## CONTENTS

<table>
<thead>
<tr>
<th>Article Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the Editor’s Desk . . .</td>
<td>3</td>
</tr>
<tr>
<td>Access to Resources: The International Dimension. <em>Maurice B. Line</em></td>
<td>4</td>
</tr>
<tr>
<td>Cataloguing in the International Arena. <em>C. Donald Cook</em></td>
<td>23</td>
</tr>
<tr>
<td>Conservation/Preservation: An International Approach. <em>Hans-Peter Geh</em></td>
<td>31</td>
</tr>
<tr>
<td>The NCIP Option for Coordinated Collection Management. <em>David Farrell</em></td>
<td>47</td>
</tr>
<tr>
<td>An Overview of American Publishing for Librarians. <em>Gary Facente</em></td>
<td>57</td>
</tr>
<tr>
<td>Trends in Publishing for Children and Young Adults. <em>Regina U. Minudri</em></td>
<td>68</td>
</tr>
<tr>
<td>The Pricing of British Journals for the North American Market. <em>Marcia Tuttle</em></td>
<td>72</td>
</tr>
<tr>
<td>Microfilm Types: There Really Is a Choice. <em>Suzanne Cates Dodson</em></td>
<td>84</td>
</tr>
<tr>
<td>In Memoriam: Frances Morton</td>
<td>92</td>
</tr>
<tr>
<td>For the Record: Annual Report of the Decimal Classification Editorial Policy Committee, July 1, 1984–June 30, 1985</td>
<td>93</td>
</tr>
<tr>
<td>Letters to the Editor</td>
<td>96</td>
</tr>
<tr>
<td>Instructions to Authors</td>
<td>97</td>
</tr>
<tr>
<td>Index to Advertisers</td>
<td>71</td>
</tr>
</tbody>
</table>
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From the Editor’s Desk . . .

This is the first of the LRTS “Best of Conference” issues. Each paper identified with a star was selected by a jury of nine as the “best” paper presented at a 1985 Annual Conference program. For each of the RTSD programs at which several formal papers were presented, a jury of nine was appointed. Each jury member listened to all of the papers and voted for the one that in his or her judgment best met these criteria: (1) the content was substantive and timely; (2) the ideas were expressed clearly; and (3) the paper did not communicate primarily by audiovisual aids (which would be expensive for LRTS to publish). Each of the three starred papers received the majority of the votes from the jury judging the program at which it was presented.

Volunteers and persons recommended by the conference program chairs or the assistant editors comprised the three juries. The editor gratefully acknowledges the contribution of the conference program chairs and assistant editors and of the twenty-seven who served as jurors: Carol Lee Anderson, Elizabeth R. Baughman, Sharon Bonk, Robert E. Boyer, Jennifer Cargill, Paul Fasana, Marlene Sue Heroux, Frances Hinton, Stanley P. Hodge, Sandra Hurd, Arlene E. Luchsinger, Myra Jo Moon, Paul Mosher, Marilyn L. Norstedt, Jack Pontius, Michael H. Randall, W. Boyd Rayward, John H. Reidelbach, Phyllis Richmond, Beth B. Rile, Linda L. Smith, Dona S. Straley, Larry E. Sullivan, Robert C. Sullivan, Ann Thompson, Nancy Williamson and Gregory Wool.

Some of the jurors who listened to the papers at the RTSD program “International Issues in Resources and Technical Services” reported that voting was difficult because all the papers were good. The Editorial Board agreed that additional papers from that program should be published in LRTS and three are included in this issue.

Two other papers appearing there have originated in the 1985 Annual Conference. The contribution by Regina Minudri was the keynote address at the program on “Trends in Publishing for Children and Young Adults,” while Gary Facente’s “An Overview of American Publishing for Librarians” was one of the papers heard at “The Business of Acquisitions” Preconference. All of the conference papers are published here in full and with a minimum of editing.

Three other papers on subjects of current concern complete the issue. Marcia Tuttle’s report is designed to bring readers up-to-date on the difficult problem of subscription prices for British journals; Suzanne Dodson offers valuable suggestions on choosing microfilm; and Henriette Avram’s paper describes the important Linked Systems Project.—Elizabeth L. Tate.
Access to Resources: The International Dimension

Maurice B. Line

Access to resources has gradually moved from local possession to transcend national boundaries. Automated union and other catalogues will accelerate this process. Digital text storage and transmission offer further possibilities for some material, but meanwhile conventional international lending is hindered by numerous barriers and restrictions. Few countries are yet able to supply even the majority of their own publications. International cooperation in collection building is unlikely to contribute much, but international cooperation in preservation microfilming and digitization could aid availability. In the future the wheel could come full circle if media such as CD-ROMs holding vast quantities of information can be acquired cheaply by individual libraries.

The Four Ages of Access

Access to published knowledge can be divided roughly into four overlapping periods or ages. The first age of access is the Individual Age, where most books or other media were owned by private individuals, though doubtless they changed hands by sale or loan, and there were of course some libraries that were accessible to more than a privileged few. Individual ownership was dominant well into the nineteenth century and is still important: more books, as physical units, must be in individual hands than are in libraries.

The second period is the Local Age, where book resources were shared either by hiring them out (from subscription libraries) or by communal ownership (institutional or public libraries). Local access did not become general until the development of public libraries in the mid-nineteenth century. Not only was access thereby extended to those who previously had little or no access, but by serving the middle and upper classes it made the creation of huge private libraries less necessary and less common.

The National Age of access is relatively recent. Books moved great distances long before the twentieth century, but this was exceptional, and there was no attempt to develop access at a national level until the

This paper by Maurice B. Line, Director General, Science, Technology & Industry, The British Library (formerly Science & Technology, British Library Lending Division) was selected for the "Best of Conference" issue by the jurors for the program entitled "International Issues in Resources and Technical Services," presented by RTSD on July 7, 1985.
growth of publication, the expansion of education, and an increasingly widespread need to be informed made local libraries manifestly inadequate. Interlibrary lending expanded surely but slowly until World War II; since then it has shown very rapid growth, until now it is not unusual for an individual library to obtain for its readers tens of thousands of items from elsewhere in a year. In the last decade or so, several countries have made deliberate national plans to try and ensure adequate access, although the need for access to publications to advance at least in line with bibliographic control has yet to be fully recognized—it is, of course, this need that led to IFLA’s and Unesco’s Universal Availability of Publications (UAP) programme. The greatest success in improving availability has been achieved in the United States, largely through OCLC but also through the Research Libraries Group and the Center for Research Libraries, and the United Kingdom, where the National Lending Library for Science and Technology, created in the early 1960s, gradually grew into a comprehensive centralized resource serving the vast majority of British interlending needs—the British Library Lending Division (now renamed Document Supply Centre).

Just as no local library can be self-sufficient, so no country, however wealthy it is and however effectively it plans for national availability, can be self-sufficient, and it is no surprise that international lending has grown faster than lending within countries. It is worth dwelling a little on the present nature of international lending. Most borrowing is done by developed countries: developing countries either cannot afford it or dare not trust their communication systems, and in any case, the demands placed on their libraries are very small in relation to their populations. What is more striking is that supply is heavily concentrated in a few countries, either because of the wealth of their resources (as in the US) or because they have individual centres geared to rapid and efficient supply, such as the Centre de documentation scientifique et technique in France and the British Library Lending Division in the U.K.; the last institution may be handling half or more of all international transactions in the world.

The progression from the Individual Age to the International Age, which is still in its early years, has been driven by need—more publications, more awareness of what has been published, and reduced ability of individuals, libraries, and nations to keep up. It has at the same time been led by advances in communications. The development of mail services in the nineteenth century, allied to much faster surface transport, made possible much speedier requesting and supply. Surface mail still handles the bulk of items requested and supplied, but it has been supplemented for requesting purposes by telephone and Telex for many years, and for supply purposes by courier and other services and by air mail. These supplementary means help to overcome distance, but generally at the expense of cost, and they are still not fast enough for many purposes. If it is once accepted that remote access is an integral part of a local library’s services, not a disposable luxury, it should come as close to local access in speed and efficiency as it possibly can.
SPEED OF ACCESS

Before going on to consider the impact of computers and electronic technology on access, I should point out that while distance may affect the cost of access by conventional means such as the above, it bears no obvious relationship to the speed of access. A survey carried out in 1979-80 as part of a UNESCO research study of international provision and access looked at speed of supply by airmail between cities in six different Asian countries. The fastest times within Asia were between Tokyo and New Delhi (which were furthest away from one another) and the slowest between New Delhi and Lahore (which were nearest). The fact is that the time items actually spend in transit, if sent by air, is relatively very small—at most, not more than forty-eight hours, usually not more than twenty-four—and supply times are affected far more by local mail and transport systems in the countries and cities concerned, not to mention the efficiency of the library concerned. If all countries had efficient postal services—and if all libraries gave to remote access the same priority they give to supply from their own stock—international transactions could achieve a good performance even without the aid of new technology. A further implication of the survey of supply times is that cooperation between neighbouring countries is unlikely to be any more useful—and in some circumstances likely to be less useful—than cooperation among distant countries.* Regional cooperative systems, such as have been tried in Southeast Asia, have superficial attractions but little practical value.

IMPACT OF COMPUTERS AND ELECTRONIC TRANSMISSION

The computer has added a new dimension to interlibrary access. It has made union lists far easier to construct and maintain, and they can be as up-to-date as the catalogue records added to them. Access to them can, if online, be much faster and easier, and so can requesting, the switching of requests from one potential source of supply to another, responses in the case of delay, and recalls—which are facilitated by automatic checking of return dates. Accounting can be automatic, and monitoring of demand and supply can be built into the system.

The impact of computers on interlibrary supply is visible in many countries, most notably the United States as a result of OCLC’s initiatives. There is no reason why the international impact should be less; indeed, it may be greater. OCLC’s files are now searched for possible sources of loans and photocopies by many libraries outside the U.S. Some of them must find it easier to locate items in U.S. libraries than in libraries in their own country; or they may prefer to use U.S. locations because they have reason to expect a faster response than from within their own country, just as many foreign libraries are known to use the British Library Lending Division in preference to their national systems. In a few years, we can expect the holdings of many major collec-

*In a few cases countries may be so close to one another (as in Western Europe) that loans of books can be made by surface mail and so save money—though not time.
tions in developed countries, and the union catalogues of some countries, to be accessible online from anywhere in the world; and with the ability to search the files will go the ability to send a request by computer. Access to bibliographic files such as CAS and BIOSIS already knows no national boundaries: access to library files will similarly be worldwide.

To immediate access to library catalogues and instant requesting will be added electronic transmission of documents. This will however be much slower to occur, and it will be available for only a fraction of items, mainly articles from high-ranking scientific and technical journals, for quite a long time ahead. Telefacsimile has been around a long time already without making a real breakthrough. It requires quite expensive and compatible machinery; it still requires the use of single sheets, so that books have to be copied twice; successful first time transmission can by no means be guaranteed; and it is not nearly so fast as the manufacturers would have us believe (partly because of the two preceding factors).

Direct transmission of high quality is far easier if material is in digital form; but this requires that printed materials be digitized, or that the publications be available already in digital form. Transmission of digitized text over great distances may be best done by satellite, since the cost is independent of distance. However, the use of satellites requires ground stations, and not every institution will have a receiver, let alone a transmitter. The solution may well be a limited number of receivers, which will retransmit the data to selected local institutions by landlines. This is what is likely to happen in the APOLLO project, part of the DOCDEL programme of the Commission of the European Communities, which is due to become operational in 1986. The possibility of overload from the transmission of large quantities of digitized text may also have to be dealt with, but larger satellites and higher bandwidth landlines should be able to cope.

Digitization by individual libraries of printed materials would be uneconomic unless it were on a large scale, since the equipment is expensive, and questions of copyright would arise. In the case of material already in digital form, the database hosts (disc-spinners rather than tape-spinners) may wish to supply libraries direct rather than sell their discs to libraries and allow them to sell their contents to other libraries. Selected libraries may be able to strike a deal with publishers so that they too can operate as database hosts. This would benefit user libraries only if the host libraries subsidized them by charging them less than commercial hosts: presumably the publishers would not mind, so long as they received as much money from the library hosts as from commercial hosts, but commercial hosts would be unlikely to welcome what they would see as unfair competition. In any case, for host libraries to be able to subsidize an extensive service, they would have to be specially funded by the state, presumably on the principle of public good. There is no indication yet how these issues might resolve themselves: different countries may apply different solutions according to their social or political complexion. None of this need affect the increasing internationalism of access to resources; what is in doubt is the role of libraries in it.
The position as I see it is then that international requesting will be transformed by direct access to union and other catalogues and by direct online requesting. This transformation will occur as catalogues become available online, starting with countries like the U.S., Canada, the Federal Republic of Germany, the U.K. and Australia. Most material will still be transmitted by mail (in some cases by courier) for some years to come, but some shorter items, mainly journal articles (which are after all more in demand than books), will be transmitted electronically, possibly not by libraries. Before this happens on any scale, problems of standardization of storage, hardware, and software have to be overcome.

**Need for observance of common standards and procedures**

The immediate problem is how to improve international supply by overcoming the obstacles and difficulties, so that improved access does not result in frustration, bottlenecks, or overloads. Regrettably, a great deal still needs to be done. Customs regulations are one obstacle, not so much for journal articles as for loans and especially microforms. Another obstacle is the restrictions placed by some libraries on supply. A fear of loss in the mail is natural, especially in some countries, but there are other restrictions whose rationale is hard to fathom. Unwillingness to lend is often due to the length of time items are absent, and this is in turn often due to the use of surface rather than air mail in one or both directions. There are standard international request forms, but this does not stop some countries, or even libraries, from inventing their own quite different versions. Loan periods differ, and rules for extension and recall vary. There is no general agreement over whether payment should be made or not, no general acceptance of the basis on which any charges should be made (token charges, direct costs, mail costs, etc.), and no standard system of payment (prepaid, individual invoices, etc.), let alone any standardization of charges. The whole question of payment will become more acute if increased international traffic places a special burden on particular libraries; they may be willing to supply forty or fifty items a year cheaply or even free, but not four hundred or five hundred. (As a matter of interest, the British Library Lending Division receives 2,500 requests from abroad on an average working day, and about 150 of these are for loans, which are supplied at a subsidized rate). Copyright regulations differ from country to country; not only that, but the onus of observance may fall either on the requester or on the supplier. This could have the absurd result that a country where the onus was on the requester could supply freely to a country where the onus was on the supplier, but reverse traffic would have to overcome barriers in both countries. Some of these problems are not soluble by libraries, but some of them, particularly those relating to standard procedures and payment methods, most certainly are. In fact, standard IFLA guidelines have been laid down for international transactions; if these were fully observed, matters would be greatly improved.

IFLA's international lending rules, originally formulated in 1954, were thoroughly overhauled in 1978 and slightly revised in 1983 to take
account of the growth of transactions and in particular the enormous expansion of photocopying. There is little doubt that they will need another overhaul after a much shorter interval, so rapid are developments. One of the major recommendations of the present rules is that loan (not necessarily photocopy) requests should go through national centres. The reasons for this rule are, or were, sound. International loans are costly and take time; requests should therefore be satisfied within the country if possible, and only a national centre is (or was) likely to know whether they could be. Also, national centres (preferably national libraries) should take more responsibility for ensuring that there is an effective national lending system (in fact, many of them wish to know nothing of the whole business). Online catalogues are changing this. The guide to national centres prepared by the IFLA Office for International Lending will be of use for some years to come, as will Wehefritz's handbook on international loan services, but the new situation will have to be recognized. Other changes in the principles and guidelines will become necessary, and the work of the IFLA Office to improve international access will take on new dimensions.

A WORLDWIDE SYSTEM OF PROVISION

Access and supply are useless without provision—unless, that is, the documents are actually there to be supplied. Can international cooperation help to ensure better provision? Extended and improved access to libraries will, of course, help, but cooperation could go further than this. A cardinal principle of UAP is that each country should be able to supply its own publications. This responsibility needs to be taken more seriously: as budgets of national as well as other libraries get tighter, the ability of one country to rely on a neighbouring country for a rapid supply of its publications could relieve it of a great strain on its resources—and perhaps enable it to devote more attention to ensuring an efficient and comprehensive supply of its own publications. If it did become possible to rely on every country to supply its own imprints rapidly and efficiently, international transactions would be transformed.

We are, however, a long way from this goal yet, and developed countries in particular will have to rely mainly on one another for the publications of developing countries. Is cooperative collection development among countries a viable proposition? I have yet to be convinced of the value, or at any rate of the cost-effectiveness, of cooperative acquisition schemes within countries; there have been many, few have lasted long, and of these even fewer can claim real success. It is not inconceivable that, for example, different countries within Western Europe could agree to specialize in particular areas (e.g., one country could concentrate on Japanese and Korean publications, another on Latin American, and so); but the logistics and financing of such a plan would be formidable. They would be more formidable still for similar cooperation among less developed countries, especially since continued political stability in various regions of the world cannot be guaranteed.

In the UNESCO study referred to earlier, an attempt was made to see what kind of worldwide pattern of provision might be most satisfactory.
It is not sensible to think of a deliberately conceived worldwide plan, since this could be neither constructed nor managed. We concluded that the best pattern might be a number of comprehensive national collections, set up in countries with a large demand as the most efficient way of serving that demand, but able also to provide a charged service to other countries (as the British Library Lending Division does). Several countries could justify such collections, and if they did come into being they would undoubtedly simplify and enhance international provision and supply enormously. Several years later, there is no sign whatever of any of the countries in question working towards such a solution, largely but not solely because of the capital costs of setting up the system.

The U.S. nearly got a National Periodicals Center a few years ago. If it had one now, there is little doubt that it would be absorbing a great deal of the interlibrary loan demand and so relieving other libraries of the burden of supply while simplifying matters for requesting libraries. It does not have one, and systems like OCLC are offering an extremely good alternative. We should now be thinking along the lines of such systems for international provision and supply, and automation and electronic technology enable us to do so.

Although international cooperation in collection building may not be a realistic proposition, international cooperation in conservation surely is. Whatever advances may be made in preservation of original materials, for example by mass deacidification, such methods will not by themselves solve the problem for all materials and all libraries. Sooner or later substitution will have to be used for much printed matter—conservation of the content rather than the physical form. Whether material is microfilmed or digitized, it is a highly labour-intensive and hence very costly operation. It would be absurd for major libraries in many countries all to film or digitize without reference to other libraries and other countries, since much of the effort would be bound to be duplicated. Once a master copy is made, further copies can be made quickly and very cheaply. Not only could they be supplied to libraries that also had the originals; they could be sold to libraries that did not have them, and their holdings could thus be greatly enhanced at the cost of little money and little space. In many cases, the existence of substitutes for regular use may allow the originals to be preserved. Conservation and availability can both be served by cooperative substitution programmes. Indeed, the development of such programmes at the international level must surely be one of the most obvious and important steps that can be taken in the near if not the immediate future.

**SUMMARY AND CONCLUSION**

International access can be expected to increase and improve with the growth of online automated union lists and direct computer links. Electronic transmission of text will take longer to make a significant impact, but as and when it does national boundaries may come to mean very little for many transactions. Here we have a paradox, or rather perhaps, a double opportunity. Digitized text cannot only be transmitted easily over any distance, so that local holdings become less and less important.
It can also be stored in very dense and compact storage media like digital optical discs or CD-ROMs, which could, if the market were large enough, be sold very cheaply: the actual cost of producing an extra copy of thousands of pages of text is a fraction of the cost of the same material in print on paper. Whether the producers will be prepared to sell electronic texts to libraries, and if so on what terms and at what cost, remains to be seen; but potentially even a small institution could hold huge quantities of published material, making access to external resources, at home or abroad, only an occasional need. Electronic technology will make nonsense of the "holdings versus access" debate, since it makes both holdings and access far easier and more economic than now. Will the International Age of access be followed by a second Local Age? Indeed, will individuals be able to acquire electronic texts cheaply for use with their home computers and so enable a second Individual Age to come into being? Opening up sales to individuals could greatly increase the market and so prove very attractive to producers and distributors.

This is looking some years ahead—how far I would not care to guess. However fast and far electronic technology penetrates into publication, provision, and access, there will still need to be systems for the supply of conventional books and journals. In particular, it remains to be seen whether the Third World, whose libraries are generally weak and whose interlending systems are weaker still, will be able to miss out on the twentieth century and share an electronic future with developed countries. It is easy to get very excited about the possibilities opened up by technology and forget that at present and in the immediate future, they apply to only about a quarter of the world's population. They could indeed widen the gap in library and information provision between developed and developing countries. In looking towards the future and studying how technology can and should affect international provision and supply, both the UAP programme and the IFLA Office for International Lending will have at the same time to consider the needs and interests of the less-developed world. And, to end on a note of realism, I would remind you once again that a lot needs to be done, and can be done, in the near future to improve conventional access within and between developed countries.

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An International Framework for National Bibliographic Development: Achievement and Challenge

Dorothy Anderson

During the past two decades the very distinctive changes that have taken place in the content of bibliographic tools have been matched by similar changes in the approach of librarians to their profession. Much work was undertaken in developing international bibliographic standards and standard practices, and on the basis of these, a number of international information programs and systems were established in the 1970s. Librarians, in understanding the complexities of trying to create bibliographic tools that could be used worldwide, became more flexible in their approach. As a consequence, national bibliographic developments worldwide are now planned with an awareness of the international context and of the advantages of following internationally used standards and practices, including catalog codes such as AACR2 and classification schemes such as DDC. Today, however, the information gap between librarians in the rich and in the poor countries appears to be growing, particularly through the introduction of high technology. This is leading to frustration in poor countries where high technology is not widely available, but where the international bibliographic tools are in use, and the situation is made worse when libraries in rich countries, because of economic decisions, cease to produce bibliographic services in hard copy. Catalog cards and printed issues of the larger national bibliographies have helped the creation of many national and university libraries in poor countries, and it is hoped that this contribution to development will be recognized by developed countries when decisions to cut such services are under discussion.

Ten years ago in San Francisco I spoke to an RTSD audience. The theme of my paper on that occasion was simple: it was a plea to those catalogers who would be involved in the preparation of the new edition of the Anglo-American Cataloging Rules. I spoke about the widespread and varied use of the 1967 edition of AACR and showed how, even though it had been prepared for the English-speaking catalogers in North America and the United Kingdom, it was in use in libraries in many countries throughout the world. I asked that the editors, in preparing the new edi-

Dorothy Anderson, former Director, IFLA International Office for Universal Bibliographic Control, now retired, presented this paper at the RTSD program, "International Issues in Resources and Technical Services," on July 7, 1985.
tion, would take particular note of this international use and of the comments received from international users. It would be a contribution to the needs of the international library community if the text of the new AACR were to be written simply and directly, and if its rules and stipulations recognized the cataloging requirements of libraries in countries with differing publishing traditions, where scripts other than roman are used, where languages follow differing grammatical structures, and where patterns of name usage are not as direct and consistent as the Anglo-American.

AACR2 was published in 1978, and the measure of the way in which its editors and its Joint Steering Committee had taken account of the international environment in which it would be used is shown today by the extent of that use, and by the fact that it has been translated to serve the needs of catalogers in so many countries. AACR2 is the cataloging code in use in countries as far apart in tradition and library development as Brazil and The Gambia, Singapore, and Sweden, New Zealand, and Korea, and is being translated into twelve languages. Moreover, the editors of AACR2 not only paid attention to possible international use: basic to its creation was the incorporation of an international standard for bibliographic description, the ISBD.

The decision to develop an ISBD had been reached at the International Meeting of Cataloguing Experts (IMCE), in Copenhagen in 1969: hence the publication of the first texts of ISBD (M) (Monographs) and ISBD (S) (Serials) in 1971 and 1974. The texts, and the concepts behind those texts, were also welcomed by catalogers of specialist library materials, and it became apparent that a standard framework was required upon which the bibliographic descriptions of all types of library material could be developed: a general ISBD. The initiative for that ISBD (G) (General) came from AACR2 editors and the Joint Steering Committee.

AACR2 not only incorporates an international approach to the descriptive part of the bibliographic record, it also adheres to the Statement of Principles agreed at that earlier International Conference on Cataloguing Principles, Paris, 1961. At the same time that AACR2 was in preparation, a number of national and multinational cataloging codes were also being compiled—among the German-speaking countries, in Japan, in Yugoslavia; there were new bibliographic and cataloging standards in Hungary, France, the Soviet Union. Each of these, compiled by a small group of cataloging experts, and designed to reflect the demands of cataloging library materials within a particular environment of language, publishing tradition, and library needs, incorporated international decisions. Indeed, at the core of every national and multinational cataloging code now in use are the Paris Statement of Principles (for headings and entry words) and the ISBDs (for bibliographic description). National developments in cataloging are now made within a framework of international standards and with the recognition of national differences and needs.

This multilevel environment of bibliographic development reflects the far-reaching changes in professional attitudes and practices that have
taken place. In the past—before the middle of this century—lip service was paid to the international nature of the profession of librarianship, and there was this attractive ideal of the librarian wandering the world—by ship and rail, of course—welcomed in libraries everywhere as an academic and a colleague and able to browse effectively through library catalogs. But in fact librarianship was national, even parochial, and cataloging codes and the other bibliographic tools were developed within the limited environment of a particular language, cultural and literary experience. A look at the tools in use in the 1940s and 1950s shows this most clearly, and even AACR1 was not exempt from misjudgments. For example: in 1970 I was visiting Bangkok and found the Thai Library Association in confusion. AACR1, and Library of Congress, had decreed that Thai names should be entered in catalogs under the second or last element of a Thai name. But it is the first part of a Thai name which is important. Some Thai librarians felt that, after all, AACR1 and Library of Congress must know best, and all their entries for Thai names should be changed; others, more sturdily independent, said, “But it is not our national practice.” It is worth noting that there was a rapid change to this rule.

I believe that it would not now be possible for such an error in judgment to be made. There is much more awareness everywhere that just as not all languages have the same syntax, not all personal names follow the same simple sequence of personal name followed by a more significant surname. Recognition of this, and of other differences, is imbedded in AACR2, and more important, has now become a part of the common thought and awareness of librarians.

Complementing this widening of horizons in cataloging can be traced to a similar broadening of attitudes towards classification and subject analysis. There has always been the recognition that the subject approach is the most difficult to consider in any other than a local or possibly national environment, but about fifteen years ago there was a certain interest, if not enthusiasm, to consider developing international classification schemes, or equating one established classification scheme with another, or building up a wide range of subject headings, which could be interpreted in the same manner whatever the language. Well-known subject classification schemes were rejected for international acceptance because they were too specifically based, such as Library of Congress, or too North American oriented (the Dewey Decimal Classification), or too slow in response to new demands (the Universal Decimal Classification). As we are all very much aware, the past decade was a period of exceptional scientific, educational, and technological change, and the probability of developing any kind of international classification scheme that could incorporate the changes of subjects—much less adjustments in terminology in a variety of languages—is now recognized as impractical, if not impossible.

What has happened has been the acceptance of compromise solutions that may not be perfect, but can be made to work. On the one hand, there has been the development of specialist classification schemes in specific subject areas; for example, in physics and in mathematics. Inter-
nationally there has been the wider use of the established schemes. At the International Congress on National Bibliographies held in Paris in 1977, Recommendation 11 was that "the current issues of the printed national bibliography should be arranged in a classified order in accordance with a stated internationally-used classification scheme." No "internationally-used" classification scheme was specified.

Since then, surveys of printed national bibliographies have shown that the majority are arranged in order of DDC, with a specific edition noted. The fact that a classification scheme that was criticized recently as being limited—suitable only for public libraries in North America, is now being used satisfactorily in Nigeria, Barbados, Kenya, and elsewhere—is an indication of the willingness of the Forest Press, publishers of DDC, and of the DDC Editorial Committee, to be more flexible and make changes; of the work of librarians all over the world to create the framework of those changes; and of the library community to accept such changes.

It is important to recognize that the initiative to widen and strengthen DDC came both from the library community and from the publishers of DDC, with the first step taken by the latter in the late 1960s, when a librarian from the United Kingdom was invited to serve on the DDC Editorial Policy Committee. At the same time, official requests were being received by the DDC editor from librarians in a number of countries pointing to inadequacies in particular schedules and requesting approval for study and examination before drawing up new schedules. Some early approaches were made in 1970 when Iranian librarians working in the Tehran Book Processing Centre pointed out the inadequacies of the sections dealing with Iran, Islam, and Islamic culture, and requested permission to make a study and suggest changes that could be incorporated in new editions of DDC (and of Library of Congress schedules). Similar studies for much the same reasons have been made since then, some with official approval, others unofficially. The most straightforward and easily recognized reason is the necessity within a country and for a national bibliography to develop and extend DDC schedules for the history, geography, language and literature of the country or region; in the issues of the Malaysian national bibliography, for example, are set out just such schedules. This has been one much appreciated way by which a classification scheme designed specifically to relate to a particular economic, cultural, and linguistic environment has been extended and made flexible enough to provide for its worldwide use in a multitude of differing language and library environments. Just as important has been the acceptance within the North American library community and by the publishers and editors of DDC that such flexibility has strengthened, not weakened, its use nationally.

It would not have been possible to launch the IFLA/UNESCO program of Universal Bibliographic Control (UBC) in the early 1970s without the supportive background of this international awareness and of the commonality of catalogers' approach and librarians' needs. The basis of the UBC concept is simple: first, the practical common sense of making use of and exchanging worldwide bibliographic records created nation-
ally, but based on internationally accepted bibliographic standards and
cataloging practices; and secondly, the recognition that the catalogers in
any one country are best able to describe the publications of their coun-
try. The emphasis throughout in developing the UBC program has been
on cataloger and librarian, on bibliographic standards and cataloging
practices: if the same rules and standards are followed, then the biblio-
graphic records created will be similar, notwithstanding the technicali-
ties of producing those records in physical form. This is the core of the
UBC program, which was stated in the original 1974 IFLA UBC docu-
ment and has been maintained since:

In a world which is unevenly composed of over-privileged and under-
privileged countries, where economic resources rest unequally and
what in one country seems commonplace—computers, typewriters,
copying machines—in another country may seem a far distant and im-
possible dream, yet the objective of international standards rests firm
with or without the computer. All countries can participate as compo-
nent parts of a world wide UBC system if their contribution follows
patterns and standards that are universal; and equally can receive.

The librarians who, during the early years of the UBC program, worked
on developing the required international bibliographic standards were
very aware of the purpose of their work and of the difficulties. There can
rarely have been a period in librarianship—or for that matter, in other
professions—when so much was achieved by such small and variegated
groups of people, speaking variations of English and French, working
with concentration and intent: American, German, French, Canadian,
British librarians, as one would expect, but also librarians from Finland,
Poland, Hong Kong, Iran, Yugoslavia, and elsewhere.

For the librarian presently at work in a library in North America, or in
the United Kingdom, or in Australia, or Jamaica, these people are un-
known; even perhaps their work and the publications resulting from
their work are not identified. But not the consequences: the biblio-
graphic tools in use in national, public, university, college, and special
libraries and the ways in which bibliographic records are made and rec-
ords prepared for exchange. There has been created an international
framework within which national bibliographic developments operate:
from this point of view achievement has been considerable.

There is also the changed approach to the perennial problem of a
world where publications are produced in many languages and differing
scripts, but where the predominate international use is for records in the
roman alphabet. Once, the creation of schemes for transcription or
transliteration was considered the preserve of scholars and experts out-
side of the country where a particular script originated. Transliteration
was considered a practical tool whereby the librarian in a European or
American library could organize within one library collection the cata-
log records for publications produced in China, the Soviet Union, India,
Sri Lanka, etc.

In the original 1974 IFLA UBC document, the recommendation that
national libraries accept the responsibility for approving transliteration
schemes of national scripts into the roman alphabet, taking into account modern transliteration practices, was considered unrealistic and not required. But that is not now the case. It is necessary for national schemes of romanization to be developed and accepted internationally if national records of the publications of a country are to be added to an international database where all records are in romanized form (for example, the ISDS Register of Serials). The outstanding example of a national decision on transliteration made at governmental level was that of the People's Republic of China in deciding to change to "pinyin" in 1979. Indeed, this is an area of library and information development where national decisions reflect international demands. The solution noted here should be considered as short term rather than perfect; and long term there may come a time when bibliographic records made in all scripts will be accepted in international databases.

It is as well to remember just how hospitable was the climate of opinion of that decade of the 1970s, and how generous. It was a period of optimism and of expansion in education, technology, and economic development. In the information field there was the creation of international information systems based on the potentialities of computer sorting, storing, interrogating: the ISBN system, created by publishers as a tool for stock control and adopted by librarians as a bibliographic control number; the International Serials Data System (ISDS) and the ISSN, established in response to the demand from the scientific information community and utilized by librarians for worldwide serial control; and in the specialist subject fields, INIS, the international information system for atomic energy, and AGRIS, that for information in agriculture. The UBC program was able to develop in this environment because there was the willingness to be flexible, to make adjustments in national bibliographic practices in order to exchange and re-use records, and with the belief that the technology for such exchange and re-use was now available.

The expansion in educational demands, in book production and in library services was worldwide throughout the 1970s: for example, in Nigeria the number of universities increased from four to more than twenty; in the United Kingdom the number of library schools expanded from one, two, three, to reach eighteen; the paperback explosion was followed by a revolution in book marketing so that nowadays for many of us we are no further from a "bookshop" than the drug store or gas station.

In all parts of the world, the establishment of new universities and other higher education institutions was followed by the demand for academic and technical publications, and a large proportion of these could only be found written in English. Of necessity, for many new university libraries, the book stock had to be purchased from abroad and paid for with foreign exchange. If possible, and when funding was available, the records of the new publications would also be purchased as catalog cards. Many of the universities in Third World countries were only able to come into existence and operate effectively in the mid-1970s on the basis of books and cards coming together. One Nigerian university li-
A librarian summed it up simply: there were four members of the staff and a book fund; books and cards were ordered together; and so the library was stocked, the card catalog created, and university and its library began to function. The solution of the national and university librarian of the Upper Volta was even more simple: the printed issues of the French national bibliography were cut and each bibliographic record pasted on to a card to use in the catalog. Under these circumstances, it can be seen that there was a certain inevitability in the way in which AACR2 was accepted for international use: for example, East African university librarians, meeting in Nairobi in December 1977, noted that, as the four national libraries of the UK, U.S., Canada, and Australia were committed to introducing AACR2 from 1 January 1980, it would be necessary for their libraries to change also from that date if they were to continue to make use of the records and catalog cards that went with the books they would be buying. In the 1970s this was one of the ways by which many libraries in Third World countries felt that they were catching up and that the information gap between developed and developing was diminishing.

I have used the words "Third World" and "developing" here because they are the more usual terms the developed world uses when trying to make a tactful distinction of those regions in the world less privileged than others. But I should prefer to follow the example of my friend and colleague, Theo Mlaki of the Tanzanian Library Service, who, in a paper presented at the IFLA Nairobi Conference last year, spoke of the "poor countries." Theo, in his turn, was following the example of his first president, Julius Nyerere. It is certainly the most direct and simple adjective to use and most accurate. There are many "Third World" countries which, in terms of library development—and other forms of development—are anything but poor, with reasonably unlimited resources of funding and adequate resources of skilled manpower and high technology. As to "developing": it would seem looking back ten years that every country is developing its educational facilities and library systems; and there are seriously underprivileged library users and underdeveloped library systems in Europe as well as in other regions of the world.

My concern now is with "poor countries," where library development, and indeed any other form of development, is limited and sometimes made to seem impossible because there is a shortage of resources of every kind: of foreign exchange, so that it is not possible to make overseas payments for publications, for technical equipment, for spare parts for that technical equipment or for its maintenance; of manpower, because there are few trained professionals, no internal structure for training, few scholarships for overseas training, low salaries so that the trained on return drift from the profession of their training; of a basic and reliable infrastructure of communications, of electricity, of postal services, telephones; of the essential commodities of communications which have to be imported, such as paper, ink, petrol. For libraries in poor countries the future seems hazardous. Worldwide, the economic environment is less expansive than it was in the 1970s, and the climate of
opinion is less optimistic, and there is even some disillusionment. Among the developed countries the resources available for library systems and management are being reduced, and with that reduction of resources has come a shrinking in generous thinking and planning. The warm appeal of that international approach in librarianship fades when an organization is faced with accountants' questions of cost benefits.

The change that has come about is not just in attitudes; more fundamentally it is in library equipment. Machines seem to be taking over from standard practices. We believed that if we followed the same rules and standards, there is the possibility of re-using and exchanging similar bibliographic records. Now it appears that it is no longer necessary to make records in the same way because computers are able to bring together records that are almost the same, or not quite, or completely different, and that the screen will provide the arena in which the selection of records and of standards for the records are made.

In North America, and to some extent in Europe, there seems to be an acceptance that records in machine-readable form or in microfiche are more economical, more universal, and easier to distribute than any of the old traditional "hard copy" tools of bibliographic control and library management. We are told that paper is expensive and heavy, that postal charges have gone up, and that the card catalogs have all closed or are closing. Queries remain about these so-called economic arguments: are they compelling enough reasons for stopping the production of catalog cards, or of printed issues of the major national bibliographies; or of making the subscriptions for printed issues of the abstracting and indexing services prohibitive? Librarians in the "poor countries," and in many of the not so poor, would say, no.

Instead of narrowing, the information gap between the richer countries and the poor is growing wider and deeper, and frustrations are mounting. Librarians in poor countries maintain that their libraries are part of the international bibliographic network; they create national records in accordance with international bibliographic standards and cataloging practices; they use the international numbering schemes, ISBN and ISSN; they follow international recommendations in producing printed issues of the national bibliographies; they make use of international guidelines to develop national bibliographic services and make available national collections and national records. In some countries the setting up of an ISBN agency and of a national serial center has been a challenge; they are a matter of pride and conclusive evidence that the country is contributing as a component part of the worldwide information system. Their publications are included in the marketing network of ISBN and their serials are listed and are available on the database of the ISDS Register.

But many of the larger more specialized information databases appear to have been developed for the needs of industrialized societies, and on the basis of the commercial value of such information; and libraries in the poor countries are not asked to contribute and are unable to purchase. In other instances, it is the mechanics of belonging to international information systems or abstracting and indexing services that
make it impossible for libraries in the poor countries to make use of or contribute to the systems or the services. The high technology, which is considered by the developed countries to make for economies of resources and extensions of services, for the poor countries can mean the impossibility of participating in anything that can be called global.

There are, of course, a number of schemes to bring computers and high technology to the poor countries, international projects, and offers from grant-funding organizations. For every poor country, in planning a national information program or for library development, the most difficult decisions are to balance the costs of high technology in proportion to the number of its users against the overwhelming demands for paper and books. If children are to be taught to read, there is the need to produce books for those children to help them read and keep them reading; on the other hand, if the country is to develop its own basic research in science and technology, there is the need to ensure that its elite of scientists has access to the research reports of the rest of the world. The wrong decision or no decision can lead to the two extremes of frustration: the new reader who can find nothing to read in his own language; the research worker who has ten references but cannot find any one of the cited books or journals in the country.

People in North America and Europe have shown much awareness of the problems of the poor countries and have, and are continuing, to make generous contributions—at the very basic level of aid for famine and flood, for food and medicine. At the very much lower priority level there has also been much generous assistance for library development and information aid from governments, national and international organizations, and individual libraries: scholarships for training abroad; library buildings; consultants to advise on library development; contributions for travel abroad to conferences; books and bookmobiles. The list of different kinds of library development aid is as long as the extent of the offers of help.

At the same time, as already shown, there is the recognition in North America and Europe that the rest of the world, whether rich or poor, contains a vast repertoire of different languages, cultures, scripts, literatures, information and publications, which are important for recording and access even when they do not conform to the Anglo-American style of publication: individual units in the programs of UBC and UAP.

There is a challenge here: can we ensure that the bibliographic tools so carefully designed and created for international use, will continue to be used, because they are as relevant for libraries in poor countries as they are for those in the richer and more developed? Can we also ensure that when something seems to be becoming obsolescent, no longer relevant in North America and Europe in library environments of computers, microfiche readers, online systems, copying machines, pocket calculators, we pause and consider whether this is worldwide obsolescence—or are we being forgetful?

I have mentioned here the interrelationship of national and international needs and demands, seen most clearly in the area of bibliographic practices, but repeated in many other aspects of library development:
for example, worldwide access to publications, the IFLA program of
UAP, in archives, in preservation and conservation. It is an interrela-
tionship which is complex yet complementary, frustrating yet reward-
ing. I believe that it is an interrelationship which we should continue to
pursue and develop in the expectation that the rewards will outweigh the
frustrations.

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Cataloguing in the International Arena

C. Donald Cook

Cataloguing at the international level involves both exchange of data and one-way provision of information. Problems needing continuing attention include local and national variations, the role of the main entry, use of the vernacular, options in codes, increased use of multiple access points, sophisticated authority control, and improved searching techniques. Subject access through words or classification remains highly problematic. Greater international uniformity will provide better cataloguing and information management for most libraries.

It would be easy to demonstrate that cataloguing has been in the international arena for centuries, from the library at Alexandria, to the Italian-English origin of Panizzi's 91 Rules, to the 1908 Anglo-American Catalog Rules, to the second edition of the Anglo-American Cataloguing Rules, and to the numerous other international cataloguing activities which are quite recent and current. It is probable that cataloguing has been and continues to be the most "internationalized" activity in library and information science.

Rather than tracing these activities through history, or attempting to review the wide variety of current efforts, I have instead selected several aspects of cataloguing which I believe may have particular relevance for international activities currently and in the near future, and I should like to comment on these.

First of all, perhaps, is the question "What do I get out of cataloguing at the international level?" We belong to a profession with a high social consciousness, but few of us are or can afford to be so altruistic as to support international cataloguing activities solely because we believe these are "a good thing." With limited resources (and all of our resources are limited), each library must define its priorities among local needs and its more general responsibilities to the profession as a whole.

Another way of posing almost the same question is "What is the point in sharing cataloguing unless I can use what is being shared?" However, we should be aware that some international cooperation in the exchange of bibliographic information is not actually "exchange" but rather is a

G. Donald Cook, Professor, Faculty of Library and Information Science, University of Toronto, presented this paper at the RTSD program, "International Issues in Resources and Technical Services," on July 7, 1985.
one-way provision of information. Thus, simply the fact that a library may not consider it directly appropriate to its needs to use cataloguing from other countries may not necessarily remove the library’s potential responsibility to provide such information.

There are at least two distinct types of international cooperation in cataloguing (even though the distinctions between the two are sometimes blurred). There are, on the one hand, what may be called bibliographically developed countries, which have much the same level of bibliographic sophistication; here there may be relatively equal exchanges of cataloguing information, a substantial degree of compatibility, and similar problems in development.

On the other hand, there is also a group of countries in which cataloguing and other bibliographic activities are at other levels; here the one-way provision of information and professional assistance may prevail, at least for the present. However, it is this group of countries which may be able to take advantage of the most sophisticated methods of bibliographic control, to go directly from the horse and buggy to the supersonic aircraft without the intervening steps. As an example, these countries might bypass entirely a system such as Library of Congress subject headings and proceed directly to a subject approach more amenable to computer manipulation. This opportunity, to begin with (or to introduce with less disruption of existing methods) the most advanced and sophisticated cataloguing, is a situation many of the more developed countries might envy.

Hazards, of course, exist. Those of us who enjoy what we consider more sophisticated methods need to guard against the presumption, for example, of assuming that AACR2 and other North American cataloguing practices are automatically good for everyone else as well. It is important not to impose methods in use by more developed countries without appropriate evaluation of the suitability of these methods in other environments and cultures. There are also practical problems, sometimes unsuspected by well-meaning consultants: lack of a suitable power source for computers, computers sitting idle for lack of basic maintenance, insufficient trained personnel, and the like.

I have digressed somewhat from my original point—what we want from international cataloguing. I submit that what we want is no more nor less than what most libraries throughout all ages and cultures have wanted: access to information for users, and all international activities in cataloguing should be directed to this simple if difficult goal.

When one considers the international activities and professional affiliations which contribute to this objective, one may quickly grasp the parameters by realizing that these pose basically the same problems as do our regional and national networks—plus additional differences in bibliographic practices, computers and communication formats, library customs and traditions, general cultural and economic differences, and possible legal problems.

**CATALOGUING STANDARDS**

Consideration of cataloguing in the international arena should not go further without comment on the cataloguing standards which make co-
operation and exchange possible. Not only is standardization of cataloguing desirable internationally, it is essential. However, as Henriette Avram has pointed out:

We all acknowledge the benefits of cooperatively cataloging according to established standards, such as cataloging codes and machine formats, so that data can be shared. When it comes to practice, however, we often take liberties with standards. Those who fail to follow standards will often create their own variety of non-standard records. Consequently, those who truly follow standards must either input new records or must upgrade someone else’s record.

This simply means that we would like everyone else to maintain standards, so we can understand what they are doing and so we can communicate more easily among libraries through networks and other arrangements, but we wish to remain free to depart from these standards ourselves.

The dilemma of standards versus cataloguing tailored to local needs has been with us for a very long time, with no satisfactory resolution. We need to continue to question seriously all local variations with a view to eliminating those which result simply from the inertia of existing records, from purely economic considerations, and from “whims” or resentment at being told what to do. At the international level, we need to ask these questions of our own national practices as we compare these with the practices of other countries with which we wish to cooperate.

An emerging concern rapidly becoming more serious is the local variation which can result from the growth in the use of microcomputers in cataloguing. The emphasis on local needs and facilities which the microcomputer permits may also serve to undermine standards and to jeopardize regional, national, and international exchange of cataloguing.

Cataloguing standards must, of course, be those which can cope with an activity that is highly dynamic. As Hickey and others have pointed out, one of the principal conditions necessary to the acceptance of standardization is flexibility—not the flexibility which produces contradictory bibliographic records, but one which allows the suppression of extensive detail in favor of simplified and reformatted listings.

These subsets of bibliographic data—minimum-level cataloguing, for example—are important for some international considerations, but are secondary to the importance of multiple access, to which I shall come in a moment.

Another problem in the establishment and use of cataloguing standards on an international level is their voluntary nature. “A condition for the acceptance of standardization is its ability to be monitored for consistency of application.” It is here that participation in a network, possibly an international one, has the advantage (as well as the disadvantages) of a kind of controlling mechanism which furthers cooperation and standards.

AACR2

I should like now to comment on two of our principal international
cataloguing standards: AACR2 and the ISBDs. With AACR2, I see three aspects of the code which are particularly important internationally: the main entry, use of the vernacular, and the provision of options.

We are all aware of the diminution of the importance of the main entry, as evidenced in AACR2, and in the way in which most machine-readable databases operate. I believe that even the long-held theory that a main entry is needed for one-entry use may genuinely have ceased to be valid. One-entry usage can, and often does, set its own ground rules, which may or may not conform to cataloguing practice. This may now be of little importance since our machine-based cataloguing can provide generously for any and all reasonable (and some unreasonable?) access points and references; one can even accommodate the "principle of title-ship," and all of this need not preclude the collocating function of the catalogue. "The death of the main entry" may, in fact, be one of the most important factors in developing an international cataloguing code or standard. The international problem of the choice of a "main" entry is probably disappearing before our eyes.

The regular use of the vernacular in headings, in preference to the language of the home country, may very well solve another large set of problems. The new German cataloguing code, the RAK, operates on this principle, and the use of a single additional reference from the home language—Germany, see Deutschland; Spain, see España—with all actual headings in the vernacular is simplicity itself. Our long emphasis in descriptive cataloguing on the use of English may have been largely for our own benefit; users of catalogue records in other languages usually know them. It is tempting to consider the possibility of introducing computer-based romanization to expand this use of the vernacular, although this particular refinement is not quite ready to be used with ease. While considering language, some of you may not be aware that, because of the bilingual nature of Canada, the National Library of Canada operates the CAN/MARC system bilingually, and thus already offers a basis for handling some of the language problems which may arise in using the MARC communication formats.

The options which exist in AACR2 and other cataloguing standards are a built-in assurance of lack of standardization. Variation in physical description is often acceptable, at least as long as certain minimum information is provided and suitably coded for computer manipulation; the appearance of eye-readable output can vary enormously without harm. So far as the headings are concerned, variation in choice is less of a problem than in form, although a recent study comparing corporate headings used by national agencies suggests that even variations in form among these agencies may not be as frequent or as disrupting as may have been thought. Automated authority files and references embedded in a database, so that users may arrive at a desired record from variant forms of name without being aware of intervening references, undoubtedly will reduce the importance of even these variations. In addition, minor variations in form may be unimportant where computer access is easily browsable or "forgiving" in accepting and subsequently matching, or presenting simultaneously, relatively inconsequential differ-
ences. Nevertheless, it seems desirable that further agreement be worked out internationally among the national agencies to reduce those variations which still exist.

However, the options in AACR2, and other judgmental decisions left to the cataloguer, have resulted in extensive rule interpretations and decisions on options which have, in fact, turned a standard which was intended to have flexibility into a substantially more rigid one. This suggests that we may be returning to the "nit-picking" for which cataloguers have long been criticized, and which cataloguing on an international level may not support. It is interesting to note that the detail and rigidity of programming and coding for computers apparently are acceptable, while similar detail and rigidity in cataloguing codes are constantly questioned.

ISBDs

Going on to the ISBDs, as authors such as Elizabeth Tate have pointed out, some time ago, the real importance of an ISBD has little to do with its Latin abbreviations or with what was originally unfamiliar punctuation, but rather with the idea that bibliographic description must be self-sufficient and not be affected by the choice and form of a main entry or other headings. The ISBDs thus give us a single descriptive record, amenable to several levels of complexity, to which any number and kind of "arrows," references or search techniques can point.

We now have the possibility of no main entry and numerous access points in whatever languages may be needed directing us to a standard bibliographic description of the item or work sought. At this juncture, as Richard Coward has suggested, "It is the manual of search techniques which becomes important, not the manual of cataloguing." Many machine-based systems now provide a reasonable amount of "smart" searching, and programming is rapidly becoming more sophisticated in accommodating readily many more access points from MARC data such as publisher, type of media, dates, language, and the like. Boolean and keyword searching are no longer rare.

SUBJECT ANALYSIS IN AN INTERNATIONAL CONTEXT

The subject approach in cataloguing is the most difficult to consider on an international level. In performing subject analysis and expressing this in whatever form, we are attempting to codify human thought. We have great difficulties doing this within our own language and culture, and expanding this to numerous languages and cultures is a staggering concept. Cultural and social differences are reflected far more in subject approach (both verbal and symbolic) than in headings and description. Consequently, there are almost insurmountable problems in international usage.

However, so far as the verbal subject approach is concerned, some subject heading systems such as LCSH have been translated and are used in other languages. Linkages among these would be possible in a computer. The PRECIS system of the British Library has demonstrated its adaptability to use in a number of languages, and it may be that there
is more promise in PRECIS or a PRECIS-like system than we have realized thus far. Multilingual thesauri are another avenue which can be pursued.

Classification as a method of subject searching in the online catalogue is receiving substantial current attention. More uniform use of classification as a language-independent means of subject access might seem to have considerable potential internationally. However, not only are there several widely used classification systems, but none of these is applied uniformly. An international general classification is unlikely. MARC formats will accommodate numbers from various classification systems, but it seems probable that few libraries would be prepared (or able) to classify their materials in several schemes in order to provide access for users of other systems. In North America, at least, this use of classification would require considerable rethinking to separate classification itself from our "mark-and-park" call numbers, as well as considerably more attention to the potential of the classed catalogue and its requirement of multiple numbers for the same item.

**OTHER INTERNATIONAL ASPECTS**

Cataloguing in the international arena also involves several matters not usually thought of when cataloguing is discussed in other contexts. We have gradually watched as our bibliographic records have become a commodity with commercial implications. The major bibliographic utilities now extend well beyond North America. This and other commercialization and internationalization by the information industry undoubtedly will affect cataloguing and its standards. It remains to be seen whether this will increase uniformity and exchange or whether rival standards will arise as they have in products such as television and VCRs. Problems of ownership of cataloguing data have arisen here, and transborder data flow, or the free flow of information and the rights to its use, will undoubtedly affect cataloguing records used internationally. There are national interest and security problems in many countries, including our own, and cataloguers may find themselves involved not only with AACR2, but also with national policies and international agreements on the protection of privacy and the transborder flow of information.

All of these factors affecting standardization are often slow in developing and sometimes result in conflicting standards from different bodies. Moreover, different countries do not always wish to standardize—the metric system began in 1799 and at least one major country still is reluctant to use it.

Given all of these, and other, considerations, can we have and do we want international cataloguing which goes beyond the multinational AACR2? We already have the beginnings in the Paris Principles. AACR2 is, in several senses, already a de facto international code—in its origin, in translation, and as a pattern for other codes. It is very possible that we are closer to an international code than one might first think. IFLA, at its meeting in August, will have a panel discussing the translation of cataloguing codes, and I know personally of several individuals
interested in examining the possibility of further internationalization of a code.

Perhaps we should consider seriously another international conference on cataloguing such as the IICP—this time to include also the problems of computer-based cataloguing, subject access, and international bibliographic exchange.

Among the major problems, of course, are communication and common understanding—something international conferences on cataloguing should foster—and increased democratization of the process by which cataloguing standards are developed and adopted. We must be sure we have what have been called "user-driven" standards.

Current awareness of cataloguing activity going on outside of one's own immediate environment is important; not all of the advances in cataloguing take place in North America or in English. Continuing study and research are important, not only on the techniques and results of cataloguing and searching a catalogue, whatever its form, but also on the developing technologies which constantly influence what the cataloguing techniques can and should do.

Standardization and uniformity in cataloguing on an international level have more than theoretical value. The use of derived cataloguing, particularly through bibliographic utilities and networks, is taken for granted by large numbers of libraries, both here and abroad. It surely must follow that national bibliographic agencies, at least, should not be deprived of the benefits of shared international cataloguing. Such shared cataloguing is redistributed to many other libraries for their use, and also saves the agencies' time, staff, and money to accommodate reduced budgets and to further other cataloguing and bibliographic developments. For all of this to occur, and for these benefits to be passed on in turn to us, a high degree of international uniformity is essential.

The international standardization of bibliographic information and of systems for its use must improve rather than reduce the quality of catalogues. Moreover, as we deal with the changes which are needed, we must be sure that these do not damage the cumulative progress we have made to date toward a comprehensive system.

We need active and creative thinking on the part of cataloguers as to ways in which cataloguing techniques can be developed in and for an international environment, for different levels of information management and retrieval.

Finally, while we can usually determine the costs of the cataloguing we provide, locally or internationally, it is impossible to assign a value to the information a user has not found but to which better cataloguing could have led. Cataloguing in the international arena must contribute to better cataloguing everywhere.

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Conservation/Preservation: An International Approach

Hans-Peter Geh

The new Preservation and Conservation programme of the International Federation of Library Associations and Institutions is described. The importance of approaching the problems of preservation and conservation on an international scale and the need for international guidelines and standards are emphasized. Forthcoming international seminars and conferences that will offer training opportunities are mentioned.

The book treasures in many libraries of the world are deteriorating with accelerated speed from year to year.

This fact is not only true for the valuable holdings of libraries in regions suffering from hostile climatic conditions or from insufficient storage facilities, but also for the documents of libraries in the industrialized world due to air pollution, ink corrosion, acidic paper, and last, but not least, heavy use.

Underlining this fact I only want to mention that about one hundred thousand pieces out of the more than three hundred thousand volumes of my library's rich collections of medieval manuscripts, incunabula and books of the sixteenth and seventeenth centuries would need some kind of conservation treatment.

In addition a large number of books printed on acidic paper, which came into use in the first half of the nineteenth century, are in danger of falling to pieces in the not-too-distant future.

Conservation/preservation is no doubt primarily the task of the single library; it is, however, also a national and—if the concept of the national library is accepted—an international obligation.

The overall assignment of conservation/preservation is really of a Herculean dimension and the intellectual, organizational, technical and financial difficulties involved should by no means be underestimated.

As a first step, incentives should be given for individual libraries to pursue their local goals, which should, however, be linked to the national ones. The strategy to be followed will be guided by the principle of selectivity rather than comprehensiveness and of content rather than artifact.

Hans-Peter Geh, Director, Württembergische Landesbibliothek, presented this paper at the RTSD program, "International Issues in Resources and Technical Services," on July 7, 1985.
As public money is rather scarce in all parts of the world, it is always of
great help—especially in the Western countries—if initiatives are also
being taken by private institutions or organisations. In this connection I
only want to mention the farsighted and successful preservation activi­
ties of the Council on Library Resources here in the United States and
the substantial financial contributions for conservation/preservation
which have been made by the Volkswagen Foundation to a number of
single libraries in my own country over a period of several years.

On the national level each country has to ensure that domestic publi­
cations will be preserved permanently. Conservation/preservation is,
therefore, of special interest to national libraries and to supraregional
research libraries with unique holdings. In the United States, the Li­
brary of Congress has started already a huge preservation programme;
in Britain a National Preservation Office was created at the British Li­
brary last year to promote throughout the U.K. the better conservation
of library collections; and in my own regional state, Baden­
Württemberg, conservation/preservation was announced as a major
government programme.

But there does exist— with regard to conservation/preservation—not
only a local and national interdependence, but also a national and inter­
national one. If this is a valid conclusion it will be quite obvious that
IFLA as the representative of international librarianship has to play a
leading role in this field side by side with related regional associations or
institutions such as the Ligue internationale des bibliothèques euro­
péennes de recherche or the recently planned European Council of Re­
search Libraries—a replica of the Council on Library Resources in this
country.

After the development of the very successful IFLA core programmes
of Universal Bibliographical Control (UBC) and Universal Availibility
of Publications (UAP), the new one Preservation and Conservation
(PAC) is only a logical consequence. For it would cause much frustra­
tion to the researcher or scholar when a system of universal bibliographic
control produces citations of seemingly pertinent material and the pro­
gramme of Universal Availability of Publications awakes great expecta­
tions, if then the documents cannot be obtained for the simple reason
that they are in bad shape.

The IFLA Programme of PAC, which is in a stage of development,
has a retrospective and a prospective aspect; that means conservation of
library materials of the past and of the future.

Retrospective problems have no doubt already played a more or less
important role in the past and some promising results have been achieved. But the sheer magnitude of the number of books involved re­quires tremendous concerted efforts in and among all countries of the
world. It is therefore of great importance to raise awareness for conser­vation/preservation measures worldwide, not only among librarians,
but also among decision makers and those responsible for cultural pol­icy. As to the prospective problems, we have nowadays a realistic chance
of solving them through improved paper quality, new manufacturing
methods, development of materials that will not decay under difficult
climatic conditions, and through computerized and other forms of stored text. In order to achieve these goals, cooperation will be necessary with information producers, scientists, paper manufacturers, and the involved government agencies.

Let me now mention rather briefly the previously established components of and the proposals and recommendations made in IFLA’s PAC programme. As conservation/preservation is of major concern not only for libraries but also for archives, IFLA—right from the beginning—has started consultations and has established working relations with the relevant committees of the International Council on Archives (ICA) and other related associations and institutions: International Institute for the Conservation of Museum Objects, International Centre for the Study of the Preservation and Restoration of Cultural Property and International Council of Museums. For the closer the coordination and the more intensive the joint efforts in these fields will be, the better the results we shall achieve with regard to the preservation of our cultural heritage.

As a basis for all future international activities, it will be advisable first of all to formulate an internationally acceptable policy for the conservation/preservation of library materials. The next step will be the establishment of international guidelines for national planning in conservation/preservation of library documents and the initiations of international standards. These guidelines will, in addition, assist in formulating principles and actions for retrospective and prospective activities for research, training, and exchange of results on the international level.

In order to carry out IFLA’s PAC programme, it is absolutely necessary to establish—in the same way as was done for UBC, UAP and International MARC—an international focal point. IFLA is very grateful that the Library of Congress, with its admirable preservation facilities and its vast experience, is prepared to take over this very important task.

The research and analytical work required is extensive and costly. As a rule, IFLA studies will be keyed to the needs of libraries in all parts of the world and will therefore be conducted in close international cooperation, using the expertise in the different countries.

In addition new research centres and centres for practical conservation/preservation work should be established worldwide and existing ones should be staffed and equipped in such a way that they will meet the most important demands. Furthermore, cooperation with scientists of various disciplines will be indispensable in order to solve conservation/preservation problems of the different regions as to materials like vellum, paper, silk, palm leaves, bark, colours in medieval manuscripts, and the use of alternative technologies—i.e., methods of production and preservation of information in formats other than the original. These measures should also include new technology for mass deacidification and paper strengthening. The overall policy should be to acknowledge the importance of the physical format of publications, but to give priority to the preservation of the content.

Not only are the incentives for research of international concern, but
also the exchange of information among research centres of different countries on methods, techniques, and products of conservation. In this connection, the establishment of an information system on ongoing and completed research in the field of conservation is really a must. One of the possibilities would be to use the existing UNESCO/FID System on Research in Documentation (ISORID) for that purpose.

International agreements on technical requirements for information storage and transfer are another important item. I think especially of information carriers like microforms, optical discs, and electronic media. In order to make general use of them, international standards have to be established as to the storage and technical transfer of information.

As to training and education, IFLA is prepared to provide assistance for the training of specialists in the conservation/preservation of library materials, to develop—together with ICA—a model curriculum and teaching methods for library schools, to publish teaching materials, and to organize meetings of groups of experts involved in training.

Furthermore, exchanges of specialists should be arranged in order to give assistance to international, national, or regional conservation/preservation centres.

With regard to education and training I should like to mention that an expert on conservation/preservation will give a paper on teaching conservation/preservation in library schools in an open meeting of the Section on Library Schools at IFLA’s fifty-first General Conference in Chicago and that a joint seminar of IFLA and ICA education experts is planned to take place in Vienna, 11-13 April, 1986.

As a common basis for international cooperation in research work and for the international exchange of information on conservation/preservation activities, the following projects are envisaged.

1. A dictionary of conservation terms
   Such a dictionary in five languages (English, French, German, Russian, Spanish) is already in preparation by ICA. In a recent meeting with the ICA Conservation and Restoration Committee, it was suggested to circulate the dictionary, covering already four hundred terms of interest both to archivists and librarians, among the relevant experts of IFLA in order to complete it with the library terms. It is hoped that finally a joint IFLA/ICA edition will be published.

2. A directory of facilities for conservation/preservation
   This directory will contain referral information on existing regional, national, and international research centres and other conservation/preservation facilities, including laboratories, research capabilities, training programmes, etc. This directory will also facilitate the personal contacts and the exchange of information on PAC.

3. IFLA newsletter on PAC
   This newsletter will be addressed to librarians and could also disseminate information to the public on achievements, plans, and ongoing activities in the field of PAC (including equipment, technology, and standards).
4. International seminars

International seminars and conferences will be organized especially in cooperation with national libraries. In this connection IFLA is presently participating in a committee for the preparation of the agenda, working documents, and recommendations of the International Conference on Preservation of Library Materials—sponsored by the Conference of Directors of National Libraries and IFLA—which will be held in Vienna, 7–10 April, 1986.

The goal of this conference is to "emphasize for library leaders the worldwide importance of preserving library materials by increasing the awareness of and interest in preservation activities." The international conference will deal with nearly all of these topics: elements of worldwide conservation/preservation policy, preservation planning, preservation in original format, role of paper quality, format conversion, international standards for microforms, environmental control, copyright aspects of reproduction, conservation treatment of books, paper, newspapers, approaches to training in conservation/preservation, and questions about the storage and handling of audio and magnetic materials.

We have dealt briefly with the many-sided and difficult problems of retrospective and prospective conservation/preservation on the local, national, and, especially, the international level.

In the international framework, IFLA has taken the initiative by way of its PAC core programme, a programme which will be given first priority. For it is really high time to take quick and joint actions for the preservation of the intellectual heritage of all nations.

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The Linked Systems Project: Its Implications for Resource Sharing

Henriette D. Avram

This paper gives a short history of the events leading to the Linked Systems Project. The two major components of the project are described, namely, the communications facility and the applications programs. The initial application, the sharing of authority data based on the Library of Congress Name Authority Cooperative Project (NACO), is discussed and future applications and their implications are briefly addressed.

In the United States, almost two decades ago, the Library of Congress (LC) MARC Project provided the means for sharing bibliographic data in machine-readable form and the impetus for library networking. Following closely the development of MARC, OCLC implemented its system, proving the viability of a shared online system for library operations. The expansion of OCLC services was rapid, as was the number of institutions involved.

By the mid-1970s, the then Bibliographic Automation of Large Library Operations Using a Time-Sharing System (BALLOTS) and the Washington Library Network (WLN), now called the Western Library Network, were developed which, with OCLC, resulted in three major bibliographic utilities, each with its own tailor-made system, database, and membership. Although the membership of each utility shared the resources of that utility, there still existed costly duplication of cataloging and conversion since the utilities had no way to share resources among them. The only shared database was the MARC file, distributed by LC as part of its MARC Distribution Service.

Although it can easily be demonstrated that a single system would be the most effective way to build a consistent database and avoid duplication of cataloging and conversion, it was obvious that there would not be only one such system in the United States. The question remained, then, how to work toward the efficiencies of a single network given multiple and disparate systems?

It was in response to this need that senior members of the utilities, networks, and networking-related organizations were invited to LC in late 1975 to explore approaches to the problem. The result was the organization of LC’s Network Advisory Committee in 1976 (originally known as the Network Advisory Group), which still exists today and is concerned with various complex issues of networking.

During the same period (1975-76), the National Commission on Libraries and Information Science (NCLIS) funded a study for LC to determine its role in the evolving nationwide network. The study proposed that LC assume the role of coordinator for network development and also continue its work on the standards activities required for the exchange of data. Based on the study’s recommendations, the Librarian of Congress established the LC Network Development Office (NDO) now called the Network Development and MARC Standards Office.

The Committee’s planning document recommended that NDO serve as an interim network coordinating body. In addition, a task force would be set up to design the interconnection of the bibliographic utilities for the purpose of sharing bibliographic, authority, and location data for any library function requiring such data. The task force, called the Network Technical Architecture Group (NTAG), was funded by the Council on Library Resources (CLR) and chaired by the director of NDO. It held its first meeting in February 1977 and a basic assumption of the task force design was that each member of a utility would access other utilities via its own utility system.

Early efforts of NTAG included an analysis of the work performed and experience gained from the Research Libraries Group (RLG) link with the LC computer system. RLG at that time used the New York Public Library (NYPL) computer.

In an effort to test the feasibility of not duplicating the storage of LC MARC data, but rather having on demand access to the MARC records housed at LC, RLG and LC established a pilot project linking the NYPL and the LC computer systems via telecommunications. This link was put into operation in 1976 and was probably the first computer-to-computer link in the library environment, albeit a very simplified version of linking.

The RLG/LC link permitted access by an RLG member library, via the NYPL computer, to the LC MARC file stored at LC. Staff of an RLG library would search the NYPL database for a bibliographic record. If the record was not in the file, the search query was sent via the computer-to-computer link to LC, invoking the LC searching software. If the record was found in the LC system, it was transmitted via the link to the NYPL system; if the record was not found, a message indicating a negative result was relayed to the system. Even in this early system, the user was searching LC, not by terminal to LC, but by terminal through the user’s own system.

NTAG’s major contribution was the publication of the Message Delivery System for the National Library and Information Service Network: General Requirements. This document was a statement of the general technical re-
requirements for a message delivery system, i.e., a communications facility that would link automated bibliographic services on different computers and permit messages to be transmitted over the links, thus permitting the sharing of data and services. NTAG also recognized the need for a message processing system, i.e., the interface between the communications system and the application programs and services, which would reside at each host computer system.

In 1976, just preceding this NTAG activity, NCLIS, with assistance from the National Bureau of Standards (NBS), formed a task force to develop an application level protocol. Such a protocol is required for application programs running on one computer to communicate with the application programs on another computer, regardless of differences in system hardware and software. This NCLIS/NBS work actually was based on the framework for a computer-to-computer communications protocol developed by the Telecommunications Committee of the American Library Association's Library and Information Technology Association, formerly Information Science and Automation Division, and published in the June 1976 issue of the *Journal of Library Automation*. The Telecommunications Committee decided that a more concentrated effort was required to complete the task at hand. The NCLIS/NBS effort was also built upon other data communications protocols either developed or still under development by national and international standards bodies. It was thus logical that all NTAG plans for a message delivery system were based on the use of the NCLIS/NBS protocol.

In the midst of this activity, staff of CLR, with support from NDO, defined a five-year program, which would result in linking the bibliographic utilities and LC. Under the leadership of Warren J. Haas, president of CLR, the program document was used to successfully obtain funding from several major foundations. At long last, the funding was in place to design and implement a computer-to-computer link. WLN, RLG, and LC agreed to link their three systems. By this time, RLG had selected BALLOTS as its system and the augmented version of the system has become known as the Research Libraries Information Network (RLIN). Later, OCLC decided to join the utilities and LC in the authority implementation of the linking project. The approach was to build a facility that (1) does not require modification of the existing application programs on the different computer systems; (2) is expandable to add new participants without impact on existing members; and (3) is composed of two major components, (a) the communications link hospitable to the transmission of any kind of data (bibliographic, authority, location, text), and (b) the application processing programs which interface the host application programs with the communications link. These major components relate respectively to the message delivery and message processing systems defined by NTAG.

**LINKED SYSTEMS PROJECT**

The total project, known as the Linked Systems Project (LSP), is made up of two elements. The first is the Standard Network Interconnection (SNI), the communications facility. The second is the applica-
tion programs, e.g., the sharing of authority data and the sharing of bibliographic data. CLR is largely funding the development of the SNI and the first application, that for authorities sharing.

The NCLIS/NBS protocol had been designed during the earlier stages in the development of communications standards, and as time passed, some of the strategies changed. Therefore, when LSP funding became available, the NCLIS/NBS techniques had been largely superseded by the International Organization for Standardization protocols, which were close enough to completion to be used for the SNI.

The SNI is based on the ISO Open Systems Interconnection (OSI) Reference Model (see figure 1). OSI was developed by the standards community to overcome the cost and complexity of exchanging messages between systems, different in hardware, software, and data representation. Without OSI, two disparate systems would develop a set of special procedures and software to exchange data. If a third system joined the network to exchange data with the other two, additional procedures and software would be required, and this would continue for each new system added, creating the growth of tailor-made communications protocols at an exponential rate.

The OSI model is made up of seven layers, which consist of all the procedures required for systems to communicate. Needless to say, these procedures must be accepted as standards. Standards for the first five

![Diagram of computer network](image-url)

*Figure 1*
layers exist and work is underway for the remaining two. The concept of layer was adopted to more easily modify a procedure considered faulty without disrupting other portions of the link. Each layer has "hooks" into the next higher and the next lower layers.

In the OSI model, a message initiated by a terminal user to an application program passes down through each layer to the lowest layer where the message moves across the communications link to the recipient computer system. Here the message enters the system at the lowest level and passes up through each layer to be processed by the application programs (figure 2). SNI uses all the existing OSI standards and those currently in draft form.

The first application being developed for the LSP is the sharing of authority data. The design of the authority implementation was predicated on an already established system at LC, the Name Authority Cooperative Project (NACO) (figure 3). NACO permits selected libraries to contribute records for name and series headings to LC for inclusion in the LC authority file. These headings, established by the participating library, are transmitted to LC, amalgamated into LC's file, and distributed via the MARC Distribution Service to all subscribers. When LC catalogs an item and the heading has already been contributed by a NACO participant, the heading is used by LC. Thus, LC also stands to gain in the joint building of the authority file.

NACO at present operates using three methods.

1. The contributing library uses LC tools such as the National Union Catalog or the Name Authorities Cumulative Microform Edition to determine if a heading has already been established by LC. If the heading is not in the LC files, the NACO participant establishes the heading and mails the record to LC for amalgamation into the LC file. The participant is notified by mail as to the final form of the heading. This method is slow and often headings are duplicated because the participant does not have immediate access to LC machine-readable files.

2. The NACO participant has online access to search LC files and thus has up-to-date information as to whether a heading has been established. The procedure then follows (1) above, and the heading as established by the participant is mailed to LC. This method is an improvement over (1) but the delays in mailing still may create a situation where LC or another NACO participant will duplicate the heading.

3. Two institutions, namely the University of Chicago and Harvard University, have online access to search LC files as well as to input headings immediately should the record not be available. This method is the best to date, but will not be greatly expanded due to possible contention by outside organizations for LC computer resources.

The authority application was chosen as the first for LSP because the most expensive part of cataloging is creating headings and related cross-references for the building of consistent catalogs. In addition to the savings connected with the actual sharing of this data, the use of one consistent authority file by many institutions to establish headings for
Figure 2
Linked Systems Project (LSP)

Figure 3

Bibliographic records will make more effective over time the sharing of these bibliographic records without requiring local modification in order to add the records to the individual library catalogs.

The authority master file will reside at LC with LSP participants having copies on their systems. LC catalogers will search the LC files. If a record exists, it will be used; if not, a new record will be added to the file and distributed via the link to the LSP participants (figure 4). WLN, RLG, and OCLC members who are also NACO participants will search their respective files and, if a record exists, it will be used; if not, a new record will be added to the corresponding file. The new record will be contributed to LC via the link for adding to the master file and redistributed to the LSP participants (figure 5). Procedures are being implemented for new records as well as updating of already existing records. All records (new and updated) from NACO participants will also be distributed by LC through its MARC Distribution Service.

Record transfer between LC and the LSP participants will take place at least once every twenty-four hours, thus making the data more timely than the present tape service and avoiding, in most instances, the costly duplication of data. In addition to the record distribution and contribution modules, the other link module under development at the present time is intersystem searching. Intersystem searching will permit the member libraries of one utility to search other utilities (depending upon the utility’s agreement to participate in intersystem searching) for authority records that are in the system and are not part of the LC master file. For example, members that are not NACO participants could enter...
Authorities Implementation (LSP/AI)
Figure 4

Authorities Implementation (LSP/AI)
Figure 5
records into WLN, RLIN, and OCLC, and these records would not be contributed to LC and therefore would not be redistributed to the other LSP participants. (see figures 6 and 7).

In order to implement intersystem searching, an intersystem syntax had to be designed to permit the searching of and display from the LSP participants' systems, all of which are different, through the user's own utility search system.

In summary, we have become "expert" in sharing machine-readable data offline using a common format, we do reasonably well at sharing data with all who can establish terminal-to-computer links with our systems, but the differences in machine hardware, operating systems, and application software have kept separate systems themselves from sharing data. LSP has helped develop tools with which we can break down the barriers to sharing that dissimilar computer systems have created.

RESOURCE SHARING

Let us look at the types of data we are interested in sharing. First there is cataloging data. We are all well aware of the savings that accrue to libraries if the cost of incorporating an item into a collection can be reduced by the expense of cataloging. The original cataloging of some items can far exceed the cost of the item. Cataloging data is now exchanged on magnetic tape, sometimes taking many weeks to arrive and be loaded on a system. With LSP, it will be possible for a member utility to receive records distributed online, dramatically reducing the time required to make the data widely available. While, initially, LC will offer only authority records online, eventually bibliographic records will be added to the service.

Looking ahead, there is another way in which the standard intersys-
System links will be useful for sharing bibliographic records. More and more, large libraries or groups of libraries are considering the installation of automated systems, usually to serve as an online catalog or union catalog. These systems are interested in keeping their relationship with their utility and taking records into the local system only when they are used. Thus, with the LSP links, these different systems will be able to down-load and up-load records as required. We will be out of the era in which dissimilar hardware and software ruled out communication. This will enable institutions and networks to distribute data efficiently among multiple systems.

The ultimate aim in sharing among libraries is the exchange of library items themselves, not just bibliographic data. Here in the United States, we have several utilities and other union catalog systems, but access to information on locations and transaction of interlibrary loans are limited to members of each utility. With the appropriate expansion of application programs, LSP links can extend interlibrary loan beyond membership groups. This will be the next major area of standardization that we are interested in seeing developed.

And finally, with appropriate application software, the full texts of books, etc., may eventually be shared over computer-to-computer links. While this might be done in a number of ways, one scenario would make the data available to libraries and users straight from the publisher's own computer—from the database that drives the printing of the item. When we get that far into the future, the roles and functions of libraries as they
exist today become an interesting topic. We are already seeing full-text experiments supplying books, articles, pictures, etc., over terminal-to-computer links, so it will not be surprising to see computer-to-computer experimentation in the future.

As indicated above, the next LSP application will be the bibliographic record implementation. The analysis and design for that implementation are already underway.

What is being accomplished has significant implications for the national and international information community. A facility is being established, based on national and international standards, which will permit the linking of computers within an individual country and across national boundaries. The standards are being tested in an operational environment for all to observe. Hardware manufacturers are also observing the standards activities and already are considering designing chips for some of the OSI layers to replace the current costly software development. Someday, therefore, a new entrant into the network will be able to "buy" the major portion of the OSI standards, making it increasingly simpler to share resources.

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The NCIP Option for Coordinated Collection Management

David Farrell

Three research libraries in Indiana—Indiana University, the University of Notre Dame, and Purdue University—are developing an approach to coordinated collection management through application of the Research Libraries Group’s Conspectus. The effort has been managed by the Association of Research Libraries Office of Management Studies as Phase 2 of the North American Collections Inventory Project. This paper describes why and how the North American Collections Inventory Project was implemented in Indiana; how cooperative decisions and planning are proceeding as a result of the project; some of the benefits and drawbacks of the project; and concludes with comments on the future, as the North American Collections Inventory Project begins Phase 3.

THREE RESEARCH LIBRARIES IN INDIANA—Indiana University, the University of Notre Dame, and Purdue University—are developing an approach to coordinated collection management through application of the Research Libraries Group’s (RLG) Conspectus. The effort has been managed by the Association of Research Libraries Office of Management Studies (ARL/OMS) as Phase 2 of the North American Collections Inventory Project (NCIP). The reasons we decided to participate in NCIP were to introduce our librarians to a standard collection assessment technique developed and tested by similar institutions in ARL and RLG and to develop and strengthen the existing cooperative environment in Indiana. The active encouragement of top-level administrators in our libraries and universities was also an important factor.

In the course of NCIP in 1984 our libraries completed coordinated collection assessments in five Conspectus subject divisions; we applied verification studies and conducted an interlibrary loan study to test the validity of the assessments; and we initiated the process of identifying subject collections for further analysis of their potential for coordinated collection management. We also tested the Conspectus as a tool for assessing undergraduate instructional collections and as a tool for assessing...
ing research collections in non-research institutions throughout Indiana.

This paper describes the organizations and institutions supporting the cooperative environment in Indiana; how we selected and implemented the NCIP option for coordination; and how cooperative decisions and planning are proceeding as a result of NCIP. Finally, this paper considers some of the benefits and drawbacks of the project and some of the questions for the future as NCIP begins Phase 3.

First, what is coordinated collection development? What does it mean? It depends on who’s talking, what he or she is describing, and the context. Does coordination refer only to materials, or does it refer to collection management information and personnel? Does coordination involve core collections as well as unique research collections? What role is there for university administrators and, even more important, scholars and researchers, in determining the need for, and scope of, coordinated collection development? Are signed agreements and high technology necessary for coordinated collection management to succeed? These are some of the questions that we are attempting to answer through NCIP.

In their useful "Guide to Coordinated and Cooperative Collection Development," Mosher and Pankake define coordinated or cooperative collection development as synonymous terms meaning "sharing in the development and management of collections by two or more libraries entering into an agreement for this purpose." They further note that "cooperative and coordinated collection development is normally achieved by the distribution of collection development responsibilities among libraries of a consortium . . . in a way that will provide greater coverage than is possible for any single library."

For the purpose of describing our work in Indiana, it is useful to consider the terms cooperative and coordinated separately, one defining the pre-existing environment, and the other defining the objective toward which NCIP leads us.

The NCIP process for developing cooperation and coordination has not resulted in an elaborate collection management system for Indiana. We have a modest model, a developing but working model, built on a subject-by-subject analysis of collections and collecting practices in ARL institutions.

Simultaneously, we are analyzing our collections and the research and instructional programs they support. We are looking at complementary collections in our sister institutions as well as in other libraries in Indiana to see if a coordinated approach to developing collections and sharing information about how we manage them might help us to meet our local obligations more effectively and efficiently. At this stage, we are not planning for a central staff supported by a "high tech" network. The people primarily involved in making our model work are the subject specialists and the chief collection development officers in each institution.

ELEMENTS OF THE COOPERATIVE ENVIRONMENT IN INDIANA

In Indiana, cooperative organizations and networks have been a part
of the environment a long time, but their impact on collection management has been uneven. For example, considering the potential impact of the bibliographic utilities, one would have to say their support for cooperative collection development has been largely passive, if not negligible. InCOLSA, the statewide network, supports shared technical processing and bibliographic access, as do similar networks else. While InCOLSA provides an important link among the state's research libraries, it offers little direct benefit for collection management. This is a critical problem because collections (by which I mean local as well as remote resources in all formats) are still the core of the scholarly enterprise. The utilities can provide not only access to records but, through manipulation of their machine-readable bibliographic databases, they can provide a wealth of collection assessment and management information. The Conspectus addresses this issue by bringing a new collection-centered focus to research library management and cooperation. If successful, the NCIP effort will redefine the meaning and use of the utilities as well as other organizations, systems, and networks.

The first of the major organizations in Indiana's cooperative environment are the three ARL institutions themselves.

Indiana University is a public institution with collections numbering four million volumes and special subject collections for African, Slavic, Asian, European, and American languages, literatures, and linguistics; history; music; and social sciences. In addition, the collections of the Lilly Library comprise four million manuscripts and 400,000 rare books. Collection management staff include an associate dean, ten-and-a-half full-time bibliographers, and twenty-five other librarians with collection-management responsibilities.

The University of Notre Dame is a private Roman Catholic university with 1.5 million volumes and special subject collections in theology, church history, American Catholic studies, Dante, and medieval studies. Collection management staff include an assistant director, three full-time bibliographers, and fifteen additional staff with collection-development responsibilities.

Purdue University is a public land-grant university with collections numbering 1.5 million volumes and special subject strength in physical sciences, agriculture, engineering, technology, veterinary medicine, and computer science. Collection management is the responsibility of an assistant director and twenty-five librarians with collection-development responsibilities.

In addition, the following organizations provide cooperative links among Indiana's research libraries:

The Indiana Four State Cooperative includes Indiana University, Purdue University, Ball State University, and Indiana State University, the four state-supported universities that are signatories to an agreement made in 1969. By the terms of their agreement, each institution provides expedited reference and interlibrary lending services to the other three. The current budget of $75,000 per year supports staff, equipment, telephone, postage, and photocopying costs. The smaller institutions pay the larger share of costs because they require the most service. System
traffic for IU's portion in 1984 totaled 1,314 books and 25,112 photocopied pages sent to the other partners.

The top-level administrators of the four libraries (joined by their counterparts from the Indiana State Library and the University of Notre Dame) meet annually to discuss mutual concerns. One result partly due to this organization was the decision to participate in NCIP and to include in the project a survey of research collections in Indiana's non-ARL libraries. The libraries recently decided to install telefax equipment to improve cooperation.

A second organization significant in the development of cooperative collections is the Committee on Institutional Cooperation (CIC). CIC links the "Big Ten" institutions (Indiana, Illinois, Iowa, Michigan, Minnesota, Michigan State, Northwestern, Ohio State, Purdue, and Wisconsin) and the University of Chicago. According to recent statistics, these eleven institutions award 10% of all master's degrees and 20% of all Ph.D. degrees in the United States each year. Their libraries hold more than 40 million volumes and receive more than 450,000 serial titles. The CIC sponsors cooperative programs supporting research, instruction, minority fellowships, and faculty and curricular development. The CIC library deans and directors meet occasionally, and the chief collection development officers have been meeting twice a year at ALA since 1983. The Sloan Foundation supported these initiatives by funding a collection management conference for fifty-five CIC science librarians in September 1985 at the University of Chicago. In preparation for the meeting, librarians in the institutions completed parts of the science Conspectus divisions to allow institution-by-institution comparison of collection strengths, much in the manner of the work completed in Indiana as part of NCIP. The CIC librarians also conducted a comprehensive survey of science collection management issues and practices. The documents produced by these efforts provided a common background for conference discussions and for the development of an agenda for future efforts, which may include closer coordination through cooperative collection development agreements. We hope to extend the CIC conference series to include our humanities, social science, and area studies librarians.

OCLC's Research Libraries Advisory Committee (RLAC) is a third organization in the cooperative environment. RLAC was organized in 1980 by OCLC's research library directors to raise OCLC's consciousness to the needs of the network's large research libraries. RLAC will play an important role in regional and the national cooperative collection development initiatives if it can bring OCLC's database, computers, and personnel to work for research library collection managers. It's apparent that RLAC takes this role seriously. The RLAC Task Force on Cooperative Collection Development has urged its members to complete the Conspectus through participation in NCIP and has suggested that OCLC might mount the Conspectus Online. Pointing to the collection analysis service offered by several networks, RLAC has proposed that OCLC produce similar products for gap and overlap studies, verification studies, and shelflist counts. OCLC has responded with the
Collection Analysis Project, a test using a sample of one thousand OCLC records to assess the feasibility of analyzing the archival tapes and in the Online Union Catalog to provide collection management information. More recently, OCLC supported the CIC science librarians by running a sample against the OCLC database to measure collection strength and overlap in parts of the CIC libraries' botany and mathematics collections.

COORDINATING COLLECTION MANAGEMENT IN INDIANA:
NCIP PHASE 2 PROGRESS AND RESULTS

ARL's Office of Management Studies brought NCIP to Indiana in January 1984 as a pilot project to test and to develop a training program and a methodology, using the RLG Conspectus as the structure, for coordinating collection management among ARL institutions.

NCIP developed from a project organized by ARL's Collection Development Task Force in 1981. The ARL charged the Task Force to plan a standard approach to cooperative collection development to ensure that specialized research collections in ARL libraries would be maintained as national resources. The ARL also desired to develop a program to support local libraries' collection development programs by encouraging the drafting of collection development policies, identifying long- and short-term collection needs, establishing priorities for fund allocation, developing staff expertise in collection evaluation, and involving teaching faculty in the collection development process. After an initial test in five libraries, the task force recommended the Conspectus as an assessment vehicle because it appeared to be the best instrument available for inventorying research collections and assessing their comparative strengths. The Conspectus lacked a technical manual and a training program for bibliographers, so a major objective of NCIP was to develop these resources.

NCIP was conceived in three phases. In Phase 1 (1983), Conspectus training materials and a training program were developed by OMS and ARL signed an agreement with RLG for cooperative development of the Conspectus. By the terms of this agreement, RLG opened participation in the database, the Conspectus Online, to non-RLG libraries and an ARL representative was appointed to RLG's Task Force on Conspectus Analysis. RLG and ARL have agreed to work together to develop and improve the Conspectus (and its associated verification studies and supplemental guidelines) so that it can truly become a national database and a standard for research libraries.

In Phase 2 (1984), the training program and materials developed in 1983 were tested in Indiana. We did this by simultaneously completing five conspectus subject divisions (technology; psychology; linguistics, languages and literatures; art and architecture; and physical geography and earth sciences), adding our data to the Conspectus Online, and analyzing our data to determine subject areas to explore for further cooperative decision making. In Phase 3 (1985), the project is being implemented in some twenty ARL member libraries. Four groups presently are completing cooperative Conspectus divisions in Canada, California,
the Southeast, and the Pacific Northwest.

NCIP has been supported by grants from the Council on Library Resources, the Lilly Endowment, and the Mellon Foundation.

Three task forces, one in each of the Indiana libraries, guided the local NCIP Phase 2 efforts while a committee of OMS staff and collection development librarians from each institution coordinated progress among the institutions. A statewide advisory committee representing public, special, governmental, college and university libraries, and InCOLSA, provided general oversight and conducted a survey of research collections in the state’s non-research libraries.

Our initial cooperative task was to select the first five Conspectus subject divisions to complete. We chose divisions that represent collections we consider to be strong, or collections that we think might be significantly enhanced if we combine our resources. We also considered the subject expertise and availability of staff who would be completing the divisions, and we selected certain divisions because they have verification studies.

For example, each of our institutions has a strong chemistry collection but the collections have different focuses; we wanted to see if the combined collection is significantly stronger than three distributed collections. IU’s language and literature collections are unusually strong; Notre Dame and Purdue wanted to know if our strengths complement their weaknesses. Purdue has special strength in engineering, while IU is developing a new program; we wanted to know if Purdue’s expertise and materials can support us in the expensive endeavor of developing an engineering collection. IU’s religious studies faculty has proposed a doctoral program; we wanted to know if Notre Dame’s strengths in religion can be utilized.

The organization of NCIP at each institution varied according to local circumstances. At IU, for example, a task force member served as liaison to each group working on a Conspectus division. As liaison for the languages and literatures division, I worked with about ten subject specialists representing American and foreign, ancient and modern, languages, literatures, and linguistics; children’s literature; journalism; film studies; and rare books and manuscripts. The group put about 250 hours into the project, not including about 100 hours spent to complete a verification study for English literature. In other areas, six bibliographers worked a total of 70 hours on the psychology division; three bibliographers put 64 hours into the art and architecture division; four bibliographers worked 25 hours on the technology division; and three bibliographers completed the physical geography and earth sciences division in 24 hours.

When the assessment of a division was completed at all three institutions, we compiled the values on a master set of worksheets and distributed it to our bibliographers for analysis. We asked them, first, to consider whether their collections were sufficient to support the local instructional and research programs. Second, we asked them to consider how the values for their collections compared with those of the other two institutions; were there significant lacunae and redundancies? Third,
we wanted to know if collections at one institution could support programs at another institution.

Initial analysis suggests that we need to examine more closely our collections in chemistry, mathematics, Latin American studies, religious studies, and environmental and chemical engineering. Engineering values as recorded in the technology division of the Conspectus were surprisingly low and of special concern to IU as it develops a new program. Further analysis of Latin American Studies appears justified because IU has strong retrospective collections (including unique book and manuscript materials in the Lilly Library), but funding for the program is relatively low. At Notre Dame, on the other hand, a private institute has a special interest in Latin America, but their collection is relatively new, with little retrospective strength.

In their analyses, bibliographers are looking at factors such as growth and change in number of faculty and their research interests, student enrollments, interlibrary borrowing, shelflist measurements, and verification studies. Our chemistry librarians are checking a list of one thousand frequently cited journals and will compare the incidence of gaps and overlaps. We are completing a study of interlibrary borrowing transactions to determine by Conspectus category those items the three institutions could not procure within the state last year. Preliminary analysis of these data suggest that in some divisions of the Conspectus there is a higher number of transactions for strong collections than for weak collections, including a fair amount of out-of-state borrowing for collections that are strong at all institutions. We also discovered that in some parts of some divisions interlibrary borrowing has been concentrated in subject areas where, over the past decade, selective budget reductions have been made. Analysis of specific items and users and data for additional years will give us more useful information about collection use and overlap among the three institutions.

In another NCIP project, ARL surveyed research collections in non-ARL institutions in Indiana. More than six hundred libraries participated, including governmental, industrial, college, secondary school, and small public libraries. The survey produced data on about forty collections assessed at the "research" level; these values may be put into the appropriate conspectus division of the nearest ARL library. Eventually the values would appear in a statewide or regional conspectus.

We also tested the Conspectus as a tool for assessing undergraduate instructional collections in the IU System libraries in Bloomington, Indianapolis, and six regional campuses. One result of this experiment has been the development of expanded definitions for the non-research library collecting level codes (levels 1, 2, and 3 in Conspectus terminology). These new codes have been endorsed by the RLG Conspectus task force and are now in use in libraries participating in NCIP across the country.

The IU System librarians who work primarily with undergraduate collections have not yet found the results of their Conspectus work very useful. They completed the psychology Conspectus division but found the subject breakdown to be too specific to adequately describe (and cer-
tainly not to "assess") a general undergraduate collection. They feel they must develop "core" collections, which of necessity are duplicative; they are unclear about the advantage of knowing the profile of similar, if not identical, collections at other institutions. On the other hand, librarians in the IU System are quite interested in knowing the strengths of the research collections in Bloomington and Indianapolis, which they have long regarded as cooperative resources to which they need full rapid access.

**Benefits and Drawbacks of the NCIP Option for Coordinated Collection Management**

What are the benefits and drawbacks of the NCIP program and the Conspectus methodology? What is the future? I will consider the Conspectus first.

Based on the LC classification scheme, the Conspectus imposes a standard format and terminology, which allows collection development librarians to discuss and compare collections with colleagues across distances, working in different environments, with common understanding. While the LC class schedule is an imperfect outline of scholarly knowledge, it is, taken as a whole, better than any other general scheme, and it is the most familiar to most American research librarians. It is flexible and expandable. Mounted in an interactive database, the Conspectus Online makes long-distance communication easy, can be searched a multitude of ways by combining terms, and is easily corrected and updated.

It is also something like the Jarvik-7 artificial heart. As a regulator of scholarly information—the lifeblood of research—the Conspectus has its flaws, and if you undertake to use it, you will have to tolerate undesirable side effects. This is because of imperfections—the dynamic, imperfect-but-perfectable LC scheme upon which the Conspectus is based—and the experimental, developmental nature of the work itself. Conspectus parts are not always consistent or logical. It's not a complete or full summary of knowledge. The NCIP manual and training program address these difficulties, and many of the flaws will be corrected in time by the Conspectus task force, aided by those presently applying the Conspectus, but improvements take time. The Conspectus will continue to try the patience of experienced bibliographers who do not relish the task of working with a developing tool.

For those in multi-library systems or concerned with the comparative evaluation of duplicative core collections, the Conspectus is not proven as a tool, as the experiment in the IU System suggests. The work being done in the Library and Information Resources for the Northwest (LIRN) project of the Fred Meyer Charitable Trust and the recent development of the revised collecting level codes by IU's undergraduate librarians, however, indicate that there is active interest in developing a Conspectus-based tool for non-research collections. The shape of that tool and its purposes are a subject for further consideration.

Time is another factor to consider in evaluating the benefits and drawbacks of NCIP, as with any coordinated collection management scheme. The Conspectus is costly to implement in terms of staff time. Libraries
may wish to address this problem by doing the Conspectus piecemeal, although I recommend that the entire Conspectus be completed eventually.

Looking at some of the benefits of NCIP for coordinating research collection management in Indiana, I would include the following:

1. Seven conspectus divisions have been completed cooperatively, and our values have been put into the Conspectus Online (the first non-RLG libraries to be included in the national database). Several verification studies were applied; overlap reports have been produced and will be used in further analysis of our collections.

2. Our collection development librarians were introduced to new ideas and methodologies for collection planning and assessment, and we explored these issues together in a structured, cooperative way.

3. We gained experience and knowledge of national collection management issues and activities. Conspectus work helped us develop relationships with sister institutions in the CIC, including IU’s primary interlibrary lending partners, Illinois and Michigan, in addition to Purdue and Notre Dame.

4. The chief collection development officers at IU, Notre Dame, and Purdue established regular contact. Calls and meetings now occur regularly to exchange budgetary and collection data, and we exchange our serials, accessions, deaccessions, and desiderata lists; and library newsletters. Our subject specialists, too, have increasing interaction with distant colleagues.

5. We now have useful data from the Conspectus analyses for cooperative decision making; we are exploring local uses of the data too, for collection and budget management.

6. Finally, our Conspectus training prepared us to draft a collection development policy. It is LC class-based, Conspectus-based, and uses the standard terminology.

I’ve been asked, “Has NCIP changed anybody’s behavior? Does anyone do things differently as a result of the effort?” If our behavior hasn’t changed perceptively yet, I think we have developed a structure useful for analyzing the results of our behaviors; we see more clearly the implications of current collection management and development practices, and we have the tools to develop options for managing change.

I do think that as a result of NCIP we are cooperating more, and that the Conspectus is leading us toward closer coordination of resources and planning. I think there is potential for our Conspectus-based analyses to have greater influence on existing organizations, network, and utilities, to redefine them for the purpose of better collection management.

Coordination, like cooperation, is very difficult to bring off; it is difficult to make it work efficiently and effectively. Neither the Conspectus instrument nor the Conspectus methodology adequately addresses the sensitive, critical issues of organizational and attitudinal changes necessary to make coordinated collection development work, but I expect there will be progress in this area as OMS develops the Phase 3 program for Conspectus trainers.

I assume coordinated collection development will pay increasingly
larger dividends, and that efforts like ours will grow, but I'm aware that not all librarians think so or are interested in addressing these problems. And they may be right; if closer cooperation and coordination produce only negligible gains, then they are not necessary. It may well be more costly to cooperate than to buy outright what a library needs, but I don't think we know enough yet to make that judgment.

The research library environment has never been more supportive of coordination than it is today, and we must seize the opportunity offered by new attitudes, methods, and technologies for experimentation and progress. Building on and improving RLG's important work toward standardizing research collection assessment, NCIP is an important part of this promising venture.

REFERENCES

2. NCIP Phases 1, 2, and 3 are described in the Association of Research Libraries Newsletter 122 (Oct. 1984), 124:2 (March 1985), and 126:1 (July 1985).
4. Ibid.
6. The best of the LC-based, Conspectus-based models I've seen is the Brown University Collection Development Policy (Providence, R.I., April 1984).
An Overview of American Publishing for Librarians

Gary Facente

A financial survey of the American publishing scene is given, followed by descriptions of the way editorial and marketing processes work. Practices relating to contracts, imprints, distribution arrangements, remainders, etc., are described. The changes in contemporary publishing practice resulting from electronic publishing are noted.

This is a financial snapshot of American publishing in categories that publishers use. These categories are a curious mix of type of book, such as mass market paperbacks, which are a standard size to fit into standard racks, or distribution channels, such as book trade/retail stores, which include hardcover and trade paperback books as well as children’s books of whatever binding.

The largest revenue-producing category is the trade book. Next ranks the professional book—the scientific, technical, medical, and business book designed to be sold through various distribution channels. Textbooks for college and then elementary and high schools rank next. The ubiquitous mass market paperback follows, though in terms of units, it was second behind trade books, with over 600 million units sold. Book clubs commonly sell trade books, but print their own editions. In 1984, the Department of Commerce estimated that 53,380 books were published by 2,128 American publishers (table 1).

The total dollar volume of all books sold by U.S. publishers is estimated to be $10,057,800,000. This dollar volume is about the size of the annual sales of each of the following firms: Phillip Morris, or Goodyear Tire and Rubber, or Westinghouse Electric, or Dart & Kraft, or Boeing.

Now let’s look at book sales by distribution channel (figure 1). Over 60% of books published in the U.S. are sold through stores. Institutional sales, that is direct to schools and libraries, account for 20% of sales, and sales directly to consumers represent 15%. The difference between the dollar volume of consumer sales and publisher sales is the discounts publishers give to retailers.

This year (1985) the largest domestic publisher is Gulf and Western,

Gary Facente, Associate Executive Director for Publishing, American Library Association, presented this paper on July 5, 1985, at the preconference given by the Resources Section Acquisitions Committee on "The Business of Acquisitions."
TABLE 1
ESTIMATED AMERICAN PUBLISHING NET BOOK SALES BY CATEGORY, 1984

<table>
<thead>
<tr>
<th>Category</th>
<th>$(millions)</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>$2,284.00</td>
<td>23%</td>
</tr>
<tr>
<td>Religious</td>
<td>$607.80</td>
<td>6%</td>
</tr>
<tr>
<td>Professional</td>
<td>$2,136.40</td>
<td>21%</td>
</tr>
<tr>
<td>Book Club</td>
<td>$527.50</td>
<td>5%</td>
</tr>
<tr>
<td>Mail Order</td>
<td>$552.50</td>
<td>5%</td>
</tr>
<tr>
<td>Mass Market</td>
<td>$900.80</td>
<td>9%</td>
</tr>
<tr>
<td>University Press</td>
<td>$103.80</td>
<td>1%</td>
</tr>
<tr>
<td>ELHI Text</td>
<td>$1,308.70</td>
<td>13%</td>
</tr>
<tr>
<td>College Text</td>
<td>$1,416.00</td>
<td>14%</td>
</tr>
<tr>
<td>Subscription</td>
<td>$219.90</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>$10,057.40</td>
<td>99%</td>
</tr>
</tbody>
</table>


Figure 1
Estimated Consumer Expenditures in Books, 1984 (in millions of dollars)

whose businesses include sugar plantations in the Dominican Republic. But publishing has become a big factor at this conglomerate because of the aggressive acquisitions policy of its subsidiary, Simon & Schuster. This year, Simon purchased, among other things, Prentice-Hall for $705 million, giving Simon and its associated companies, including Ginn & Co., Allyn & Bacon, and Esquire, (the latter names will likely disappear), revenues of approximately $1.4 billion. The next biggest publisher is McGraw-Hill, with revenues over $1.3 billion, but which includes many nonbook or journal businesses such as TV stations and
Other huge publishers include Harcourt, Brace, Jovanovich at $650 million and Macmillan at $430 million. In effect, these four companies control almost 40% of American publishing. At the other end, are the almost two thousand small established publishers and thousands more uncounted publishers.

Let me put one myth about the publishing business to rest. Some people believe, and even some publishers and people who work in publishing assert, that publishing is not a profitable business. We’re in it, we say, because we love books. It is usually true that many publishing people love books, as it is true of many librarians. But not in it for the money? Not profitable? Of twenty-seven industry categories, Fortune 500 companies in publishing ranked first on stockholders equity for 1983, with a 17.8% return on capital. Publishing ranked second in return on sales, showing a 7.5% median return. In 1984, publishing ranked second in growth, with a 12.1% increase from the previous year. From a strictly financial point of view, publishing is a healthy business.

Let me give you one more snapshot of financial data from another point of view, namely that of a single book. Let’s use a typical professional book and see where the costs are (table 2). Percentages vary widely among different types of books. The majority of costs are not the costs that many customers typically believe represent the bulk of expenditures. The “cost” of a book is much more than the cost of typesetting, paper, printing, and binding. All the other costs listed in table 2 are charged against each book.

Each of these cost centers requires people to spend money and, like any organization, publishers have standard methods of organization. A professional publisher, such as ALA, typically has a unit responsible for acquiring new books, another for editing and producing the books, another for selling the books, and another for processing and shipping the orders. In addition, publishers need various degrees of support services.

TABLE 2

<table>
<thead>
<tr>
<th>Net Sales</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of Sales</strong></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>26%</td>
</tr>
<tr>
<td>Royalties</td>
<td>9%</td>
</tr>
<tr>
<td>Cost of Sales</td>
<td>35%</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Editorial</td>
<td>9%</td>
</tr>
<tr>
<td>Production</td>
<td>5%</td>
</tr>
<tr>
<td>Marketing</td>
<td>20%</td>
</tr>
<tr>
<td>Order Fulfillment</td>
<td>7%</td>
</tr>
<tr>
<td>General &amp; Administrative</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>54%</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>11%</td>
</tr>
</tbody>
</table>

for financing and housing the business, for example.

**EDITING AND MARKETING**

The core of publishing, and that which sets it apart from some other businesses, is obviously the editing and marketing functions. There is no single role of editor any longer because editors play different roles in different kinds of organizations. Trade book publishers have acquisitions editors whose job it is to acquire manuscripts for publication. They usually specialize in fiction or nonfiction and, in larger houses, specialize in categories such as science fiction or biography. The acquisitions editor seldom does line-by-line editing. He or she does help the author with the direction of the book, with its organization, with ideas about what to include or exclude. And he or she becomes the champion for the book and the author in the house, selling it to an editorial board that selects what books should be published, working on the financial analysis with the controller’s office, helping the designer with a concept for a cover, and urging new plans on the marketing people. At the same time, the acquisitions editor must hold the hand of the often nervous author and, while advocating the book in the house, lower the author’s expectations, which are frequently unrealistic.

Editors in other kinds of organizations, such as book clubs or in elementary and high school textbook houses, have completely different roles. The book club editor selects books from manuscripts submitted by publishers and negotiates a contract with the publisher. The elementary/high school textbook editor often actually writes much of the textbooks that our children use and that studies show are the single most important factor in the school curriculum. Editors also style an author’s prose—a procedure we call copyediting—and see books through all the proofing processes prior to making plates for printing. So the editorial unit, which is at the center of the key decisions of any publishing house—namely the decision of **what** to publish—is also heavily involved in the production process.

The marketing department of a publisher is characterized by the distribution channels that the house typically uses. Most publishers have people skilled in producing and scheduling space ads for periodicals and brochures for direct mail. Trade book publishers need publicists, whose job it is to get stories about books and authors placed in newspapers and magazines and to arrange author tours to cities around the country that include appearances on radio and TV shows, and, those holy of holies, the “Today” show and the “Donahue” show. Educational and college text publishers have marketing support people, often called product managers, like Proctor and Gamble, who produce supporting documents for sales people, plan and deliver presentations to large potential buyers and to sales representatives, and generally oversee a list of books, such as chemistry or art history. In recent years, publishers have changed certain aspects of marketing organization to rely less on sales people and more on direct mail advertising. Nevertheless, staff of large sales organizations still call on college professors, elementary and high school teachers and supervisors, and bookstores. Sometimes these sales reps are employees of the publisher, and sometimes they are commis-
sioned representatives. Employees sell only the house’s books, whereas reps generally carry several firms’ lists and are not paid a salary and expenses, but rather a percentage of sales.

Note that the larger publishers, such as those identified earlier, publish in a variety of areas. For many years, publishers organized by divisions. Fifteen years ago, when I was at McGraw-Hill, the company had a school division, a college division, a community college division, a film division, an educational technology division, a trade division, a professional and reference book division, and divisions I didn’t know about then, much less remember now. Each of these divisions had separate editorial departments. Some production and order fulfillment functions were centralized. In recent years, firms like McGraw have consolidated divisions and various other functions along functional and/or market segment lines. Other companies—like Prentice-Hall, before its takeover, and Harcourt—have spun off separate companies to encourage a greater entrepreneurial attitude on the part of employees. Organizational patterns change as fast as business theories.

The important function of publishing, the creation of a book, a video or an electronic file of data remains the same. Technology and organizational practice, of course, affect that creation, but the initial act of creation does not change. A book begins with an author, an editor, an agent—with an idea. That idea, however, comes to a publisher in many ways, shapes, and forms, often dependent on the category of publishing we are talking about. In the trade-book publishing practiced by established houses, most manuscripts come through agents. The agent earns his fee by knowing which companies are most appropriate for particular books at particular times and by negotiating contracts. Agents also sift through manuscripts to discover those that editors will find acceptable. It is rare any longer for editors at established houses to read unsolicited manuscripts. Agents have taken on that job. In other types of publishing, however, projects arrive by different routes. University presses, for example, were notorious for waiting for manuscripts to come their way and they rarely needed to solicit books from professors and others. This is now changing. Professional publishers and college text publishers are active in soliciting projects from authors. Editors in these houses develop publishing programs in their specialities and thus stay on the lookout for books on subjects that fit. They also seek out authors to write specific books. In trade, professional, and college-text publishing, editors help authors organize their work. Depending upon the author, it is the editor’s job to bring the project through the house’s procedure that authorizes a contract. These procedures vary widely. In some houses, editors may sign books on their own authority. More commonly, an editorial board of some type reviews editorial recommendations. Often, financial analysis on a per-book basis is submitted to the board. Usual business tools, like break-even formulas, are commonly used to assess the financial prospects of a book. Contracts are then submitted to authors for signature. The main points of publishing contracts are as follows: first, the author gives the publisher the right to publish, which outlines the geographic territory. Some established authors make separate agreements for translations and English-language foreign sales. Typically, though,
publishers contract for worldwide rights. Other rights, such as paperback, movie, or electronic transmission are also usually retained by the publisher. Different royalty arrangements obtain for the sale of these rights. For example, a hardcover, nonfiction trade author typically will receive 50% of all monies resulting from a sale to a paperback reprinter or for sale to a company that makes a training film based on the book. Second, the rate of royalty varies from 7.5% to 20% on direct sales. Trade book authors and mass market authors receive royalties on the list price of a book, so on a $20 book, an author receiving a 10% royalty gets $2 for each book sold. The publisher retains a reserve for returns. Authors are often advanced money from the projected royalty as a way of supporting them through the writing and waiting period. Writing, in addition to being a difficult process, is also time-consuming. And the production of a book typically takes six to twelve months or more, and then royalties are not paid for a period after that. So royalty advances are a way of helping authors through the process.

Other important contract clauses include the author’s guarantee that his or her work is original and not libelous. The publisher requires that an author pay some or all of the legal costs resulting from any suit brought against the publisher questioning a book’s originality.

One of the most controversial clauses in the standard publishing contract is one that allows the publisher to decide whether the final submitted manuscript is, to use the customary language, “acceptable in form and content.” Authors hate this clause because they fear that publishers may use it to reject a manuscript under contract for reasons that have nothing to do with the manuscript itself, such as a change in the house’s financial fortunes or publishing directions. Often manuscripts championed by an editor who moves to another house will languish under a new editor who does not have either the same opinion of the work or the same emotional investment.

**PRODUCTION**

After the author and publisher have negotiated a contract that both are willing to sign, the publisher awaits delivery of the manuscript. As I have pointed out, the editor is working at various levels of intensity before and after a contract is made. Once the work is delivered and accepted by the editor in charge and once that editor completes work on it, he or she transmits it to be copyedited. There are various levels of copy editing, from changing the occasional *which* to *that* to almost complete rewrites. After the author has agreed to the changes, the manuscript is designed, i.e., typefaces and layouts specified and the manuscript is marked for the typesetter. Historically, publishers have not done their own manufacturing, but contracted it out to typesetters, printers, and binders. The advent of word-processing equipment has changed that, however, so that now publishers and authors may do the original keyboarding of manuscripts, and changes are made to this original file. Two or three stages of proofreading are generally done from pages sent by the typesetter to the publisher. At that time, front matter and indexes are assembled. Finally, film is made from which plates are produced. Ap-
An Overview


tropriate paper has been selected and is waiting at the printer. Books are printed and bound and samples sent to the publisher for approval. On occasion, a bad printing job is rejected. Upon approval, books are shipped to the publisher's warehouse. A publication date has previously been set which may or may not correspond to the delivery of books. In the case of many kinds of books, folded and gathered sheets (f&g's) are previously bound and rushed to reviewers, book clubs, and sometimes large customers undecided about the size of their order. Ad schedules previously decided upon are adjusted as schedules change. Schedules for releasing back orders and standing orders are arranged in the order fulfillment area.

So many activities occur simultaneously in the production cycle of a book that communication of schedules and insight into the time cycles of other departments is an essential ingredient in the successful launch of a book. The coordination of these activities for a single book, while complex, is possible. What often makes the organization of a publishing enterprise seem impossible is that dozens of such projects are going on at once, each on a different schedule and each with slightly different requirements. As if this isn't complicated enough, various other publishing practices complicate it further, both for publishers and librarians. For example, often an American publisher will make an arrangement for a Canadian or British edition. Sometimes the foreign publisher, instead of obtaining a duplicate set of film from which to make printing plates, will import its edition from the American publisher's inventory but with the British publisher's name on it. This means changing certain plates on the press to substitute the Canadian or British name and sorting the inventory so that the two or three editions aren't mixed up.

Other common publishing practices that do not impact on production but are useful to understand are imprints and distribution arrangements. Publishers have engaged particularly talented editors to create lists of books that carry an imprint along with the publishing house's name. The first such imprint I was aware of were Kurt and Helen Wolff books. This couple were refugees from the Nazis and had a particular interest in European literature that matched the interest of the company now called Harcourt, Brace, Jovanovich, which gave them a wide latitude to develop a publishing program of continental authors.

Specialized imprints in children's books and science fiction have become quite common in recent years. Usually the editors whose imprints appear on these books have a stable of loyal, successful authors. If such an editor was not happy at, say Doubleday, he or she might take his or her authors with them to, say, Norton. The companies that value these editors make special financial and other arrangements for their superstar editors. Over time, one pattern of publishing companies is to give these editors ownership in the firm. Harcourt, Brace, Jovanovich, for example, was founded by Donald Harcourt and Alfred Brace, both deceased, but William Jovanovich, a talented salesman, editor, and executive who became the company's president at age 29, was subsequently given a small piece of the company and his name became a part of it. I don't remember who Farrar is, but Straus was another talented execu-
tive who gained control of the company and, in turn, put the name of another talented editor, Giroux, into Farrar, Straus and Giroux.

**DISTRIBUTION**

A different publishing arrangement is one where one publisher distributes the books of another. Sometimes a publisher will arrange for different publishers to distribute their books in different markets. I've been involved as a distributor of legal and real estate reference books to trade bookstores while the publisher sold adaptations to college professors, and the books appeared for sale in college bookstores. Sometime customers, including librarians, find that this pattern causes problems in knowing where to get certain books. From the two publishers' points of view, there is a good rationale for distribution arrangements. Some publishers, who feel their strength is in producing books, may not want to or may not be financially able to make the investment in sales and distribution mechanisms. Obviously, they pay the distributing publisher for the services it provides. But these are usually variable costs that are dependent on volume and require no capital investments for warehouses, for example. Also, some firms, like the one that published the legal and real estate books that I mentioned previously, are unable and unwilling to conform to certain terms of business customary in the book trade, namely that most books are shipped to both retail and institutional customers on a fully returnable basis, and most publishers wait a longer time than many manufacturing businesses to get paid. From the point of view of larger publishers that distribute other companies' books, the increased volume spreads their fixed costs of order processing as well as provides a small profit from being of service to small publishers.

I've touched briefly on subsidiary rights, but let me expand on a few other matters. Trade book publishers usually sell to a reprinter the right to make its edition nine to twelve months after the hardcover has been released. Paperback houses traditionally pay advances upon signing a contract and often include incentive clauses. For example, a book may earn several thousand dollars for each week it appears on the *New York Times* best-seller list and may earn additional money depending on its ranking within that list. When the new editor of the *New York Times Book Review* changed the way the lists were constructed, taking, for example, advice and how-to books off the regular list and constructing new lists of, in effect, ephemeral books, many publishers and agents objected because it undermined a certain way of doing business. It is, by the way, the existence of a paperback that often triggers the remaindering of a book. That is, if a publisher has printed 50,000 copies of a hardcover book over a year and has 5,000 left in the warehouse, the publication of a paperback will dry up retailers' demand for the hardcover edition. The publisher will then contract with a remainder house to buy the remaining stock, usually for less than 10% of the list price. The remainder house may, however, have to wait for a specified time to sell the book so as not to compete with the paperback. Authors are not paid royalties on books that are remaindered. Speaking of remainders brings up the whole issue of inventory control, one of the thorniest problems in pub-
lishing. In order to keep prices down, publishers often print more books than they know they can sell. The higher a print run, the lower the unit cost. The paper, presswork, and binding of a 196-page hardcover book in a run of 5,000 may be $1.50. But if the run is 20,000 it may be $1. If the publisher uses an eight-times markup to set the price, then the retail price of the shorter run will be $12, of the longer run, $8. Depending on the type of book and the size of the order, the retail store will pay between 50% and 80% of the list price of the book to the publisher. If the publisher can sell only 5,000 books, obviously it should only print as close to that number as possible, because 15,000 books leftover, for example, even at a lower unit cost of $1 is still $15,000 that will have to be written off, that is, deducted from profits and is $15,000 of cash that the publisher does not have to spend on other things. But some books, particularly scholarly and professional works, are very slow moving. Sometimes a publisher would keep these slow-moving stocks in print but for financial reporting purposes will deduct part or all of their value from its books to reflect the probability that all or part of the inventory may not be sold. A ruling by the U.S. Tax Court, called the Thor Power Tools case, has affected the length of time that publishers now keep books in print. This ruling prohibits any manufacturer from writing off all or part of the inventory while at the same time selling that stock at the same price. In effect, prices have to be lowered concommitantly with the write-off, reducing partly the financial incentive to keep books in stock that inventory write-down formulas may define as obsolete but that provide a service to customers. The long term effect of this ruling is that books go out of print faster.

**Electronic Publishing**

I was asked to touch briefly on the subject of electronic publishing. This assignment is a little like asking the Catholic priest to teach sex education; the speaker is knowledgeable about the theory but inexperienced in practice. Also, the subject of electronic publishing is too broad to discuss in detail now, but I will make several observations. The rapid changes in technology that are transforming our society are also transforming the book and journal business. One aspect of that transformation is that databases are available online so that up-to-date information is more easily available. The combination of databases with microcomputers may change the way certain kinds of reference and research work are done.

The availability of word-processing technology is changing the way some publishers work with some authors and typesetters. Keystrokes can now be captured at the author level and changes made there, at the publisher’s or at the typesetter’s, online. A disk can be used to drive a typesetter without incurring the additional costs of rekeying the manuscript. The technology as it now exists can transform the process of making books by marginally saving money and by greatly saving time. By capturing keystrokes electronically, a database is created that can be changed and sold as an update. The technology is capable of all this and much more. Two main factors are at work that inhibit more rapid appli-
cation of these technologies. First, there is considerable human resis-
tance in publishing houses to change. This is magnified by the ignorance
of some top publishing managers about production in general and tech-
nology in particular. Second, economic factors are operating at several
levels to slow the transformation of publishing. Capital investments for
new equipment are high and the cost benefits are suspect. Certain kinds
of books, especially where the copy is straight text, are suited for these
new processes. Books that require more sophisticated design need very
high-priced equipment that is not yet totally reliable. Finally, publishers
have an important stake in selling books and journals in the forms in
which they now exist. Journal publishing, for example, is not only very
profitable, but publishers receive the money from subscriptions well in
advance of their need to spend it to make a physical product. The model
for distributing information online is that there is a subscription fee but
also a fee for connect time that the publisher does not receive until sev-
eral months after the transaction is completed. So the application of the
new technology to certain aspects of distribution is inhibited by financial
self-interest.

The most important aspect of new technology in publishing has not
been the distribution of information directly to readers through online
services, nor has it yet been through shortened production processes. In-
stead, automation has transformed and is transforming the way pub-
lishers process orders and the way librarians and retailers may begin to
order books and journals.

The availability of full bibliographic information through the MARC
system, the Bowker system, and through microfiche programs including
those of Ingram, Baker & Taylor, the National Association of College
Stores, and others makes purchase decisions easier.

Online ordering systems are currently being developed that will in-
crease the processing speed of purchasing. ISBNs give a numeric code to
products; if we all will adopt SANS—that is, standard address
numbers—these ordering systems will go forward.

Most important, technology is currently employed by vendors in their
own internal order processing. Systems now in place contain files of a
vendor's customers and include credit controls, links between billing
and shipping addresses of organizations, and other important data. Sys-
tems also contain files of all titles published, including inventory status
and sales history. Order processing clerks identify the customer and the
titles requested, input specific instructions on the order and send the or-
der through for processing. Computer systems automatically reduce in-
ventory or hold orders unavailable for future shipment, create the docu-
ments necessary to locate the titles requested in the warehouse, create
invoices for the customer, and add this sale to others in the vendor's ac-
counts receivable and sales files. Both publishers and wholesalers are up-
grading their systems so that the complexities of the book distribution
system can be accounted for. One of the improvements that will save
money will be the exchange of electronic instead of paper invoices as well
as orders.
Various players in the distribution chain have been important in the application of technology. Librarians were the first to embrace the new technology with MARC format and OCLC. Wholesalers and jobbers have played an important role in automating aspects of the distribution process. And publishers automated order processing, which is now ready for a second or third stage of improvement. With the advent of online database distribution and electronic means of production, you see what I mean by asserting that technology is transforming publishing.

Publishers recognize the truth of the story of the old schoolteacher who died and went to heaven. Upon her arrival, Saint Peter greeted her and announced that, just as on earth, people had to work in heaven. So the teacher was assigned to a school. Several weeks later, she came to see Saint Peter. "I don’t think I can do this job very well," she said. "All the video monitors, the microcomputers, the individualized instruction are just overwhelming to me. Can’t I teach like I did for 40 years? Isn’t there an old-fashioned school I can work in?"

"Well, yes there is," said Saint Peter, "but it takes certain, uh, adjustments that may not please you."

What the old schoolteacher learned is that same lesson that publishers are learning everyday—namely that you can change or you can go to hell.

REFERENCES

Trends in Publishing for Children and Young Adults

Regina U. Minudri

This paper contrasts the world of the 1970s with that of today with special reference to publications for children and young adults.

Let's take a look at how our society has changed in the last fifteen years. What were you doing in 1970? I was deeply enmeshed in the Federal Young Adult Library Services Project in Mountain View, California. We felt that we were on the cutting line of services to young adults, cutting red tape, being where the action was, etc. It was an exciting time and one that provided much stimulation, energy, and enthusiasm.

What was going on in the world? Dick Nixon was president. We were beginning to realize that Vietnam was a horrible mistake (400,000 American troops were pulled out of Vietnam in 1970, the beginning of the end.) Charles Manson and his followers brutally murdered innocent people in the Tate-LaBianca killings. We found it difficult to understand such wanton murders. Isn't it interesting how violence somehow becomes more acceptable when it becomes more common? The Baltimore Orioles won the World Series; Kansas City won the Super Bowl. Margaret Court not only won Wimbledon, she won the Grand Slam of women's tennis. America, by 1970, had really felt the impact of the foreign car market on our economy. Hot tubs were becoming popular in California, and in a few years, we would all chuckle about peacock feathers in Marin County.

We all rushed to see the movie M*A*S*H though some of us complained of the violence and bloodshed. We also saw Midnight Cowboy, Catch 22, and Patton. More than four hundred thousand rock fans took over a field at Woodstock, New York, for the be-all and the end-all of rock concerts. We listened to Sly and the Family Stone, Simon & Garfunkel, Diana Ross, and Burt Bacharach. Best-selling tunes included "Raindrops Keep Falling on my Head," from Butch Cassidy and the Sundance Kid. Do you remember the scene in which Paul Newman and Robert Redford jumped from the cliff into the raging river below?

This paper, presented by Regina U. Minudri, Berkeley Public Library, was the keynote address at the RTSD/Association of American Publishers Joint Committee program, "Trends in Publishing for Children and Young Adults," on July 8, 1985.
In 1970 the population of the United States was 205,052,000; today it is projected at 236,681,000. In 1970, 69,762,000 of us were under eighteen, approximately 34%. In 1985, under 18-year-olds number 62,318,000, or approximately 26% of the population. (Now don’t let demographers tell you that, therefore, children and young adult budgets should be cut, since there are fewer of them. What you need is more, so that you can reach out better to our target populations. More about that later.)

In 1970, the consumer price index was 116.3. In December 1984, it stood at 311.1. In 1970, you could buy an ounce of gold for $35. (I wish I’d invested then, but who had any disposable income in 1970?) On July 1, 1985, gold was priced at about $318 per ounce. All this is by way of partially explaining the $19.95 picture book, and the $23.95 novel, neither of which is a rarity today.

Among the adult best-sellers in 1970 we find Love Story, by Erich Segal; The French Lieutenant’s Woman, by John Fowles; All You Ever Wanted to Know About Sex, But Were Afraid to Ask, by Theodore Rubin; and The Sensuous Woman, by J. The Newbery Award book in 1970 was Sounder, by William H. Armstrong; and the Caldecott medal was awarded to Sylvester and the Magic Pebble, by William Steig. Included in the “Best Books for Young Adults” were I Know Why the Caged Bird Sings, by Maya Angelou; Bless the Beasts & Children, by Glendon Swarthout; and In This Sign, by Joanne Greenberg. Also published in 1970 was Are You There God, It’s Me, Margaret, by Judy Blume. As far as I can tell, the Newbery and Caldecott and the “Best Books for Young Adults” selections are still being read. I’m not sure we can say the same about the adult best-sellers.

Thousand and thousands of books are published each year. It is the job of children’s and young adult librarians to select from these thousands of titles those few that have meaning and relevance to our target audience. Librarians do the selection and review of new materials in strange and mysterious ways. It is not at all unusual for some of us to gather in hordes and conduct mass reviews of particular books.

Others work alone, using the review media as aide, guide, and friend. Methods are interesting, but what is important is that sound judgment is used, and that a sincere and judicious understanding of community and patron needs is present. I have yet to meet an active children’s or young adult librarian who does not know her territory. Generally, we understand what’s coming down, and frequently catch it before it hits. Active youth services librarians not only spot trends, they help nurture them, and can often create them. I have always felt that it is our duty to let publishers know what kids are asking for, what kind of information they need today, in the mid-1980s, a time so different from the 1970s.

Back to demographics. It is inevitable that, in our aging society, some administrator will come up with the bright idea that services to youth can be cut back because there are fewer children, fewer in schools, and fewer young adults. Hogwash. School libraries, however, have been victims of this phenomenon. We must all be prepared to show how important it is to educate youth in our challenging world, how critical it is for them to understand history and science, have a love and recognition of fantasy,
and read for pleasure as well as edification. Since we have never been able to reach all children, even when we had more money and staff than we have now, this is our golden opportunity to make an impact. And what better people to make that impact than youth services librarians? End of sermonette.

With a little help from my friends, particularly Linda Perkins, Berkeley Public Library’s honcho of children’s services, I now embark on what we have perceived to be some of the publishing trends of the 1980s.

Paperbacks? How do you use them? Are they for “hot items” only, or do you use them as part of your core collection? What about the series books, the romances, the so-called “peripheral” series items (Harlequin Romances)? Most of us consider that kind of fiction to be a kind of “popcorn” for the mind. Good tasting, but full of air. Popcorn is a very healthy junk food, but most agree that sound bodies need a more substantial diet, one that includes fresh fruit, meat, and dairy products. Make your own substitutions. Do paperbacks go better than hardbacks? Why? Have the reasons kids like paperbacks changed? Have librarians’ attitudes toward paperbacks changed?

You know, World War II is really history to today’s young people. So is the Vietnam War. Today’s fifteen-year-old wasn’t even born when much of the turmoil over Vietnam was going on. There seems to be an increasing interest in war books, in books about contemporary war machines, planes, tanks, guns, and military history.

There is also great interest in books on making money, jobs kids can do or get to earn money for themselves, the entrepreneurial syndrome. Are these pre-Yuppies?

Linda Perkins says she believes the market for computer books has hit a plateau. After all, there is only so much you can say about them without being machine specific, and if it’s machine specific, it’s limiting, etc., etc., etc. In the same way, there are apparently enough of the “choose your own adventure” books. We can tell that by the fact that now some of them are actually on the shelves. Is it the sameness we see in these books that makes the repetition somewhat boring?

Is juvenile publishing getting too much like the adult market, trying to “catch the next wave” and cash in, rather than providing the quality that young people need? Also, are paperbacks now being sold so much more aggressively that one might be led to conclude that they are “merchandise” rather than books? Paperback packaging has become much more slick, and I’m sure it influences selections by kids as well as librarians. By this, I mean the publishers’ displays and other devices.

While we cannot dictate what writers should write, or what publishers should publish, another problem that should be examined is the lack of minority representation in general trade fiction and nonfiction. There seems to be a definite lack of minority lead characters or even supporting characters. I think this should be carefully scrutinized. With the numbers of minorities in our country, the large increases of Asian and Hispanic children, there are ever-increasing needs for minority representation in books for children and young adults.

All children need role models; heroes and heroines in fiction and nonfiction can serve this purpose well.
How can you encourage increased visibility of minorities in books for youth? What steps can you/we take without violating the rights and privileges of writers and authors. Perhaps it is here that our advice, counsel, and knowledge can be of inestimable value.

What’s good on the scene? It looks as if there is a definite move back toward the classics. Titles like Heidi, Andersen’s tales, Rascal, even Seventeenth Summer, are back in print. It looks as if some back lists have been “dressed up.” There are also some excellent new board books for the very young, and some wonderful books for babies. These have clear, concrete illustrations, an uncluttered background, and are for children six- to eighteen-months-old. They are available in boards, fabric, or plastic.

In conclusion, have we changed much over the past fifteen years? What do we do differently today from yesterday? Have selection processes changed? How? Are children and young adults different today from children in 1970? Are librarians different? What has changed us? How has the environment of selection been affected (or has it?) What about external/internal pressures? Fiscal, conservative, environmental, governmental attitudes? Have we gone from protective selection, to adventurous selection, to custodial selection? What about publishers? Are they in fact practicing more self censorship and has publishing become more restrictive? I leave you with these questions to ponder.

INDEX TO ADVERTISERS

<table>
<thead>
<tr>
<th>Advertisement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambassador Book Service</td>
<td>99</td>
</tr>
<tr>
<td>Audio-Forum</td>
<td>98</td>
</tr>
<tr>
<td>Baker &amp; Taylor</td>
<td>100</td>
</tr>
<tr>
<td>Blackwell North America</td>
<td>3d cover</td>
</tr>
<tr>
<td>Ebsco</td>
<td>102, 104</td>
</tr>
<tr>
<td>Gale Research</td>
<td>4th cover</td>
</tr>
<tr>
<td>The Library Corporation</td>
<td>2d cover</td>
</tr>
<tr>
<td>Sperry Corporation</td>
<td>101</td>
</tr>
<tr>
<td>H. W. Wilson</td>
<td>103</td>
</tr>
</tbody>
</table>
Many British scholarly journals have had one price for domestic subscribers and another price for North American subscribers for several years. Recently, the two prices have become totally unrelated and American librarians have become aware of the discrepancy. A seminar entitled "Learned Journals: The Problem of Pricing and Buying Round," held in London on March 22, 1985, was in part an attempt to answer charges of discriminatory pricing. This paper is an informal report of the seminar.

Most librarians expect to pay a surcharge to cover postage and handling for subscriptions to journals published abroad. The added cost depends on the frequency of the journal, the weight of the issues, and the method of shipping. Many journals, therefore, show both a domestic and a foreign (or overseas) subscription price. In the early 1980s, many British scholarly publishers began to list a third subscription price for North America. Usually this third price includes both the United States and Canada, but some publishers charge Canada the overseas price. At first the new price was reasonably in line with the other rates, but in many cases, within a few years it had increased to two or three times the domestic price. While the strengthening dollar enabled a library to purchase more materials from other foreign countries, this pricing practice decreased a library's purchasing power for British scholarly journals.

The earliest expression of concern was a letter from librarians at Linda Hall Library published in April 1984 in the British magazine Nature, criticizing its practice of charging American libraries a much higher rate than other subscribers. The letter was widely publicized in this country. At the ALA conference in June 1984, the Bookdealer/Library Relations Committee of the Resources Section of the Resources and Technical Services Division introduced a resolution, which was passed by the RTSD Board of Directors. The resolution is as follows:

Whereas, Libraries subscribing to some British periodicals are required to pay a U.S. subscription price which is significantly higher than the subscription rate

Marcia Tuttle, Head, Serials Department, University of North Carolina at Chapel Hill Library, served as the ALA delegate to the seminar on "Learned Journals."
charged to libraries within the United Kingdom as well as other overseas libraries, and

Whereas it is expected that there may be some price differential due to fluctuations in exchange rates and postage costs, some British journal publishers have established U.S. prices in excess of what can be considered a normal differential, and

Whereas the higher U.S. price is seriously affecting library budgets and their ability to continue to subscribe to needed British journals, and

Whereas such practices are operating against the free flow of exchanging and disseminating information,

Be it Resolved, Therefore, that the Board of Directors of RTSD request that the Executive Director of the American Library Association take action, in conjunction with other appropriate library organizations, including ARL, SLA, MLA, and IFLA, to convey to British periodical publishers the concern of U.S. libraries and to ask that British periodical publishers establish more equitable subscription rates for U.S. libraries.

A few months later, the Faxon Company received 1985 subscription rates from a British scholarly publisher. The geographic differential in pricing was so great that Faxon’s vice-president sent a letter to customers subscribing to those titles, calling their attention to the pricing policy and asking them to review their decisions to subscribe. The letter also suggested that librarians express their displeasure with the pricing structure to the publisher’s managing editor.

While attending the Frankfurt book fair in the fall, Robert Wedgeworth, ALA executive director, discussed the matter with representatives of the offending British publishers, as he had been asked to do through the RTSD resolution. The publishers denied that the pricing was intended to be discriminatory, but assured Wedgeworth that they would carefully consider the North American prices for 1986. Wedgeworth related the substance of the discussions to the RTSD Board at Midwinter 1985.

Meanwhile, the Bookdealer/Library Relations Committee invited representatives of the British scholarly publishing industry to its 1985 Midwinter closed meeting in an effort to stimulate open discussion of the problem. Both publishers and librarians presented their positions candidly. Although nothing was resolved, the meeting served as a prelude to subsequent discussions, and those attending felt optimistic.

At about the same time, an article by Charles Hamaker and Deana Astle appeared in Library Acquisitions: Practice and Theory, reviewing the pricing situation, supporting the 1984 RTSD resolution, and calling for discussions. The article documented the discriminatory pricing by means of tables showing comparative prices for specific titles and specific publishers. Siegfried Ruschin published a well-documented article on the topic in Serials Librarian.

Mr. Wedgeworth was informed of the seminar on British journal pricing to be held in London immediately before the 1985 Annual Conference of the U.K. Serials Group. He was asked to send a speaker to repre-
sent American librarians, and shortly after Midwinter, the author was appointed the ALA delegate.

**THE SEMINAR**

The meeting was sponsored by the Association of Learned and Professional Society Publishers and the Publishers Association. The large, international attendance demonstrated "the present concern felt by Librarians, Agents and Publishers over the difficulties of journals pricing, particularly for overseas sales." Morning sessions were concerned with "Costs, Pricing and Marketing Journals," while the afternoon sessions centered around "The Role of the Subscription Agent," particularly the practice of "buying round," whereby agents purchase British journals at the domestic price on behalf of U.S. customers, thus bypassing the higher North American price.

In the seminar's opening talk, "Costs and Full Recovery: Budgeting for Journals and Justifying New Journals," John Jarvis of John Wiley Ltd. observed that a new journal begins with a call for papers (market research). He presented a hypothetical budget that showed that a journal was not expected to make a profit for about five years. The sole source of income is the number of subscriptions times the price. Jarvis listed the following costs: editorial fees and expenses, distribution costs at about 40 pence an issue, promotion, a percentage of the publisher's overhead, and the actual costs of production. The difference between the income and the costs is the profit or loss. He then gave four reasons for beginning a new journal: financial—for cash flow; competition—someone will publish the journal if the publisher does not; response to learned societies' requests for assistance; responsibility to provide "vehicles for primary information transfer" for researchers.

In the major presentation of the day, "Market Strategies and Price Differentials," Gillian Page of Pageant Publishing, spoke about prices that are lower for individual subscribers than for institutions, pointing out that economies of scale in production permit lower prices for such "extra" copies. She mentioned the editorial, design, and production/promotion costs that are independent of the number of subscriptions. Thus, the small number of "extra" (or individual) copies requires but a small effort; these are made available because of editorial pressure and the advantage of having controlled advertising. "Extra" subscriptions sometimes are actually produced at lower cost to the publisher, if there are accounting and distribution economies in bulk orders from sponsoring societies. The dual pricing structure gives value to both the individual subscriber, who needs only a few pages of a journal issue, and to the library, which purchases a group of papers more economically than if it acquired them separately. In addition, the publisher manipulates the market by establishing student rates and/or a tie-up with a learned society, giving a new source of authors and forestalling the creation of a competing journal in the field. With regard to overseas subscription prices and the publishers' markups, Page stated that selling overseas costs more in two ways: promotion, including mailings and visits; and postage for distribution of the journal and for correspondence. These extra
costs should be paid by the subscriber. Other "overseas" costs include
local offices and services, such as an 800 telephone number and the ac-
ceptance of credit cards. The U.S. dollar price was created to help the
U.S. customer, since Americans are not able to pay in foreign currency.
The present imbalance in pricing, Page believes, resulted from fluctua-
tions in exchange rates at the time of pricing (commonly June before the
January volume begins) and was an honest error.

Speaking as the ALA delegate, I then said that American librarians
believe that libraries in the U.S. and Canada are being charged a higher
price for many British journals than anyone else in the world. We do not
understand the justification for the three-tiered pricing structure. In re-
sonse, librarians are beginning to publicize this situation, for we are
not at liberty to cancel journals arbitrarily. At the University of North
Carolina Library, a study is being made of the pricing pattern of British
journals, which will involve a faculty review to decide whether to con-
tinue to subscribe.

Dr. Ray Wall, Deputy Librarian at Loughborough University, rep-
resenting British librarians, explained the budget cuts imposed on Brit-
ish libraries, occasionally as high as 40%. He then attacked the pub-
lisbers' price spiraling for the principal market (libraries) to meet a profit
margin. This action leads to library cancellations, then to higher prices,
and so on. To the publishers' claim of being ripped-off by interlibrary
loan and photocopies, Wall said "Nonsense!" Libraries are forced by
the publishers to use interlibrary loan. He suggested that journal pub-
lisbers look in-house to reduce journal costs. Wall asked why publishers
do not charge all customers in sterling, and why they should base their
prices on their major market of overseas customers. In the scientific and
research journal market, 85% of the circulation is overseas; 35% to 45%
of the subscribers are North American. Wall asked to what extent pub-
lisbers are pricing themselves out of the market. Are librarians paying
for publishers' experiments? Are publishers' profits always reasonable?
Wall explained that, because of demographic changes, educational insti-
tutions are having their enrollment-based budgets cut. At the same time,
libraries must continue to add materials. He appealed to publishers to
use their influence to help increase library materials funding.

John Merriman from B. H. Blackwell opened the afternoon session
by speaking against excessive publisher profit and a deteriorating rela-
tionship between the publisher and the subscription agent. He stressed
that 80% of the journal publisher's business is from subscription agents.
Merriman demonstrated that many services to librarians are of equal
benefit to publishers. He asked that the agent be judged on experience,
technology, service, and caring. Merriman then discussed the agent's
practice of buying round or "consolidation": purchasing journals on
behalf of a library, having them mailed to the agent (where they are
checked in and claimed, if necessary), and reshipping batches of periodi-
cals to the library. This issue was at the heart of the seminar. At least
three subscription agents provide the service to American customers
who hope by this means to avoid the North American price for British
journals. In contrast to the British publishers, most U.S. publishers
charge all foreign subscribers the U.S. price plus postage.

Edwin A. Shelock, of the Distribution Centre of the Royal Society of Chemistry, argued that the agent provides a service for the library only, so the library should pay the entire cost of the service. Publishers cannot afford to give agents discounts, because agents complicate their distribution processes. Shelock discussed the information broker (the librarian) working on behalf of the reader and trying to use, with efficiency, an inefficient product (the journal). For scientific journals with a nine- to twelve-week production and delivery schedule, the practice of consolidation interferes with the dissemination of information. Shelock’s justification, later attacked soundly, for the three-tiered pricing structure is that the U.S. Postal Service requires that mailed materials carry a dollar price. Later clarification showed that this requirement holds true only for materials entering the mails in the U.S., as many foreign journals do. Shelock’s greatest concern about publisher/subscription agent relations and consolidation appeared to be the loss of integrity in distribution statistics, since the agents do not reveal the names of their customers. He also wondered if journal prices were high because librarians take too long to pay their bills.

I then explained the reasons American research libraries use foreign subscription agents and the benefits of the consolidation service provided by a U.K. agent. The University of North Carolina Library prefers to purchase journals from an agent in the country of origin to ease currency exchange problems and to reduce potential language difficulties and other problems arising from orders placed directly with foreign publishers. The consolidation service offers claiming closer to the source and nearer the time of publication and makes possible speedier delivery of the British journals to our library. The library paid domestic prices for 1984, but the following year was charged North American prices for most titles.

Dr. Wall reviewed the librarian/subscription agent relationship: timing of new subscriptions and cancellations, invoicing, pricing trends, title information, automated check-in, back-run supply, disposal of surplus journals, and buying round. Dr. Wall was entertaining and hard hitting.

CONCLUSIONS

Many of us were disappointed that there was not the promised 50% discussion time during the seminar. The meeting was scheduled to run only four hours; two before lunch and two after. The late start allowed participants to reach London from their homes without spending a night. I was surprised by the wide international interest in the program; 120 persons had come from all over the world to attend a four-hour meeting.

American librarians and British publishers do not understand each other’s business; perhaps the subscription agent, in the middle, understands best. The seminar was an educational experience for all of us. In learning about journal publishing, we had to account for the differences between American and British publishing. For example, it appears that
in the United Kingdom publishers and subscription agents are much freer to work together to set prices and discounts. At the same time, there is in the U.K. Serials Group a dynamic group of publishers, agents, and librarians working together on matters related to serials.

The publishers do not realize that American research librarians do not require a dollar price for British journals, because we purchase these periodicals through a subscription agent, either in the U.K. or in this country. American libraries do not pay the British publishers, early or late; the agent pays them. A price in pounds sterling presents no problem to American library subscribers to British scholarly journals.

Several years ago when the U.S. dollar was falling against European currencies, American librarians wanted a firm price for foreign journals. The price set then was fair: U.K. cost, plus something for postage and conversion into dollars. The "overseas" price, given in sterling and used for all foreign countries except the United States and Canada, still bears some relationship to the domestic price; often it is identical. The publishers gave annual percentage increases to both sterling and dollar prices. This practice, along with the dollar's increasing strength, led to the pricing situation that exists. All the publishers at the seminar claimed that the situation was a surprise to them when it was called to their attention. Most agreed that something should be done, but . . .

We heard many reasons why nothing could be done quickly about the discriminatory pricing. U.K. publishers rely on the income from U.S. library subscriptions and cannot simply lower that price to either the domestic or the "overseas" price. They could raise the other prices to our level, but "Would you have the U.K. librarians paying that much?" they ask. Maybe not, but how about the other overseas customers? The publishers might well investigate the possibility of economies from closing some of the New York offices or discontinuing the 800 telephone numbers and credit card payments—services libraries do not need. Our subscription agents handle the publishers' customer service and advertising already.

Had American librarians not complained about the discriminatory pricing, the situation would have gotten worse. Now that the practice has been publicized and criticized, almost certainly something will be done. It will not be as much or as soon as we would like, but it will be at least a gesture, and it is beginning with 1986 prices. Americans who attended the seminar have already heard from a few of the British publishers about revisions in prices for 1986. Several librarians are studying these prices, and their watchfulness will help persuade the publishers to continue to bring prices into line.

British publishers are quite angry now about the practice of consolidation, for they see income slipping away from them. I suspect loss of income is much more the reason for their anger than the unreliability of their statistics, as Shelock maintained. Since the seminar, at least two European subscription agents have received letters from one U.K. publisher demanding a guarantee that they will not reship journals to the U.S. On the other hand, one British agent is promoting his consolidation program and guaranteeing domestic prices for 1986.
Those of us who attended the seminar are aware that we, building on the groundwork of other librarians, have probably accomplished something. One publisher is holding American prices at the 1985 level for two more years, although they are outlandishly high prices; others are giving all journal prices in U.S. dollars. There are indications that more British publishers will follow with two prices, given in the same currency. We feel certain, however, that had American librarians not brought the situation into the open, the pricing differential would have continued to grow. We would be prudent to continue to monitor these prices in the coming years.

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Microform Film Stock: A Hobson’s Choice. Are Librarians Getting the Worst of Both Worlds?

Jerry Dupont

The Law Library Microform Consortium, a nonprofit library cooperative, is a major supplier of legal materials on microfiche. Because it regards silver halide film stock as an inferior medium for materials destined to see actual library use, it supplies its products only on diazo film. The author believes that many librarians have misconceived their goals in the cause of archival preservation, and that many micro-publishers are unable or unwilling to buck this widespread misconception. Publishers will continue to provide silver halide film until educated librarians begin to demand a more durable film stock for their libraries.

The organization which I represent is a nonprofit consumers’ cooperative of libraries. We service all types of libraries, but mostly those with an interest in law books or government documents. Due to our nonprofit status, we are able to price our materials very attractively, currently at an average of $2.95 per volume or 49¢ per fiche. In seven years we have delivered over 1.7 million volumes on microfiche to over five hundred subscribing libraries located in fourteen countries.

We now offer some 1,500 separate titles which, because many are multivolume, total more than 55,000 volumes. Most of these materials are American. But we have already made a strong start with Canadian and British titles, and next year will be adding large batches of material from Australia and New Zealand. In the past, this library of titles has grown at an average rate of 7,500 volumes per year. Over the next three years we envision quintupling our filming output; so that by 1988 we expect to be filming an average of about 35,000 volumes per year. Our long-range goal is to capture for posterity the bulk of the retrospective public domain titles held in the world’s law libraries.

This paper by Jerry Dupont, Executive Director, Law Library Microform Consortium, was selected for the “Best of Conference” issue by the jurors for the program entitled “Illusions of Longevity? Microforms and Optical Discs in Permanent Library Collections,” presented by the Reproduction of Library Materials Section on July 6, 1985.
Libraries purchase our materials for two principal reasons. Some of our participants have major, mature, research collections. They already have most of what we publish in hard copy, but are beset with problems of book stock deterioration and lack of shelving capacity. They buy our product both to serve the needs of preservation and to recapture valuable shelving capacity for new, more heavily used acquisitions. Others of our customers presently lack many of the titles which we offer. They view us as an extremely economical source for building up their collections in a way that does not involve eventual conversion problems. Servicing the needs of these different types of libraries provides us with a sufficiently wide marketing base to guarantee the viability of the project.

This short introduction describes our mission and helps to explain our choice of a filming medium. We are very interested in preservation. It is a major part of what we do. But we are just as interested in achieving widespread access to the materials. Many of the titles we have filmed were in scarce supply, prohibitively priced in reprint editions, or just plain unavailable. We are dedicated to ending this era of scarcity and are working toward the day when virtually all law libraries, wherever situated, will have achieved a rough parity in their ability to access legal research materials. We have found that the economics of microform permit a pricing structure that makes that goal attainable.

It is for this reason that we have chosen diazo microfilm as our preferred medium of distribution. We know that our materials actually will be used in libraries—used heavily. And we believe that of the presently available alternatives only diazo microfiche meets our need for relative permanence combined with durability under the conditions of real library use.

As has been explained widely in the literature, silver halide film is the preferred film medium for permanent archival storage. We believe in this also and maintain a silver halide copy of everything we film in a secure, atmospheric-controlled storage facility. In short, we maintain "archival conditions" for the storage of our master fiche. That is essential if we are to accomplish our total preservation goals.

We believe, however, that many librarians have misunderstood the meaning of archival storage, erroneously thinking that their separate libraries can or should be fulfilling this mission. But this is impossible! No library is capable of maintaining archival storage for the film copies used by its patrons, since use by anyone cancels out one of the essential givens of archival storage. Archival storage requires that materials be stored in unvaryingly perfect conditions of temperature and humidity, in total darkness, and in a permanent state of nonuse.

No real library works that way. If we want to achieve permanent archival storage, we must do it in a context different from the working library environment by building and maintaining specialized long-term storage facilities.

We share the concern of those librarians who worry about the problem of permanent storage for the masters of our many microforms. And we are realistic enough to recognize that permanent storage of masters is too important a job to be left to the uncoordinated efforts of individual mi-
Microform publishers. Missions change. Publishers get acquired by entertainment conglomerates. There is no such thing as institutional memory.

For that reason we have long advocated a sustained governmental involvement in the societal task of maintaining our stock of microfilmed masters, perhaps in one or more facilities such as that built by the Church of Jesus Christ of Latter-day Saints for its genealogical records in the granite mountains of Utah. If such an effort were undertaken, it would probably be at the instigation of some organization with the organizational clout of the American Library Association. We would be delighted to cooperate with such a national effort.

But permanent preservation is not your library’s problem. You are in business to serve real live patrons. We publishers should be delivering fiche to you which is designed to withstand the hard wear and tear to which your patrons will undoubtedly put it.

Yet the majority of publishers do not give libraries a choice. While different titles are variously offered in silver halide, diazo or vesicular film stock, few publishers can afford to offer a choice for the same title. The economics of microform duplication prevent that. When it comes to choosing their film stock, librarians are usually faced with a true Hobson’s choice. They get to accept the horse closest to the door. In the majority of cases today, that will be silver halide, offered because that is what publishers know most librarians have come to believe is appropriate. As a result, libraries are purchasing ever larger collections of mostly silver microforms, little realizing that silver film stock is probably the least appropriate choice for their purposes.

Of the available alternatives, silver film is the least suitable in a use environment. It is quite susceptible to scratching. More importantly, it is highly susceptible to mold growth. Our organization receives regular reports from distressed librarians wanting to know what they can do about mold growth eating its way through their microform collections. The problem always occurs in their silver film. It breaks our heart to have to tell them that there is nothing they can do to reclaim the images that have already succumbed to the destructive growth.

Silver is also the most expensive type of film stock, and it requires the most expensive handling during the manufacturing process. This translates into higher prices. The final irony is that librarians, in their well-intentioned pursuit of an illusive permanence, have managed to select the most expensive film with the least durability under actual library conditions. To the extent that they have been given a choice, librarians have managed to find the worst of both worlds.

Our organization must also bear responsibility for placing some of that fragile silver film. When we first began operations, the archival storage myth appeared to be too entrenched to combat. As a new publishing venture, nonprofit but self-sustaining, we had enough problems to occupy us without our trying to change the mind-set of the library world. But we were never comfortable with silver as a vehicle for our titles, and began an education program with our subscribers to acquaint them with the issues involved. We had already prepared them for a change when
two events occurred, which made our task much simpler. The first was an amazing rise in the price of silver, and thus, silver halide film, caused by intense speculation in the world silver market. The second was the decision by the GPO to issue its microfiche in diazo film stock. The occasion was too good to miss, and we immediately notified all of our member libraries that we were changing over to diazo ourselves. We have never regretted the decision. Nor have we lost customers because of it.

Of course, we had better reasons than the shenanigans of the Hunt brothers to justify our move. Our own internal testing results gived with those cited by the GPO in support of its conclusion that diazo film is the best currently available medium for materials that will see library use. The micrographics industry rates diazo film as having a working life of one hundred years plus. In addition to its inherent long life, diazo film is very durable. Unlike silver halide film, diazo is not easily scratched. Also unlike silver halide, diazo is virtually impervious to mold. This quality of durability is one of diazo film's major virtues.

Vesicular film is also durable and mold resistant. However, we have other problems with vesicular film. To date we have not yet received sufficient assurances of its longevity to justify our adopting it as a medium of distribution.

Diazo film is rated as having a life expectancy of something over one hundred years. That is not permanent. But then, we have to be realistic. What is? Certainly none of our present book stock will last that long. Even words carved on stone don't always last that long. Take a walk around one of the older cemeteries in your community. Look at the tombstone inscriptions for people buried one hundred years ago. Most of the carving will be illegible. It is a law of nature. Nothing is permanent. Heraclitus taught us that the only thing permanent is change itself. Things can be only relatively permanent. Our mission is not to make our collections indestructible. That is not possible. Our mission is rather to insure that human knowledge is preserved in a medium sufficiently durable, and sufficiently future compatible, so that the next generation will be able to receive it and pass it on. We believe that the hundred years or so of additional existence we are providing to our materials is sufficient to fulfill that mandate.

One new technology, which may eventually replace microforms, is the optical disk. We have all heard of its potential storage efficiencies and other virtues. We think that optical disks have great promise, but that they have a long developmental period ahead before they become commercially feasible for the bulk storage of library collections. More in keeping with our present focus is the question of permanence as it relates to the optical disk. One of the best recent studies on this was released by the International Management Congress as BND Research Fund Report Number 10. It states: "At present, however, it must be said that most of the optical disk suppliers only appear to be aiming at a storage life of ten years." Given current developmental trends, we don't expect to see optical disks with the capacity for archival storage in this century.

There is a different problem with archival storage, which deserves mention. Archival storage is predicated on the assumption of a central
storage facility in which master copies of material, correctly processed on silver halide film, are maintained in perfect atmospheric conditions—a fireproof library of Alexandria, if you will. But we live in perilous times. In this nuclear age, destruction of whole cities is a tragic, but ever-so-real, possibility.

Without being unduly morbid, what, for example, would be the result of a thermonuclear blast on the city of Ann Arbor, Michigan? Among other horrors, it would result in the destruction of the storage vaults of University Microfilms and the loss of the masters for the biggest collection of filmed periodicals in the world. True preservation under modern conditions may call for something conceptually different from storing masters in central storage facilities. Dispersal, not concentration, may be the only effective preservation strategy for the future.

If this is so, then we may be on to something. As I said earlier, our primary goal is to make our materials as widely available as possible. That is why we concentrate so heavily on making them cheaply available. We have valid service goals in mind with this dispersal. It is just possible that we are also making possible the eventual survival of much of this material.

The conveners of this panel chose an intriguing title for the program: "Illusions of Longevity? Microforms and Optical Disks in Permanent Library Collections." Illusions is an apt choice of word. Permanence will always elude us. It is a will-o’-the-wisp, a chimera, an ever-receding goal. Microforms will only last a hundred years plus. Books themselves will disappear before that. Optical disks are currently being designed with maximum lifespans of only a decade or so. We will not achieve permanence with any of these media. But we must use the best available medium until something better comes along.

For our purposes, diazo microfilm appears to be the most prudent and economical medium available. We don’t think that it will last forever. But it will last through the next century. After that we are confident that it will be replaced by media yet unknown. The successor medium will also prove to be impermanent. And our successors in the library profession will have to find something better. In the meantime, however, we will have fulfilled our own destiny by preserving recorded knowledge until then. We have a tried and true technology at hand available for application to that task. The important thing now is that we set our minds to doing it.

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Microfilm Types: There Really Is a Choice

Suzanne Cates Dodson

Silver halide, diazo, and vesicular films have special characteristics. The purchaser’s choice of film should be governed by an understanding of just what one does and does not get with each of these types of film.

Buying microforms these days is a lot like buying clothes. Just as we have a wide variety of fibres from which to choose in selecting garments, so do we often have a variety of film types to consider in purchasing a micropublication. Most of us are familiar with the characteristics of the various fibres used in clothing—cotton, wool, silk, polyester—and we select the fabric that best suits our requirements. Most of us would not consider Harris tweed for an evening gown, nor silk chiffon for a business suit, but the reverse would be entirely appropriate. One selects a fabric for its performance—for its warmth, its coolness, its softness, or stiffness. One should also select a film type on the basis of its proven characteristics, choosing the film that best suits one’s needs. It would be incorrect to claim that one fabric is best for all garments for every occasion, and it is equally incorrect, in my opinion, to say that one film type is superior to all others for every application. The film you choose should depend upon the way in which you plan to use it, and it therefore becomes very important to know how each film type behaves and what one can expect of it.

Two recently published articles about film types express a strong preference for a specific type of film. Because some of the arguments for these recommendations are not supported by the results of other studies, I hope here to give the reader the grain of salt with which one should, in my opinion, read these articles. My purpose in doing so is not to argue that one should never consider buying a film type other than silver halide (although there are those who never would) but rather to provide the facts with which one can make an informed decision.

At this time, we generally find ourselves asked to choose from three basic film types—silver halide, diazo, and vesicular. Additional films exist—ovonic, electrophotographic, photoplastic, thermally processed,
for example—but these are still in the developmental stage and are not used for library publications in microform. Therefore, the films with which I am concerned here are the first three.

**Silver Halide Film**

Silver halide film is the only film for which there are standards for archival stability. In other words, with silver film one can say that when it has been manufactured, processed, and stored in accordance with the relevant standards, one then has a proven archival medium. At this time, silver halide film is the only recognized archival film. To be truly archival, silver film must be stored in accordance with ANSI PH1.43, *Storage of Processed Safety Film.* As Dupont has pointed out, using film as we do in libraries means that that film is not being kept under archival conditions at all times. In most cases, I suspect, it never is kept under archival conditions. However, silver halide film holds up remarkably well even when it is subjected to conditions of temperature and humidity well beyond the upper limits specified in the standard. Robert Mottice, Quality Control Supervisor at University Microfilms International, described a test in which a piece of silver film was left in a special oven for a prolonged period. The enclosed piece of silver film was in the chamber for thirty days at 122°F (50°C) at 96% relative humidity. As you can see [and I did], it emerged relatively unscathed. There is however a strange phenomenon which takes place when vesicular film is subjected to the same environment. The effect was discussed in a recent ANSI Subcommittee meeting and a new appendix will be added to the vesicular film specification pointing out the dangers of very high humidity storage. Properly processed silver film is also resistant to damage from exposure to light.

**DiazO Film**

The most difficult film to choose is probably diazo. The reason is that diazo films are manufactured by different companies—Kodak, Xidex, Bexford, for example—with each manufacturer making a range of diazo films designed to meet specific needs. Since all diazo films fade, and since the rate of fading varies from film to film, it becomes important to know just which film you have bought or are considering buying. Figure 1 illustrates the number of hours it took to fade fifteen different diazo films from Dmax (maximum density) to a density of 0.5, which is the density at which a diazo film is considered unusable. The author of the report from which this table has been taken concluded that "there does not appear to be a diazo film characteristic which indicates the resistance of the film to fading. Some manufacturers appear to have a range of films which are generally more resistant to fading than those made by their competitors. From time to time the manufacturers make changes in the formulation and manufacturing technique used for their products so the results given here may not be valid in future." These facts mean, of course, that you may have bought a film that takes 19.6 hours to fade, or you may have bought one that will fade in 3.4 hours, but usually you have absolutely no idea. I have questioned micropublishers on the sub-
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<td>13</td>
<td>Bexford 2DP22</td>
<td>4.4</td>
</tr>
<tr>
<td>14</td>
<td>Kalle P135M</td>
<td>4.0</td>
</tr>
<tr>
<td>15</td>
<td>Bexford 2DP21</td>
<td>3.4</td>
</tr>
</tbody>
</table>


**Figure 1**
The Times Taken to Fade from Dmax to D = 0.5 for the Film Samples Exposed in the NCR 456-200 in Test 2.

ject, and they generally do not know either, leaving the selection of the film stock to their technical people, I suppose, who probably look for the best price. The Law Library Microform Consortium, for example, states in their catalogue that "all microfiche are supplied in ANSI/NMA Standard [which standard?] 24X or 42X, Diazo film, negative images, with eye-visible headers," a description that really tells one very little. The one publisher I have found who does specify uses Xidex DHCF, which faded in 6.9 hours in the test mentioned above. Why, one wonders, did they not select the long-lived Xidex DEH, which lasts almost three times longer? Surely the customer who chooses a diazo film deserves the best of that type. But to be fair, since the customer rarely asks, why should the publisher care?

**VESICULAR FILM**

Vesicular film is generally unaffected by light, but it does scratch readily, and it can be damaged by excessive heat. Again I am indebted to Robert Mottice for some firsthand evidence. At University Microfilms
International they performed a scratch test on samples of silver, diazo, and vesicular film stock, using a piece of apparatus built there in accordance with ANSI PH1.37, the standard for such devices. Mottice describes the process: "The downward force of the scratching stylus can be changed by moving the brass weight along the threaded shaft. For this test, the force was set at 18 grams. Multiple, side-by-side passes were made at this setting on each of 3 different film types. The scratched samples were put into slide mounts for your viewing convenience. You will notice the diazo film sustained more damage than the silver. This I find hard to understand since past practical experience reminds me that diazo is generally the tougher of the two. It is possible that surface hardness varies from manufacturer to manufacturer and from product to product. As you can see, the vesicular was damaged the most." In the samples I received, the damage to the vesicular film far exceeded that to the silver or diazo films.

Vesicular film is also susceptible to damage from heat. "All indications are that this type of image [vesicular] is very stable at room temperatures. However, at elevated temperatures there is a softening of the binder which causes a collapse of the bubbles and image loss. Examples of image loss have been observed after short exposures to 150°F. The maximum safe upper temperature varies with the film manufacturer and the film type. . . . The essential fact to keep in mind about vesicular film stability is that even very short exposure times to elevated temperatures will destroy the image." The ANSI standard for the film gate temperature in microform readers specifies 167°F as the upper limit, but many machines exceed this, some by a good many degrees. Read the periodic equipment reviews in Library Technology Reports if you doubt this. The only vesicular film at this time durable above 167°F is Xidex XRPG, which is rated by Xidex as stable to a temperature of 170°F. For this reason any vesicular film you buy should be Xidex XRPG—at least until a film as good as or better than Xidex XRPG is developed.

These, then, are the basic facts. I might also mention that one will, of course, have very special problems with films where the temperature and humidity are far above what we in temperate climates ever experience—in the tropics, for example. In my own situation, our building temperature is generally too hot, although the outside air is usually cool, but our humidity is low, so fungus growth has never been a problem. It would not do, however, to store one's films in a damp basement. More detailed information about these three film types can be found in "Microfilm—Which Film Type, Which Application?"  

**RECENT RECOMMENDATIONS**

In light of the foregoing observations, I would like to comment on some of the statements made in the previously mentioned articles by Dupont and by Mayfield. Jerry Dupont, of the Law Library Microform Consortium, in his paper "Microform Film Stock: A Hobson's Choice. Are Librarians Getting the Worst of Both Worlds?" defends his firm's decision to issue their publications on diazo film by repeatedly arguing that microforms in use in a library are, obviously, not being kept in ac-
cordance with the relevant standards for archival storage of film, and that since silver halide film can be considered to be truly archival only when it is archivally stored, it follows that silver film in use in a library is not archival and therefore a waste of money. He goes on to say that "the micrographics industry rates Diazo film as having a working life of one hundred years plus." What he neglects to mention is that a diazo film rated as "long-term" film, can only be considered so when it is stored under archival conditions. ANSI PH1.60, Specifications for Stability of Ammonia Processed Diazo Film is very definite about this: "Long-term film is a photographic film which is suitable for the preservation of records for a minimum of one hundred years when stored under archival conditions." (emphasis added). And furthermore, elsewhere in that standard we find that "it is recognized that diazo images do change upon exposure to light and that use for more than three hours might cause unacceptable images. However, this standard applies only to storage copies and not to work copies. . . . While work copies may be subjected to substantial use during their useful life, storage copies should be used only infrequently. A maximum three-hour use in a reader or printer seems reasonable during the 10-year life expected of a medium term storage film or the 100-year life expected of a long-term storage film." Yet Dupont recommends that we select diazo film instead of silver halide because we cannot provide archival storage conditions and because he considers diazo tougher than silver. I submit that if we accept the facts presented in the ANSI standard, then we must conclude that silver film in a user environment is more likely to be with us for years to come than is diazo. All diazo films fade upon exposure to light, and most working collections might be expected to go beyond the three-hour limit imposed by the standard, long before their hundredth birthdays. Silver film, on the other hand, is very resistant to light and heat, and can tolerate long periods of exposure to both without problems. The scratch test made by University Microfilms International showed the silver sample to be the most scratch resistant (although in general we would expect the diazo to outdo the silver in this respect). The point is that diazo also can be scratched. Long-term diazo film has been developed not specifically for active library use but rather for those applications where it is necessary (often for legal reasons) to keep records for a minimum length of time—up to one hundred years, perhaps. The keeper of these records needs to know that within a required time period he or she can gain access to a record. The records must persist for that time, but they will be subjected to minimal use and may, in fact, never be consulted. When the conditions specified in the standard are met, long-term diazo qualifies. In this instance it represents an economical and reliable storage medium. But it emphatically does not qualify as long-term when it is subjected to the kind of use a working library collection receives.

Because there are standards governing the manufacture and processing of silver film, one always knows what one is getting when one purchases film conforming to those standards. With diazo films one can (and should) insist on knowing whether the film offered rates as a long-term film, in accordance with ANSI PH1.60. One must also recognize
that the potential life of that film will only be realized if it is kept under archival conditions, as specified in ANSI PH1.43, because failure to do so will greatly reduce the life of the film and will automatically nullify its long-term status. By saying that proper storage is important for all types of film, we can dismiss the whole archival storage question, which is so often dragged into the film argument and which is, to me, just a red herring.

Dupont argues that nothing is permanent—true, but I feel that he is overly pessimistic. He says that "certainly none of our present book stock will last that long, i.e., one hundred years" and that "... tombstone inscriptions for people buried one hundred years ago ... will mostly be illegible." The analogies he draws between books and tombstones and silver and diazo films, and the impermanence of them all, correspond to my earlier analogy between films and fibres, although not, I think, quite the way he intended. It is true that newsprint is not long-lived, but good paper is. As for tombstones, if you want to be forgotten, be sure that yours is made of limestone. Expose this to the elements and it will be gone in a flash (geologically speaking). But select a good granite and you can rest happily, knowing that whatever you have chosen to have chiselled will be there for many generations to come. The fact is that silver halide film, even in use, is eminently predictable. It stands up well to heat and light. In microfiche format, because the fiche carrier, rather than the fiche, is moved around, scratching is a minor consideration. Properly maintained reading equipment can go far toward reducing scratches on roll film. Diazo film fades, and different brands (indeed, different batches from one manufacturer) will, as we have seen, fade at different rates. The more it is used, the faster it will fade. It will fade gradually even if it is kept in dark storage. Vesicular film scratches easily, and will melt if the temperature rises above a certain point.

For similar reasons, I disagree with some of the statements in Mayfield's "Using Micrographics Technology to Preserve and Make Accessible Records of Permanent Value." Noting that silver halide film should be selected for the master negative for archival storage, he adds that "it is generally preferable to use diazo or vesicular films as working copies in a library setting. Silver film may be scratched; it is sensitive to acids left on the film by human handling; and it may be attacked by fungus if temperature and humidity controls are not carefully maintained." Silver film can be scratched, but so can diazo or vesicular and, of the three, vesicular film is the most vulnerable. Silver film can be attacked by fungus, but so (although it is not as likely) can the others, and under reasonable conditions of temperature and humidity, silver film performs very well and it is capable of withstanding extreme conditions for long periods of time without discernible damage, if the test made at University Microfilms International is any indication. Mayfield's statement that "all three types of film have the same life span when used in a library setting" is not supported by the results of the investigations of the characteristics of films described above.

In conclusion, different films exist for different purposes. If you need
an inexpensive film for a microform publication that you know will be superseded or outdated in a few days or a few years, then by all means choose a nonsilver film if you wish. But do store it apart from your silver films to avoid any possible harmful chemical interaction. If, on the other hand, you are buying a microform publication for your permanent collection, I suggest that you choose silver halide film. In my opinion, silver film reasonably cared for has the potential to far outlast the others. And for those research collections that receive only light use, and which one would hope to keep "forever," (or as long as possible), I believe that there is at this time no question that silver halide film is the best choice. All hard evidence to date indicates that if the earth continues to exist, then your silver film, kept under decent, even though "sub-archival", conditions will (together with your granite tombstone) be around for many years to come.

REFERENCES

16. Ibid.
17. Dupont, "Microform Film Stock," p.79.
18. Ibid. p.79.
20. Ibid.
CALL FOR PAPERS

To conclude its thirtieth year, Library Resources & Technical Services is dedicating the October/December 1986 issue to reviews of important publications in the technical services field. We invite you to submit a paper for this issue.

1. Write an in-depth, evaluative review of the recent publications you consider the most important in the specialty of your choice.

2. Select only one of the following specialties:
   (a) administration/management of technical services
   (b) automation of technical services
   (c) collection development/management
   (d) conservation/preservation
   (e) descriptive cataloging
   (f) micrographics/reprography
   (g) serials librarianship
   (h) subject analysis

3. Limit your choice of publications to books, new serials, single issues of serials and/or single articles. Any or all of these formats may be included in the review; exclude nonprint publications. Select only publications with imprint or copyright dates of 1981 through 1985, inclusive. Select no less than five and no more than ten publications to be reviewed.

4. No more than two authors should prepare a review.

5. Prepare a paper from 10 to 20 manuscript pages in length (typed double-spaced). Follow the "Instructions to Authors" in the January/March 1986 issue of LRTS. Send the following information for each author with the manuscript: (1) social security number; (2) business address; (3) business telephone number; and (4) home address. It is not necessary to send a stamped envelope.

6. Mail three copies of the manuscript to Elizabeth L. Tate, Editor, LRTS, 11415 Farmland Drive, Rockville, MD 20852. All manuscripts received by May 10, 1986, will be considered.

Each assistant editor will appoint a panel to select the paper to be published in his or her field of expertise. The papers will be judged on the basis of readability and cogency of the reasons for the selections. An honorarium will be awarded for each manuscript selected for publication. The authors of the reviews selected for publication will be notified in July 1986. Manuscripts not selected will be discarded.

EDITOR’S NOTE

The photograph of the Margaret Mann Citation presentation on page 384 of the October/December 1985 issue was inadvertently reversed during the printing process. The accompanying caption is therefore incorrect. Award recipient Lucia J. Rather appears on the right and chair Carol Mandel on the left in the photo as printed.
IN MEMORIAM: FRANCES MORTON

The Resources and Technical Services Division (RTSD) of the American Library Association (ALA) notes with sorrow the sudden passing of our friend and colleague Frances Morton, a senior descriptive cataloger of Persian and Arabic materials in the Descriptive Cataloging Division of the Library of Congress.

Frances entered the library profession later than many of her colleagues, completing her M.L.S. in 1977. Although a latecomer to the profession, she made significant contributions to it. She was one of a small and dedicated group who strove to increase awareness of the need for bibliographic control of Middle Eastern literature.

During her years as a member of the American Library Association she served on the RTSD Cataloging and Classification Section's (CCS) Committee on Cataloging: Asian and African materials. One of the last assignments she performed for this committee before her term of office expired was to chair the task force it appointed on uniform titles for constitutions. The bulk of this list was compiled by Frances, who spent many of her free hours digging through the resources available to her at the Library of Congress. She undertook this assignment with her usual vigor and self-discipline for a high standard of excellence. The completed work "List of Uniform Titles for Constitutions," will be published by and available from RTSD.

She also served for several years as the representative of the Middle East Librarian's Association to the RTSD/CCS Committee on Cataloging: Description and Access. In addition to her role in RTSD, Frances was also active in the ALA Association of College and Research Libraries (ACRL). At the time of her death in October she was a nominee for vice-chair/chair-elect of the Asian and African Section of ACRL.

She also was a member of the Middle East Librarians' Association, Middle East Studies Association, Society for Iranian Studies, and the Turkish Studies Association. To all her colleagues, friends, and family we express our sympathy. Frances was witty, open, and warm. She enjoyed life and got the utmost out of every second of every day. She will be sorely missed for these personal qualities as well as for the benefits she brought to the profession. She was an energetic and enthusiastic librarian who generously shared her expertise in Persian and Arabic culture and literature with all she encountered.—Prepared by her RTSD friends.
The Decimal Classification Editorial Policy Committee (EPC) held its eighty-seventh and eighty-eighth meetings at the Library of Congress (LC) on October 4-5, 1984, and April 18-19, 1985. During the October meetings, categories of priorities were established for the various schedules and tables, which had been prepared or discussed for several years, for edition 20 of the Dewey Decimal Classification (DDC).

(1) Revisions to be Published Before Edition 20

The EPC endorsed in principle the publication of 004-006 Data Processing and Computer Science and Changes in Related Disciplines. This new schedule was developed in response to many requests from the field and was subsequently published as a separate in May 1985.

The committee recommended to the Forest Press Committee (FPC) that a revision of 312 Statistics of Populations (Demographics) be published in Decimal Classification Additions, Notes and Decisions (DC&). It was subsequently published in DC& 4:5 Spring 1985. By the relocation of Demographics from 312 to the appropriate subject with the addition of s.s. -021 from Table 1, the DDC removes the previously existing dual provision of both 312 and the subject plus s.s. -0212. The elimination of the confusing dual provision should help the classifier to avoid inconsistent application of the DDC. However, geographic statistics that deal with a particular place will remain in 314-319 as a number of classifiers had requested.

The EPC reaffirmed its decisions to publish expansions for areas -52 Japan and -68 South Africa (Table 2) in DC& 4:5 Spring 1985. The previously approved expansion of areas -624-629 Sudan was withdrawn, however, because of the possible instability of its geographic boundaries. A revised and expanded area table for -95 Melanesia, including Papua New Guinea may also be published before edition 20 if a

*A modification and summary of the complete Report, which will be published in Decimal Classification Additions, Notes and Decisions.
satisfactory table can be prepared in time. All of these area expansions have been requested by classifiers in the countries concerned, are in accordance with local literary warrant, and are in accordance with the principle that the DDC must continue to be a classification system for international use.

All of the above schedules and area tables, together with 301-307 Sociology, published in 1982, are viewed as parts of edition 20, projected for publication about 1991. Their publication now should help to reduce the implementation problems of edition 20 for practising classifiers. As usual, these revisions are applied centrally by LC's Decimal Classification Division (DCD) through the various LC mechanisms after publication in DC& or as separates.

(2) REVISIONS FOR POSSIBLE INCLUSION IN EDITION 20

Five phoenixes or schedules with major revisions were reviewed to try to finalize some decisions for edition 20. There have been numerous requests from practising classifiers for major revision of 350-354 Public Administration, since this class is so difficult to apply. No decision will be made on this schedule until the EPC has seen a fuller draft schedule and until it has been sent to outside subject experts for critical appraisals.

Various drafts of a phoenix revision of 370 Education have been under consideration; the latest draft was sent for evaluation to subject experts. Although the critiques were mixed, the EPC believed that the phoenix still needed much revision and would also have required substantial changes throughout the DDC. The 370 Education phoenix was, therefore, withdrawn from consideration for edition 20.

Phoenix revisions of 560-590 and 611-612 Life Sciences are being prepared by the division staff at LC and by a team of librarians and biologists at Lancashire Polytechnic (United Kingdom). The discipline is complex because of basic disagreements among scientists about its intellectual structure and thus about the nature of the literature and the citation order for synthesis in classification. The committee recognizes the need for critical reviews of the two drafts by science librarians, scientists, and other subject experts; the EPC hopes to make an interim recommendation on one of the phoenix drafts in 1986, but a final recommendation about its inclusion in edition 20 cannot be made for some time.

The phoenix Proposed Revision of 780 Music had been published as a separate in 1980 for detailed evaluations and field trials in North America and abroad. During the 1984-85 meetings, the EPC discussed the 780 phoenix in terms of its general acceptability and in the light of various published and unpublished critiques. Its merits are particularly strong as a bibliographic classification for classified catalogues and bibliographies, largely outside North America, and as a tool for online searching, browsing, and retrieval. The problems it creates are also undeniable: the necessity, at least in some libraries, for reclassification to avoid split files; the lengthy notation if the synthetic capabilities are fully exploited; and the difficulties of application if the full synthesis is used. The committee also recognized the need for this fully synthetic bibliographic classification in non-American libraries, which account for
about 50% of the DDC sales. Finally, the EPC recommended to the FPC that the phoenix 780 Music be published as a separate before edition 20 with certain changes: principally, the use of 780.924 instead of the finite list of composers at 789; and the alteration of the citation order for the literature of vocal music to "form—executant" instead of "executant—form." The EPC will ask LC to consider applying both the revised 780 Music schedule and the edition 19 schedule until edition 20 is published when the phoenix 780 will become part of the official DDC canon.

The EPC also agreed that work on 001-003 Systems and Communication should be continued, for possible approval and publication in DC&E, perhaps in 1986, for centralized application on publication.

(3) REVISIONS TO BE POSTPONED BEYOND EDITION 20

The following schedules and tables had been considered or approved for major revision for edition 20, but have now been postponed or withdrawn: 624/690/711 Buildings; Table 1 Standard Subdivisions; 800 Literature, together with Tables 3-4; 355-359 Military Art and Science; and a change in the official citation order for synthesis in 340 Law.

(4) OTHER BUSINESS

The committee honoured John A. Humphry and Betty Humphry on the occasion of his retirement as executive director of Forest Press and as the Forest Press continuing member of the EPC. The EPC welcomed Peter J. Paulson as Humphry’s successor. Arnold S. Wajenberg was elected as vice-chairperson to December 1986.
From: Dana L. Roth, Head, Science & Engineering Libraries, California Institute of Technology, Pasadena. — [Abridged] Robert Rodriguez' reply (April/June 1985) to Carol Mandel's question, "Should library catalogs provide access to parts of books?" ("Enriching the Library Catalog Record," Jan./Mar. 1985) fails to recognize the comprehensive treatise, which in some cases is followed by monographic reprints of individual chapters. . . . One of the major promises of online public catalogs is the opportunity they offer to reexamine past practices and develop new solutions for seemingly intractable problems. The recent recognition that databanks available to the public need to be location specific . . . and accurately reflect a given library's holdings can easily be extended to include analytical entries in the online public catalog. . . . What better way for reference librarians and catalogers to work together developing their collections than to actually analyze reference books for the online public catalog?

John W. East's recent review of the implications for cataloging conference proceedings, ("Citations to Conference Papers and the Implications for Cataloging," April/June 1985) correctly notes that title entry should become de rigueur. An additional suggestion would be that catalogers go one step further and actually check CASSI (Chemical Abstracts Source Index) or the Mathematical Reviews List of Periodicals and see how a major abstracting/indexing service cites the publication in hand. East's initial example, i.e., "Proceedings of the Symposium on Thin Film Phenomena," is cited in CASSI and Chemical Abstracts as "Proc. - Electrochem. Soc., v. 78-2, 1978."

Editor's note: Letters sent to the editor for publication in this column cannot be acknowledged, answered individually, or returned to the authors. Whenever space is available in an issue, selected letters will be published, with little or no editing, though abridgment may be required. Letters intended for publication should by typed double-spaced.
INSTRUCTIONS TO AUTHORS

Please follow these procedures for manuscripts to be submitted to Library Resources & Technical Services:

1. Submit original, unpublished articles only. Do not submit manuscripts being considered for publication elsewhere. Articles of four to six thousand words on subjects of interest to technical services librarians are preferred.

2. Write the article in a grammatically correct, simple, readable style. Remember that the author is responsible for the accuracy of all statements in the article.

3. Give the article a brief title; if the title is not descriptive of the content, add a brief subtitle. On a separate page give the title, the name(s) of the author(s), and the title and affiliation of each. If the paper has been presented at a conference (the proceedings of which will not be published), identify the conference by name and date on the cover page.

4. On a separate page, type the title and subtitle, followed by a brief abstract, typed double-spaced. Do not identify the author(s) here or elsewhere in the manuscript.

5. Type the manuscript, double-spaced, on 8 1/2-by-11-inch nonerasable paper. Use fresh, bright typewriter or computer printer ribbons. Please TYPE ALL QUOTED TEXT DOUBLE-SPACED.

6. Consult Webster's Ninth New Collegiate Dictionary, supplemented by Webster's Third International, for spelling and usage; prefer the first spelling. Verify the spelling and accuracy of names in an appropriate reference; don't rely solely on your memory.

7. Consult The Chicago Manual of Style, 13th ed., revised and expanded (Chicago: Univ. of Chicago Pr., 1982) for capitalization, abbreviations, etc.

8. Follow the examples and suggestions in chapter 12 of The Chicago Manual in designing tables. Submit each table on a separate page at the end of the paper. Indicate the preferred placement in the text with an instruction in brackets. Use tables sparingly and provide each with a brief, meaningful caption. TYPE TABLES DOUBLE-SPACED THROUGHOUT.

9. Be prepared to supply camera-ready copy for each illustration, if your paper is accepted. Accompany the manuscript with a photocopy of each and a brief, meaningful caption noted on the verso.

10. Submit all bibliographic citations on separate pages at the end of the article. PLEASE TYPE ALL "REFERENCES" DOUBLE-SPACED. Use superscript numbers throughout the text, but do not type the numbers as superscripts in the "References," and do not indent the first line. Use "References" to document the text, not to amplify it. Note that a shortened form (not op. cit. or loc. cit.) is used for subsequent references to a previously cited work. If no other reference intervenes, use "Ibid." to take the place of the elements of the previous reference that apply. Do not underline "Ibid." A reference to another article from a previously cited collection can be shortened by means of a cross-reference. VERIFY EACH CITATION CAREFULLY.

The fictitious examples below illustrate the preferred style.


2. Neville A. Fisher and others, Publishing Patterns of the Next Decade, Li-
3. Ibid., p.194.
11. Send the original and two photocopies of your manuscript to Elizabeth L. Tate, Editor, LRTS, 11415 Farmland Dr., Rockville, MD 20852. Allow a minimum of two months for refereeing and editorial review. Please include an addressed envelope, large enough and with sufficient postage for the return of your manuscript. Overseas contributors need send one copy only, and no envelope is required.

The LRTS editorial office in general follows the Guidelines for Authors, Editors and Publishers of Literature in the Library and Information Field, adopted by the American Library Association Council in 1983 and available from the ALA Executive Offices. Information about copyright policies also is available at ALA Headquarters.

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If you plan to attend and would like to be a member of the 1986 Listeners' Jury, please let the LRTS editor know of your interest. Members of the 1985 juries are eligible to serve on this year's jury. Send the following information to the editor: your name; business address; business telephone number; home address; areas of special interest or expertise; and any preconferences you plan to attend (Technical Services Cost Preconference, June 26-27 or Preservation for Collection Managers, June 27). Send this information postmarked no later than April 15, 1986 to: Elizabeth L. Tate, Editor, LRTS, 11415 Farmland Drive, Rockville, MD 20852.

Those selected as jurors will be notified and sent specific instructions in May or early June.

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