrative logistics. We intend to learn by dealing with these problems.

Likewise, we decided to take advantage of the fact that about half of the items were already photographed onto professional quality colour transparencies-so we decided to photograph the rest. This allows us to scan the trannies rather than the originals directly, adding a preservation-

enhancing step to the process. We are interested in exploring the preservation implications of digitisation, but at the same time we are cautious about relying on it.

We are aware that responding to preservation concerns in this way adds considerably to the short term financial cost. This project will give us very useful benchmarking information on the image quality we can expect from this kind of pictorial material; it will also give us experience with one approach that uses an analogue technology as a preservation backup to a digital database.

Ross Coleman has already spoken at length about the Australian Cooperative Digitisation Project and the thought processes behind it. From the National Library's point of view, it is a project worth being part of for a number of reasons. It responds to a formally articulated demand from a primary user group; it lets us build on the experience we have in cooperative microfilming, testing and developing our collaborative procedures to make them applicable to digital reformatting. We will learn about the similarities and the differences, the costs and the surprises. We will also learn a lot about options for archiving large amounts of data, for providing networked access, and about some legal issues associated with ongoing ownership and responsibilities.

The project is also attractive because it involves historical print materials—a good contrast with our portraits project.

The project to scan articles from current Australian serials indexed under APAIS (the Australian Public Affairs Information Service) takes a very different approach. Whereas our retrospective digitisation efforts involve struggles with priorities, finding best copies, preparing material that is sometimes in poor condition, and so on, the APAIS scanning project is based on a much simpler concept of building a digital collection as we go. If we can digitise before the material is put on a shelf we can avoid many of the costs associated with retrospective projects.

From a preservation point of view this is going to be fascinating: unlike our other projects there will be no preservation intermediate copy—we will be relying on our ability and will to migrate the data we create, without recourse to microfilm or transparencies should our migration paths fail. This experience will help educate us as we address one of the major issues—can we rely on digital imaging for preservation? Of course, the project has not been set up to answer that question—in fact, its focus is access, access, and more access, but having created this growing database, we will be faced with preservation questions to which we have to find answers.

In all of these projects, and at each stage of them, we have tried to get the right balance between making a responsible and accountable decision based on thorough consideration of all the factors, on the one hand, and experiment, on the other. Learning is not an adequate justification for any of these projects, but we expect it to be a major outcome of all of them.

What is important to understand from this is that these projects were not chosen at random: they came from ordinary priority-setting processes-operating in slightly extraordinary circumstances-to pursue outcomes in line with the Library's strategic objectives. It is important to put the main point of this paper in this context. When we talk about choosing a system we must go back to our priorities, and ask ourselves why we are doing this-what do we hope to get out of it? It is the answer to this question that we need to carry with us as we look at options, talk to systems designers, and put ourselves at the mercy of sales reps.

### **Some Issues to Consider**

What are some of the issues to consider when we look at systems for digitising collections that we have identified as worth doing? how are we going to choose the best solution? I will try to mention a few issues that I think are worth pursuing.

I could sum it all up by talking about a cost/benefit analysis. This doesn't seem like a paradigm shift-we basically want to know whether the benefits are worth the costs, and to be able to compare the benefits and the costs we will wear with different systems. I think that process can be as formal and rigorous, or as informal and intuitive, as we need to be, but it should go beyond the obvious.

There are some obvious costs-what we pay to a scanning service provider, what we pay to buy or hire equipment and staff to do it ourselves, the cost of staff identifying and preparing the material. Then there are costs that don't get factored in if we are just thinking about the cost of scanning-things like building the access interface, storage and maintenance of the digital data we will create, the infra-structure that may be needed to make the data available.

And there are obscure costs in managing the project, developing specifications, tendering, monitoring performance. It is easy for a few cents per page for scanning to turn into many dollars. And there is the cost of other activities foregone-what we could have done with the money, time, energy, and creativity that will go into the project. (As I have already said, this doesn't necessarily have to be done with rigour, but at least we need to get some gut-feeling for it.)

All of these costs are sounding like they add up to too much, so it is worth looking at the benefits. Hopefully they will be high. The benefits are usually not quantifiable in the way costs are, but we should be able to compare the benefits between systems. Because, like the costs, they will vary between systems. Again, we need to look at them seriously.

As well as the obvious benefits, such as improved access, we should try to make a realistic estimate of the preservation potential, the learning potential, what I might call the synergy potential. Just as some systems have hidden costs, there can also be hidden benefits that maybe should influence our choice of one system over another. But benefits also have a way of looking more promising than they are. It's worth asking whether we are really going to get them, and whether they are really what we want?

Often we are making a huge investment when we digitise, not just in making the information available for remote and multiple users, but also by improving access within an item or collection. It represents a major investment in improved accessibility, in many ways doing the work the reader or a librarian or an archivist was once expected to do. This sort of investment should be made consciously, based on how the information will be used.

In choosing a system, there is a decision to be made about convergence. I have already said that I don't expect all digital data to be handled in the same way. At the same time, my digital Baden-Powell in his little canoe was paddling towards a glorious sunrise of happiness and integrated information access. Choosing a system involves making decisions about what can be converged, how easily, and when. Perhaps I have already answered my own question by talking about integrated information access.

We probably aren't going to use the same system for capturing and digitising information from all of our collection areas, but we almost certainly will want to be able to make all of it available to a user, using the one access tool, without having to move from place to place. So we have to make some sophisticated judgments about exactly where we seek convergence, choosing the point that gives us the maximum benefits and the minimum pain.

In many cases deciding on a system also means deciding whether it will be a system or a collection of components. It is easy enough to walk through the door marked "do we have a system for you!"-easy to walk in and say "yes, I'll have one of those please". I find it encouraging that fewer people are doing that. When we open the door marked "components we can put together to meet your needs", we find we are blessed with the range

of possibilities before us, though cursed with the responsibility of wider choice. In most cases, what we need are systems—even if we are building from components we still need to be integrating them into a system that works as a whole.

Systems like this need design, they need a unifying understanding of what has to be done. Probably like most institutions, we have to decide at how many levels we can make this system design work. We know we want a digital set up in our sound preservation area that works beautifully as a system; we have to decide on how far we need to design that into a grand concept of a Library-wide system. I am fairly sure these are questions of “when” rather than “if”.

One thing we are blessed with is the growing ability and readiness of the market place to build things that talk to each other, that can be put together to make what we are calling a system. This is an encouraging sign!

I should like to think that this came about through preservation awareness, but it really has to do with winners and losers. Because we have a small number of very big winners the market has tended to be pulled into line with them. There is a big lesson in this for us when we are choosing digitising systems. In a very fluid market place we are trying to pick winners: the people whose technology will be so widespread that it will be superseded in ten years rather than two; the people who will stay in business and be able to offer us support for our system. There are many good reasons for choosing something that isn't likely to become an unserviceable white elephant, that was once a great innovative idea.

A question that worries me sometimes: should we digitise once for all? We have tended to assume that we should only digitise once; that we want a system that gives us the resolution—if I can use that term very broadly—to meet all of our anticipated needs. That approach surely makes sense, as it does with microfilming.

But of course it comes with a cost—the more the resolution, the bigger the digital file, the more it costs to store, the longer it takes to copy, and all the rest. There is understandable pressure to set some sensible limits on resolution—let's limit it to the resolution of viewing equipment, or what people can see and hear, or what publishers need to make art print quality reproductions?

“No, no,” we say, “you don't understand: the time will come when we can view at much higher resolutions, when we can send massive uncompressed pictorial and sound files through networks with no delays; where will we be then, unless we have very high resolution images? And

what about preservation-surely we must be capturing enough data to reproduce all of the original?" "Ah," the answer comes back, "I thought you weren't relying on this for preservation; I thought this was why we had to have microfilm as well.

And, when the day comes when we can store and transmit very large files at such a low cost, will we not also be able to digitise at a much lower cost? Why not do it now for the purposes we have now, and accept that we will be able to do it again later for tomorrow's purposes?" This is almost an open and shut case, but perhaps it is not completely shut. I know what my current approach would be, but maybe there is an interesting debate in some cases. Now this debate hardly applies at all to the Oral History digitisation project. We don't think we will have the option of re-digitising from "the originals" in 50 years' time. We think this really is a "once and for all" job. (It also means that we haven't had to pay attention to the otherwise critical question of whether we can digitise without causing damage to the originals.)



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# Index

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## A

Academic Staff, 446, 494, 495, 496.  
Accounting Firms, 409.  
Antique Library Ladder, 127, 128.  
Architectural Firms, 409.

## B

Bibliographic Citations, 295.  
Book Budget, 67, 227, 237, 246.  
Business Community, 407, 410, 411,  
412, 413.  
Business Performance, 55, 56, 58,  
59, 60, 61, 62.  
Business Processes, 56, 57, 62.

## C

Cataloguing Rules, 28, 425, 426.  
Censorship, 348, 367, 368, 369,  
371, 372, 374, 375, 376, 377,  
379, 380, 381, 382, 383, 384,  
385, 387, 388.  
Collection Development, 3, 285, 301,  
302, 306, 307, 308, 310, 312,  
317, 318, 319, 326, 327, 329,  
330, 331, 332, 333, 336, 337,  
338, 340, 341, 342, 343, 344,  
359, 367, 368, 372, 403, 404,  
405, 432, 433, 510, 516, 522.  
College Library Service, 251, 280.  
Congress Classification, 291, 292,  
504.  
Contemporary Library Furniture, 125,  
133, 134.

Contractual Compliance, 362.

Copyright Act, 288, 341, 347, 350,  
351, 539, 540, 542, 543, 544,  
545, 547, 548.

Corporate Information Centre, 407,  
408, 409.

Custom Designed Library Furniture,  
131, 132.

## D

Development Policy, 565.

Dewey Decimal Classification, 291,  
292.

Digital Collections, 507, 508, 549,  
550, 566.

Digital Information, 515, 516, 517,  
545, 575.

Digital Library, 141, 143, 144, 145,  
151, 152, 430, 431, 432, 433,  
434, 436, 437, 438, 439, 440.

Digital Millennium Copyright Act, 341,  
347, 350, 351.

Digital Preservation, 138, 144, 360,  
432, 509, 551.

Digital Publications, 507, 510, 511,  
512, 515, 516, 517, 519, 520,  
521, 523, 549.

Draft Research Agenda, 519.

## E

Educational Institutions, 198, 215,  
344, 346, 351, 364, 431.

Electronic Journals, 9, 18, 361, 430,  
435, 492.

Estimating Costs, 330.

Ethical Relations, 197.

## F

Fiscal Management, 326, 327.

Furniture Arrangement, 115.

Furniture Designs, 120, 121.

Furniture Manufacturers, 125, 126.

## G

Government Services, 523.

## H

Heritage Collections, 563.

## I

Information Networks, 406, 407, 408.

Information Policy, 35, 36, 37, 38, 39, 43.

Information Services, 9, 11, 15, 19, 20, 26, 27, 28, 29, 30, 32, 33, 34, 36, 108, 334, 340, 362, 368, 389, 395, 396, 397, 398, 401, 403, 404, 408, 410, 413, 414, 416, 419, 420, 429, 435, 442, 448, 526, 532, 534, 541, 575, 581.

Information System, 8, 9, 11, 13, 15, 18, 19, 33, 37, 52, 73.

Intellectual Freedom, 367, 368, 370, 371, 375, 376, 380, 381, 383, 384, 385, 528.

Interlibrary Loan, 281, 283, 284, 285, 286, 287, 288, 289, 295, 296, 344, 356, 357, 412.

Internet Services, 23, 24.

## K

Knowledge Management, 7, 54, 55, 57, 60, 61, 62.

## L

Law Firms, 409.

Library Administrators, 77, 82, 397, 398, 407.

Library Bookkeeping, 235.

Library Budget, 83, 207, 212, 218, 219, 221, 222, 223, 226, 227, 228, 229, 328, 426, 489.

Library Xatalogue, 5, 17, 20.

Library Classification, 155.

Library Collections, 65, 328, 379, 380, 410, 419, 420, 457, 464, 507, 515, 549.

Library Computer Furniture, 121, 122.

Library Cooperation, 13, 245, 281, 282, 285.

Library Finance, 63, 75.

Library Fund Accounting, 329.

Library Management, 191, 448, 462, 464, 478, 576.

Library Material, 262, 286, 387.

Library Networks, 6, 496.

Library of Congress Classification, 291, 292, 504.

Library Planning, 98, 103, 104, 105.

Library Profession, 158, 161, 198, 201, 205, 251, 382, 401, 441, 442, 443, 444, 445, 446, 447, 448.

Library Relationship, 243.

Library Resource Allocations, 430.

Library Rules, 22, 260, 263.

Library Shelving Considerations, 129.

Licensing Agreements, 341, 356, 362, 363, 364.

## M

Manufacturers, 125, 126.

Metadata Record, 510, 551.

## N

National Consultative Meeting, 510, 561, 562.

Neoclassical Revolving Bookcase Table, 130, 131.

**O**

Online Publishing, 493, 494, 496.  
Organizational Business Processes, 54, 56.

**P**

Periodical Indexes, 259, 260, 261.  
Personal Computer Era, 454.  
Philosophy, 26, 177, 192, 381, 387, 463.  
Practical Information, 400, 401, 404, 406.  
Preservation Metadata, 507, 508, 509, 549, 550, 551.  
Printed Materials, 194, 322, 388, 539.  
Professional Corporations, 409.  
Professional Training, 161, 163, 164, 168, 169, 172, 189, 195, 202, 458.  
Promotions, 184, 185.  
Provisions, 37, 47, 175, 177, 188, 201, 288, 290, 349, 356, 357, 358, 370, 420, 504, 511, 517, 540, 542, 543, 544, 545.  
Public Lending Right, 311, 366.  
Public Library Planning, 389.  
Public Library Reference, 399, 406.  
Public Library Service, 105, 250, 392, 396.

**R**

Real Knowledge Management, 59.  
Reciprocal Borrowing, 282, 344.  
Reference Materials, 241, 290, 394, 409.  
Reference Questions, 394, 499.  
Reference Sources, 405.  
Reference Tools, 395.  
Reference Work, 163, 407.  
Relevant Knowledge, 56, 60.

Research Agenda, 516, 519, 522.  
Research Libraries Group, 508, 550.  
Research Methodology, 445, 494, 496.  
Resource Discovery, 508, 533, 550.  
Role Setting Process, 389, 391.

**S**

School Library Furniture, 132, 133.  
Scientific Information, 18, 47, 48, 53, 493.  
Service Ratings, 184, 185.  
Small Businesses, 410, 413, 534.  
Sole Proprietor, 410.  
Space Management, 115.  
Staff Status, 174, 175, 176.  
Staffing Levels, 439.  
Strategic Execution, 58, 59, 60.  
Student Assistants, 157, 174, 202, 203, 204, 205, 206, 207, 208, 209, 210, 240.  
Student Employment, 202, 204, 206.  
Subject Data, 334.  
Survey Results, 417, 510.

**U**

Union Catalogues, 13, 31, 282, 283, 309.  
University Library, 3, 9, 11, 13, 15, 18, 19, 199, 225, 273, 317, 407, 410, 411, 430, 432, 439, 463, 469, 470, 574.

**V**

Vendor Evaluation, 308, 310.

**W**

Wholesale Library Furniture, 134, 135.  
Women Library, 399.  
Wood Library Furniture, 119, 120, 135, 136.