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Publication in Library Resources & Technical Services does not imply official endorsement by the Resources and Technical Services Division nor by ALA, and the assumption of editorial responsibility is not to be construed necessarily as endorsement of the opinions expressed by individual contributors.
Springtime thoughts of faraway places have inspired this issue of *Library Resources & Technical Services*. Papers from colleagues in Australia, Belgium, Canada, England, and Venezuela afford readers an opportunity to look at international standards through European eyes, contemplate the future of cataloging, consider the merits of the nineteenth edition of *Dewey*, note the effects of technology transfer to libraries in a South American country, and learn about a specialized new supplement to the Library of Congress subject heading list. Complementing these articles and contributing to the international flavor of this issue are several papers from colleagues at home. One, a bibliographic essay, has been designed to assist in cataloging Africana. Another examines the costs of Soviet serial exchanges, while a third summarizes the history and impact of the international standard bibliographic descriptions. Another, based on the author’s recent research in Copenhagen, tells the story of a nineteenth-century feminist reading society in terms of its collection development policies. There are two papers on music cataloging, one of which concerns the revision of the decimal classification schedules for music, prepared in Great Britain. And in a delightful bit of whimsy, one paper assesses the adequacy of decimal classification for organizing extraterrestrial literature. May *LRTS* readers find these articles informative and enjoyable! — Elizabeth L. Tate.
Australia, LCSH and FLASH

John McKinlay

The paper describes the first edition of the List of Australian Subject Headings, and sets it in the context of the history of subject cataloguing in Australia and of the origins of LCSH. The reasons LCSH needs to be modified for Australian use are described, and some future possibilities for subject cataloguing in Australia, and for LCSH, are suggested.

One last complaint. I have a rooted objection to consulting foreign language catalogues; my language is Australian English, I consider myself insulted by any cataloguer who expects me to look under corporations for companies. I got mixed up in one library with an irate professor over this. There wasn't even a cross reference from companies to corporations, and I realised that the cataloguer who had probably wasted half an hour finding the LC heading didn't have the education or the general knowledge to know what Americans call a corporation is what we call a company, and what they call longshoremen we call wharf-laborers, and so on. (John Metcalfe)¹

The first edition of A List of Australian Subject Headings was published by the Library Association of Australia at the end of 1981.² It bears the acronym FLASH, which has a peculiarly Australian connotation. As described by Robert Langker:

During the convict period in New South Wales flash as a noun denotes the more or less secret English thieves' cant which was a língua franca of a large proportion of the English convicts and which was utilized to prevent the police, overseers and reputable members of society from understanding what convicts said. Flash was a special vocabulary rather than a language since it employed standard English grammar and syntax and substituted flash terms, usually one for one, in place of standard English terms. For convicts flash constituted a common property which all could share and which let them believe that in using it they belonged to a cohesive group.³

FLASH is designed to supplement, and to be used in conjunction with, the ninth edition of Library of Congress Subject Headings (LCSH). It had its origins in 1973 when the committee of the newly formed Library Association of Australia Cataloguers' Section identified a number of possible projects as appropriate for its attention. One of these was the compilation of an Australian list of subject headings.

As president of the section I prepared a report entitled "An Outline of

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a Proposal for an Australian Supplement to the Library of Congress Subject Headings List," which was approved, in principle, by the committee. During 1974, armed with this proposal, I visited and talked with librarians in three state libraries, the National Library of Australia, and several large university libraries. The proposal prompted some approval, some criticism, and even an occasional offer of assistance. As a result of these discussions, the proposal was rewritten as “Project for a List of Australian Subject Headings” and was christened Project LASH. It received the blessing of the General Council of the Library Association of Australia, and I became the editor.

The aim of the project was, in the short term, to produce a preliminary edition of a list of Australian subject headings as a basis for comment and discussion by librarians. This preliminary edition appeared in 1978 and was, inevitably, nicknamed PLASH. The long-term aims were to have the list adopted by the National Library of Australia and incorporated into the Australian National Bibliography and AUSMARC tapes; to have the list adopted as a standard by Australian libraries; and to encourage the Library of Congress to accept as many additions, and to acknowledge as many variations, as possible.

The idea for FLASH did not, of course, originate with the Cataloguers’ Section. Parallel to the progressive acceptance of LCSH over the past fifty years as the primary source of subject headings in Australian libraries has been the recognition that it needs to be modified for Australian purposes. However, there was not at the time a readily available published list of standard variations, based on a consistent plan.

This is not the appropriate place in which to discuss the nature, and the uniqueness, of Australian English. The point to note is simply that not only is there a wide range of words which describe purely local phenomena, such as fauna, flora, customs, life-styles, institutions, and so on, but also that many of the common words of English have uses in Australia which are separate. Within the past five years several dictionaries have been published which attempt to cover the vocabulary, idioms, and pronunciation of Australian English, including the Australian Pocket Oxford Dictionary, the Collins Dictionary of the English Language, and the Macquarie Dictionary. The latter is the most comprehensive, and has several useful introductory essays on aspects of Australian English.

Professor Arthur Delbridge, editor in chief of the Macquarie Dictionary, was quoted in the press as saying that Australians felt cheated by present dictionaries. He went on: “We think it’s high time people in Australia, when they want to know about the way this community uses language, should be able to look up a book that tells them that—not something about how people in another community use that word. The basis of the dictionary is the way you and I use words. Other dictionaries will tell you a veranda is a gallery attached to the outside walls of a structure. But the Australian veranda isn’t anything like that at all. It extends the internal living space outside. If we don’t get that feeling into a definition, we haven’t produced an Australian dictionary.”

Much of the justification for FLASH is the same as that for the Macquarie Dictionary—that users feel cheated if there is not an Australian fla-
vour in subject headings, as John Metcalfe observed in the quotation at the head of this article. Metcalfe, Australia’s best known and most perceptive writer on subject analysis, was a consistent critic of LCSH long before it became a popular sport in the USA. So were many other Australian librarians. These facts were acknowledged at a milestone in Australian cataloguing history—the seminar on central cataloguing held in Canberra in 1966. The seminar resolved that the national central cataloguing agency should adopt LCSH as a standard, making such modifications as were necessary for the inclusion of Australian terms and for maintaining consistency in the listing. The new-look Australian National Bibliography which resulted from the seminar did accept LCSH as a standard, even if since 1972 it has not used it as a means of subject access to the entries. However, it paid only token homage to the request to prefer Australian terminology and, fortunately for everyone’s sanity, chose to completely ignore the request to rectify the inconsistencies in LCSH.

It is surprising, in retrospect, that neither the seminar nor the National Library made any moves to publish an Australian supplement to LCSH. There was, in fact, an excellent model available at the time. The 1964 List of Canadian Subject Headings, prepared by the Technical Services Section of the Canadian Library Association, placed considerable emphasis on history, but its 1966 and 1968 revisions, and the 1978 Canadian Subject Headings produced by the National Library of Canada, are broader in intention and in scope, and can be regarded as the direct inspiration for FLASH. 9

LCSH had its origins in the reorganization of the Library of Congress catalogues near the end of the nineteenth century, under the direction of J. C. M. Hanson, the first chief of the Catalog Division. Hanson described the decision and its implementation in a very interesting paper entitled “The Subject Catalogs of the Library of Congress” given at the ALA Bretton Woods Conference in July 1909, which might well still be required reading for students interested in LCSH. 10

Hanson made a number of important points which deserve repetition. He acknowledged that the decision to create a dictionary catalogue was made in the light of the developing preference of American libraries. Hence, the Library of Congress was a follower not a leader. He also explained that the new classification scheme and the new subject headings were developed in parallel, discipline by discipline. The overriding impression from this article is that LCSH was created on a pragmatic basis, using principles which had little to do with the inherent nature of the exercise. The headings which were created, their subdivisions, and to some extent their form were determined according to the peculiar needs of the collections and the users of the Library of Congress.

Hanson cited details of the sources used for LCSH, including the ALA list, the Harvard list of subjects, Mr. Fortescue’s subject index, and the “NSW subject index.” The NSW subject index, which Hanson said had “been in constant use,” was H. C. L. Anderson’s Guide to the Catalogues of the Reference Library of the Public Library of New South Wales. 11

There is, thus, ready evidence of a parallel tradition of alphabetical subject cataloguing in Australia, which existed prior to LCSH and
which continued long after LCSH was established as the standard authority. Anderson's list was completed in 1895, with Anderson being unaware that Cutter and others were also preparing a similar work for publication, the first edition of the ALA list. Anderson differed from Cutter both in using inverted headings to bring like subjects together and in dividing some subjects, like Birds, by country, rather than the reverse. In these respects Anderson's list looks more like LCSH than the ALA list, and it is thus easy to see why it found ready acceptance at the Library of Congress. Unlike either Cutter or LCSH, Anderson permitted upward as well as downward see also references. It is only in recent thesauri that the value of this device has been accepted.

A further product of the Anderson tradition was the Short List of Subject Headings compiled by Heather Sherrie and Phyllis Mander Jones and published in 1950. It was, as John Metcalfe's foreword says, a labour of love by two experienced cataloguers from the Mitchell Library. The preface indicates that the work “is based on the methods established in the [i.e., Anderson's] Guide” and that it also drew upon the ALA list as well as Sears and other sources. It was intended for smaller libraries, both school and public, has a useful introduction, and an unusual but interesting arrangement. It favours a direct form of entry but with many exceptions. Relatively few topical headings are further subdivided by topic, and subdivision by name of country is selectively used. There are lists of subdivisions to be used under names of countries and cities, races, languages, authors, and wars. The language of the list is soundly English without being aggressively Australian. There is significant overlap of coverage with FLASH in both choice and form of heading and there is a general air of sanity, reasonableness, and rationality. It is a very good list, which might well be revised and updated. If there was to be no change in target audience, the percentage of headings which would have to be added or changed would be small in relation to either LCSH or Sears.

Why has LCSH been so widely used, not only in the United States, but in Canada, Australia, and elsewhere? The answer, simply, is that it has been accepted as part of the total cataloguing package provided by the Library of Congress. The Library of Congress correctly judged in 1898 that its cataloguing services would find a ready market. They did, and the consumers acquired the Library of Congress subject headings and classification scheme as part of the transaction. The Library of Congress has never claimed that either of these tools was perfect, or perfectly suited for any other library system or for any other library collection than its own. Both tools work well enough, much of the time. Even today, most monographs are on simple, named subjects, and any subject heading list or classification scheme can provide adequately for these. In defending much of LCSH or the Library of Congress classification, one is simply defending the inevitable.

Australians, as is their way, have been a little more individualistic than their North American colleagues. The Library of Congress classification was not used in Australia before the mid-1960s, and the extensive use of Library of Congress copy cataloguing is not all that much earlier
than that. By 1948 only fourteen libraries in Australia used LCSH. Most were state or university libraries, but not all state or university libraries did so. I remember in both Tasmania and Victoria in the early 1960s libraries which were still in the process of moving from their own subject authority control system to that of LCSH. Hence, Australian librarians did not until much later accept the Library of Congress package, although one might note that Australian libraries have gone a long way towards doing so since the development of the MARC services, and will go even further along that road when the Australian Bibliographic Network (ABN), a national online shared cataloguing facility established by the National Library of Australia, is fully operational.

It might be argued, then, that FLASH should have followed this parallel tradition and tried to establish a self-contained existence. This was not possible, because by the time FLASH was conceived in the early 1970s, LCSH was firmly established. Had FLASH been started ten years earlier the other option still existed. At the seminar on central cataloguing in 1966, the possibility of an independent Australian subject heading list was seriously considered, and deliberately rejected. The Report of the seminar described the views of the delegates:

Some delegates urged the construction by or for the agency of a new subject headings list. While considerable dissatisfaction with some features of the Library of Congress List was expressed, some libraries considered that they were already too far committed to it to be able to accommodate major variations from it in central cataloguing. The majority was prepared to accept the Library of Congress List, with certain modifications, as a standard.\(^{13}\)

Perhaps the idea of a separate list should not have been rejected, but as the National Library proved to be unable to consider making the kind of modifications to LCSH which the seminar recommended, it was most unlikely that it would have considered creating a totally new system.

FLASH, then, was conceived as and developed as a dependent list. Its scope is:

- Existing headings from LCSH relating at least in part to Australia, e.g., Australian football; Australian literature; Burke and Wills Expedition, 1860–1861. For the most part these headings are listed without comment, and users are required to consult LCSH for the appropriate references.
- Australian synonyms not covered at present by LCSH, e.g., Road safety for Traffic safety; Public transport for Local transit; Railways for Railroads, and so on. This category is the most contentious, and will be discussed further below.
- Australian terms or subjects not covered at present by LCSH. New headings have been created freely where there appeared to be no LCSH equivalent and where the need for the term has been demonstrated by the existence of works which would typically be given separate cataloguing in a library. While this is a relatively large group, the majority of entries are proper names, for animals, birds, and plants, and hence are compatible with, even if not given in,
Australia. LCSH and FLASH /105

LCSH. LCSH includes, for example, the ubiquitous Kangaroo but not the equally well known Koalas. There are, however, various other terms for which there is no simple and direct LCSH equivalent, such as Pastoralists, Colleges of advanced education, Surf life saving, Green bans, Swagmen, Long service leave, Mallee districts, Bushcraft, and Brick veneer houses.

- Names of tribes, tribal groups, etc., of indigenous peoples and names of their languages. LCSH includes many of these, and all LCSH entries have been included, corrected in a few cases, and the scope has been greatly extended. Such a list can never be comprehensive, but the expansion should be useful to libraries. One of the major problems is the variations in the literature and in the reference sources on the preferred forms of names, and FLASH has attempted to provide some consistency.

- Variant and additional period subdivisions for headings. At the time at which FLASH was being prepared, the National Library of Australia was revising its practices in the Australian National Bibliography in respect to period subdivisions. The opportunity was taken to jointly develop a set of period subdivisions for history and other headings for Australia, its states and territories, and for its major cities. The revised headings are now appearing in the Australian National Bibliography.

- Additional subject subdivisions for headings. There are relatively few of these, and the majority occur under the headings for Australia, Australian Aborigines, and the Australian Parliament.

- Additional and variant see and see also references relating to the categories above. This group is fairly straightforward, and includes cases like a see reference from Australian rules football (the common but officially nonpreferred form) to Australian football and an xx reference from the Burke and Wills Expedition, 1860–1861 to Australia—Exploring expeditions, which FLASH prefers (for Australia only) to the LCSH form of Australia—Discovery and exploration.

As FLASH is a dependent list, the reference structure is necessarily incomplete. When a heading has no simple LCSH equivalent, the full reference structure has been included, to the extent of linking the heading with existing LCSH headings. However, when a heading has been varied from LCSH, only the direct reference from the LCSH form, and additional references, are included.

The exclusions from FLASH are based, more or less, on LCSH convention, and include names of persons and families, except as examples; names of corporate bodies, such as government organizations, societies, institutions and firms, except as examples; names of places, physical features, and national parks and reserves, but there is a good set of examples, designed to illustrate problems, solutions, references and, as an added bonus, the AACR2 form; and most Australian variant or preferred spellings and Australian preferences for one-word, two-word, or hyphenated forms of words, except where the heading has been included for other reasons. Hence, on this last point, Tires and Dikes
have been left unchanged, but **Folk-lore** has been changed to **Folklore** because references were being added.

At the heart of FLASH is a dilemma. Should one make references from Australian variants to the LCSH heading, or vice versa? Should one follow both policies according to what suits the strength of the argument, or should one use parallel headings? Or should one adopt a combination of all of these principles? FLASH has opted for the latter, and compromise, course. When both the LCSH heading and Australian synonyms are in common use, the LCSH heading has been retained and see references made from the Australian synonyms. Thus, there are references from **Road safety** to **Traffic safety**; from **Shift work** to **Shift systems**; from **Shop assistants** to **Clerks (Retail trade)**; from **Poker machines** to **Slot machines**; and so on. When an Australian synonym is more commonly used than the LCSH form, the synonym has been adopted with a see reference from the LCSH heading. Thus, **Sheep properties** has been substituted for **Sheep ranches**; **Public transport for Local transit**; **Companies for Corporations**; **Waterside workers for Longshoremen**; and so on. When the exact correspondence between the Australian term and the LCSH form is uncertain, both terms have been used in parallel. This device has been used very sparingly, such as with **Collusive tendering** and with **Verandas** (which has been separated from LCSH’s **Porches** and **Balconies**).

When I visited a selection of larger libraries in 1974 in order to discuss FLASH, some of the librarians I spoke to saw FLASH, or something like it, as essential and urgent, others saw it as desirable but optional, and yet others saw it as either unnecessary or undesirable. The librarians who expressed doubts made three points. Firstly, it was said that the availability of central cataloguing services makes local variations uneconomic and hence undesirable. Against this point I would set the cost to our users of not doing so. Our subject catalogues are little enough used anyway, and to ignore the linguistic preferences of our users would seem to be a way of further discouraging use and of hiding information in what is a very expensive tool. Besides, there is a great difference between variations followed by an individual library and standard variations accepted at a national level.

Secondly, it was said that established libraries would be unlikely to accept such a list. Yet libraries in Australia, as elsewhere, have been able, without undue trauma, to accommodate many changes in cataloguing rules, classification schemes, and filing rules. Also, there will inevitably be many new libraries in the future, and all libraries, old and new, must accept that the future is going to be longer, and more important, than the past.

Thirdly, it was claimed that there is no problem at all, because the extent of the desirable modifications is negligible. The research for FLASH has firmly and, I would like to think, finally dispelled that myth. It is perhaps painful to admit that **Public transport** is really more appropriate in Australia than **Local transit**. To make a see reference from **Public transport** to **Local transit** is the soft option but it is not a solution. To use both is intellectually satisfying, but it is not a solution read-
ily amenable to copy cataloguing procedures nor to automated authority file procedures. Why not be firm and admit that we are different? International cooperation, whether in politics, in economics, or in cataloguing, does not require that national differences be forgotten. Rather, it is the ultimate celebration of uniqueness.

The problem is not, and never has been, the terminology for uniquely Australian subjects—whether fauna, flora, social customs, or life-style. The problem is that Australia has not accepted American terminology, and certainly not LCSH’s archaic version of it. Normally our language is rather closer to British than American English, but Britain has not produced, and is never likely to, a list of subject headings which could be an alternative to LCSH. The British Library Bibliographic Services Division freely amends LCSH for its UKMARC records, but it has not published either a list of its variations, nor a statement of principles on which they are based.

The question is not whether we should sacrifice our Australian English for LCSH, but whether we should ask our users to do so. I cannot, with a clear conscience, agree with the view which says that we should.

Things now look a little more promising. Recent developments, both nationally and internationally, have suggested that there is a heightened awareness of the importance of, and problems with, subject headings. Locally, the Washington Library Network subject authority control software, on which the Australian Bibliographic Network is based, permits subject heading decisions to be made centrally, once and for all, for all libraries and for all entries. One of the first actions of the Network Standards Committee was to establish a Subject Heads Subcommittee to examine proposals for additions and changes to LCSH. While, quite properly, the initial task of the subcommittee will be to supplement LCSH, the option exists for a more radical modification or extension, if this is seen as desirable. Although ABN will not, as such, adopt FLASH, it will take due note of it because it is dealing with the same problems. One of the aims of the FLASH project was to raise the consciousness of Australian librarians to the problems and to some of the possible solutions. This it has certainly done.

On the broader scene, the ABACUS meetings are commencing to discuss subject headings and LCSH, which may cause the Library of Congress to accept that what it has created is not Hanson’s private and in-house system, but something approaching a standard subject heading list for the English-speaking world. However unintended and even unwanted this role may be, it implies a responsibility to consider the requirements of the whole spectrum of LCSH users. With the proper spirit of cooperation, American libraries have as much to gain from the FLASH project as do Australian libraries. Indeed, ultimately, LCSH may become as dependent on FLASH, and its ilk, as FLASH is on LCSH.

REFERENCES

1. John Metcalfe, “Notes of a Contribution by Mr. J. Metcalfe on LC Subject Cataloguing as Central Cataloguing Used in Australian Libraries,” in Seminar on the


Gail J. Junion

Africana materials are notoriously difficult to catalog. The number of publications about and from Africa has increased rapidly in the last two decades, proportionately increasing the number of problem books that cross the cataloger's desk. Although much has been published about the problems of cataloging Africana, very little actually aids the cataloger in finding answers to the practical questions raised by these materials. Answers are found in scattered and sometimes obscure publications. There has long been a need for a guide to these sources of information. Here is such a guide, compiled with the needs of both the generalist and specialist cataloger in mind.

The problems associated with cataloging Third World materials have long been discussed in meetings and in published articles. But the cataloging problems associated specifically with Africana materials have, until recently, been neglected. With the rapid increase in publications about and from Africa in the last two decades, awareness of the cataloging problems these materials create has increased. Many discussions have taken place in area studies groups, such as the African Studies Association, and recently a number of good books and articles that include discussions of Africana cataloging have been published. Only a very few, however, are an aid in finding answers to the cataloging questions raised by Africana.

These cataloging questions fall into the following general categories: form of geographic name, choice of entry element, form of personal or corporate name, and form of ethnic group or language name. At present there is no one source of answers. Catalogers must instead refer to scattered and sometimes obscure reference works, monographs, serials, journal articles, and even unpublished typescripts. There has long been a need for a practical guide to these useful tools.

Gail J. Junion, head, Original Cataloging Unit, Bowling Green State University, is the African Studies Association representative to the RTSD CCS Committee on Cataloging: Description and Access. She served also from 1979 to 1981 as chairperson of the association’s Subcommittee on Cataloging. The author wishes to thank the many librarians who contributed to this guide and Elizabeth Widenmann, in particular, for her encouragement. Manuscript received April 1981; accepted May 1981.

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This guide has been compiled for the practicing cataloger, both generalist and specialist. It is a select list, arranged first by cataloging problem and further subdivided into general and specific sections. General sections include tools covering all of Sub-Saharan Africa. The majority will be found in any research or large public library. Specific sections include tools covering individual countries, peoples, etc. The majority are geared for the Africanist scholar and may be found only in libraries with sizable Africana collections.

This guide does not purport to be a comprehensive bibliography of reference sources about Africa, since useful cataloging tools for many African countries are at best few and at worst nonexistent. The tools included were available as of January 1981. Some references are annotated and to direct the reader to additional information code numbers from the Guide to Reference Books or the appropriate supplement have been added in brackets, following the publication date, for many citations. Titles that Africana catalogers deem most essential have been marked with an asterisk.

The Archives-Libraries Committee of the African Studies Association discussed the need for such a guide in 1977. In response, Wendy Simmons, formerly of Boston University, compiled a preliminary list. Additional committee discussion confirmed the need for the development of a complete and detailed guide, which this author volunteered to compile. Through announcements in the Africana Libraries Newsletter, word of the proposed guide spread throughout the United States, Europe, and Africa. Lists of useful tools were received from most U.S. libraries with Africana collections, from libraries in Africa, and from the Library of Congress.

**GENERAL WORKS**

This section lists reference tools that contain two types of information: either general background information or a broad range of specific information on individual countries of Sub-Saharan Africa. Both the generalist and the specialist will find these tools an excellent starting point in any search for information. They are especially useful for summaries on political divisions, major cities, famous historical kingdoms, and well-known ethnic groups.

*Africa South of the Sahara.* London: Europa, 1971-. [DD 61]

Contains information on general history, political parties, and economic conditions.

*African Books in Print.* London: Mansell, 1975-

* * *


Excellent source for biographies, names of political parties, and ethnic groups. Each title begins, *Historical Dictionary of . . .


v.3. Grotzpeiter, John J. *Swaziland.* (1975)


v.5. Stevens, Richard P. *The Republic of Botswana.* (1975)


v.11. Imperato, Pascal J. *Mali*. (1977)
v.12. Foray, Cyril P. *Sierra Leone*. (1977)
v.15. Kurtz, Laura S. *Tanzania*. (1978)

Excellent source for historical geographic information. Has appendix of post-colonial geographic name changes.


Good source, giving much the same kind of information as *Africa South of the Sahara*.

**GEOGRAPHIC NAMES**

**GENERAL**

Most general reference collections contain atlases and gazetteers that list African geographic features and/or place-names. The most useful are listed below. Since African country, province, city, and town names remain in flux, catalogers should also search the *New York Times Index* or *Facts On File* for the latest form of name.


Good general atlas, available in most libraries.


Good source for major place-name changes only.


Excellent source for all but extremely obscure villages. Generally available.


_____. Geographic Note. Washington, D.C.: The Office, 1964–Indispensable, issued whenever there is a major name change.

SPECIFIC

There are a large number of in-depth geographic tools available. Those listed below are the ones Africana catalogers find most useful.


Covers Central Africa.


Pettman, Charles. South African Place Names, Past and Present. Queenstown: Daily Representative, 1931. [CL 159]

Excellent source for historical place-names of Portuguese, French, Dutch, English, German, and African origin.


Contains a useful appendix of Nigerian state-level divisions.


Although somewhat out-of-date, the best source in a neglected area. Contains a comprehensive index of place-names.


The gazetteer section contains more than twenty-two hundred entries.


ETHNIC GROUPS

Tools that can aid the cataloger in establishing the correct form for ethnic
group names can be found in most library collections. The most useful and widely used is Murdock, still the work, even though published in 1959.

Covers four geographic areas—West, North-East, East, and South-East-Central Africa. Includes indexes of ethnic groups and language names.


Good in-depth studies that include summaries of peoples.

Lists 1,016 ethnic groups.

Mostly out of date, but still useful on occasion.

Arranged by ethnic classification. The index is indispensable.

_____ Outline of World Cultures. 5th ed. New Haven, Conn.: Human Relations Area Files, 1975.


SPECIFIC

Although there are hundreds of books on specific peoples, most are arranged so that one must scan or read the entire work to locate a desired piece of information. The tools listed below contain information formatted for easy consultation.

Brelsford, William V. The Tribes of Zambia. 2d ed. Lusaka: Govt. Printer, 1965(?)


LANGUAGES

GENERAL

Two categories of Africana often necessitate cataloger research: linguistic studies, and texts in African languages. Catalogers will often find conflicting information in linguistic works, as scholars cannot agree on the proper form of
name. African language texts can create insurmountable problems for the cataloger, as they are almost always unreadable and only rarely contain English or European language summaries. Catalogers handling these materials are advised to ask local linguistic faculty for assistance.

  Very detailed map, very large format somewhat unwieldy.


  The standard work.

  Contains many cross-references to variant name forms.

  Excellent general source.


  Excellent source for even the most obscure languages. Well cross-referenced.

  Not as complete as the 1977 edition.

  The least complete, but still valuable if the two later editions are unavailable.

  Good quick-check reference list.

**SPECIFIC**

Listed below are the most useful studies selected from the hundreds available. Of value primarily to the specialist, they provide valuable information on minor languages and most dialects.


Excellent quick-reference tool.


Hard-to-find publication, but harder-to-find information.


PERSONAL NAMES

Both the third edition of IFLA’s Names of Persons and AACR2 contain more information on choice of entry element and form for African personal names than did previous editions. These two sources cover only a few African countries and ethnic groups. Extensive research and publication still are needed in this area. Catalogers should also be aware that tools which, by their title, appear relevant to choice and form of personal entry, may in actuality be “baby-naming books.”


Many sources are lists of forenames.


**SPECIFIC**

The following tools are those catalogers find most useful when searching for the proper entry element and form for personal names of specific African peoples or personal names from specific countries.


Good source for hard-to-find information, worth a search.

**GENERAL**

The biographical tools that cover Sub-Saharan Africa, both current and historical, are far from being complete or comprehensive. Although current biographical tools exist for some countries and many regions, large gaps still exist.

Current tools list mostly political figures, government officials, and business leaders. *African Biographies*, a loose-leaf publication that was updated regularly, is the best source for current information. At this time there are few collected historical biographies that are comprehensive. Either the proposed twenty-volume *Dictionary of African Biography* (two volumes of which have been pub-
lished) or Lipschutz provide the best comprehensive coverage to date. Other collected historical biographies vary greatly in quality and scope. Tools such as Webster's contain little information except for biographies of African heads of state.

Arranged alphabetically by country. Overlaps with *African Biographies* but also contains some older biographies.

Very complete biographies that include photographs. Has a name index. Unfortunately this reference work recently ceased publication.

Best source for French-speaking Africa. Previously published as separate volumes for individual countries.

An alphabetical listing of major historical figures.

Relatively current coverage, it includes information similar to that in *African Biographies*, but it is not regularly updated.

**FOR WEST AFRICA**

Only some West African countries publish current biographical tools. Collected historical biographies are common, especially for Ghana and Nigeria, but these vary greatly in quality and scope.


Mostly current biographies. Also includes academic and business leaders.

Arranged alphabetically by country. Mostly current biographies of government and business leaders.

Mostly historical biographies, not complete but the best tool available.


*Sierra Leone Year Book*. Freetown: Daily Mail, 1961–. [CJ 214]


"FOR EAST AND CENTRAL AFRICA"

Although current biographical tools exist for both regions, there are only a few that cover individual countries. Collected historical biographies are few and difficult to locate. The most readily available tools are listed below.

  Good source for Belgian colonial officials.

Contains 800 biographies of persons connected with the revolution.


Arranged alphabetically, only source of its kind for this area.

Mostly current biographies arranged alphabetically by country. Covers Cameroon, Congo, Gabon, and Chad.

Société de l'histoire de l'Ile Maurice. Dictionnaire de biographie Mauricienne. Port Louis: Esclapro, 1941–52.


In addition covers Zambia, Malawi, Botswana, and Mozambique.

"FOR SOUTHERN AFRICA"

Southern Africa is well covered by both historical and current biographical tools. Separate publications exist for some of Southern Africa's racial groups. Some publications represent only one political or racial point of view and exclude biographies of banned individuals and political parties. The annotations in this section should, therefore, be carefully noted.

Contains current biographies. No information about detained persons or about members of the Zimbabwe African National Union or the Zimbabwe African People's Union.

Contains very detailed biographies of persons who died between 1959 and 1965.

Contains twenty-eight mostly political biographies.


Contains more than two thousand mostly historical biographies of whites only. Includes index by profession.


Current biographies of whites only.

FOR AUTHORS

Most biographical information on African literary figures was published in the early to mid 1970s. Current biographical information is difficult to locate. *African Books in Print* is the best current source.


Contains 238 biographies of authors writing in English.

Good older source, divided geographically; excellent author index.

Very useful index.

Biographies of 185 authors writing in English.


The long author index is especially useful.


**CORPORATE NAMES**

Names of African corporations, government bodies and agencies, and divisions of state are difficult to verify. A myriad of general and specialized guides exist. The most useful ones are listed below.

*Abbreviations en Afrique*. Munich: Deutsche-Afrika Gesellschaft, 1969. [CA 70]

Arranged alphabetically by abbreviation.


Lists principal businesses, government departments, churches, banks, hotels, etc.

*Cape Times Directory of Southern Africa*. Cape Town: Cape Times, 1956-

Same as Bottin guide, covers South West Africa and Mozambique.


Arranged alphabetically by country, it lists the major corporations of French-speaking Africa.


Similar to the Bottin guide.


Publications identified with the symbol $ in the list below appear in Library of Congress catalogs under the main entry U. S. Library of Congress. African Section.


Arranged alphabetically by abbreviation.


Best source for names of African institutions of higher learning, museums, and libraries.

**References**


Is There a Catalog in Your Future? Access to Information in the Year 2006

Nancy J. Williamson

In 1957, THE FOUNDING YEAR OF RTSD, the focus was clearly on the catalog. It was the eve of the Stanford Institute that preceded AACR1. It was a time for reappraisal of the physical form of the catalog and the prelude to an era of intense concentration on international agreement and standardization. Just prior to this Strout, in a paper on the “Development of the Catalog and Cataloging Codes,” had expressed the view that in the past, while librarians had been “intelligent and serious scholars,” they had also been very “short sighted.” Reflecting on this, she challenged her audience to rethink principles and practices anew, lest they take for granted things that some day “might look equally ridiculous to another age.” She warned:

We may be so blinded by . . . firmly established customs that we are incapable of seeing some utterly simple alternatives which might quickly resolve our problems, and which will some day look so easy and obvious that our descendants will in turn look upon us as unseeing and unimaginative.

Twenty-five years later this statement can be both reflective and challenging. How will the information professionals of the year 2006 view our approach to the challenges of 1981 and succeeding years? Will they be able to say with conviction that we met the crises of environmental, sociological, and technological changes affecting the world of information storage and retrieval with foresightedness and determination in shaping the future? Only time will tell. It will be the speakers on the podium of RTSD’s fiftieth-anniversary program who will be able to answer this question. Meanwhile, librarians must do what they can to ensure a smooth and creative transition into the information environment of the twenty-first century. In doing so, they must endeavor to play a leadership role wherever and whenever possible.

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Is there a catalog in our future? I am almost certain of it. But what kind of a catalog will it, and should it, be? What will it be a catalog of? What kind of access will it provide to the items it describes? What functions will it perform in relation to other tools of information storage and retrieval? While precise answers to these questions cannot be immediately forthcoming, it is important that we begin now to consider the state of the art of access to information and to assess trends, technological developments, and predictions for the future, with a view to the identification of problems and issues that must be addressed as we progress toward the year 2006.

**THE CATALOG AND THE STATE OF THE ART**

Traditionally, the card catalog, supplemented by periodical indexes and supported by general and subject bibliographies, has provided the primary means of access to recorded information in general, and to library collections in particular. These tools, products of the world of print, are still very much with us, and have, for the most part, been developed as separate and distinct tools, without reference one to another in terms of their content, format, and functions. In the environment for which they were originally created, they served remarkably well. However, the growth of knowledge and increasingly sophisticated needs of information seekers, combined with the technological development of viable alternatives, has called the suitability of some information retrieval tools—particularly the library catalog—into question. The catalog is very definitely in a state of transition.

Nor is our preoccupation with the state of the catalog a new issue. Developments of the past twenty-five years have seen ever-increasing efforts on the part of librarians to develop the traditional catalog into a better retrieval tool. Much of what has been accomplished has been a result of a surge of interest in cooperation that had its origins in the National Program for Acquisitions and Cataloging and which has had its fullest impact in the sharing of cataloging data and the development of networks and bibliographic utilities. Instrumental in these developments has been the preparation of widely accepted bibliographic standards in the form of AACR1, ISBD, and AACR2, and in the design of a format for machine-readable bibliographic records. Without the MARC record, it is doubtful that the networks and bibliographic utilities would yet be a part of the library environment, or that, as of now, librarians would be converting their catalogs from card files to COM and online catalogs. Moreover, it is the development of networks and online catalogs that has finally precipitated libraries and information centers in the direction of total mechanization of their files. Few would dispute that all of this represents an important step forward.

Nevertheless, while significant progress has been made in some areas, the status quo is still the order of the day in others. In providing new physical formats for the catalog, for the most part we have been putting old wine into new bottles. The changes that have taken place have given the catalog a new face but have done little to alter the kinds of access to its content. Few would question the importance of the work on AACR1
and AACR2, which has given us an immeasurably sounder and more logical basis for the structuring of catalogs, but these catalogs are still prototypes of Cutter’s catalog of 1904.5 We have perfected the catalog which has existed for more than one hundred years without significantly improving the kinds of bibliographic and subject access that the catalog might provide. Nor have we experimented sufficiently with possible new approaches to subject retrieval of bibliographic items which modern technology could support. For example, the thesaurus and the PRECIS system of indexing, the two most significant developments in subject retrieval in the past twenty-five years, appear to have had little impact on the traditional subject catalog. In brief, librarians have not responded to the potential for change in a creative way. Improvements have been cosmetic rather than substantive and the catalog remains a tool that provides limited access to information. Is this the catalog with which librarians should enter the twenty-first century? Is it the best we can do, in spite of new technology? Or should the catalog continue to represent the status quo, while we direct our energies toward the improvement of access to information in some other way?

The truth of the matter is that the utility of the card catalog is already being challenged by bibliographic tools created and maintained outside the library per se. These are the products of the commercial abstracting and indexing services, many of which are computerized, and a large number of which are accessible through online bibliographic databases. While the formal bibliographic citations in these databases may not be very different from those in traditional indexes and catalogs, it is the sophisticated access capabilities which make them more efficient search tools than traditional library catalogs. Such features as the enrichment of subject description through the inclusion of abstracts as part of the record, the assignment of multiple subject descriptors, and provision for free-text and Boolean searches make these tools infinitely more efficient than the catalog. Moreover, as time goes on, increasing exposure to online reference services may have a profound influence on the kinds of demands both librarians and information seekers make on the library catalog of the future.

Of primary importance also will be the fact that as we move forward toward the year 2006, online bibliographic databases will not be the only competitors for library catalogs. Two other modes of information storage and retrieval are just now emerging—the business information systems and the information systems which are intended for general use and which are products of the union between computers and telecommunications technology. Both function as source databases, providing direct access to data, as opposed to bibliographic citations. Systems such as these, which eliminate one step in the two-step search for information through both catalogs and online bibliographic databases, may be doubly attractive to users.

Computerized business information systems are already in the process of propelling the commercial world Toward Paperless Information Systems.6 Such systems used in conjunction with specialized online databases could reduce the role of the catalog to that of a location tool in most
instances. In contrast, the general information systems, variously described as viewdata, videotext, PRESTEL, Telidon, and Channel 2000, with few exceptions, are still in the experimental stages. Nevertheless, if fully developed, the potential is there for direct home access to information on a wide scale. Although present experiments with viewdata systems may be viewed with skepticism by some, one must not forget that the horseless carriage was the ancestor of the Rolls-Royce and the Ford Escort, the punched card was the forerunner of the CRT, and the typewriter and television both had their rudimentary beginnings. The predicted “wired city” could very soon be a reality, with widespread use of source databases that would enable information seekers to bypass the library completely for most of their information requirements.\(^7\)

Where does this leave us with the status of the library catalog in the year 2006? To feel threatened by obsolescence is not the answer. Rather, librarians must be prepared to adapt and adjust to new ways of accessing information. However, such adaptation and adjustment will not occur without careful planning and a willingness to look at access to information in an unbiased and objective way, unhampered by the knowledge of existing information retrieval systems. A first step in development of services suitable for the information seekers of 2006 should be to consider the environment into which such services will be projected.

**THE INFORMATION ENVIRONMENT IN 2006: WHAT WILL IT BE LIKE?**

If we are optimistic enough to ignore those who predict doomsday by the year 2000, we must assume the presence of information and a need to provide access to it. Forecasters in all spheres of life have always taken considerable delight in predicting the future. The library world is no exception to this. As long ago as 1945, Vannevar Bush conceived his plan for a futuristic library.\(^8\) He was but one of the forerunners of such crystal-gazers as Licklider,\(^9\) Booth,\(^10\) and Lancaster.\(^11\) As we proceed into the 1980s, it cannot be unexpected that the forecasts on expectations for the information industry,\(^12\) libraries,\(^13\) and the future of the catalog\(^14\) have become more numerous, and some have been brave enough to project their thoughts to the year 2000 and beyond.\(^15\) It comes as no surprise that the predictions range from cautious optimism to doom and gloom, and that some have an excellent chance of becoming reality. Whichever pronouncements are fulfilled, given the remarkable ability of the human race to adapt to a changing environment, an optimistic approach to the catalog and its problems seems both attractive and sensible. For those who already feel that they are suffering from future shock, it will also be comforting to know that any process of adaptation or change is almost certain to be evolutionary rather than revolutionary. Changes are inevitable, and while they will come quickly, they will not occur overnight.

Barring unforeseen political and environmental catastrophe, and assuming that governments, industry, and business have succeeded in solving the energy problems, it is probable that by the turn of the century the information environment will be highly computerized at all levels of life. Our personal lives are already affected by computerization of
banking, supermarkets, and airline and hotel reservations, while the word processor is rapidly replacing the office typewriter, and the personal computer is within economic and operational reach of many individuals. Given that the majority of North American homes have one or more television receivers, it is a very short step to the installation of the hardware attachments which will permit television sets to become interactive viewdata systems, and to be as common in 2006 as the conventional television installations are today.

As sophisticated computer and telecommunications technology becomes increasingly available, it is predicted that it will decrease in price, whereas the cost of paper is expected to increase, be very scarce, and relatively inefficient in terms of some types of information needs. The future information environment will certainly be one in which some kinds of information will be recorded only in electronic form and disseminated only through computerized databases. Moreover, if the conservators are correct, many of the printed publications now extant but published prior to 1950, will have disintegrated or be in perilous physical condition by the turn of the century. Inevitably, expensive preservation programs will be launched for purposes of preserving the knowledge of the past which, for both practical and aesthetic reasons, is worth perpetuating. For current information, paper, when it is used, will be used sparingly and for specific purposes, perhaps with books and journals being marketed electronically and only printed on demand for specific customers. Undoubtedly, we should shed a few tears over the slow demise of the universal use of the printed book. Nevertheless, there is surely something positive in the mammoth weeding of obsolescent materials which we ourselves have found humanly impossible to accomplish up to now. And think of the diminishing size of those closed and frozen card catalogs!

In this projected physical environment, the basic needs of the information seeker may not be very different from those of today. However, these people will have been educated to the new technologies in a way in which we ourselves have not been, and will have had increasing exposure to their use and capabilities. In some ways information will be more easily accessible to individuals than it has been in the past, and such users are likely to be more sophisticated in their demands on the services of libraries and information agencies of the future. As such, information seekers may be much more finely tuned to the possibilities available in accessing information than are their 1981 counterparts—a factor to which libraries and information agencies of the future must inevitably respond.

It will not be easy for us to project ourselves into this environment which is forecast for A.D. 2000 and beyond. However utopian it may seem, we are well aware of the frustrations the computer can bring and we are already plagued with downtime from overloaded systems. Moreover, the present economic climate suggests that it is unrealistic to assume that we will be able to afford the technology that is projected. However, it will be most important to remember that all things are relative. If the costs of hardware and computer time continue to decrease,
while the cost of the production of printed information continues to spiral, it is not unreasonable to surmise that computer access to information will be more cost-effective than traditional methods by the turn of the century.

**Toward Information Services in 2006**

As we move toward the year 2006, I see a catalog in our future, but a catalog which will not be the major focal point in gaining access to information, and one which will play a diminished role in that world. While the role of the library as a recreational institution does not appear to be in serious question, its survival as an information agency will be dependent on its ability to redefine its procedures and goals in terms of the bibliographic universe as a whole. In doing so, it will be necessary to place its basic tool—the catalog—in its proper perspective with other access tools. In brief, librarians must consider the ways and means of developing information services as opposed to providing access to specific collections or particular databases. How should librarians proceed with this mammoth task?

Logically, the establishment of such a service should begin with a plan or blueprint which identifies issues to be addressed and priorities to be established. Such a plan must recognize the realities of the information world, but at the same time it is imperative that there be response to technological change. By way of encouragement, this paper attempts to identify some of the problems of access to bibliographic information which should provide food for thought and discussion by members, committees, and sections of RTSD over the next twenty-five years.

For the kinds of information services envisioned there are at least four fundamental requirements. First of all, librarians must become information professionals as opposed to reference librarians, catalogers, or collection development librarians. As well, not only the names, but also the actions must change. The new information professional must be prepared to customize services to individual users and to fulfill a role as tutor and educator in aiding and advising information seekers in the most effective use of the services and systems available. This will require much retooling and reeducation of present library personnel and some redirection of library education. In this respect, a more interdisciplinary approach to information work and education will probably be necessary. Some sacrifices will almost certainly be required. However, an adjustment and redirection of our talents and capabilities could place librarians in a much better position, not only to provide better services within the library environment, but also to market their expertise to commercial information entrepreneurs and to services in the information industry at large. The ability and desire to do this is all-important if librarians are to gain and maintain influence and credibility in the information world of the future.

A second requirement in preparing for the future is that librarians as information professionals not only act, but act decisively, objectively, and without prejudices in favor of traditional methods and practices. For if they do not, someone else will. All too often in the past, there has been
a tendency toward the hole-in-the-dyke approach, in which the solution to a problem has sometimes been the cheapest and easiest one, but not necessarily the best. Already librarians may be somewhat out of step with preparations for the information requirements of the future. Information brokers and commercial indexing and abstracting services have become well established in the marketplace and home information systems are being launched, in many cases without the help and expertise of librarians. Clearly, in the competition for control of the information industry over the next twenty-five years, it will be the fittest who will survive. Even now, the more enterprising of our colleagues have recognized this fact and are operating personalized information services from their homes and small offices, in communities where libraries have not yet moved to provide such services. These librarians are the potential information professionals of the future, and will surely make it to the year 2006. Will we?

A third necessity is that future planning must be done on the basis of sound analysis of problems and issues backed by thorough research. There are many unanswered questions on which librarians sometimes make sweeping statements, but about which they really have insufficient factual information upon which to base their actions. All too often the solution to an important problem is based on an assumption. Assumptions will not be sufficient basis for the preparations necessary for a successful and smooth transition into the information environment of the year 2006. Nor should they be. With such facilities as online databases and the emerging online catalogs and viewdata systems, librarians have at their disposal the material for investigation and research hitherto unavailable to them. We must make the best possible use of this opportunity in the earliest stages of the transition from the traditional to the new electronic systems.

Finally, it seems to this author that it is time that the operations of storage and retrieval were considered as functions of one single operation. That these processes are reciprocal is well known in practice and well documented in the literature. Yet in the day-to-day activities of libraries, their problems are usually treated separately. Surely those who know the most about storing information should also be best qualified to know how to retrieve it most successfully, and vice versa.

A number of the components of the storage and retrieval process will need to be examined with these four requirements clearly in mind. Among these are the information seeker, the role and function of the catalog, the nature of the bibliographic record, and the kinds of access to information that will be required.

THE INFORMATION SEEKERS

Any attempt to reshape the storage and retrieval process in anticipation of the future must begin with a reassessment of information seekers and their potential needs. It seems probable that library users of 2006, like their 1981 counterparts, will have two basic types of information needs—the need to locate a particular document about which they have some information and the need to retrieve successfully information on a
particular topic. However, as a basis for redefining the roles of various retrieval tools (including the catalog), information professionals will need to know more about the effects of the machine environment on users' requests than they do at present. If it is true that users tend to tailor their requests to the kind of information they believe a system can provide, will they pose the same kinds of questions as they did with manual systems? Will their questions be more precise? Will the emphasis be bibliographically oriented or subject oriented? Which kinds of retrieval tools have the potential for heaviest use? Will it be the bibliographic and source databases or the online catalog? Whatever the answers to these questions, various factors will be instruments of the results—such factors as user familiarity with different types of retrieval tools, the scope of the tools, ease of use, success in retrieval, and efficiency in information and document delivery. As amply demonstrated in the past, valid user studies are not easily achieved, but an understanding of both the what and the why of information-seeking behavior is crucial to the design and use of all kinds of retrieval tools, including the library catalog.

THE CATALOG

As we progress toward the twenty-first century, it can be readily surmised that proportionately less of the world's information will be accessed through online catalogs than through other kinds of online databases. Thus, there is a very real possibility that we will soon again be debating that timeworn question, Should the catalog be a finding list, or a bibliographic tool?

As finding lists, most catalogs could well suffice if they displayed records with minimal-level description and a limited number of access points per record. On the other hand, as reference tools, it could be desirable, and perhaps necessary, to enrich the catalog record with fuller bibliographic descriptions and a greater number of access points than is customary at present, to permit sophisticated access and search capabilities such as those investigated in a recent study by Pauline Atherton Cochrane.21 In brief, a vital question to be addressed is, Where should libraries and information centers be putting their money? Should the concentration of time and effort be placed on enriching source and bibliographic databases, or in creating a supercatalog? Small local libraries, whose primary function is to provide recreational reading, may be able to take some comfort in the fact that they may be able to continue to provide "a good book" from a local catalog. Larger information and research-based institutions will almost certainly be in quite a different position. Present trends suggest that the databases could easily take precedence over library catalogs as the first place to search when accessing information.

THE BIBLIOGRAPHIC RECORD

In the kind of information service envisioned for the future, the role that is defined for the catalog should determine the nature of the bibliographic records it should contain. The development of various levels of detail in bibliographic description, first suggested by Cutter22 and redis-
covered for AACR2, is the first step toward tailoring a standard record to a variety of information systems. As we progress, the second step will be to identify which levels of bibliographic description are best suited to which retrieval tools, and the reasons for this. There is every reason to believe that in 2006, there will continue to be a need for MARC, or MARC-like, records, universally available somewhere on demand. Indeed in this future store, records could be more detailed and more complex in their content than are the present standard records. Nevertheless, libraries and other information agencies should be in a position to exert as much flexibility as possible in the creation and formatting of records for their own use—records that would be cost-effective for an agency’s specific requirements. In each institution, the information professional would be cast in the role of an assessor of the requirements of a particular information service, with the authority to prescribe the kinds of records needed to satisfy those requirements.

ACCESS TO BIBLIOGRAPHIC RECORDS AND SOURCE DATA

The content of a bibliographic record is but one side of the coin. The other is the provision of various kinds of access to it. Online files of all kinds offer infinite possibilities for the extension and enrichment of access to information, over those provided by the present manual catalogs. While enthusiasm for these possibilities may be tremendous, wise exploitation of them will require answers to a number of important questions. What kinds of access are needed? Which databases should provide which kinds of access? How can access capabilities best be distributed through a number of retrieval tools, so as to provide the most cost-effective overall information service? Moreover, serious attention must be given to studying the need for increasing the amount of access, particularly with respect to the subject content of documents. Among the variables that should be taken into account are the following:

1. The kinds of access needed;
2. The requirements for formatting and structuring any output, including any subfiles or spinoff files which are expected to be created for display;
3. The search algorithms to be used; and
4. Interface and compatibility among files and databases created by different agencies.

It is unlikely that one solution will be suitable for all situations. It can be assumed that the variables might be combined in any number of configurations depending upon the type of agency, the combination of retrieval tools, and the kind of service to be given.

The reassessment of bibliographic access will raise once again—dare we say once and for all?—the question of the validity of the main entry concept, which has been a primary feature of catalogs up to the present. Is it possible to dispense with the main entry? Under certain circumstances, the answer to this question could probably be yes. It is true that in a machine environment, where the only requirement is to gain access to records, the main entry loses its significance. Nevertheless, consider
the problems of retrieving organized subsets of bibliographic files for purposes of creating separate bibliographies. Wherever there is need to produce single-entry lists of bibliographic items, the process of structuring those lists will presuppose some method of identifying principal access points. However, by the year 2006, the main entry, as presently known, may have disappeared completely, and its function be transferred to machine identifiers or tags which could be used, when necessary, to permit retrieval of structured single-entry bibliographic lists.

Nor is the main entry the only time-honored cataloging tradition that could be challenged. Will it always be necessary to identify variant names of persons and corporate bodies and variant titles of documents with preferred forms of those names or titles? Present trends in technology suggest that the answer to this question is probably no. In the past, catalog codes, with some exceptions, have emphasized the use of preferred names and titles to gather related records in the catalog for ease of use by information seekers. Technologically, it is now possible to provide online browsing capabilities that minimize the problems presented by slight variations in names. Moreover, the invisible linkage of variants could facilitate the retrieval of works by the same author or editions of the same work without the use of the “preferred form” principle. However, as in the case of main entry, unless the needs of information seekers alter significantly in the future, the logical display of subsets of a file will still need to be provided for in some way.

Lest catalogers despair at the loss of the heart of their work, it should be pointed out that the intellectual challenges of organizing information and retrieving it will not disappear. New problems will replace old ones and the decision and judgment of the new information professional will still be required—perhaps on a more challenging plane than before. Control of data will still be important, even though it may be accomplished through new methods and devices. For example, in the new information environment, authority files could assume an increasingly important role as control mechanisms, although their format and content may be significantly different from the authority files with which we are currently familiar.

**SUBJECT ACCESS TO INFORMATION**

Potential for the most dramatic changes lies in the methods and devices used to provide subject access to information. Such changes could have their origins in the exposure of information seekers to online databases, viewdata, and other high-technology information systems. Crucial to the design of new information systems will be the development of more effective methods of subject description and retrieval than have been used in the past. It is true that there have been significant attempts over the past few years to develop a theory of indexing and to design new indexing languages in the form of thesauri, faceted classification schemes, and string indexing systems such as PRECIS, as well as to experiment with automatic methods of classification and indexing. Nevertheless, these innovations have had little impact on the widespread use of traditional subject headings and enumerative classification
schemes as the major instruments of subject retrieval in libraries. It would be folly to try to transfer old methods to new technology without an objective investigation into ways and means of using the advances in technology to improve subject retrieval which in the past has often been barely adequate. Thus it is imperative that there be study and research into all aspects of subject access to information—the needs and requirements of the information seeker, the indexing process, the generation and development of indexing languages, as well as the creation of efficient search strategies and retrieval techniques commensurate with new information environments.

Basic to successful subject retrieval is effective subject indexing and cataloging, the requirement for which is competent indexing, based on an understanding of the relationships among users, documents, indexing languages, and the available technology. If, in recent years, there has been criticism of subject cataloging and classification, it has been due largely to the fact that we have been unable, and perhaps in some cases unwilling, to seek out the appropriate balance among these factors needed for optimum results. Two assumptions have contributed to this problem—the assumption that subject indexing and cataloging are easy (when indeed they are not), and the assumption that one system can be adapted with equal effectiveness to a range of different information environments, large and small, general and specialized.

As identified by Elaine Svenonius in her recent article “Directions for Research,” it will be necessary to know a great deal more than we now do about the indexing process and its problems if subject access is to be more effective in the future. Not only is there a need for a better understanding of the factors that determine the “aboutness” of a document, but there are also a number of related questions for which answers might contribute to improved results. Should the documents or their contents be indexed? What level of indexing is suitable for which kinds of documents? Under what conditions?

Moreover, the indexing languages themselves are a source of many of the deficiencies of contemporary subject retrieval. Our present subject catalogs provide for retrieval at the minimum level, with the standard subject heading lists and classification schemes encouraging a “mark and park” approach to subject indexing. The result is often that a document is described in terms of the system and the descriptors provided. A more useful approach would be to give a document an accurate description based on its content and require the system to respond to its subject. Such a system would change and evolve as documents or subjects are added and as the needs of the user population change. Machine methods are much more amenable to change than manual systems, and growing sophistication in technology suggests that such flexibility will be possible before the year 2006.

If as a result of new technology information seekers become more intensely aware of the potential for improved subject access to information, subject retrieval systems will be expected to respond to their demands. This implies enrichment of the subject description of documents
as well as the development of more effective indexing languages. Terminology is important, but so also is the structure of the language. It is essential that any subject retrieval system be equipped to provide information seekers with both direct access to information and the alternative of browsing among subjects for purposes of selection and choice of items. Thus provision for Boolean searches alone will not be sufficient to meet all requirements. Systematic searches for information must also be possible.

Will the indexing languages of the future be highly controlled or completely uncontrolled? More research is needed into all kinds of indexing languages, from natural language systems that facilitate free-text searching, to highly structured languages such as thesauri and PRECIS strings. It is probable that neither of the extremes will be completely acceptable as the ideal system. Present predictions suggest that natural language will play an increasingly important role in the subject retrieval systems of the future, but that in a majority of cases there will need to be at least simple synonym control through online thesauri, with perhaps some hierarchical search capability. In contrast, the systems requiring complex and time-consuming search strategies for retrieval purposes will probably be the exception rather than the rule for several reasons. Among these are the cost in time and effort of maintaining the systems, the direct interrogation of online systems by users who cannot be expected to be experts in complex search procedures, and the need for the information professionals to be able to move quickly and efficiently from database to database without having to reorient themselves significantly. This is not to say that there will not be some use of indexing languages with sophisticated syntetic structure, but for ease of use the structure may frequently be machine controlled and invisible to users.

In summary, either the completely unstructured or the rigidly controlled subject retrieval system could prove to be less than satisfactory in the overview, and some middle-of-the-road approach most acceptable in many cases.

As a particular kind of indexing language, classification can be expected to assume a new and important role in the information environment of the future. Unquestionably, classification is likely to continue to function as a shelving device as long as open-shelf access to library collections is desirable. However, with increasing amounts of information browsable only in online systems, the role of classification in information systems has exciting new possibilities. The multidimensionality of subjects has always been one of the problems that shelf classification has been unable to overcome; however, browsing through an online classified catalog would be more effective than searching open shelves because of the ability to represent a document in multiple places in a classified file of surrogates. Moreover, the application of the principles of classification—"the other half of the retrieval process"—will be essential to user-friendly systematic browsing of online systems. Helpful order as well as direct access is fundamental to the best retrieval systems, and one of our problems in designing subject retrieval systems in the past has
been our failure to recognize fully the essential relationship between the structure of helpful order based on the principles of classification and the inherent order of the alphabet.

STANDARDS AND STANDARDIZATION

The cohesive factor in all of this is standardization. In this era when our lives seem fraught at every turn with standards, they cannot be passed over without comment. For those who feel that the saturation point has been reached, this author cannot offer the comfort that standards will go away quietly. Quality control will still be an important factor in the world of the future. Although I do not predict AACR3, there will be yet another code, which it is hoped will be designed with complete independence from the constraints of present philosophies and rules and that will be the result of sound and careful research into the characteristics of the online environment and new developments in high technology. As well, in the next few years much time and effort will be expended on addressing the problems of interface and compatibility among various databases. Already work has begun on developing yet another standard, a “common communication format,” which may provide a switching device to facilitate the linkage of several kinds of databases for more efficient use. The development of new techniques will not make it any easier to make a silk purse out of a sow’s ear, but perhaps a new attitude towards standards will ease some of the frustration. Standards are important as conditions and guidelines within which to work in a particular information environment, rather than as ultimata for production lines which produce carbon-copy results for every situation in every institution. After all, the automobile has a common set of standards which enable drivers to operate different models and kinds of cars, but think of the variety that exists in those vehicles. Standards are, and will remain, essential, but it should be as a source of usefulness not as the basis for trauma and nervous breakdown.

CONCLUSION

The predictions are not for an easy time in the transition to 2006, but for a challenging one. In Lewis Carroll’s Alice in Wonderland the Mad Hatter asked “But my dear, was there progress?” and Alice earnestly replied “Well, there was change.” In our wonderland of the next twenty-five years there must be progress as well as change. In the marriage between new technology and access to information, let us not be left standing at the alter. Let us begin to move now in creating the “information bridge to 2006.” We have the best opportunity we have ever had.

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"Access to Good and Current Reading": Collection Development in the Feminine Reading Society in Copenhagen

Erwin K. Welsch

This article describes the origins and collection development procedures of the Kvindelig Læseforening (Feminine Reading Society) in Copenhagen. The leaders of the society, particularly Charlotte Klein, viewed it as an extension of adult education. They were conservative in their selections but were affected by changes in Danish society, and they gradually accepted realist literature. The society became one of the largest women's organizations in Scandinavia and lasted for ninety years.

During the 1870s pioneers of the modern Danish women's movement established institutions that provided access to facilities and educational opportunities previously restricted to men. They created schools in the fields of commerce (Handelsskole for Kvinder, 1872) and art (Tegneskole for Kvinder, 1875) that offered virtually the only vocational training available to women beyond graduation from primary schools at age fourteen. The first professional women's association (Kvindelig Pædagogisk Forening) dates from this period as does the oldest continuously active women's organization (Dansk Kvindesamfund, 1871). Sensing the need for intellectual involvement as well, a small group of women in October 1872 founded the Kvindelig Læseforening (Feminine Reading Society) that became one of the largest women's groups in Scandinavia and one of very few restricted, from its beginnings, to female membership and governance. Through these organizations women were able to acquire the increased training needed to compete in a rapidly industrializing economy, forge support groups to counter commonly held beliefs that women's proper roles were exclusively as wives.

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and mothers, and obtain the intellectual stimulation and cultural enrichment that access to books and libraries provides. This article examines the Reading Society’s unusual collection development procedures and policies.¹

**LIBRARY SERVICE IN DENMARK IN THE LATE NINETEENTH CENTURY**

A serious problem facing women in the 1870s was the lack of adequate library service in Copenhagen. Although there were numerous rural libraries, many of them in schools, and an organization offering free books and pamphlets, the country’s largest city—and its capital—lacked public libraries. Two small collections were established early in the decade to provide morally uplifting reading for the poor, but the founding of a true public library system was delayed until 1885.² There were several substantial private libraries, but these were restricted to men. Women were discouraged from using the Royal Library and barred from the all-male university as well as its library.

Rental libraries maintained by booksellers and other merchants were open to all borrowers able to pay the modest fees, but offered limited services and collections. Typically, they contained plays, novels, and light reading, in Danish or in translation, intended “to fill the family circle with entertainment, laughter and emotion” rather than to challenge the intellect or inform the mind.³ Foreign authors such as Dumas—father and son—, Dickens, and Eugène Sue and popular Danish authors, rather than classics, dominated the shelves. Books by female authors were also well represented. Ouida, George Sand, George Eliot, and others shared the shelves with Nordic female authors such as E. Martens and J. Schjørring. Titles such as *Lady without a Heart*, *The History of a Woman’s Heart*, and *An Italian Woman’s Vengeance* suggest that Barbara Cartland would not have been unwelcome if she had been born a century earlier. And the numerous loan cards signed by a maiden, miss, madame, or lady show that the books found a receptive audience.⁴ Any library planned for women would face stiff competition from well-established rental libraries.

**ORIGINS OF THE KVINDELIG LÆSEFORENING**

The idea of a women’s library in Denmark developed simultaneously with the decision to found a Danish section of the Association internationale des femmes. On February 24, 1871, a group of men and women met at the home of Fredrik Bajer, an educator influenced by Swedish feminists, to found a society dedicated to improving the economic, political, and social conditions of Danish women. At the same meeting they voted to create a Læsesal for Damer (Reading Room for Ladies) patterned after the Läsesalong för Damer (Reading Salon for Ladies), founded in Stockholm four years earlier.⁵ For a modest fee the Swedish Salon offered reading-room use and home loan or, at lower cost, a routing service for current periodicals in which the subscribers would share the cost.⁶ In an attempt to encourage female teachers to join they were charged lower fees and, although men were accepted as members, they
were relegated to a separate reading room and forced to pay more.

In lectures and newspaper articles Bajer propagandized for the establishment of a similar library in Denmark. He argued that a library would aid female teachers, give housewives access to literature, and bring the family together through books. In Sweden he found that the librarian, “orderly, reliable, skilled in languages, cultured, enthusiastic for the cause, and kind but decisive in her behavior,” was crucial to its success. Enthusiasm was important since she only received, besides housing on the premises, a percentage of modest gross receipts. He encountered opposition, but also unexpected support. The conservative newspaper Fædrelandet (The Fatherland), which opposed other women’s organizations, endorsed the idea editorially and reprinted Bajer’s article. But a doctor in Copenhagen, undoubtedly expressing dominant male beliefs, claimed that “women would become literary ‘blue stockings’ instead of diligent and sensible housewives” if they started a library.

**The First Years**

Bajer became involved in political struggles and left the library’s establishment to a group of women headed by Sofre Petersen, now generally regarded as the Reading Society’s founder, and Charlotte Klein, an activist who believed that improved education was a woman’s most certain path to advancement. At the first organizational meeting at Klein’s home in December 1871, they began drafting the bylaws which left governance and book selection in the hands of a strong governing board. The record of this and subsequent meetings is found in the “Protocol over Kvindelig Læseforeningens Bestyrelsesmøder” (Minutes of the Meetings of the Governing Board of the Feminine Reading Society).

Evidently a rough draft was prepared after each meeting and submitted to the chair before it was recopied and placed in the reading room for the membership’s inspection. There are indications that the record was, at times, altered to conform to the chair’s opinions, but some debates, even those potentially embarrassing, were extensively reported. The description of this first meeting was obviously recorded later.

They planned a functioning library that also met a social need by providing schoolteachers, who were predominantly single or widowed and lacked other social opportunities, with a noncirculating reference collection in an easily accessible reading room. They also anticipated use by another class of women who had “intellectual cravings and needs but who were barred, by situation and circumstance, from satisfying them through any other fashion than books”—comparatively wealthy or middle-class women similar to themselves who, by legislation or custom, lacked educational opportunities as well as access to libraries. The circulating collection would include a “judicious selection of literature as well as history, religion, geography and art,” but not books that would be “destructive of morality,” a vague phrase but one that was to cause frequent difficulties as members sought to define morality.

At the society’s first formal meeting two months later the members attended to administrative details, such as clarifying the society’s bylaws, elected the first governing board, with Klein as chairwoman, and ex-
plored methods of increasing funds and membership. The campaign included appeals to friends, newspaper publicity, and requests for donations. Carl Ploug, an editor of Fædrelandet and husband of a member, contributed to the effort with a favorable article supporting the society’s goals. The conservative newspaper’s continued support was based on its concept of an intellectual elite and the belief that women who were not content with reading light fiction serialized in newspapers—including its own, one might add—or “greasy” novels available in rental libraries would benefit from a library of serious books. Whether they meant appearance—booksellers described books returned soaked in sweat after having been used in homes with communicable diseases—or content, predominantly romance and thrills, which the newspaper considered as destructive as disorders to the body, it is impossible to say. But the newspaper’s support, its “seal of approval,” particularly in the face of its opposition to other women’s causes, was important.

The board’s first decision about the collection was to plan for a large number of periodicals and newspapers that would be partly supported by a periodical routing service modeled on the Swedish Reading Salon for Ladies. The issues, after circulating among paid subscribers, would belatedly become part of the society’s permanent collection. Initial selections were informative but not overly complicated, and included titles such as Fra Alle Lande (From All Countries), which was similar to National Geographic, and the Nordisk Maanedsskrift for folkelig og kristelig Oplysning (Nordic Monthly for Popular and Christian Enlightenment). The literary journal For Ide og Virkelighed (For Idea and Reality), an important journal of conservative criticism, was selected rather than the Nyt Dansk Maanedsskrift (New Danish Monthly), which featured criticism of Danish society and letters. Of the titles, Revue des deux mondes was the most popular and the only one that promised to yield a profit. Few Danish titles were popular; nor did the Swedish feminist journal Tidskrift for Hemmet (Journal for the Home) attract subscribers.

Board members’ insistence on their favorites also complicated selection. Klein proposed a French pictorial which, despite the chair’s power, was deferred. Her choice of Blackwood’s Magazine also lost to another member’s Edinburgh Review, but a secret ballot had to be taken to determine the outcome. The board did agree that it had to have at least one English-language title when the society opened, but they did not subscribe to any titles in German even though it was a prevalent second language. (Perhaps potentially negative public opinion influenced this decision, for feelings were still embittered by Denmark’s defeat by Prussia in the 1864 war.) The society also depended on gifts as divergent as the British Academy, the Danish journal of popularized history and literature For Romantik og Historie (For Romance and History), and Arbeideren (The Worker) to add variety to its bland selections. Gifts of the Dansk Missionblad (Danish Mission Paper) and Evangelisk Missionstidende (The Evangelical Mission Times), which represented an evangelizing religion popular in rural areas, were surprising additions to a cosmopolitan library, but may have been an indication of a greater diversity of opinion among members than the board had perceived.
Confronted with inadequate funds to purchase expensive foreign newspapers, the society began to acquire them in a resourceful and enterprising manner. They traded the promise of a subscription to one paper for its old copies of the London *Times* and found an editor willing to sell older copies of three foreign papers at reduced prices. Although still at the mercy of donors who could change the society's collection by altering their newspaper subscriptions, it was able to offer a large, if dated, collection of periodicals and newspapers.

During the spring the Reading Society continued to augment its collections through gifts from members as well as from prominent lawyers, businessmen, and government officials. Within three months it had accumulated substantial contributions and membership dues, was able to borrow without collateral, obtain free housing from a bank, and secure a grant from the Classenske Fideicommis, a charitable educational foundation. Despite this success, Klein was hesitant. She reduced reference collection costs by shifting gift books into it from the circulating collection and borrowing others, such as atlases, from members.

Lacking guidance from other sources, the women based many practices, such as dividing available space into separate reading rooms for newspapers and books, on those of the city's leading private library, the Athenæum. It also served as a model for the catalog, divided into fifteen classes, that they planned to publish. But they differed from the Athenæum in assigning all books by and about women to the classification "Politics and Writings concerning Societal Relationships," which gradually evolved in successive supplements to be a classification for women's studies. They dealt with practical details such as a name plate, membership cards, and a printed catalog, and decided to use volunteer help initially to supervise the reading room.

By September 27, 1872, they had completed all the details but one for, in their reliance on gifts, they had not purchased a single book.

**The Collection**

When the board finally turned to buying books, it selected a book dealer and adopted a method for acquiring books that were unusual. Rudolph Klein had been in business only a short time after a number of years working with the large firm of G.E.C. Gad. Unlike other dealers, he neither supported women's issues nor contributed to the society's various appeals. He was not even a member of the official Danish book trade association, the Boghandlerforening. The board ordered a few books individually but then decided upon a plan that a librarian in the 1980s might call a blanket order or approval plan. It authorized Klein to supply packages of recently published books from which they would make their selections. It is unclear why the board delegated part of the book selection process to a dealer, for Copenhagen papers consistently reviewed important or controversial books. Perhaps the members lacked time or were insecure about their judgments; it may also have been common practice or the method the Athenæum used. Even though, as they remarked on several occasions, it was time-consuming, the board did not delegate responsibility further but personally went through Klein's
selections and made the final decisions. One chairwoman insisted that book selection not take place in her absence,\textsuperscript{27} and another directed that money set aside for books not be used for other purposes since that would be a betrayal of the society's goals.\textsuperscript{28}

The board made another, seemingly innocent, but eventually divisive, decision by deciding to acquire the "best and most worthwhile books" that had been published in 1872.\textsuperscript{29} By promising to start with materials contemporary to themselves, and avoiding an attempt to recapture the romantic glow of Denmark's "Golden Age" during the early years of the nineteenth century, the women immediately had to face selection difficulties during a decade of rapid transition in Danish culture. Trends in literature towards realism rather than sentiment, political divisions that turned discussions into arguments, and religious differences that had split the state church theologically guaranteed, then as now, selection problems.

Although no library science theorist had yet enunciated the principle, the board evidently believed in the concept of a balanced collection, for it initially bought broadly rather than in depth. Of the first sixteen titles, only one, a work by the popular author Vilhelm Bergs\o e, was fiction; the rest were in natural sciences, politics, religion, art, description and travel, history, and education.\textsuperscript{30} The emphasis on balance, on creating a collection that would include fiction as well as nonfiction (and be attractive to a variety of potential members), continued during the society's first two years.

Little more than a decade separates Vilhelm Bergs\o e's exotic, romantic, and popular novel \textit{Fra Piazzetta del Popolo} from the slam of the door that marked Nora's departure from \textit{A Doll's House}. Yet the difference in spirit and intent makes them almost unrecognizable as being from the same literary tradition. As the society was beginning to develop its literature collection, Georg Brandes' view that literature should debate current problems, as in the Ibsen play, was popular among intellectuals and troublesome to almost everyone else, including board members. Books critical of marriage and social institutions and including what was for that time explicit sex, caused debate among critics and editors. The issue was complicated by the critics' association of these ideas with Brandes' atheism and the political radicalism they falsely believed he represented. Passions during this transition period were high, controversy always possible, and selection difficult.

The board's initial literary selections were cautious and seemed to rely on the reputations of established authors.\textsuperscript{31} Among their first purchases of Danish authors were the works of H. C. Andersen, known in Scandinavia (if not always elsewhere) as a writer of serious fiction. Among foreign authors they emphasized historical novels of Scott and Bulwer-Lytton, translations of Turgenev, then enjoying great popularity, and works of such writers as Bret Harte and Mark Twain, which must have provided curious impressions of America. Notably missing were translations of French novels then considered risqué. They did not buy, at first, Eugène Sue's popular multivolume series \textit{The Mysteries of Paris}, nor did they immediately acquire Victor Hugo, Émile Zola, and similar French
writers either in the original or in Danish translations. Clearly French
realist writers offended the board's sensibility, whereas the staid English
Victorians did not. Characteristically, the board routinely bought
Bergsøe's works as they appeared, even though his style and subject mat-
ter were becoming unfashionable. They also regularly selected works of
a number of second-rate writers, little known outside of Denmark: H. F.
Ewald, who showed Dickens' influence; Carit Etlaar, pseudonym of Carl
Brosbøll, who had won medals for the almost improvised novels he
churned out; teacher-author Leopold Budde, widely known as an en-
emy of Brandes and modern literature; and the folkish Beatus Dodt, bet-
ter known for his calendars than his fiction. Despite the society's pledge
to modernity, initial selections validated Fædrelandet's support, for they
were well within a moderately conservative and traditional literary view-
point.

Fortunately for members interested in literature, the quality of books
purchased later in the society's history improved as board members be-
came more knowledgeable or willing to accept new trends. While they
still purchased popular fiction, they also systematically acquired the best
new Danish works and an excellent selection from other countries as
well. Checking their holdings against recognized lists of Danish classics
is a revelation, for they missed few important titles after 1875. They be-
gan to purchase French novels, but they bought only the originals, not
translations. Presumably those members who knew the language could,
as Klein had written, "gobble" realist novels by Sue and Dumas in their
boudoirs, but were going to improve, if that is the word, their vocabu-
laries at the same time.32

As part of its belief in the library as an educational agent, the board se-
lected a variety of nonfiction titles. With an audience of teachers it is not
surprising that education texts, including classics by such authors as
Comenius, monographs by prominent contemporary educators such as
the American Horace Mann, and commentaries on Danish education
were part of the collection. They also included works on natural science,
general descriptions of astronomy, popularized texts, and the astute
purchase of Darwin's work on natural selection. Few prominent Danish
philosophers, even the undistinguished, were unrepresented. Most phi-
losophical arguments, such as Claudius Wilken's view of society as an or-
ganism with the person as molecule and the family as cell, have been su-
perseded and the popularizers such as Rasmus Nielsen are no longer
read, but the society also included numerous works by Harald Høffding,
Denmark's leading thinker after Kierkegaard. Also outstanding were
holdings in art criticism, including illustrated works, although the latter
were not immune from being permanently borrowed.

Danish history and books by French historians such as Michelet and
Guizot (in French) and English writers such as Thackeray (in transla-
tion) were also purchased as were historical fiction, travel, and descrip-
tion. Books on the Alps, the Norwegian countryside, on travels in the
United States stood side by side on the shelves with Stanley's book on Af-
rica and von Humboldt's collected works. Travel books of various kinds,
popular or semischolarly, were widely read, and since many of the
women in the society traveled extensively, were probably of personal interest as well.

The board had to contend with the difficult problem of selecting religious books during a period when the state church, Lutheranism, was divided among traditionalists, rural fundamentalists believing in a literal Bible, and "Grundtvigians"—followers of the teachings of N. F. S. Grundtvig and political activists. Selection of Fredrik Nielsen's polemic against free thought, the works of Vilhelm Birkedal, a pastor and politician, and others favoring Grundtvig's beliefs seemed logical since Grundtvigians supported married women's inheritance rights. Yet supporting the Grundtvigians was unusual for a reading society since the Grundtvigians emphasized, as Sofie Petersen pointed out in a letter to Bajer, oral skills and lectures rather than books and reading. But the board might also be viewed as courageous since these writers were in conflict with traditional beliefs, the government, and therefore Fædrelandet. The society's belief in balance prevailed, for they also acquired works such as Bishop H. L. Martensen's standard Den christelige Ethik (Christian Ethics), which portrayed the family as the center of all societal activities and tacitly opposed improvements in women's rights.

The society's selection policies were not, as a later debate showed, uniformly satisfactory. The board avoided political issues and other potential conflict by purchasing few books or pamphlets on contemporary issues even though women's inheritance rights were part of political discussions. They infrequently acquired books on economics, law, or medicine even though women's educational opportunities were improving. They also began to buy, particularly when the author Benedicte Arnesen-Kall succeeded Klein as chairwoman, much more fiction. Women in Danish society had traditionally been active in literature, philosophy, and the arts, but not in political or economic questions. As chairwoman, Klein shared this narrow view, for she believed the "women's question" dealt with the moral right of women to use their full abilities, and not with political action. Although a married woman, she even opposed Bajer's attempt to improve inheritance rights. Most men still denied women's ability to participate actively in "serious" issues, defined as economics and politics, precisely those subjects the society did not collect. Board members' backgrounds limited their conception of women's roles, which was reflected in some aspects of their book selection.

Constraints board members may have felt did not always apply to women's studies, for they developed an extensive collection of books written by and about women. One of their early purchases was Blade fra Danske Kvinder (Pages from Danish Women), a pioneering collaborative effort that enunciated Danish women's needs in the 1870s. Another was a new edition of the remarkable diary of Leonora Christina, which detailed the successful struggles of a woman to survive imprisonment and oppression in the seventeenth century and served a new generation of Danish women as a heroic symbol of what could be accomplished. They also meticulously acquired fiction by internationally famous women writers such as George Eliot and George Sand, as well as the now less well known Florence Marryat and "Mrs. Craik" (pseudonym for Dinah
Maria Mulock). Nor did they ignore Nordic authors such as Magdalene Thoresen, Laura Kieler, and Johanne Schjærring, who depicted the more traditional problems—love, marriage—of women in Nordic society. When they purchased the anonymously published *En Kvindehistorie (A Woman’s Story)*, a tale of the tragic fate of a woman who gave everything for love, they were probably unaware that its author, Ragnhild Goldschmidt, was a member. (Later she led the society for a decade.)

While women’s journals were few in number, their relevance should have made them obvious and immediate purchases. Yet the society’s board did not immediately acquire *Tidskrift for Hemmet*, the leading Scandinavian feminist journal; they depended upon a gift, and when it failed to materialize, relied on a member before choosing to pay for a subscription. They did not subscribe to *Fredagen, Ugeblad for Kvinder* (1875–79) (*Fridays, the Weekly for Women*) even though it was edited by Peter Christian Zahle, Nathalie Zahle’s brother, and dealt with women’s issues. But it was published in Ringkøbing, a provincial town, and they subscribed to no provincial periodicals. Nor did they subscribe to a leading periodical for middle-class women, the *Nordisk Mønster-Tidende (Nordic Pattern Magazine)*, which included general information on housekeeping as well as patterns for the latest fashions in each issue. They subscribed to Elfride Fibiger’s *Tidskrift for Kvinder (Magazine for Women)* from the first issue in 1882, but by then the society was comparatively wealthy.

The society showed, primarily in its book rather than periodical purchases—which remained cautious—continued interest in women-oriented issues and offered information through publications to which women would not easily have had access. But its support for feminist causes was always indirect; the society avoided direct expressions of opinion. Yet to conclude that the members only wanted light reading or sewing patterns is contradicted by the variety of donated periodicals and in the evidence that emerged during debates on the collection. Members were both aware of and interested in developments affecting them even if they were sometimes uncertain about appropriate books to purchase.

Dissatisfaction with the board’s attempt at conservative moderation surfaced at the first general assembly in February 1873. Several times during the proceedings a member, Rosalie Rosenfeldt, author of several fictional works published anonymously and a contributor to *Blade fra danske Kvinder*, interrupted with questions about book and periodical selection. When the agenda was completed she angrily addressed the society, and claimed that her membership right to ask questions had been denied. Specifically she wanted to know whether the society intended to exclude a direction in literature represented by the Litteraturselskab (Literary Society) and by the periodical *Nyt Dansk Maaanedsskrift (New Danish Monthly)*. The quarterly contained Brandes’ challenge to belief in the superiority of Danish literature and, therefore, the values of Danish culture. It introduced Mill’s ideas, solicited contributions from the younger generation of realist authors, and included vaguely veiled fables such as Brandes’ “Adventures of Little Red Riding Hood,” which portrayed free thought as a girl slaying outmoded, traditional values. It won
him the enmity of organized religion, the government, and the press. The Literary Society, also led by Brandes, consisted of a group of young authors and critics that was commonly condemned as the "atheist society." Klein defended exclusion of the periodical by saying that the entire board considered the article "Om Befolkningssforholdene" ("On Population Factors") especially "injudicious" for a reading society of women and, therefore, they had rejected it, although the "Protocols" do not record the event. She also cited works of Brandes that had been purchased—again not listed in the "Protocols"—and claimed the Literary Society's works were not purchased because few members were interested in theology. (While the lack of interest in theology is confirmed by small circulation, the board had, in fact, bought religious works.) She also claimed that foreign novels, such as those Brandes mentioned, were not purchased because few members were interested in literary works in the original languages. Klein was not being entirely honest; the literature selections showed she evidently disliked realism in novels. In a written exchange with writer Rudolf Schmidt, she confirmed her prejudice by rejecting his title for a proposed lecture on French drama as too "piquant." Klein continued by deploiring the "more corrupt, coarser nature which enjoys the spicy, which in the newspapers first reads of unhappy incidents." She noted that lecturers—undoubtedly referring to Brandes, who had created an uproar with a series of lectures in November 1871—could cause laughter with provocative topics, but wondered if the expression of mirth was but a mask for different feelings.

Klein's defense, perhaps because it was insincere, did not satisfy Rosenfeldt. She continued to challenge the board and to ask whether it had a "distinct party color," referring to the ongoing debate in Danish politics and culture. Besides, she argued, a reading society was not a place which should seek to protect its members' morals; if the society "had a party banner, it should have been raised earlier." Nathalie Zahle, director of Copenhagen's leading school for girls, defended the board and pointed out that it had the responsibility of rejecting anything that was "blasphemous" and "immoral." With Rosenfeldt continuing to pose questions and the board continuing to defend itself the stormy meeting ended with the general assembly reaffirming the board's authority in matters of book selection.

Even though the "Protocols" are silent on the issue, Rosenfeldt had prevailed, for the titles she wanted were purchased. Klein reported at the next general assembly that the board had ordered *Nyt Dansk Maanedsskrift*. But the victory was shallow—by this time the periodical, with Georg Brandes and his brother Edvard no longer contributing, was declining in subscribers and influence. The Brandes brothers had begun their own journal, *Det Nittende Aarhundrede (The Nineteenth Century)* and again their writings provoked a "rather long and keen discussion" at a board meeting. Benedicte Arnesen Kall, an author with a Grundtvigian background and then head of the society, resolved the issue with less controversy: she simply decided to try it for six months and, when little happened, continued the subscription. With the discussion over *Det Nittende Aarhundrede*—and perhaps because Kirstine Frederiksen, who
had progressive views on women's rights, had become chairperson—the issue of which periodicals and books were appropriate for women seemed to end.

**COLLECTION USE**

The first annual general assembly meeting provided a forum for debate and controversy about future acquisitions policy and also provided an opportunity for Charlotte Klein to look back and assess the collections and their use. She realized the society's continuing dependency on and the importance of donations, for more than nine hundred of the collection's thousand volumes had been donated. She had managed to create a reference collection, but one still dependent on members' gifts and loans. Efforts to solicit periodical and newspaper subscriptions from members were successful, for the society had by then obtained thirteen weeklies through gifts and discounts, and it held twenty-two newspapers at one quarter their cost; but, as they found out when different titles were received, the selection was still at the mercy of the donors. The reliance on gifts continued at least until 1878 when book purchases exceeded donations for the first time.

Klein maintained circulation records and used them to determine how well the balanced collection fared in the first three months. Unfortunately the concept of balanced and edifying reading did not seem to affect the patrons, for her survey showed that fiction and literary criticism were most popular with the members, accounting for almost 60 percent of the circulation. Despite her efforts, few books circulated in categories such as education or politics. Her next report, and last before reluctantly relinquishing the chair, confirmed her initial survey. The profile of book use remained about the same, even though the sample was larger. Literature borrowings had risen to more than 70 percent of the total. Members still seemed disinterested in history and politics and many other subjects in which the society's collection already excelled. Klein, in view of her beliefs in education, must have been disappointed to see how few art and philosophy books circulated. Although the board continued to buy books in various fields, and steadfastly denied that the society was just like a rental library, what the members seemed to borrow most was fiction. The expectation that anyone could leap from a deprived educational background into reading the classics was unrealistic.

The society's decisions about books and periodicals mirror controversies in Danish society. The women who started the library had been educated to believe that Danish culture was rooted in Christian tradition and romantic literature that simultaneously elevated and subjugated women. They were trying to maintain cultural values of the past that were being assaulted by Brandes and his followers' favorable views of atheism and progressive views on free love and marriage. Klein and some of the other women did not want to discuss openly or display books or periodicals that dealt with topics that they evidently found uncomfortable. Yet there were divisions within the society, as younger women, more accepting of new viewpoints, sought greater diversity. The society gradually began to accept the new realistic literature and to collect titles
that reflected societal problems as well as ideals. The view of modernism, of naturalism in literature, of a view of the future and not of the past, gradually prevailed. The collection that resulted, while still representing some of the founders’ limitations, eventually encompassed various literary and social viewpoints.

**The Next Decades**

Charlotte Klein viewed the library as another means of helping women develop occupational skills needed to compete for civil service and other positions. It was an extension of educational opportunity during a period when little else was available. Unfortunately, as book use shows, the first members did not take advantage of the society’s adult education possibilities. But a new generation of Danish women in the 1880s and 1890s found in place reference, periodical, literature, and women’s studies collections superior to the newly founded public libraries and to most other collections in the city as well. The society encouraged women’s libraries elsewhere in Denmark and spread its influence internationally by helping a Norwegianian *Leseforeningen for Kvinder* (*Literary Society for Women*) open in 1874. It continued to encourage women’s education by offering lecture series and giving female students admitted to the University of Copenhagen free memberships. Among the members were notable women authors, prominent professional people, and gold-medal winners in university-wide competitions. Also on the rolls were women who were dissatisfied with their economic, social, and political positions and who actively sought change. One member, probably much to Klein’s horror, also challenged the sexual double standard of the times and helped precipitate the great Nordic debate on morals.

While the society was run by women with conservative viewpoints and was always reluctant to express opinions publicly, it provided a book collection that enabled women to support assertions with facts. As a means of supporting the women’s movement, albeit indirectly, and of demonstrating intellectual equality as well, it was unique.

Later the society described itself as an organization dedicated to the “encouragement of educated and uneducated women by giving them access to good and current reading.” The need for such encouragement is well illustrated by the responses to the request from the society’s third chairwoman, Kirstine Frederiksen, and another member, Louise Westergaard, for consideration as staff members in the royal library and the university library. The request was forwarded to the librarians of the respective institutions whose negative responses illuminated the problems faced by women seeking advancement. The university librarian, P. G. Thorsen, a historian of Danish law whose library achievements were modest, refused to consider the request. Women who had some experience in private libraries could very well believe they would find fulfillment working in a large library, but he doubted it. Even though women worked in other countries, it was impossible in his library because the librarians had to come into contact with a large, mixed public. He argued that it was necessary for staff members to climb high ladders which
would not be “suitable” for ladies. Besides, he claimed that their lack of education, particularly unfamiliarity with Greek and Latin, prevented them from being able to understand other areas of scholarship. Therefore, their service would be a disappointment. The royal library also dismissed the request, at greater length. While the librarian, the distinguished Christian Bruun, was not totally unsympathetic, his arguments were not convincing either. He agreed that women were acting as librarians in other countries, including America, but noted that they had college educations and served in public, not scholarly, libraries. These libraries, open from morning to night to a diverse public that included the “lower and middle classes,” were totally unlike his library. He claimed that the university entrance examination and knowledge of classical languages were required in order to provide satisfactory service. He also opposed women’s climbing tall ladders and claimed that their clothing—voluminous Victorian garments that many women themselves considered restrictive—would sweep books off the shelves and onto the floor in the library’s narrow aisles. Aspects of the work also demanded physical strength. He concluded by implying that there would be fewer jobs for men if women were hired. Despite his sympathy, he believed that the library and the public would be best served by “exclusively male personnel.”

These arguments against women accurately sum up virtually all of the arguments generally used against women’s pursuing careers. Fortunately for many of the women, they did not prevail. The economic need for skilled workers in Denmark’s commercial centers coupled with women’s willingness, usually by necessity, to work for lower wages, steadily led to a growth in the number of clerical and professional female employees. For many in this group of independent female workers the Reading Society was a source of information and support. They participated in its governance, attended its lecture series, and enjoyed the intellectual stimulation and social support that its collections provided.

For more than fifty years the society thrived and increased in membership and influence. It built one of the largest buildings in the center of Copenhagen which included meeting rooms and a women’s hotel in addition to the library. The building debt caused financial problems during the 1930s, which they overcame by selling it in 1940. During the Second World War the society served as one of the centers of the Danish Resistance movement, but after 1945 it shared Denmark’s economic distress. It tried to save itself by expanding membership to include men, but that disregard of the founders’ intentions may only have hastened the collapse, for men’s attitudes towards women had changed little: they blamed the failure on women’s inadequate managerial skills; as one new member said, “Tired housewives could not understand the accounts.”

Membership continued to decline. Ninety years old to the day and ten years before a rebirth of women’s studies might have saved it, the society closed its doors. The collections were given away to such institutions as the women’s residence hall of the university, were sold cheaply to the general public, and the remainder, with their modest blue ownership stamps, “Kvindelig Læseforening,” were forever dispersed.
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11. The laws are included as p.6-9 of the manuscript "Protocols."


20. The list of donors was published in *Faerreladet*, April 15, 1872, p.3.


30. Ibid.

31. The analysis of book purchases is based on the list of titles included in the manuscript "Protocols."

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33. S. Petersen to F. Bajer, undated, NKS 2976 4°. But their slogan, "the living word and the dead book," has also been seen as a realistic view of the failure of traditional schooling, for some Grundtvig schools became centers of book distribution and their teachers frequent library users [Harold Hvenegaard Lassen, *De Danske Folkbibliotekernes Historie, 1876-1940* (Copenhagen: Dansk Bibliografisk Kontor, 1962), p.40–42].

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36. R. Schmidt to C. Klein, March 5, 1874, NKS 3057 4°.


42. “Protocols,” Feb. 3, 1874. 198 of the 455 volumes acquired that year were gifts.

43. A detailed survey, including the number of books borrowed in each category, is part of Klein's papers in the Kvindelig Læseforenings Arkiv: Breve, 1872-1912.


45. MS fol. 3870: 11, Universitetsbiblioteket i Oslo is a letter from Klein, evidently written in 1873, that describes the society's first year. The leading Norwegian feminist writer, Camilla Collett, was a frequent visitor to Copenhagen and is frequently given credit for transfer of the idea to Norway [Marie Høgh, *Norske Kvinder. En Oversigt over deres Stilling og Livsvilkaar i Hundredeaaret 1814–1914* (Kristiania: Berg & Høgh's Forlag, 1914), II:1].


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Cost-Effectiveness of Soviet Serial Exchanges

Jana K. Stevens, Jade G. Kelley, and Richard G. Irons

While the traditional view has been that Soviet publications were best acquired through exchanges, a recent review of Soviet serials at Duke University Library suggests that this may no longer be as true as it once was. The availability of Soviet publications through normal trade channels has increased in recent years. Because of this fact, the importance of maintaining equitable exchanges in economic terms has increased. Our examination has shown that it should not be assumed that such exchanges are equitable. Regular reviews are recommended to serve the needs of libraries best.

Traditional view has it that exchanges are advantageous to libraries, primarily in two ways. As Kovacic recently put it, "The rationale of having exchange programs is to acquire material that is not available any other way or for which exchange is more economically advantageous than purchasing." He goes on to say that good exchanges depend on the quality of publications offered on exchange and the cost to the library. Obviously the rationale is a good one. Even more obvious today is the necessity for getting full advantage out of exchange programs carried on by a library. The difficulty is in determining what real advantages are enjoyed by exchange programs as opposed to other methods of obtaining material.

We have always assumed that serial publications received from the Soviet Union, for instance, are better acquired through exchange. How reasonable is this assumption? Free publications are no longer available for exchange purposes from our university presses or academic departments. Communications with the East European block countries are more open. Inflation continues to erode our library budgets. In fact, in light of these developments, this assumption is both reasonable and unreasonable, both correct and incorrect. There is no longer, if there ever really was, a valid general formula that covers all cases.

As recently as fifteen years ago, these were not the questions that

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would have been asked. At our library, as at many other academic libraries, we were interested in furthering good relations with libraries, in disseminating our university's publications, and in acquiring publications otherwise unobtainable. Price was not always the most important concern when initiating an exchange. We wanted as many publications for our collection as we could have; we wanted to enhance recognition of our university in the academic world at large.

Of course as we all know, times have changed, circumstances have changed, and our needs have changed. Inflation has reduced our purchasing power and we realize that we must be more efficient. Cost-effectiveness is becoming perhaps more important than goodwill, recognition, or dissemination of our own publications.

The last study of exchange costs per se was that of John E. Galejs, published in 1972. Galejs' study vindicated that traditional wisdom. The subject of his study was the total exchange package of his library, and he was also concerned, in spite of his emphasis on economics, with factors not primarily economic. Rightly he argued that "monetary costs and benefits are not the only consideration involved in establishing or maintaining a serials exchange operation." Considerations such as the quality of materials received through exchange and the reputation gained for the library's institution from dissemination of its publications throughout the world, for instance, should also be taken into account.

In recent years more and more libraries have been compelled by economic circumstances to examine their exchange policy. Similarly, Duke University Library recently began a review of its exchange program, which is as yet still in its initial stages. No firm conclusions have been reached, no firm decisions made. Given the number of departments both within the library and in the university community at large that are affected by library exchanges, any final decisions are likely to take some time. But we have reviewed our serial exchanges with the Soviet Union and in the limited scope of this particular part of the review a number of interesting discoveries have been made.

Even without reference to any but economic considerations, it has always been assumed that Soviet exchanges are advantageous to U.S. libraries. Lane's Gifts and Exchange Manual notes that "certain countries (notably those in East Central Europe) put great restrictions on the export of dollars; thus libraries in those countries must get their U.S. publications through exchange or gift. This necessity can work to great advantage for U.S. libraries. Publications of these countries have a lower dollar value than similar U.S. publications. Thus, what we send on exchange will bring more value in titles for dollars spent." There is also the simple fact that publications from these countries may not be available any other way. Brown and Smith, after a discussion of the difficulties of obtaining Soviet publications, state somewhat categorically that "the best way to get many publications is on the exchange basis."

Our review involved twenty-six Soviet institutions and a total of seventy Soviet serial publications. We compared the price of the publications Duke University provided with the price of acquired Soviet publications, using standard trade catalogs and indexes such as EBSCO
Subscription Services Librarians’ Handbook 1980–1981, Faxon 1981 Librarians’ Guide to Serials, Four Continents Catalogue, Newspapers and Magazines of the USSR, Ulrich’s, and the like. Of the seventy Soviet publications, thirty-nine were listed in the indexes with quoted prices, four were listed without price quotes, and twenty-seven were not listed at all.

Our findings support the statement made by Allen, USSR area specialist at the Library of Congress, when he said “the number of titles available for export from the Soviet Union has increased considerably.” But he is somewhat misleading when he says “these constitute, with certain exceptions, all titles issued by organizations at the level of the All-Union government and the fifteen constituent republics of the Soviet Union.” The twenty-seven titles not listed in trade catalogues and indexes amount to 38.6 percent of Duke’s total Soviet serial exchanges. Allen’s “certain exceptions” account for something over a third of Duke’s Soviet serial exchange titles.

In June 1981 we contacted EBSCO, a large general subscription service, and Four Continents, specialists in Soviet and Eastern European materials. EBSCO, in August 1981, informed us that they could obtain “a couple” of the twenty-seven serial titles about which we inquired. Four Continents informed us that they could obtain some of the titles also but they did not give us a specific number.

Using quoted prices from the indexes, catalogs, and our correspondence, we discovered that of the twenty-six exchanges, only nine were balanced evenly or in our favor. A rough estimate showed that the total dollar value of the favorable balance was about $131. Twelve exchanges showed an unfavorable balance of approximately $2,000. This latter figure does not include an unfavorable balance of about $710 for single titles received through these exchanges. In five cases we could not verify prices and no comparison could be made. In spite of the currency restrictions noted by Lane, and the natural advantage that should therefore be Duke University Library’s, we have a monetary disadvantage of approximately $1,869, not including monograph title exchanges. Noticeably, where prices can be verified, our exchanges are predominantly unfavorable. Moreover, the unfavorable balances are far greater than the favorable balances. For those publications where price cannot be verified there is really no way of determining relative value. Without the competition provided by vendors, fair market value becomes meaningless. Consequently if a library wants a particular publication that is unavailable except by exchange, relative economic value does not enter in as a factor in assessing the value of the exchange.

Obviously, the price of publications is not the only factor to be considered. Or is it? Galejs notes “the absence of detailed studies of the economics of serials exchanges,” attributing that absence to “the difficulty of determining the monetary value of the materials received as well as to the lack of refined cost analyses.” While his observation may have been true in 1972, it is less true today. As already noted, more than half of the publications received from the Soviet Union on exchange were listed in vendor catalogs with prices quoted. The monetary values of these materials, at least, are easily determined. There are, as well as the cost of ex-
changed materials, the costs of “personnel, office space, miscellaneous supplies, and equipment.” Obviously, these are likely to vary a great deal from library to library.

When dealing with the rather specialized task of reviewing Soviet serial exchanges, however, these costs may be of minimal importance. At Duke, Soviet exchanges account for less than 5 percent of the work of our Gifts and Exchanges Unit. Consequently, a detailed cost analysis, however refined, is unlikely to produce any information apropos of the limited scope of our review. For practical purposes, even eliminating our Soviet exchanges altogether would not significantly reduce any overhead costs within the unit—and that is a course we should not want to take, nor one that we think advantageous. What might be realized as savings is the price of the publications Duke University provides and postage.

Because our postage is paid at a set rate per title, regardless of number of copies sent or where, there is little reason to assume that any significant savings can be realized in this area. At present our postage costs for Soviet exchanges are approximately $220 per year for serial publications. Justifying a radical change in our Soviet exchange programs on the basis of such a sum would be difficult, if not ludicrous. Our concern with Soviet exchanges is, and ought to be, the discrepancy between value received for value given, and the question is what to do about the discrepancy.

Many university libraries are currently reviewing or developing formal exchange policy and procedure. University of Utah, for instance, not long ago established a new policy and procedure on exchanges. Similar policy has been in effect at the University of Washington for some time. The Utah policy stipulates that no exchange is to be undertaken for materials available through normal trade channels, i.e., vendors. Only those items not otherwise obtainable should be included in exchanges. The rationale behind this policy is simple. It is easier and often more convenient to subscribe through vendors and the discrepancy of exchange balance is avoided. As a result of our findings, Duke University Library is now following a similar policy for new exchanges. If Duke Library decides to follow this policy for all exchanges it would mean that over half of our exchange serial titles would need to be canceled from our current Soviet exchange agreements. Whether, and how, these cancellations might be arranged remains to be seen. Obviously, if half of the titles currently received on exchange are dropped, then the unfavorable balance can only be made worse.

It should be noted that our initial and largely preliminary review of Duke’s overall exchange program did not reveal the discrepancy in exchanges with the Soviet Union, which became apparent only when we focused specifically on Soviet exchanges for review. Moreover, the decision to review Soviet exchanges was made without any particular theoretical basis, though we sensed that this might be a problem area. Discovering the exchange imbalances, however, has led us to believe that a country-to-country or region-by-region review of our international exchanges may be in order.
Our study of Soviet exchanges has to a large degree vindicated the traditional view with which we began. On the other hand, our study has also suggested several important modifications to that view. In the first place, a closer watch needs to be kept on exchange balances. There is further need to keep abreast of vendor offerings. It is possible that the material available through them will increase, thus reducing the need for maintaining as many exchange agreements as heretofore. As materials are more readily available through normal trade channels, the importance of maintaining an equitable exchange in monetary terms becomes increasingly important. If a given publication is unavailable through any means but exchange, the exact question of relative cost may in fact be of minimal importance. But when these same publications are readily available, the question of cost becomes paramount.

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How Human-Usable Is Interchangeable? Or, Shall We Produce Catalogues or Babelographic Towers?

Frans Heymans

A number of international bibliographic standards, like the Paris Principles, the International Standard Bibliographic Descriptions, and the ISO standard for abbreviations, are evaluated in the light of Universal Bibliographic Control. This article has been written with the communication problems (cultural, linguistic, etc.) of the heterogeneous UBC public in mind. The author emphasizes the importance and possibilities of authority files as search keys to bibliographic descriptions and suggests that universal uniform headings be replaced by international standard control forms. With regard to bibliographic descriptions, the multipurpose use of (automatically) translatable descriptive information is proposed.

During the last twenty years, many efforts have been made by international organizations like UNESCO, the International Federation of Library Associations and Institutions (IFLA), and the International Standards Organization (ISO) to promote collaboration among libraries all over the world, the magic target being Universal Bibliographic Control (UBC). These efforts have already led to a great many international recommendations and standards: for a unique numbering of monographs and serials, for entries for bibliographic descriptions, for the description of different types of publications, the abbreviations to be used, the transliteration of nonroman alphabets, the structure of machine-readable records, for an international exchange format, and so on.¹

All of these standards have been created to facilitate international communication of bibliographic information by improving its interchangeability. Their makers have been quite rightly aware of the fact that interchangeability depends on certain rigid conditions, e.g., that machine-readable descriptions should at least be compatible as far as intellectual content, character set, format, and coding are concerned.

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The technique of communicating information among libraries will become a more and more important aspect of librarians' work. However, this communication cannot be a final purpose in itself. It is—together with all internal techniques—just a channel, the technical skeleton of one particular way of human communication. Its aim is to make information findable for the user who is unaware of any standard or international agreement among librarians or information specialists.

Communication theorists have already been in agreement for a long time on the point that human communication depends on certain standards. This compatibility is of a different kind from that required for machines. It is determined by subjective, linguistic, and cultural backgrounds which we, librarians or information specialists, cannot deny without offering a less effective service to the user.

Traditionally, bibliographic descriptions (even those of national libraries) as well as catalogues were built up according to the characteristics and requirements of more or less homogeneous groups of users. The target public was limited to a given geographic or cultural area.

During the last twenty years, international collaboration has been aided by modern techniques. National libraries got a suddenly expanded public. In terms of UBC, one could say that these libraries are working now for the whole world, a goal that cannot be accomplished without a common communication code. That is the reason so much attention has been paid in the last two decades to the problem of making bibliographic messages internationally exchangeable and interpretable.

It is the intent of this article to examine a number of international recommendations and standards known as the backbone of the actual UBC movement to find out

1. to what extent these agreements have already led to more uniformity and, consequently, to more compatible codes;
2. how human-usable "exchangeable" bibliographic information is;
3. which alternative solutions would produce more human-usable information.

This article has been written from the users' point of view. It is based on the simple idea that any information offered to the library patron should be understandable or interpretable with a minimum awareness of "daily" normal human communication standards.

**The Paris Principles**

Let us start with an agreement that can be seen as the beginning of the actual UBC movement.

In 1961 IFLA organised in Paris the long-prepared International Conference on Cataloguing Principles (ICCP). At this meeting the Paris Principles (PP) for the choice and the form of headings were agreed upon. The main purpose of this conference was "to make an attempt to meet the very urgent need for the acceptability and interchangeability of entries in catalogues and bibliographies made in different countries. There is also a related objective and that is to ensure speed and certainty in searches for information in catalogues produced in different countries."
AUTHOR “MAIN” ENTRY VERSUS TITLE ENTRY

Many traditional cataloguing rules are based on the assumption that the author’s name is the best-known search key for the vast majority of books described. The simple fact that in 1961 IFLA directed its efforts to the alphabetical catalogue can be seen as a confirmation of this statement. All post-Paris rules confirm the importance of the author as a primary search element. Even more importantly, the PP have strengthened and widened this tendency: in many rules the corporate body main entry did appear where it was not provided before.

Does this all square with the users’ expectations or needs? Many user studies seem to confirm the correctness of the PP. Montague and Tagliacozzo in the USA, Maltby and Sweeney in the U.K. and Holler in Germany all found a high incidence of searching under an author’s name. However, inquiries evaluating the correctness of a patron’s search information show less encouraging results. According to Tagliacozzo, Seymour, Ayres, and Dubester, the chance that a user would approach the catalogue with perfect or nearly perfect information is much higher in the case of titles than in the case of personal authors or corporate bodies.

It is hazardous to draw far-reaching conclusions from statistics based on inquiries with different questions and made in different circumstances. Nevertheless, the tendency shown is striking: a reader’s most efficient “main entry” approach seems not to be the same as the one propagated by the Paris Principles.

Even if some surveys seem to support the preference for author searches, one can ask with Maltby and Sweeney if this is not “partly due to the fact that many libraries omit title entries or provide very few and that many catalogue users lack confidence in the title approach for this reason.” One cannot deny that many problems arise when the author is chosen as a main entry.

Determining “authorship” is a very difficult enterprise, certainly when corporate bodies are involved. Cases of multiple diffused authorship also pose serious problems. Selecting a uniform heading for an author “known” (but to whom?) under more than one name or form of a name is an obstacle, certainly on the international level, but this is an argument I will develop later.

Some two-thirds of every set of cataloguing rules are dedicated to very complex and very learned solutions for the choice and form of headings. This simple statement might already suggest that the author’s name is perhaps too complicated to be a sane “main” search key in the hands of users, who are ignorant of the existence of cataloguing rules. Perhaps M. N. Hamdy was right with his impressive plea for the title unit as a much more objective and simpler approach to the catalogue. If bibliographic control has not been invented as a mere professional tool, but also as something that is to serve the reader’s benefit, one should at least pay more attention to the title unit entry, not only in catalogues but in the indexes of national bibliographies as well.

Fortunately, automated retrieval systems can solve many of these problems, since any element, the title, any author’s name, or other kind
of heading becomes a search key. Shouldn’t the Paris Principles be revised, taking into account these new facilities?

**UNIVERSAL OR NATIONAL UNIFORM HEADINGS**

*The Principle.* Perhaps the most striking Paris Principle is the one of collocation by the use of uniform headings. According to the ICCP,

the uniform heading should normally be the most frequently used name (or form of name) or title appearing in editions of the works catalogued or in references to them by accepted authorities. When editions have appeared in several languages, preference should in general be given to a heading based on editions in the original language; but if this language is not normally used in the catalogue, the heading may be derived from editions and references in one of the languages normally used there.¹⁴

In 1969 the International Meeting of Cataloguing Experts (IMCE) came to the conclusion that “the use of uniform headings based on translations would seriously impede the international exchange of bibliographic information and render the use of foreign catalogues and bibliographies much more difficult.”¹⁵ Therefore, the IMCE strongly recommended “the use wherever possible of the original forms of names and titles, rather than the forms used in the language of the country in which the library is located.”¹⁶

In other words, every bibliographic agency and every library should give preference to the needs of foreign users. In accepting this creed for a moment, one has to admit that its correct application is far from easy, certainly in an international context. Indeed, how can one know, for example, the most frequently used name or form of name of a foreign author if only two or three books with two or more different forms of the name are at hand? And what are “accepted authorities”?

For personal names, “another name or form of name should be taken as the uniform heading if it has become established in general usage . . . in references to the author in biographical, historical and literary works.”¹⁷ But how can one measure objectively if a name or form of name is “established in general usage,” and where should this be? A comparison of biographical, historical, and literary works often shows different forms of the name.

For corporate bodies too, exceptions are provided: “If variant forms of the name are frequently found in the publications, the uniform heading should be the official form of the name” or “if the corporate body is generally known by a conventional name, this conventional name (in one of the languages normally used in the catalogue) should be the uniform heading.”¹⁸ But how to determine the “official form” of a name? This is a judicial question whose solution very often requires difficult and time-wasting research. Again, when is a corporate body “generally known” by a “conventional” name? How can this vague, subjective notion be handled? And what does “in one of the languages normally used in the catalogue” mean? May we expect a library, serving a bi- or trilingual public to choose a uniform heading in one “preferred” language?

*The Practice.* It is a matter of fact that, although many national cataloguing codes have been adopted since 1961, a varying degree of con-
formity with the ICCP is shown. Studies by Verona\textsuperscript{19} and for the International MARC Network Study Steering Committee\textsuperscript{20} have clearly proven that uniformity of national cataloguing rules for most of the problem headings is a fiction.

On the one hand, the very idea of the uniform heading is not accepted everywhere, and, on the other hand, it has been interpreted differently. In some rules the use of a uniform heading has been adopted only in exceptional cases; in others the form chosen is not in agreement with the international recommendations. In fact one can say that for every type of real problem heading, different solutions have been chosen.

The problem is that many international recommendations do reflect, on the one hand, librarians’ will to bridge over the differences of national rules, but, on the other hand, they reflect their obvious hesitation to deny national traditions and characteristics. This is the reason most of the international rules are compromise agreements. Even more: sometimes they look like addition-sums of national cataloguing rules. The well known PP solution for headings for personal names with prefixes is a magnificent example in this respect. The rule prescribes that prefixes should, should not, or should partly be inverted, according to the cataloguing rules in the author’s country or according to the language he or she normally uses. Is it, however, realistic to urge a reader to know for every author whose surname includes a prefix (a) his or her nationality, (b) the correct orthography of the name (was it De la Forge or De LaForge or Dela Forge or Delaforge?), and (c) the cataloguing rules in the country of origin, in order to go directly to the main entry form? The library world has forgotten that people frequently use name lists other than catalogues—telephone directories and encyclopedias, for example. Of course, there too variations can be perceived if one compares such sources from different countries. But each source is consistent within itself: a given prefix is inverted for all names or it is not inverted at all. As far as this author knows, not one of them applies a Paris Principles-like rule, which requires that a person’s nationality be known in order to find the name directly.

\textbf{INTERNATIONAL STANDARD CONTROL FORM}

On close inspection, a clear distinction should be made between the ICCP intentions and its concrete realizations as of the present. In fact the intention is that each national bibliographic agency should collect information about all of its national authors and titles and make it available to other countries. The hypothetical sum of all these activities would be a tremendous exchange of authority file information and, if everybody were prepared to use the headings created elsewhere, real international search key uniformity.

Benevolently supposing that a worldwide exchange of authority files could be realized in the long run, at least by a number of great national bibliographic agencies, the life-size question that remains is whether or not this would result in better service to the user. Is it in the interest of an English user to look for \textit{Hikayat Bayan Budeman} instead of the \textit{Tales of the Wise Parrot}? To oblige a German reader to search for “Felipe II, Rey de España,” instead of “Philipp II, König von Spanien”? And should we re-
ally ask French or English patrons to know "Jami' at-al-Duwal al' Arabiyak" instead of "Ligue arabe" or "Arabian League"? In fact, the whole problem of international uniformity can be reduced to the question, Should the "bibliographic agency librarian" make descriptions primarily for his or her own public, adding UBC requirements as a kind of by-product, or should it be just the other way around? In my opinion it is precisely because of this choice that some parts of the Paris Principles have failed, and never will be successful in the UBC mechanism. The requirements of national and local users are different from those for international control, and librarians are right to give preference to the first.

If, after nearly twenty years, some of the Paris Principles have clearly proven to be inapplicable or inefficient, the time has come to look for another way to attain the end. Perhaps Dorothy Anderson, director of the UBC office, gave the answer:

What is envisaged for the system of UBC is uniformity based on international standards, which may not always be embodied in a set of rigid rules, but are rather internationally accepted principles for particular problems which may permit national variations: and that in each country the national bibliographic centre, acting as the country's agent in exporting its contribution, can then if necessary transform the international form of the bibliographic record into a national variation.21

Thinking out this thesis, one could very well imagine a revision of the Paris Principles to get rid of their disadvantages:

1. One could accept that library catalogues and national bibliographies are in the first place made for the benefit of the local or the national public. The choice and the form of a uniform heading—if any—should always be based on the needs of this public.

2. For national names and titles an International Standard Control Form (ISCF) should be provided by the national bibliographic agency. The idea of a uniform heading to be used everywhere as a main entry could be abandoned and replaced by the idea of an ISCF, to be added to the authority file description and to every related bibliographic description distributed. On cards, this ISCF can be given in a special tracing note; in machine-readable information, a special tag can be provided, and in bibliographies the ISCF can be mentioned in a note and in the index as well.

In this way a fair compromise between national needs and UBC requirements could be achieved; direct access is provided to the national form of a heading but the international control heading is always added. Note that for the majority of descriptions (all those with normal surname—given name headings) the national heading and the ISCF will be the same. Only a minority will be found indirectly. Perhaps many more bibliographic agencies and libraries would be prepared to accept and apply this method of international collaboration which fully respects the requirements of their own readers and yet renders to UBC the things that are UBC's.

AUTHORITY FILES

The definition of a universal authority file format is now being propagated. The Library of Congress and the National Library of Canada
have already elaborated their own format. The INTERMARC Group (of Western European, mainly national libraries) came to the first international realization in this area.

The LC and Canadian formats have been constructed to fulfill the requirements of specific library or cataloguing situations. The LC format gives only one uniform heading. The remainder of the authority file description is made up according to that choice, i.e., a uniform heading is fixed and put in tag 1XX, while other names or variant forms of that name (e.g., in another language) are tagged as references. Some fixed field information is relative only to the uniform heading. Hence it follows that if the receiving library wants to use another name or form of a name as uniform heading, the authority file description has to be adapted in many details.

The Canadian format provides the possibility of dealing with uniform headings in two languages, but here, too, an alternative choice is hindered by the structure of the file. The Canadians are quite well aware of this restriction in an international context. In a report of a working group, it is stated that "la nécessité d'établir des équivalences linguistiques dans une base de données n'est pas un problème propre au Canada, toutefois, la chose deviendra de plus en plus importante pour l'échange de renseignement bibliographiques au niveau international et nous nous verrons éventuellement dans l'obligation d'établir des équivalences dans d'autres langues que le français et l'anglais."²²²

This was in fact the starting point of the INTERMARC authority file format that has been built up by a group of libraries, applying different cataloguing rules and working in linguistically different areas: Danish, Dutch, English, French, German, Italian, and Spanish. Fixed field information is not influenced by the choice of a specific uniform heading and only a strict minimum of adaptation has to be done when switching to another uniform heading.

What is needed for the purpose of UBC is an authority file format in which:

- the International Standard Control Form is unambiguously identified as such;
- other uniform headings and reference forms can be added by the generating or by the receiving library without reframing the whole content;
- every heading and every reference form is identified as to the type of name (i.e., real name, pseudonym, abbreviated name, earlier name, later name, etc.), its language, the romanization scheme used, etc. Instead of framing the complete authority file description on the basis of a chosen "main entry," the generating library could indicate the form most frequently used in the country of origin;
- all name elements, prefixes in surnames included, are coded to make automatic recognition and manipulation possible;
- elements to be used to distinguish homonyms are given in a special subfield, in the vernacular form at least with a translation into English or French.

The basic idea is that an exchanged authority file description should be
an information source. With the exception of the International Standard Control Form, the information should be rule-bound as little as possible and automatically manipulatable as much as possible. As long as no real internationally accepted and applied cataloguing rules exist, it is more important to identify each name and each name element than to inform about the use of it by the generating library.

**THE ISBD-TRAIN**

The essential characteristics of the international standard bibliographic descriptions (ISBDs) are that descriptions of whatever kind of library material, made according to these standards, will contain more or less the same elements and that these elements will always be presented in the same order, with a specific punctuation mark preceding and identifying each specific element. Compared to the previous situation, the ISBDs can be considered a step forward in that more uniformity will be achieved. But do the ISBDs really "aid international communication of bibliographic information by . . . assisting in the interpretation of records across language barriers, so that records produced for users of one language can be interpreted by users of other languages." Let us examine very briefly (a) the communicative effectiveness of the ISBD punctuation as an interpretation aid, (b) the problems caused by the use of the abbreviations, and (c) the general linguistic problems caused by the use of internationally exchanged bibliographic information.

**ISBD PUNCTUATION: AN INTERPRETATION AID OR A CONFUSING TOOL?**

In daily life we are very familiar with punctuation "codes": quotation marks specify that somebody’s words are being cited, etc. These codes can be used as common property, without risking any misunderstanding. When less standardised punctuation marks are used, correct interpretation of a message becomes more questionable. If I write for instance, that I am the lucky owner of 2,250 ounces of gold, the European and the American reader may have quite different ideas of my fortune, because the American will see a decimal point whereas the European could think of thousands.

The ISBDs are full of punctuation marks, not all of them having a unique meaning. They have to be read in their bibliographic context. A colon in the title area means that a subtitle follows. In the imprint area it means that the name of the publisher will be given; but if a colon distinguishes elements enclosed in parentheses in the same area, the name of a printer follows. A colon in the collation area precedes the illustration statement. The same colon in the series area introduces a subseries title. In the ISBN area it introduces information about the price.

But there is more. The code and the context do not exclude any ambiguity: most of the ISBD punctuation marks can be used in a description as normal, grammatical signs of punctuation. "Catalographic" is distinguished from "grammatical" punctuation by a space before and behind the "catalographic" punctuation. This produces one more code, perhaps even the most subtle one. It is only one step from this statement to Lu-
betzky's assertion that the ISBD punctuation is confusing to the user, in other words, that it is a hindrance, obstructing good interpretation of the description itself.  

No user studies have been made to demonstrate either the positive or the negative effects in this respect. The point is to find out if ISBD punctuation is more instructive or less clear than the traditional way of punctuating. It would be an illusion to suppose that traditional descriptions are completely clear to library users. Akers' Simple Library Cataloging cites a few significant anecdotes in this respect.

Nevertheless, we must conclude on the one hand that the ISBD punctuation is more complex than the punctuation scheme in most of the traditional cataloguing rules, and, on the other hand, that its communicative function is much more important. Librarians no doubt will be able to interpret a description, even when the compositor has forgotten to respect spaces where, grammatically, no spaces should be introduced. It would be naive, however, to suppose that the meaning of the rather complicated ISBD punctuation is understood by the untrained user. It would even be naive to suppose that the normal patron has an inkling of a message, hidden in those often generously strewn odd points, spaces, dashes, spaces, colons, semicolons, and so on. With this I do not condemn the use of ISBD. On the one hand, its introduction has already led to more uniformity in cataloguing and, on the other hand, it makes the exchange of information easier. These are important points to be taken into account when evaluating ISBD.

ISO-832, OR THE ABBREVIATION PINNACLE

One of the first user studies made in America tried to find out whether or not students of the liberal arts colleges understood the abbreviations and symbols normally used on catalogue cards. The result was rather confusing. A high positive rate was given to uncommon abbreviations like "front." or "tr.," whereas a very simple abbreviation like "cm." got a much lower rate. However, the investigators remarked that "more accurate data could be secured regarding the students' understanding of the abbreviations by asking them to give the term for which the abbreviation stood" (a procedure not followed). An important conclusion of this investigation was that fewer abbreviations should be used on catalogue cards.

Akers' study was an inquiry with users of an English language catalogue. One could wonder about the results if a similar inquiry were to be made in a multilingual context and took into account the recommended use of ISO 832 with its more than seven hundred abbreviations in only sixteen languages! A look into Examples of ISBD(M) Usage in European Languages can give an idea of what would be brought together, for example, in the collation area:

- German descriptions:
  159 S. : Ill., graph. Darst., Kt.

- French descriptions:
  328 p. : couv. ill. en coul.
Would it be an exaggeration to say that a gain in time and space (?) realized by the use of abbreviations will often turn out to be detrimental to the interpretation of records, certainly “across language barriers”? What about abbreviation barriers?

THE LANGUAGE OF THE DESCRIPTION

According to the ISBD(G), the general material designation, the statement of function of the publisher, distributor, etc., as well as the physical description area, and the notes and information added to the standard number should be given in the language of the national bibliographic agency. This seems to be a sound principle for printed national bibliographies, which should be made primarily for the benefit of their own national public. The same idea ought to be adopted when taking over description from external sources: these should be adapted for one’s own public as far as “added” information is concerned.

At an IFLA preconference seminar on the use of machine-readable data from external sources in large libraries and library systems in September 1977, representatives of different countries told about their experiences and about their intention or hope to use more and more descriptions offered by other national bibliographic agencies. Technical problems like format or character-set incompatibilities were discussed. The general idea seemed to be that descriptions from external sources could be adopted; human control would be required mainly for the headings and maybe for the notes. It was striking, however, that most of the experiences and most of the intentions were based on the actual state of affairs, namely the almost exclusive availability of English language descriptions. Would the general feeling have been the same with more experience in the use of descriptions coming from many different linguistic sources? Isn’t that what UBC is about?

A Belgian working group, set up to make cataloguing rules for a national shared cataloguing network, was immediately confronted with the translation problem even on a purely national level. Perhaps the conclusions of this working group can be of some value for the exchange problems on an international level. Their basic idea was to make only one description for each publication to be prepared by the first library receiving the publication. Consequently, the basic description may be made either by a Dutch-speaking or by a French-speaking cataloguer. A solution was needed for the translation problem; translations would have to be limited to a minimum.

The extent to which this translation could be done automatically was explored. The use of what was called “a-lingual” bibliographic informa-
tion was investigated. *A-lingual* simply means *in coded form*. In the collation area for monographic publications, for instance, most of the information can be entered in coded form: “v” for “volumes,” “p” for “pages,” “m” for “various paginations,” etc., and in a second subfield, “i” for “illustrations,” “g” for “graphs,” etc. These letters can be translated automatically into any language. A collation entered as:

112 p, 38 l : cgm ; 21 cm

can be translated automatically to:

112 p., 38 leaves : coloured illustrations, graphs, maps ; 21 cm

or:

112 blz., 38 bladen : gekleurde ill., grafieken, kaarten, 21 cm

or:

112 S., 38 Blatter : Farbenillustrationen, graph. Darstell., Landkarte ; 21 cm

or into any other language.

Although this Belgian project has not yet been put into practice, some observations can be made now:

1. The most important goal was to introduce as much “a-lingual” information as possible, which could be automatically translated to permit printout in the language of the user.

2. A subsidiary aim was to avoid double entry of the same information, once in the fixed field and once in the variable field, or, once in coded form and once verbally, or, once in Dutch and once in French.

3. Formats like LC MARC, INTERMARC, UNIMARC, and others contain much information in fixed fields that is in fact “a-lingual” information as we intend it. To cite one example, the field for the general material designation in UNIMARC provides for the mention of “microfilm,” “microfiche,” “micro-opaque,” “large print,” “newspaper format,” “braille,” “punched paper tape,” “magnetic tape,” and “multimedia” in coded form. Appendix A gives a provisional list of similar codes for “films,” “cartographic materials,” “sound recordings,” and “printed music.” Codes for other materials can be added. This and the many other examples that could be quoted show that much information can be given in “a-lingual” form and translated by machine. Therefore, bibliographic descriptions prepared for international exchange should contain as much coded information as possible; verbal repetition should be avoided wherever possible because it will hinder automatic translation.

4. In applying this technique, one is bound, on the one hand, to limitations in the number of standard formulas and, consequently, in the diversity of the descriptive information added. On the other hand, some types of information can hardly be given in coded form because of their inconstancy—accompanying material and notes,
for instance. However, the projected experiment of the Belgian
working group is based on the assumption that this technique will
meet catalogue user demands for the great majority of works, even
in a network union catalogue.

The requirements of bibliographies, in the UBC context, are more
comprehensive. But to what degree? A comparative study of the des cri-
tions in a number of current bibliographies could be very revealing
about actual practice in this respect. An honest self-examination could
reveal that some of the descriptive details are purely dogmatic, based
only on habits and traditions and not the criterion of usefulness. Don't
we make too detailed physical descriptions, having in mind the
nineteenth-century bibliophile, who was collecting editions of all kinds,
sizes, and colors? Isn't it typical that so many formal descriptive stan-
dards have been achieved, whereas the much demanded (and indeed
much more difficult) detailed intellectual content description is still in its
infancy on the level of international exchange standards?

Perhaps it would be a good thing (a) to make an international stan-
dard about which descriptive details are effectively usable as bibliographic
control elements (the ISBDs and UNIMARC already give some hints by
pointing out optional fields or subfields) and (b) to examine if the bibli-
ographic messages with a control function could be limited to a reasonable
(i.e., standardisable and codable) number. These elements would be ob-
ligatory and, when exchanged, made recognisable with special content
designators.

CONCLUSION

In the last two decades, more efforts have been made and more results
achieved in the field of international bibliographic control than in the
twenty centuries before. Existing international standards and recom-
mendations testify to librarians' willingness to work together. No one
can deny the fact that an enormous distance has been covered already.

However, practice shows that not all adaptations have resulted in
more uniformity. Sometimes existing variations have been maintained.
In other cases, new nuances have simply replaced old ones.

Some bibliographic standards or recommendations have been
adopted in a period when very few people had an idea of the far-reaching
influence of automation on library practice. These principles have been
developed with the traditional card catalogue in mind. Now that we have
become fully aware of the possibilities of library automation and the lim-
itations of technical communication, we must be prepared to decide
whether principles based on long-standing precomputer or early com-
puter practice should not be revised.

Other international agreements reflect to a large degree the librarians'-
search for a smooth technical interchangeability of bibliographic infor-
mation. However important this may be, it is only one aspect of commu-
nication over the “library channel.” Success or failure fully depends on the
usability, the understandability of the message by human beings. In
UBC context, users of bibliographic information do belong to a great va-
riety of cultures. If modern technique can act as an interpreter among
these different cultures, then let us use it as an interpreter. Let us revalue, overhaul, adapt, unify our way of working, our technique of bibliographic control. Many things can be done in this respect. But let us stop thinking that we shall be able to unify cultures themselves for the pleasure of having unified catalogues, which, in fact, would be nothing but “Babelographic towers.”

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The Automation of Technical Services in Venezuela's National Library: Aspects of a Transfer of Library Technology

Thomas P. McGinn

This article deals with the organization of an acquisitions project for the Venezuelan National Library and its development into a means of automating its cataloging operations. The Venezuela Project, carried out at Northwestern University from 1976 to 1979, and its impact on Venezuela’s technical services are described. Observations are made about the potential of the new system for setting up a national bibliographic and information network and for solving some of the problems hindering the use of centralized cataloging in Latin American libraries.

By August 1980 the Instituto Autónomo Biblioteca Nacional had automated its monograph cataloging through the use of Northwestern University’s NOTIS-3 (Northwestern On-Line Total Integrated System). Nine months after the system was operational in Venezuela, all new material was entering the database and the retrospective catalog also was being input. By March 1981 all elements of serials cataloging had been automated. In September the national bibliography was printed from the database for the first time. At the same time the automation of authorities control and certain acquisition operations were initiated.

Several factors account for the relatively smooth implementation of the system in a country previously lacking library automation. In addition to the innovative drive of the library’s central administration and the openness of Venezuelan librarians to change, the success of the operation can be attributed first to the creation of a large database of Venezuelan material outside the country before automated processing was attempted in Venezuela; secondly, to Northwestern’s support in training Venezuelan personnel and its continuing consultancy relationship; and thirdly, to the versatility of NOTIS-3.

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THE VENEZUELA PROJECT AT
NORTHWESTERN UNIVERSITY

In 1976 the Biblioteca Nacional undertook a major acquisitions project. It was known that the library lacked a substantial number of Venezuelan imprints since the legal deposit law, which requires all editors to send three copies of each publication to the national library, dates from 1942 only and was little observed during the dictatorship from 1948 to 1957. Checks of foreign library catalogs showed that a large number of these publications were in U.S. libraries. On the recommendation of a group of Venezuelan scholars and Virginia Betancourt, director of the Biblioteca Nacional, the Venezuelan government set up the Fundación para el Rescate del Acervo Documental Venezolano (FUNRES). Its function was to identify and acquire copies of the items of the national bibliography not held in the national library.

Clearly no single library possessed all the Venezuelan material required by the project. But whatever site in the U.S. was chosen, it would be necessary for the research team to travel in order to check unpublished library catalogs.

The planning board decided very early that the project should implement the most advanced methods in automated processing. So the acquisitions effort was soon seen also as the first phase of the creation of a computer-accessed database of Venezuelan records. On completion of the project in the United States, the rest of the national bibliography would be input in Venezuela. Hence Project Venezuela very early became a program for the automation of technical services in the national library.

The location of the project, therefore, was determined less by the holdings of a given U.S. library than by its capacity and experience in the automated processing of bibliographic data. It was preferable also that the project be carried out in a library that controlled its own programs, so that its computer experts could develop the system for anticipated special needs of the project. For these reasons the foundation contracted in 1976 with Northwestern University, whose NOTIS-3 met these requirements.

The project team was headed by specialists in Venezuelan bibliography. Northwestern’s computer engineers and the library’s systems analyst advised on various aspects of organizing the data file. Henriette Avram of the Library of Congress was also an important consultant.

THE MONOGRAPH AND SERIALS FILE

The Acquisitions Aspect. Over a period of two and one-half years, 41,595 monograph and serial titles were identified by the project. The Northwestern group entered these with Library of Congress cataloging when available and formatted them in MARC II. Since many of the records reflected pre-AACR1 cataloging norms, it was not possible to construct a file usable without modification for copy cataloging in Venezuela. However, the original acquisitions goal of identifying and locating the material was completely fulfilled. The holdings record for each title con-
tained National Union Catalog symbols of up to ten U. S. libraries where a copy was to be found. At least a microform copy of each title could be acquired if hard copy were not available on the market.

Preparation for Copy Cataloging. Within the stated limitations, every effort was made to refine the database as much as possible for use as a cataloging tool. Library of Congress MARC records were transferred into the project file when available, and the other records were put into partial international standard bibliographic description format.

Authority control remained a problem, given the disparity of choices and forms of entry present in the cataloging of U. S. research libraries. A partial remedy was found by having the Biblioteca Nacional send its list of personal name authorities to Chicago. When it became known that the second edition of the Anglo-American cataloging code would restructure corporate name forms, corporate name authority control was postponed until the new rules could be implemented in Venezuela.

However, the Biblioteca Nacional did completely revise and update its subject authorities, and at the same time solved a problem that has always hindered copy cataloging in Latin American libraries. Libraries in Spanish-speaking countries have been unable to use all of the cataloging data provided by LC because the language of the cataloging agency must be used in all areas other than title, edition, imprint, and series statements. A list of subject headings adequate for Spanish-language research libraries also has been needed.

Given the necessity of standardizing the subject headings in the project data file, the cataloging division of the Biblioteca Nacional decided to use only the Library of Congress subject heading list as a basis for all subject headings. The subject headings for the entries in the project data file were then standardized in English and translated into Spanish. At the same time, the Biblioteca Nacional revised its own subject headings to a one-to-one correspondence with the LC terms.

Automatic Translation. The Northwestern programmers meanwhile sought a means of rendering the English elements of the bibliographic records into Spanish. To this effect Professor James Aagard of the Northwestern engineering faculty designed a new program that converts fixed-form English language elements of each record into Spanish. The conversion tables include the fixed-form elements of the bibliographic description as well as the various types of headings.

The name and subject heading equivalencies were placed in the MARC authorities format. Here the largest area of translation done is that of topical subjects, the Spanish-language heading being entered in field 150 and the English heading in field 450, a see from reference.

By the end of the project the program had converted more than 85 percent of the records completely and correctly into Spanish. The remainder that required individual translation was primarily original cataloger's notes. When cataloging with the work in hand, each record still has to be checked for completeness of translation, but automatic translation has been a great time-saver.

The translation program can have an even greater impact in Hispanic America because it facilitates the almost immediate use of MARC tapes.
The translation program functions within the MARC transfer program of NOTIS-3. A record found in the MARC tapes passes into the Biblioteca Nacional file through the translation program, with most or all of its elements converted into Spanish during the transfer. The conversion tables are updated according to need.

THE JOURNAL ARTICLE FILE

Venezuelan bibliographers who visited the project were fascinated by the ease of information recovery and the possibility of having bibliographies printed from the database. Since interest in the works of an author is not limited to monographs, it was requested that the file include author and title entries for articles in non-Venezuelan journals, by Venezuelans or about Venezuela. Entries for articles in Venezuelan journals could be added in Venezuela, and subject analysis also was to be done later.

Since the MARC analytics format was not then definitive, the journal article file contains author-title data in the MARC monograph format. The article is linked to the source journal by entering a record of the latter in the monograph and serial file. The record of the article contains the record number of its journal in the cataloging source field (040). When the final edition of the MARC analytics format is published, it will replace this special use of the monograph format.

More than sixty thousand journal articles were entered into the database. They constitute the beginnings of a computer-accessed index to Venezuelan material in journals. The indexing of Venezuelan journals is continuing in the Hemeroteca Nacional, which is the serials division of the national library.

In all, the Venezuela Project identified and entered in machine-readable form approximately 105,000 bibliographic records of Venezolana held in U.S. libraries and 16,000 authority records containing both the English and Spanish forms of entry. The project terminated in April 1979.

THE AUTOMATION OF TECHNICAL SERVICES IN THE BIBLIOTECA NACIONAL

CATALOGING FOR THE BIBLIOTECA NACIONAL

With the termination of the bibliographic project at Northwestern, the Biblioteca Nacional acquired all the NOTIS-3 programs then existing, which have been described by Horny and Furlong.1 In terms of technical services, the library now possessed the online capacity to input and update cataloging data, automate all aspects of acquisitions including serials check-in, and print catalog cards and other bibliographic lists from the database.

The immediate task was to input new cataloging and gradually enter the retrospective catalog. All the programs were operational by September 15, 1979. The training of personnel took five to six months, during which time the database grew slowly. In April 1980 a special team was contracted to input the retrospective catalog. During 1980, despite seri-
ous computer malfunctions from April to June, approximately 13,500 new records were entered.

There is no separation of the cataloging process from the editing and input of data. A new title is searched in the database through the index. For older Venezuelan material, the Venezuela Project file furnishes much useful cataloging. Searches are made in the MARC tapes. When a record is found, it is transferred from the Venezuela Project or MARC file to the national library file and modified as necessary. A work sheet is usually printed out so that the cataloger can revise the data without occupying a terminal. Titles not found in the database are created with provisional data and temporary catalog cards are printed for the public catalog. The entire backlog is being entered in provisional form. A title requested by a user can then be given cataloging priority. With complete data on the work sheet, the title is modified in the database at the end of the work line.

PROCESSING FOR PUBLIC LIBRARIES

As in some other Latin American countries, Venezuela's national library institute administers public libraries in the nation. In 1978 the cataloging divisions of the Biblioteca Nacional and the Caracas public libraries were merged to pool cataloging expertise, equipment, and reference materials. Thus automation came to the public libraries of Venezuela when implemented by the national library.

During 1980 the Venezuelan state governments were creating large numbers of new public libraries throughout the country. There was, however, a severe shortage of technical services personnel in the interior. The national government therefore requested that the institute do the technical processing for the collections of the 121 new libraries. The collections were initially to have the same 5,000 basic titles. Since many of these had already been cataloged for Caracas public libraries, the task consisted mainly in getting the 5,000 titles into the database and printing out the catalog cards from the computer.

Without automation the printing of catalog cards would have required a great increase in the staff of typists and duplicating-machine operators. With the computer the library has been able to produce thousands of cards daily, and in the process respond quickly to a major national need. In this way the library's database already performs a centralized cataloging function.

THE NATIONAL BIBLIOGRAPHY

As the database grows, Venezuela increasingly has its national bibliography in one place. The national bibliography has never been printed in its entirety. The Bibliografía Nacional de Venezuela, begun in 1942 as the Anuario Bibliográfico Venezolano, reports primarily the Venezuelan acquisitions of the Biblioteca Nacional, grouped by year of imprint. With entries from the Venezuela Project and the library's catalog in the database, the country will be able to have a cumulated and fairly exhaustive national bibliography within a few years.

The issue containing Venezuelan imprints cataloged during 1980 is
being printed from the database. The retrieval of records through the MARC field, national bibliography number (015), has eliminated much sorting and filing. Since the national bibliography is a by-product of the cataloging process, it will for the first time be a reliable cataloging instrument using the most recent international norms and adequate subject headings.

FORMING A NATIONAL NETWORK

NOTIS-3 permits the creation of separate files for each institution wishing to use the database. Several Venezuelan libraries have requested incorporation into the system. During 1981 the library of the Universidad Central de Venezuela and the Universidad del Zulia are scheduled to enter. Meanwhile the Biblioteca Nacional is automating its authorities control to assure the formation of an efficient network. A central office of bibliographic control will monitor the forms of name and subject headings to assure uniformity of access points and avoid the unwitting duplication of records. Since the most important research libraries of the country are funded by the government, there are no problems of commercialization and competition in the information market.

TOTAL IMPLEMENTATION AND DEVELOPMENT OF NOTIS-3 IN VENEZUELA

NOTIS-3's capacities have not yet been fully utilized in Venezuela, but there have been developments in the system to accommodate the needs of a national library.

Though the acquisitions programs are operational, special problems of acquisitions in a developing country have delayed the implementation of the ordering process as such. Nevertheless, Venezuelan titles identified by the library's bibliographers are entered into the database as desiderata. The acquisitions division at present enters partial data for all material received, but with full automation this operation will be assigned to a special unit that will do bibliographic searches for all items actively sought by the library and will enter the provisional records in the database.

Serials check-in is part of the acquisitions module of NOTIS-3. It cannot be implemented efficiently until a large number of the library's serials have been entered. Since serials cataloging is done in a different area of Caracas, setting up terminals and training personnel had to be done on a separate basis. The cataloging process as such was operational in March 1981. When a sizable number of serial titles with retrospective holdings has been entered, the process of checking in new numbers will be automated.

The legal deposit office performs a special acquisition function for Venezuelan publications. The office claims the title from the publisher and enters the provisional cataloging data in the database. From this provisional record it can produce a file ordered by legal deposit number and by name of Venezuelan publisher.

The automation of the public catalog does not have immediate priority. Northwestern at this date has advanced far in this direction with its
LUIS library user program. Venezuela’s priorities are different at the moment.

EXTENDING THE DATABASE HORIZONTALLY

The inclusion of other libraries in a network will increase the size of the database. In addition there are ways of giving users access to a much larger bibliographic universe. The Biblioteca Nacional now has an agreement with the Library of Congress for an exchange of magnetic tapes. Tapes with Venezuelan imprints are exchanged for their counterparts containing U. S. imprints. The library buys the remainder of the MARC tapes and can enter into tape exchanges with other countries.

In the agreement between the Biblioteca Nacional and LC, each party has the right to modify and distribute the other’s records without restriction. This arrangement permits the general translation into Spanish of the MARC tapes for U. S. imprints, independently of the use made of them by the Biblioteca Nacional. So the technical capacity exists to distribute a large database of Spanish-language cataloging to any library wanting it. However, it will probably not be possible to undertake such a project without the support of an international agency interested in encouraging centralized cataloging for Latin America.

INFORMATION RETRIEVAL

The development of information retrieval services requires an effort that goes beyond the present capacities of NOTIS-3. In 1981 the Biblioteca Nacional will be able to do online retrieval of all keywords in the database. This capability will make it possible to access all the information appearing on the traditional catalog card. The LIBRUNAM system at the Universidad Nacional Autónoma de México has this capacity. LIBRUNAM and NOTIS-3 are the most developed automated systems for technical processing of bibliographic materials operating in Latin America. Mexico and Venezuela are at present exchanging consultants in order to develop both systems.

The database at the Biblioteca Nacional will be enriched later by including the keywords of abstracts of journal articles and the tables of contents of monographs. Several research projects are under way on this aspect with the objective of establishing a national documentation service.

REFERENCE

The History and Impact of ISBD

Marybeth Milcetich

This paper traces the need for and development of the ISBD program. The current status of the different ISBDs is reviewed. The paper also briefly points out the early criticisms of ISBD, its final acceptance, and the many benefits it has brought.

INTERNATIONAL standard bibliographic description (ISBD) was created to fill the need for more standardization and greater uniformity in descriptive cataloging. Its origin can be traced to the 1961 International Conference on Cataloguing Principles and to the Paris Principles, which established agreement on entry and choice of heading. After this meeting there was increased uniformity among national cataloging practices because many countries rewrote their cataloging codes to conform to these principles.

In 1964 the Committee on Cataloguing of the International Federation of Library Associations and Institutions (IFLA) decided that an annotated version of the Paris Principles would be useful because of some inconsistencies and different interpretations in its usage. Several other events at about that time also had an influence on the development of ISBD by creating more awareness of the potential benefits of greater standardization.

The Library of Congress was starting its shared cataloging program. The cataloging of the foreign materials acquired through the program, done by the national bibliographic agency in the country of its origin, was accepted by the Library of Congress even though there were differences in the cataloging practices. This program showed the potential benefits of standardized descriptive cataloging in facilitating the exchange of bibliographic information. Also at this time at the Library of Congress, format recognition programs for creating machine-readable records were being developed. Standardization of bibliographic records would help make it easier to convert to machine-readable form.

In 1966–67, under a UNESCO contract and on behalf of IFLA, Michael Gorman conducted a study, the results of which are presented in

Marybeth Milcetich, a recent graduate of the Catholic University of America Graduate Department of Library and Information Science, wishes to thank Henriette Avram and Dorothy Anderson for reviewing this paper. Manuscript received July 1980; accepted October 1980 and later updated.
“Bibliographical Data in National Bibliography Entries: A Report on Descriptive Cataloging.” He examined the descriptive cataloging in the entries from eight national bibliographies and concluded that while there were similarities, there were also still many differences in the cataloging practices.

In 1969 at Copenhagen, with funding from the Council on Library Resources and sponsored by IFLA, the International Meeting of Cataloging Experts took place. A committee was set up to annotate the Paris Principles. The German report was discussed with the idea that there should be a standard for bibliographic description. It was agreed that efforts should be directed towards creating a system for the international exchange of information by which the standard bibliographical description of each publication would be established and distributed by a national agency in the country of origin of the publication. The effectiveness of this system is dependent upon the maximum standardization of the form and content of the bibliographical description.

A working group under the chairmanship of A. J. Wells was established to write recommendations for a standard bibliographic description. (The term international was prefixed at a later time.) The drafts were widely circulated for comments. At an IFLA General Council Meeting in Liverpool in 1971, the final version of the “International Draft Standard Bibliographic Description” was presented. The recommendations were published in December 1971. Copies were circulated to more than seventy national bibliographic agencies. The United Kingdom and the Federal Republic of Germany immediately agreed to implement the recommendations in 1972, while France put them into practice in 1973. This early adoption influenced others to view ISBD seriously.

At the Liverpool IFLA General Council Meeting it was suggested that an ISBD for serials (ISBD(S)) also would be worth developing. However, progress was already underway internationally in the area of serials control. It has been believed that if the ISBD(S) had been developed earlier, it might have been accepted by the International Serials Data System as the basis for serial description.

A meeting for the revision of ISBD was held in Grenoble in 1973 because of some problems encountered in its use and the need for further clarification. The purpose of the meeting was to review and revise the provisions of ISBD so that the different interpretations and inconsistencies would not become standard practice among the various national bibliographies. It was also recognized that the original ISBD was limited to monographs. The first definitive edition of ISBD(M) was published in 1974. At this time, the working group’s final recommendations for ISBD(S) were published. IFLA was encouraged by the wide acceptance of ISBD(M) to begin work on ISBDs for other types of library material.

Present at a meeting in Paris in 1975 were representatives from IFLA’s various ISBD working groups and from the Joint Steering Committee for Revision of AACR. A discussion was held concerning the establishment of a general descriptive framework to control the development of all ISBDs. Based on this general framework called ISBD(G),
other ISBDs for all other forms of bibliographic material would be developed, thus harmonizing the ISBD program. In March 1976 the working group agreed on the ISBD(G) text and in August it was presented to an open session of the IFLA Committee on Cataloguing in Lausanne.

Since then many more ISBDs have been developed. They include the following:

1. ISBD(M) — for monographs. In 1978 it was revised taking into account the framework of ISBD(G).
2. ISBD(S) — for serials. In 1977 the final text was published.
3. ISBD(CM) — for cartographic materials. It was published in 1977.
4. ISBD(NBM) — for nonbook material. It also was published in 1977.
5. ISBD(PM) — for printed music. The publication was completed in 1980.
6. ISBD(A) — for antiquarian materials. The text of recommendations was published in 1980.
7. ISBD(G) — for a general framework. It was published in 1977.
8. ISBD(CP) — for component parts. This standard was formerly known as the ISBD for Analytics. To be submitted for approval in 1982.

The first part of IFLA’s ISBD program was completed in 1978. Now a procedure has been established to monitor developments in the library field related to the ISBDs. The texts published in 1977-78 will be reviewed in the next two years. In preparation for the reviews, the Standing Committee of IFLA’s Section on Cataloguing has agreed to a general framework for the review process. An ISBD Review Committee has been established and met in August 1981. All ISBDs are to be established for five years whereupon they may be revised. IFLA’s ISBD program will continue to evolve as necessary to face new challenges and developments in the bibliographic world.

A closer examination of exactly what ISBD is and its impact is in order. The main purpose of the ISBD program is to provide a uniform descriptive framework for all types of library materials that will serve varied bibliographic uses. ISBD will also further the communication of bibliographic data by allowing bibliographic records from different sources to be interchangeable, by making the conversion of bibliographic data into machine-readable form easier, and by facilitating easy identification of the bibliographic data within the record regardless of its language.

The three main characteristics of ISBD are as follows: (1) its comprehensiveness; (2) its fixed order of data elements; and (3) its use of punctuation as delimiters or dividers between the different bibliographic elements. Each ISBD is designed to include all the necessary identifying descriptive information about a publication that may be required for different bibliographic activities. Each national bibliographic agency is supposed to supply a complete ISBD. However, individual libraries and institutions may select only those elements of ISBD that they wish to use in their bibliographic records. ISBD has distinctive punctuation that separates the various data elements within the bibliographic record. The
spaces left before and after the special punctuation (except the comma and the point) aid in the identification of each element. For example, after the title of a publication is a space-hyphen-space sequence that introduces the statement of authorship. With the delimiters marking the elements within a record, it is relatively easy to decipher foreign language entries because the language is no longer a barrier to identification.

The framework of ISBD(G) is the form from which all other ISBDs are to be developed. The descriptive elements are as follows:

1. title and statement of responsibility area;
2. edition area;
3. material (or type of publication) specific area;
4. publication, distribution, etc., area;
5. physical description area;
6. series area;
7. note area; and
8. standard number and terms of availability area.

ISBD met much criticism and opposition in the United States. Some of the opposition arose from ignorance or a misunderstanding of ISBD. Many librarians just did not want to see the status quo changed. They felt that the changes in descriptive cataloging required by ISBD would be so radical that reference librarians, catalogers, and library users would all need to be retrained. It was also thought that users would be confused with the mixture of ISBD and non-ISBD cards in a library's card catalog. Some of this criticism of ISBD was actually resentment at the imposition of changes in cataloging needed to accommodate the ISBDs. Large libraries with computer-based systems, especially research libraries, were concerned about the effect ISBD would have on their systems. Concern was expressed about the MARC records already in the databases: should they be converted to ISBD form? If so, the cost of a new program to accomplish this was an argument against the support of ISBD. Because ISBD was a new and at first a more complex system, many were of the opinion that technical processing costs would increase because there would be more mistakes. Librarians were worried that the changes brought about by ISBD would lower the efficiency of their libraries. Criticism was also directed towards the use of punctuation as delimiters because it was felt that this would be too confusing for both the librarian and the user.

Many of these early criticisms have become outdated. The punctuation required by ISBD no longer seems so radical or complex. The fear of the changes to be brought by ISBD has proved unfounded. One criticism of ISBD still valid today relates to the problems in adapting the standards to languages where the scripts run from right to left. Two solutions were proposed by the Library of Congress. One reverses all the punctuation except the slash (/). The second solution involves the use of mirror-image punctuation, so that the slash also would be reversed. The punctuation symbols that are used as delimiters are found on roman script typewriters. But those with nonroman script would require special equipment.10 Work has recently been done by IFLA that specifically recommends methods of applying ISBD to nonroman scripts.11

Despite the controversy over ISBD, the Library of Congress accepted
it in 1974. Chapter six of the first edition of the Anglo-American Cataloging Rules was revised to reflect the changes in cataloging required by ISBD(M). ISBDs have provided the framework for the rules for description in AACR2. As mentioned earlier, ISBD was immediately implemented by two countries in their national bibliographies. Other countries gradually accepted it, and it has been translated into innumerable languages. IFLA wanted to have ISBD(M) accepted as a standard by the International Organization for Standardization (ISO). In 1972 and 1974 ISBD was considered at ISO’s Technical Committee 46 meetings but was rejected as being too detailed. It was revised by ISO so that in 1976 an outline ISBD(M) based on the 1974 ISBD text was accepted as an ISO standard.

The wide acceptance of ISBD helps to explain why its impact has been so great. One area benefited by the use of ISBD is that of computerization of bibliographic records. The standardized punctuation of ISBD allows for machine coding of the data elements previously done by hand and reduces the work in tagging that was required before records could be converted into machine-readable form. Format recognition programs can recognize the standard punctuation marks used as delimiters and can now operate with one program for all languages.

Another benefit is the establishment of one integrated card catalog containing all forms of material so far united by the ISBD framework. No longer is it necessary to have a different catalog for each form of material. It has also been mentioned that there are future potential library uses in manipulating the data in the ISBD record that are yet to be fully realized.

ISBD has also helped to generate more cooperation through a standardized means of exchange. The exchange of data through networks has been facilitated by ISBD. It has paved the way for future cooperation between the library community and the indexing and abstracting services, since ISBD is not a cataloging code but a descriptive framework to which any cataloging code can be applied. ISBD has helped eliminate language as a barrier in communication of data, since the bibliographic items in each record can now be easily identified through the special punctuation and its place in the record.

Finally, ISBD has helped to bring us a step closer to the realization of IFLA’s program of Universal Bibliographic Control (UBC). In fact, the ISBD program is now administrated by IFLA’s International Office for UBC. One condition to be achieved in order to realize UBC is to have wide acceptance of international standards so that everyone can give bibliographic citations in a form that is acceptable internationally. The acceptance of ISBD is thus opening the door to international exchange. ISBD has arisen to fulfill a need for standardization and in doing so has brought added benefits to the library community, both nationally and internationally.

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4. Ibid.


10. Ibid., p.214.

Some Thoughts on the Dewey Decimal Classification

Ron Linden

We can say that the Dewey decimal classification is so embedded in our way of life in librarianship in the U.K. that we might describe it as part of our cultural heritage from across the Atlantic. It is used in most of our libraries. Many of us were first introduced to it possibly as schoolchildren—indeed, many of us will not remember when we were first introduced to Dewey, any more than we can remember first learning to read. It is fair to say that, as an institution, the Dewey decimal classification has been, and continues to be, of enormous benefit to, and a great influence on, librarianship here in Britain.

I suggest that there are three aspects to the classification so far as the user is concerned:

1. The bedrock Dewey, i.e., the decimal structure: the one hundred divisions; the standard subdivisions; the number building facilities; the relative index.
   The bedrock Dewey ensures a single community of users.

2. The optional Dewey, i.e., those parts of, and placings in, Dewey that we choose to use, and those we choose to leave. We don't accept every new edition in toto necessarily; we may simply "build onto" an earlier edition that we regard as basic (remember how long DC 14 lasted). We don't have to use the number building routines; we don't have to use the standard subdivisions. And where genuine options are offered by the scheme itself, we may plump for one and stay with it.
   The optional Dewey means that there is an enlargement of the circle in terms of Dewey usership.

3. The developing Dewey. The "bedrock" Dewey ensures that all users "pull together"; the "optional" Dewey brings a degree of variation (as reflected, for instance, in the segmented numbers used by the British National Bibliography). With the "developing" Dewey the gap, or divergence, becomes wider, and it is here that the problems start. We all know that Dewey cannot stand still; but it should not

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introduce change prematurely. The Dewey classification is a monument to the basic conflict in all classification: the need for stability on the one hand, for development on the other. It is in this third aspect that the love/hate relationship develops with the user.

One former subject librarian at the Birmingham Central Reference Library recently began an article on DC 19 as follows: “A new edition of Dewey is an event greeted by Dewey users with great anxiety, even fear. How much has changed? Can the new edition be used without reclassifying half the library?” This underlying anxiety is echoed by a local county librarian who wrote to me recently: “The scheme must of course be kept up to date... by finding room for new subjects and new relationships. But the disruption and confusion produced in large and often dispersed library systems are often out of all proportion to the benefits.”

These are strong words. The questions that arise would appear to be:

1. How much change is needed? (With emphasis very much on “needed.”)
2. How can we handle these necessary changes?

Classification systems that are in heavy use involve people: people to produce schedules; people to understand and apply them; people to provide resources to implement them; and, above all, people who will have to experience the end product. For these reasons revision of the scheme should be a planned managerial exercise with full consultation of all concerned. This may be an impossible ideal, but perhaps we have approached a point where the ideal needs to be more of a reality.

Still on the subject of change—we should be hardheaded as users and try to abandon the nit-picking approach. There will always be those who raise issues in their bonnets about something, who feel that the Dewey scheme does less than justice to their particular cause or topic. Those who represent specialist or sectarian interests will often object to particular schedule placings, but it should be realised that both decision and change in a general bibliographic scheme must be based on a reasonable consensus. The scheme can itself be of help by the use, so far as possible, of noncritical headings and captions.

On the whole the nineteenth edition of Dewey has been received with general sympathy for the editorial objectives as explained in the preface. The progressive removal of American bias (e.g., in Politics, class 324), and the attempt to keep the relocations within a reasonable number, have been welcomed. We realise in Britain that any changes actually made in successive editions must be seen against the background of the development of the classification itself over the years—a situation that has brought its problems. For instance, certain schedules presently suffer from an inconsistent texture arising from a selective application of the facet principle, as occurs, for example, in classes 616 Diseases and 617 Surgery under 610 Medical Sciences. One could ask “What about other portions of 610, and for that matter other parts of main class 600 for similar treatment?” While on the subject of facets, we can note that the lack of facet indicators apart from the zero can cause problems for the user (in all senses of that word)—a point made by Russell Sweeney in introducing his Proposed Revision of 780 Music.
It is perhaps inevitable that any discussion of the nineteenth edition of Dewey should include mention of classes 301-307. This area is a major feature of DC 19 with its complete remodelling, for which, in the editor's words, there seemed to be a "pressing need." It is a phoenix schedule and as such stands as a representative of what we might call the total picture that can emerge from such a schedule. We are aware that there is already a draft revision/expansion of the schedule, which has attracted its own crop of comments. The following points can be made with regard to the schedule as published; the same general comments could apply to other phoenixes.

1. There is a comparative lack of definition, and an uneasy relationship (it would seem) between 305 Social stratification and 306 Culture and institutions.
2. The lack of breakdown under individual numbers (apparently deliberate) simply acts as a barrier to use. Scope notes and examples are essential.
3. There is a lack of provision for certain topics that are bound to be recurrent in the literature, e.g., Strikes (Social effects, etc) (306.3?); Literacy (302.22?); Leisure (306.4?)
4. While topics such as those above are prevalent in the literature, others actually included in the schedules are less likely to be so.
5. There is a consequential impact on class 360 Social problems and services.

It can be said that since class 300-307 is a "soft" area rather than a "hard" area like class 540, explanatory notes and guidelines are the more essential—even in a deliberately "sparse" phoenix schedule. The same applies to other contrasted areas of the classification.

Among the many comments made by Ross Trotter about this schedule (the word "sparse" is his) there is one to the effect that there has been a migration of topics from 301-307 (covering "pure" sociology) to 360 (which can be seen as covering "applied" sociology). Police services, for instance, will class in 363.2 rather than under Political institutions in 306.2. This is fair enough; but a problem may still remain as to the placing of works dealing with the sociological aspects of policing. Such a migration of topics in the relocation process raises a fundamental question: What principle, so far as the DC editorship is concerned, informs "Social problems and services" as distinct from "Sociology"? Are such relocations as occur based on clear concepts as to the precise relationship between the areas, on expediency, or simply on pressures from users in pursuit of particular interests? Whichever it is, such relocations should be introduced with care, preferably on clearly enunciated principles that are well disseminated beforehand, in view of the uncertainties that can otherwise arise.

Any new edition of Dewey must have an impact on the local library system, which needs to make its own responsive changes. Up to a point change is induced when the national bibliographic agency decides to adopt the new edition; this benign bibliographic dictatorship leaves the local system with its own immense problems. It may be, too, that the British Library acts on draft revisions that may not be accessible to the
local system grappling with its EMMA (Extra-MARC Material, i.e., material not covered by available MARC records) and perhaps with extensive reclassification.

Certainly one thing the local system will be keen to establish is the question of how much change is involved. Changes brought about by revised editions of Dewey can be of various kinds, e.g.,

1. Major disciplinary changes, where there may well be a consensus that such changes are needed (e.g., Mathematics (510) and Law (340) in DC 18; the proposed remodelling of the Life sciences).
2. Preferred locations (e.g., Educational sociology now placed at 370.19 in DC 19).
3. Episodic changes, namely, those changes that are made, so far as the user is concerned, without apparent sound reason (e.g., 002 in DC 19).

The last two types of change, though smaller in scope than the first, so far as the classification may be concerned, can still cause problems locally where a large amount of material is involved.

The problem at the local level, then, is not so much classification as reclassification, and sometimes additional work beyond that. All of the following steps may be needed as part of the routine of change:

1. Preparing a timetable for the phasing of the reclassification.
2. Identifying the stock affected.
3. Assigning staff.
4. Aligning decisions with British Library decisions.
5. Amending all records.
6. Locating materials to be reclassified—sometimes a special problem for multisite systems.
7. Associating pipeline material with ongoing changes.
8. Conducting the whole operation with normal services ongoing.

We should also spare a thought for the effects, whether of classification or reclassification, on both readers and the staff who assist them. To quote our local county librarian again: “The notation is no more meaningful to the ordinary reader than random telephone numbers.” A counter-argument could run as follows: “Why should the reader need to understand the notation, providing he has a good subject index to use and good shelf-guiding?” The reader, after all, does not have to understand bus route numbers either, only the stated destination on the front of the bus. We know, of course, that classification numbers—whether lengthy or otherwise—can result simply from the classifier’s own interpretation of the scheme. A sort of mysterious language results whose intricacies are known only to those who are “in” on the act. Those librarians who have worked in an academic environment know only too well the “my books” syndrome evinced by lecturing or teaching staff, who may storm in demanding to know what the classifier has done with “my books.”

The twentieth edition of Dewey (and we can assume there will be a twentieth edition) may well include the proposed revision of class 780 that has been undertaken by Russell Sweeney and his project team, and also a revised life sciences schedule being presently undertaken by staff
at Preston Polytechnic. Two British polytechnics, namely, Leeds and Preston, have already become involved in active revision—and we can note in passing that polytechnics with their links with industry and the professions are particularly suitable as agents for the revision process. Thus, in any future editions of Dewey, I think we would like to see (inter alia):

1. Still more active British involvement (and with more attention given to terminology current in Britain).
2. Consideration of the idea of longer intervals between the revisions of the “basic” editions, with pilot phoenix schedules, published perhaps as fascicules or separates in the first instance (on the Sweeney model).
3. More attention to definitions and scope notes, especially in pilot phoenix schedules.
4. A much improved index, as the present system of indents and qualifiers can be very confusing, and the language remains “schedule language” rather than the language of “sought terms.”

In conclusion, a certain danger is evident that I can only describe as fragmentation. It stems from the third aspect of Dewey that was mentioned earlier. Consider what we have at the moment in respect of the Dewey phoenix schedule for 301-307:

1. A nineteenth-edition phoenix schedule for class 301-307
2. A proposed re-draft of class 301-307 (to be published eventually in DC&?).
3. A manual (whose explanatory notes could be used as a cloak for still further revision).
4. The interpretation of schedules by the British Library and other bibliographic agencies, both as in DC 19 and as given in DC&.
5. What the individual local system makes of all this for its EMMA material.

The consequences could be far from what is presumably our aim in this worldwide scheme: a degree of standardisation. Personally, I would urge that there be a single current edition of DC at longer intervals (excluding abridged versions), together with a controlled programme of officially sponsored pilot phoenix schedules for priority disciplinary revisions—the whole operation to be planned in full consultation with the Library Association Dewey Decimal Subcommittee (and, of course, other national committees), and announced well ahead to those most likely to find themselves eventually at the end of the production line.

References

Extraterrestrials in the Dewey Decimal System;
or, A Study of the Dewey Decimal Classification as Pertains to the Contact of Homo sapiens with Extraterrestrial Sentient Life

Libby Jones

With the scientific community conceding the probability of non-Earth life forms, and the increase in science fiction literature spewed forth by those who have long believed WE ARE NOT ALONE, it occurs to me to wonder: Are we librarians ready for aliens?

This is not a discussion of personal readiness. I, for one, have no intention of meeting up with any bug-eyed monsters, regardless of the need for good intergalactic relations. It is just possible, of course, that they won't be bug-eyed at all; they might resemble human beings. Take, for instance, Mr. Spock, the famous Vulcan created by Gene Roddenberry for the television series “Star Trek.” Outside of Spock's pale green appearance, slanted eyebrows, and pointed ears, he looks human. Not only that, he is considered to be a librarian as well as science officer on board the starship U.S.S. Enterprise. The fact that he is totally unemotional and functions purely by logic is considered a sign of his nonhumaness. Actually it means Mr. Roddenberry never met any library administrators, but that is beside the point.

Whatever forms aliens take when we meet them, we will have access to a whole raft of new information. They will probably have social customs. Obviously they will have a history. They may have diseases and germs we will have to know about and defend ourselves against. Most important, they will have literature. No intelligent human race has ever not had at least vocal literature, and I see no reason why this wouldn't apply to nonhuman races as well.

The amount of material that will be generated by exposure to an alien
species will be enormous, as well as two-sided. On the one hand we will have the human interpretations and studies, and on the other we will have the aliens' literature and information in whatever form they store it.

What do we do with this influx of material? First of all, there would have to be crash courses in a truly foreign language, unless the beings are exclusively telepathic, in which case it will be mandatory for every large library to have at least one nonhuman on the staff. (I have been informed by reliable sources that such is already the case, but I am sure this is merely rumor.)

The next step would be to accommodate alien information, literature, what-have-you, in existing cataloging and classification schemes. Having spent agonizing hours studying AACR2, I feel that it is complex enough to handle anything, interstellar or not. That leaves us only with classification.

Melvil Dewey, idiosyncratic as he was, was rather a forward-looking person, so I chose to examine his DDC to see if allowances had been made for interplanetary communication.

Now the DDC is divided into three main categories: the index, the tables, and the schedules. The index would seem to be a good jumping-off point, although it is not nearly inclusive enough. I compiled a list of terms along with their classification numbers and systematically checked them with the schedules. Extraterrestrial was my keyword.

The first place I looked in the schedules was 001.942, or UFOs. It seemed logical to me to assume that some provision would have been made for unidentified flying objects becoming identified. This was incorrect. I strongly recommend that this number not be used for extraterrestrial beings, or if it is, that no one ever tell them that they have been lumped with curiosities, mysteries, delusions, and the Abominable Snowman.

Nothing was given in the index for the 100s, but I went over that section carefully to see if I could construct a number base of my own. All sorts of intriguing ideas come to mind: Will our visitors have psychological problems created by domineering mothers? Will they have mothers? Do they have obscenity and how will we know? The trouble is, all the numbers so far assigned are strictly human oriented. Granted you could add -099 from table 1 to almost anything, but that is not terribly specific, as well as being subject to misinterpretation. If you chose to use the number 156.099, for example, that translates as a comparison of human psychology and the psychology of lower organisms in a historical or geographical context, more specifically concerning extraterrestrial worlds.

In the first place, any extraterrestrial worth his salt is going to object to being referred to as a lower organism. In the second place, -099 is far too general. The exact location of the creature's home planet would require additional numbers. You could tack on -99 from table 2, which would give you 156.09999, and then decide arbitrarily that there are one million possible planets with intelligent life to account for. (This is actually a low estimate according to Carl Sagan, a noted jack-of-all-trades scientist.) Each of these worlds should have its own distinctive number under -99 in table 2. Using 659 477 as the definitive number for our hypotheti-
cal space voyager’s origins, our final number would appear as 156.0999659477.

This number is obviously too unwieldy. The tables are not the answer. Even table 7, which covers age, social status, mental characteristics, occupation, and so on, does so by referring to “persons by racial, ethnic, national background,” or “persons occupied with astronomy and allied sciences.” It would be difficult to apply the term “person” to something with nine tentacles and no head. However, the women’s liberation movement has done so much to make “person” preferable to “man” or “woman” that we could go one step further and use “being” in place of “person.” We would then have beinghole covers, chairbeings, and new meaning to the phrase “well-being.”

In the 200s the best, most nearly perfect number in all of Dewey was found. 215.24 is a subdivision of Science and religion, which itself is a subdivision of Natural religion. 215.24 is Life on other worlds. It is a fearfully controversial number, however, by virtue of its subject matter. It deals with the antagonism and reconciliation of the scientific approach with the religious approach to the idea of other life forms. The prospect of a Christian from another planet is distinctly unnerving, and would probably cause a whole lot of antagonism and little reconciliation among local Earth denizens. 215.24 should be a comfort to any aliens, though—at least we anticipated their existence.

Proving that controversy not only applies to man’s thoughts but also to his possessions, a classification number has been given to law and jurisdiction in extraterrestrial space, i.e., 341.47. Its application includes anything beyond Earth’s atmosphere. I don’t know how we would enforce a no-parking zone on the moon, especially if the transgressor was at all like Darth Vader, but I can see that order needs to be kept, even in space.

I must say that I was amazed to find the post office represented in my quest for suitable futuristic digits. While the mind boggles at the thought of postal service in space, a number has been provided. 383.144 is for mail carried through space, including transportation by missile. In fact, someone with incredible foresight has even made a place for star routes.

Also to be found in the 300s is an ominous number: 358.8. This is Space forces and warfare. All I can say to this is, if they arrive here at light speed, bristling with photon torpedoes and laser guns, we are out-classified and will probably never have a chance to use this number.

I approached the 400s hopefully. After all, it is already crowded with strange languages. Surely there would be room for one or two more. 499 does say “other languages,” but you must add numbers from table 6 to show which language you mean. Table 6 lists languages I never heard of and some I’m sure were made up, but there isn’t a gap anywhere to slip in an unearthly dialect.

Since the 800s are so closely linked with the 400s, I turned to them next. I knew before I started that it was a lost cause, though. If literature is divided by language, and there is no language to divide by, there won’t be any literature number either.
The sciences would seem to be chock-full of berths for our friendless waifs. There were several areas that sounded good in the index. I was led to 574.999, which turned out to be Geographical treatment of biological organisms. This was better than 576.1919, which was Geographical treatment of microbes. I refuse to believe we will be contacted by microbes. 591.1919 is an attempt to link biophysics and biochemistry with zoological extraterrestrials. What if our new friends aren’t plant or animal?

The 600s offer Engineering for other worlds and space, 620.419. This is a good, solid number but is only large enough for a few general items. It was probably inspired by the idea of structures being built in Earth orbit or on the moon.

629.4 is Space flight and spacecraft, but refers specifically to our own. Since -099 has been eliminated as a viable addition, we are boxed in again.

636.08920145 was in the index. I would never have had the courage to make it up. It was listed under Bioastronautics, medical science, animals, and means “how to take care of animals in space.” This conjures up visions of a galactic Noah but again raises the question, What if the term “animals” is not applicable? Also, that number is about five digits too long.

There are only two numbers of significance left. They are 709.04079, which is Space art, and 999, or Extraterrestrial worlds, which is again so loose a number as to be unusable.

The findings of this research show some rather peculiar criteria for importance. For instance, we can’t do a thing with their language, but we can deliver their mail. While they’re loaded down with shelves and shelves of unclassifiable literature, metaphorically speaking, we’re treating them as zoological specimens. If they object to our attempts to lay down interplanetary law, we can study firsthand their space warfare. We can argue their existence while we paint pictures of them.

My conclusion then is that the DDC as it stands is not fit for classifying alien material except on a limited basis. Whether or not it could be updated in some way is arguable. Adding the number 1000 after the 900s would seem to be the easiest way, but would make applying the tables more difficult, a highly objectionable result. Furthermore, Melvil Dewey would object.

Perhaps using a letter of the alphabet at the beginning of each section, e.g., M800 for Martian lit., would solve the problem. It would, however, alter Dewey as a pure classification scheme, also undesirable.

The answer may be in one of the other classification systems such as Library of Congress, or the Universal Decimal Classification, the last of which at least has the right name. Then again the aliens themselves could be so far advanced that we would adopt their system.

After all is said and done, though, I think the very best thing to do is to say to our new acquaintances, “Welcome, fellow travelers. Come stay awhile and share what you have learned and dreamed and we will give what we have found and are still seeking. We’ll classify it later.”
Revising the Dewey Music Schedules: Tradition vs. Innovation

Robert H. Hassell

This article presents a statistical comparison of the music schedules of the Dewey decimal classification and the Library Association’s proposal for a total revision of these schedules. The analysis is based on the ability of each classification to serve the needs of library patrons using the shelf arrangement to retrieve scores for performance purposes.

The basis of the comparison presented here is a random sample of 400 chamber-music scores chosen from the British Catalogue of Music. Each classification is analyzed for its strengths and weaknesses in terms of its ability to meet the needs of performers, and the classifications are then compared using standard statistical methods.

The paper concludes with a discussion of whether or not the Library Association’s proposal is a proper vehicle for a phoenix treatment of DDC 780 and some of the consequences of including it in some future edition of DDC.

The venerable music schedules of the Dewey decimal classification (DDC), which have resisted any extensive revision in the more than one hundred years of their existence, are now under increasingly strident attack and may shortly be the subject of the most fundamental and sweeping change ever attempted in the history of DDC. The vehicle currently under consideration to accomplish this change is a proposal originating with the Library Association (United Kingdom) in 1973 and prepared in Great Britain under the supervision of Russell Sweeney and John Clews at the Leeds Polytechnic Institute. The proposed new schedules have now been published as a separate by Forest Press so that their features can be tested by the library community.¹ This paper will compare the proposed scheme to the 780 section of the nineteenth edition of DDC and will evaluate both schedules from the point of view of the needs of performers seeking chamber music.² The needs of performers are the focus of this study because the primary purpose of a musical score is for performance, and because the use of a classification scheme to en-

¹ Robert H. Hassell is a reference librarian, Northern Arizona University Library. This paper is based on the author’s master’s thesis, Graduate Library School, University of Chicago. Manuscript received April 1981; accepted August 1981.
hance access to the collection is most likely to be of interest to musicians seeking music for performance.

The vehicle of this comparison is a random sample of 400 ensemble music scores selected from the 1973-78 editions of the *British Catalogue of Music* (BCM). The scores in the sample have been arranged in the filing order prescribed by each classification scheme, and that order is then compared with the order deemed most advantageous for those seeking to retrieve such scores for performance purposes. The arrangements are compared using statistical principles and the significance of the observed differences is evaluated by these principles. This paper, then, seeks answers to the following questions: (1) From the standpoint of performers, does the proposed schedule result in a significantly better shelf arrangement for chamber music than the 780 section of the nineteenth edition of DDC? (2) In what ways, and in what areas of chamber music, are there significant differences between the proposed revision and the current schedules? (3) What impacts on libraries are likely to result should the proposed schedules be incorporated into some future edition of the *Dewey Decimal Classification*?

**SELECTION OF THE SAMPLE**

It was anticipated that the two classification schemes under study here would produce significant variation in the classification of chamber-music scores and in the resulting shelf arrangement of such scores. However, to verify this hypothesis and to quantify the significance of the differences observed, it was decided to base the study on a sample of 400 ensemble music scores drawn from the four 1975-78 annual volumes of the *British Catalogue of Music*. By ensemble music is meant the musical scores in which the composer's intention or traditional practice dictates that performance be given with only one performer (voice or instrument) per part. This includes both literature in which there is only one instrument and literature involving several parts and several instruments. In selecting scores from the BCM to be part of the pool from which the sample was drawn, this definition was rigidly followed, with the exception that certain categories of scores were intentionally overlooked: instrumental instruction books, exercise books, pop-rock-folk, and music intended to accompany dancing. These are categories clearly marked in the BCM and thus easily segregated.

The BCM was selected as the base for the sample because it combines a number of advantages. First, it is a current listing of published music that cuts across a wide spectrum of publishers. This wide embrace tends to smooth out the biases inherent in the output of any one publisher. Second, its year-by-year publication makes it possible to take the sample from recently published scores. The sample was distributed over four years' output to minimize the inevitable vagaries of publishing in any given year. Third, as the arrangement of the *British Catalogue of Music* is based on a classification scheme that separates books on music from works of music, it is a relatively simple matter to construct a frame from which a truly random sample of scores can be drawn without having to resort to cluster sampling or some other less desirable method.
The size of the sample was based on a standard statistical formulation and is a direct consequence of the precision of measurement desired. For purposes of this study it was decided to accept an error of estimation of ± .05 with a confidence level of 95 percent. The actual quantity in the sample drawn from the volume of any particular year was based on the proportionate output of ensemble publications from that year to guarantee that any ensemble score in the pool will have an equal chance of being selected regardless of the year in which it appeared. As might be expected, the selection procedure depended upon the use of a random number table. In this case each random number consisted of three digits.

**CONSTRUCTION OF THE PERFORMANCE-ORIENTED ARRANGEMENT**

Once the sample had been drawn, the scores were grouped and ordered in a linear sequence that reflects the needs and expectations of those searching the scores in the sample for performance purposes. Although there are no studies available which describe the browsing behavior of performers, there are sufficient obvious criteria to determine a linear sequence for the sample used in this study. It should be emphasized that the principles of the performance-oriented arrangement are not derived from a formal analysis (e.g., a statistical analysis) of observed behavior, but instead are plausible assumptions.

The most important principle followed in the construction of the performance-oriented arrangement was that all music of interest to a particular performance medium should be kept together. Hence, in this arrangement all music for soprano voice, for example, will be found in one place, and not interfiled with other vocal or instrumental music. Scores in which the performance medium is not designated are also filed together in a sequence of their own.

Keeping music for a particular medium together is relatively simple, but putting the resulting groups of scores in a particular order involves a somewhat more difficult problem. Obviously, when a score specifies two or more instruments, it is not possible to collocate that score with other scores for each of the instruments specified. Accordingly, the principle defined for such scores was to select one instrument or instrumental family as the focus of that score and then to collocate that score with other scores for that instrument or instrumental family. Focus has therefore been defined so as to represent the performance medium of principal interest. Focus must often be decided on a case-by-case basis, but certain principles are evident.

First, music for a particular instrument, voice, or combination with keyboard should be collocated directly with music for the same instrument, voice, or combination without keyboard. Hence, music for violin and piano follows immediately music for unaccompanied violin. Likewise, music for piano quartet (violin, viola, cello, piano) should follow immediately music for string trio.

Second, music for an ensemble of one particular instrument, with or without keyboard, should be collocated with music for that instrument,
groups of scores being arranged in an order of increasing complexity. These two principles, taken together, result in the following general order:

- instrument
- instrument with keyboard
- duets of the instrument
- duets with keyboard
- trios of the instrument
- etc.

A third principle is that arrangements should not be interfiled with original music for an instrument or combination but should be filed as a group immediately following original music for that instrument or combination. Hence, in a performance-oriented arrangement, original music for violin and piano will be filed as a group immediately preceding arrangements for violin and piano. From a performance standpoint this is particularly important, as for many purposes arrangements are not considered acceptable, and many performers refuse to use arrangements at all. This principle has not been made to apply to vocal music, however, as the difference between original and arranged music for voice is very difficult to determine.

Music for wind-string combinations is kept together and collocated with music for wind ensembles. This particular order was chosen because the acoustical nature of brass and woodwind instruments makes it most likely that both compositional and performance interest will center on those instruments rather than the string members of the ensemble.

The final general principle relates to the method of subfiling scores which occur in a single performance category. For example, the sample contains fifty-five scores of original music for piano solo. In such a case it is better to file collections by several composers first, arranging them in alphabetical order by title. Separate works and collections by a single composer are arranged by composer and then subarranged by title-opus number sequence within opus number. Subarrangement under instrumental or vocal groups by form (i.e., sonata, fugue, dance, nocturne, etc.) rather than by composer is definitely not in the best interest of performers and has not been used in the performance-oriented arrangement. As E. T. Bryant pointed out many years ago:

The average pianist is not so much interested in various volumes of waltzes as in music of an individual composer. If he wishes to borrow Chopin’s waltzes, and if no copy is available, then another Chopin volume is far more likely to be preferred to an album of waltzes by Brahms, Schubert, or some other composer. 4

In closing this section it should be emphasized that the filing arrangement being provided here is not a classification scheme. The arrangement and the categories included provide space only for scores that actually occur in the sample, no provision having been made for instruments or combinations that do not occur. The actual purpose of drawing the sample and providing the performance-oriented arrangement is to provide a base from which the two classification schemes in this study can be
compared in their ability to meet a performance need. The hypothesis behind this study is that the Dewey decimal classification and the proposed revision will vary widely in the arrangement they give to chamber music. The sample provides a test of this hypothesis and allows a quantifiable measure of how well each scheme matches the performers' expectations and needs. As Langridge has observed in his work on classification and indexing in the humanities, "Since there is no such thing as absolute classification, we can't just say that there are so many categories and these are their names. We can only ask what is the most suitable for our purpose."

ANALYSIS OF THE DATA

By using the data from this study, both of the classification schemes are compared to the performance-oriented arrangement. The strengths and weaknesses of each scheme from the performer's point of view are then discussed.

The basis for the comparison is the linear arrangement provided to the sample by each classification scheme. The sample was first arranged in linear order by the performance-oriented criterion described above and the scores numbered in sequence. The sample was then placed in the linear arrangement dictated by each of the classification schemes under study, first by the Dewey decimal arrangement and then by its proposed revision. A count was made for each arrangement as to the number of scores located adjacent to each other in the performance arrangement which were also adjacent in the particular arrangement under study. When this occurred a "match" was counted, and the total number of matches in the given linear arrangement was determined. The total number of matches over the whole linear arrangement can then be used as a reflection of the extent to which the classification scheme under consideration meets the needs of performers. By examining each linear arrangement category by category, it is possible to observe where the strengths and weaknesses of each classified arrangement lie in relation to the needs of performers.

A perfect correspondence of the performance-oriented arrangement with one of the classified arrangements would have resulted in 400 matches. With this in mind the total number of matches under each classification could then be easily converted to a proportion by dividing that total by 400. For the purposes of statistical analysis, a 95 percent confidence interval has been constructed around each proportion, using standard large sample formulation. The results of this analysis for both the Dewey decimal classification and the Proposed Revision of 780 Music are given below. (See tables 1 and 2.)

The 95 percent confidence interval included in each table indicates the range within which one would expect to find the value of the proportion were the sample to be redrawn and the experiment repeated with this new sample. From the range of each interval we can conclude that two scores adjacent in the performance-oriented arrangement will also be adjacent in the arrangement provided by the Dewey decimal classifications between 33.24 percent and 42.76 percent of the time. For the Li-
### Table 1

**Matches between the Dewey Decimal Classification and the Performance-Oriented Arrangement**

<table>
<thead>
<tr>
<th>Ensemble Title</th>
<th>Number of Scores</th>
<th>Number of Matches</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Ensemble Collections</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sacred Vocal Music</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Vocal Solos</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Vocal Ensembles</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Instrumental Ensembles — Collections</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Duets with Stringed Instruments</td>
<td>33</td>
<td>12</td>
</tr>
<tr>
<td>Duets with Wind Instruments</td>
<td>58</td>
<td>15</td>
</tr>
<tr>
<td>Duets with Percussion</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Trios</td>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>Quartets</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td>Quintets</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Sextets and Larger Combinations</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Piano Solos</td>
<td>70</td>
<td>28</td>
</tr>
<tr>
<td>Piano Duets</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Organ Music</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Unaccompanied Solos</td>
<td>57</td>
<td>30</td>
</tr>
</tbody>
</table>

**Total**                                             **400**     **152**

Proportion = \( \frac{152}{400} = .3800; 95\% \text{ Confidence Interval} = (.3324, .4276). \)

### Table 2

**Matches between the Proposed Revision of Dewey 780 and the Performance-Oriented Arrangement**

<table>
<thead>
<tr>
<th>Ensemble Title</th>
<th>Number of Scores</th>
<th>Number of Matches</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Ensemble Collections</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vocal Ensembles</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Vocal Solos</td>
<td>37</td>
<td>27</td>
</tr>
<tr>
<td>Ensembles for Mixed Families</td>
<td>63</td>
<td>21</td>
</tr>
<tr>
<td>of Instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percussion Ensembles</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>String Ensembles</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Woodwind Ensembles</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>Brass Ensembles</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Piano Solos</td>
<td>67</td>
<td>17</td>
</tr>
<tr>
<td>Keyboard Ensembles</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Other Keyboard Solos</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Percussion Solos</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>String Solos</td>
<td>59</td>
<td>23</td>
</tr>
<tr>
<td>Woodwind Solos</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>Brass Solos</td>
<td>15</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total**                                             **400**     **164**

Proportion = \( \frac{164}{400} = .4100; 95\% \text{ Confidence Interval} = (.3618, .4582). \)
Library Association's proposal the range is 36.18 percent to 45.82 percent.

DEWEY DECIMAL CLASSIFICATION

In this section the strengths and weaknesses of the Dewey decimal music schedules as revealed by the study are explored. The analysis is based on the arrangement provided to the 400 scores in the sample by the nineteenth edition of the DDC. It should be pointed out that in classifying the scores the preferred location was always used in preference to the several nonpreferred options the schedules offer.

The arrangement of vocal music in DDC is significantly harmed from a performance standpoint by the separation of sacred scores from secular works, both for solos and for ensembles, sacred works going into 783 and secular works being placed in 784. DDC's main weakness within these divisions is the lack of specificity for categories of voices or types of ensembles. For solos in which the voice is designated in some way, DDC's method of division is by the categories children's, women's, and men's voices. If the designation is high, middle, or low, as was the case with five scores in the sample, then there is no specific category provided, as both male and female voices can be high or low. In such a case the scores must all be placed in 784.30612 with music for female voice. Because there is no specific category for ensembles of mixed voices, such scores will be placed in 784.3064x2 with ensembles for women's voices. Overall, however, the vocal arrangement in DDC is one of the classifications's stronger features, and if the option provided to classify both sacred and secular vocal chamber music at 784 is used, then this section becomes strongly performance-oriented.

DDC's arrangement of instrumental scores for two or more instruments has few matches with the performance-oriented arrangement. The fundamental point of division within the schedules is by size of ensemble, and only secondarily by instrumentation. There is no provision for separating collections from single works nor arrangements from original music. The works for violin and piano in the sample are well collocated in DDC largely because the scores in the sample for this medium are made up largely of separate original works. No other instrumental grouping, however, is well collocated in DDC. As an illustration of the difficulties of arrangement DDC gives the performer, it is instructive to look at what this classification does to string quartets. There are seven such scores in the sample, but DDC collocates only four of them. Intermingled within the string quartet scores are such things as the Bertali Sonata for Two Violins, Trombone and Continuo, the Bononcini Sinfonia for Two Trumpets, Violin and Keyboard, and the Wilson Complementi for Clarinet, Violin, Cello, and Piano. Such works bear no performance resemblance at all to the string quartet, and one can conclude that the collocation of such scores in DDC is decidedly nonperformance in effect. In fact, the collocation of string literature in DDC is one of the scheme's weakest features.

The arrangement of piano literature in DDC is strong, due largely to the fact that the scheme makes use of only a few form divisions and no character divisions. DDC's one serious weakness in this area is its lack of
provision for separating collections from single works and for separating arrangements from original works. The results are an interfilng of much material in odd ways that hamper performance-oriented retrieval. The arrangement of piano duets in this scheme is a perfect match with the performance-oriented arrangement, and is due largely to the fact that DDC separates music for one piano-four hands from that for two pianos-four hands, an arrangement indispensable from a performance standpoint.

**PROPOSED REVISION OF 780 MUSIC**

In examining the Library Association’s proposed scheme from the point of view of its ability to match the performance-oriented criteria described above, the schedules have again been strictly followed, and only preferred locations are used. While the potential for extraordinary detail in classification exists in the schedules, the instructions specify that for scores only three characteristics of an individual score should be used in classification, and that dictum has been rigidly observed. Form and/or character subdivisions were used only when the name for such a subdivision was explicitly mentioned in the title of a score.

Under vocal music there are several classification features that decidedly improve on the arrangement under DDC, nineteenth edition. The classification provides for the collocation of scores for high-middle-low voice as well as for soprano-alto-tenor-bass voices; DDC does not. Separation of secular from sacred works occurs in this scheme, but at a secondary, not primary, level of subdivision. Hence, songs for soprano solo, for example, are kept together, subdivided by form and/or character. Provision is also made for collocation of scores for mixed voices. Neither DDC nor this proposed revision pays any attention to the method of accompaniment, whether keyboard or otherwise, for vocal solos and ensembles. However, the proposed revision does separate accompanied from unaccompanied works; DDC does not. Neither scheme makes any provision for separating collections from separate works nor arrangements from original works.

Certain aspects of the classification for instrumental ensembles show a decided improvement from a performance standpoint over DDC. The primary manner of subdivision here is by instrumentation and then secondarily by size of ensemble, a priority DDC reverses. The result is that string quartets and string trios, just to cite two examples, are arranged in this scheme exactly as they are in the performance-oriented arrangement. The most pronounced weakness of the classification for chamber ensembles is that it places all scores where the instrumentation is for mixed families of instruments in the interval 785.2-785.5, while ensembles whose scoring is for only one family of instruments (strings, woodwind, brass, percussion) or one instrument and keyboard are placed in the range 785.6-785.9. The result is that the Handel Sonatas for Two Violins and Continuo is classed at 785.2813, while the Handel Fantasia in A Major for Violin and Continuo is classified at 787.2. Hence, the presence or absence of a keyboard part in an ensemble has a drastic effect on the location of the score for that ensemble, and the result is a wide separation
of materials which by their very nature should be collocated. As mentioned, however, this principle is not followed where the ensemble consists of a keyboard instrument and one nonkeyboard instrument. Such ensembles are classed with the scores for the nonkeyboard instrument, unaccompanied. There is, however, no way in the classification scheme to differentiate between accompanied and unaccompanied solos of an instrument. Hence, the Stamitz *Eight Caprices for Flute* and the Faure *Fantasie for Flute and Piano*, op. 79 will both be classed at 788.32, resulting in a linear arrangement in which these two types of scores are interfiled. There is also no distinction made between original works and arrangements, or general collections from works by a single composer. The arrangement is further complicated by the use of a long and quite detailed list of form and character subdivisions. There are, for example, no fewer than five separate numbers for contrapuntal forms and three for symphonic forms. The result is an arrangement which, from a performance standpoint, offers little quantitative advantage over the DDC arrangement.

The section for keyboard music in the Library Association’s scheme is decidedly weaker from a performance standpoint than the arrangement in DDC. The major fault lies with the fact that the form and character divisions in the schedules provide for a very detailed classification of piano scores in categories that have little performance interest. The result is that the piano output for a single composer can be scattered into a dozen different categories. For example, the Stravinsky *Scherzo for Piano*, 1902 is classed at 786.2, while the Stravinsky *Sonata for Piano in F Sharp Minor*, 1903–1904 is classed at 786.2183. (Sonata is a form recognized by the schedules, while scherzo is not.) As in the schedules for other instruments and ensembles, there is no provision for separating general collections from works by a single composer, or arrangements from original works, and, as general collections and arrangements are relatively numerous in the sample, the result is a decidedly weak match with the performance-oriented arrangement.

The Library Association’s proposed scheme provides separate numbers for harpsichord solos and piano solos (786.4 vs. 786.2), and while on the surface this looks to be appropriate, it causes some very real problems in classification. For example, where are we to class the Bach *Well-Tempered Clavier: Forty Eight Preludes and Fugues for the Piano*? The classifier versed in music history knows that these works were not written with the piano in mind, yet the score specifies the piano. Should the classifier apply musicological knowledge and place the work in 786.4, or should the designation of the score prevail, thereby classing the work at 786.2? The same problem arises in conjunction with the Handel *Keyboard Works*, and will arise similarly with any work composed for keyboard before the time of Mozart and Haydn. The fact is, of course, that early keyboard works can be performed on any one of several keyboard instruments, including the modern pianoforte, interchangeably, and attempts to separate such works by instrument are at best contrived and artificial.

An additional weakness of the proposed scheme for keyboard literature is that there seems to be no way to separate piano duets in which
there is only one instrument from those in which there is a need for two instruments, both being classed at 785.6212. Such works are also classed a considerable distance from works for solo piano (786.2), even though both classes have essentially the same performance medium.

**Statistical Comparison of Dewey 780 with the Proposed Revision**

In this section the differences between Dewey 780 and the Library Association's proposed scheme are evaluated for statistical significance. The consequences of the result of this comparison are outlined, and the paper concludes with a discussion of some of the consequences to the Dewey decimal classification should the proposed revision be incorporated as part of the DDC in some future edition.

It will be noted in comparing the bottom lines of tables 1 and 2 that in arranging the 400 scores of the sample the Library Association's proposed scheme scored somewhat higher from a performance standpoint than did the music schedules of the DDC, nineteenth edition. In any statistical comparison, however, the question arises as to whether the observed result can be counted on to recur should the sample be redrawn and the experimental procedure repeated.

Evaluating the observed difference with standard statistical procedures yields a negative result to the hypothesis that the observed difference is statistically significant. That is to say, one cannot conclude on the basis of this study that the proposed scheme is actually a better schedule from a performance standpoint than the existing DDC music schedules. This result does not mean that there are no differences between DDC and the proposed revision. The differences are both real and substantial. The point to be made, however, is that the statistics resulting from this study offer no evidence that from a performance standpoint the new scheme provides a better arrangement than that provided by DDC.

With this result in mind, the decision as to whether to adopt or reject the proposed scheme must be made on some other basis than its utility for the classification of chamber music, and certain significant points, therefore, require examination. From the standpoint of notational convenience there are no differences between the two schemes. Both use the purely numerical scheme developed by Dewey more than a century ago, and the proposed revision uses the same range of numbers for music, the 780s.

However, the methods by which the classification numbers for a given work are determined are vastly different. During its century of existence DDC has been essentially an enumerative classification scheme. That is, one only had to match the work in hand with the categories of the schedule and apply the number therein prescribed. The proposed schedule, however, is not an enumerative scheme at all, but is a faceted classifica-

*Using the standard Significance of Differences Test (Binomial Data), the value of the standardized variable (Z) for the two arrangements is .8671. For statistical significance at the 95 percent level a value of Z > 1.64 is required.*
tion developed along the same lines as the classification developed by E. J. Coates for the British Catalogue of Music more than twenty years ago. In a faceted scheme the numbers are built by first analyzing the work in hand for its constituent characteristics; then a number is devised from these characteristics by using a formula from the schedules and tables that outline the numbers that match these characteristics and give instructions for combining the numbers. Now, there is no denying that certain elements of faceted schemes have been in DDC from the beginning, and Elaine Svenonius is quite right in her observation that "DDC is moving in the direction of assuming more of the synthetic capability that characterizes the Colon Classification." However, it is equally clear that these new schedules are a radically different thing from what DDC has been heretofore. The consequences of adopting this proposal as a phoenix schedule for music would be to alter dramatically the character of DDC as a substantially enumerative scheme and would force a major shift in the way most American librarians, in particular, think about classification. There is also little doubt that classification in a faceted scheme is more complex, time-consuming, and therefore more expensive than in an enumerative scheme, and in this case the data fail to support the hypothesis that the result will be enough improvement in shelf arrangement to justify the effort and expense.

One of the most frequent criticisms of DDC has been that it does not provide the level of detail necessary for the arrangement of a truly large and comprehensive collection, and thus the authors of the proposed revision have opted for a scheme incorporating a vast amount of detail. However, the evidence in this study suggests that performers would be better served by a broader classification that centers on performance media and composer rather than on form or character. There is no reason to suppose that a pianist, for example, approaches a library music collection looking for fantasias or fugues so much as works by a single composer, and there is, therefore, little justification for splitting up a composer's piano output into a large number of separate locations on the shelves. Extraordinary detail in category and notation may be necessary in classification for the sciences, but in the area of musical scores such detail may be counterproductive, at least in fulfilling the needs of performers.

These conclusions are not intended as a judgment on either DDC or its proposed revision from the standpoint of the total scope of classification in the library community. It must be remembered that a classification scheme must serve many needs and provide access in many different settings, and this study has chosen to concentrate narrowly on only one user group and one limited purpose.

REFERENCES

Problems in Applying AACR2 to Music Materials

Sam Richmond

Successive revisions in cataloging codes have posed special problems for music materials primarily because the economics of music publishing have dictated traditional departures in bibliographic presentation. The adoption of AACR2 additionally focuses on the unique problem of participatory creation in music: the performer as author. This article studies the impact of these phenomena on certain matters of description, access points, and uniform titles.

Music catalogers have maintained a skeptical attitude toward generalized code revisions, and the adoption of the second edition of the Anglo-American Cataloguing Rules will prove to be no exception. To appreciate their hesitancy one needs to consider some of the bibliographic peculiarities of printed and recorded music. When Oscar Sonneck declared that “music cataloging and book cataloging are essentially the same,” he meant that the standards relating to accuracy and clarity of bibliographic description for the two types should be identical. His argument that the similarities do not go beyond the standards of quality has been advanced by music librarians ever since, typically with rising fervor upon the appearance of yet another code that overlooks the special problems posed by the economics as well as the content of music publishing.

This study takes as its scope the more significant points of disagreement in a currently minute body of literature over the differences in music cataloging practice between the first edition of AACR and the second. Its purpose is not to evaluate the overall suitability of either code but rather to forecast some of the directions that continuous revision will take, and to outline the directions already being taken.

BIBLIOGRAPHIC DESCRIPTION

The peculiar difficulties one faces in the descriptive cataloging of music materials often begin immediately with determining the chief source of information. As AACR2 is a comprehensively organized code, both printed scores and commercially labeled recordings fall under the same

At the time this paper was submitted the author was a student at the Graduate Library School, University of Arizona; he is at present the music cataloger at the University of Nebraska-Lincoln. Manuscript received February 1981; accepted April 1981.
"title page principle," as do monographs, serials, pamphlets, and related print commodities. For music, however, the analogy is faulty. In the case of scores, the frequent lack of title pages may not be obvious to the nonspecialist because the available substitutes appear to have a similar function. Cost considerations in the separate publication of musical works in the same genre, medium, opus, and sometimes by the same composer have led publishers to avoid unique title pages in favor of a phenomenon known as the passepartout: this consists of a list of works published in a set or series with the appropriate title underlined. The space limitations of this time-honored format more often than not discourage inclusion of essential statements of multiple responsibility (transcriber, arranger, or editor) and even those of the title proper (key or medium of performance), which may or may not appear in the uniform title heading. Such omissions can then be relegated in varying amounts to the cover and caption titles, making either of these areas more desirable as chief source. Nevertheless, AACR2 rule 5.0B1 opts for the single source having the fullest information, neglecting the possibility that quantity may fall short of adequacy. What needs questioning here is the whole concept of transcription as opposed to synthesis, since the necessary information can be sprinkled over three (or more) sources. The position taken by the recently published International Standard Bibliographic Description for Printed Music (ISBD(PM)), which leaves the choice of source to the cataloger's judgment once a list title page is found insufficient, should provide practicable ways out of this dilemma.²

A similar confusion arises in the selection of chief sources for sound recordings. AACR2 rule 6.0B1 stipulates the label "permanently affixed" to the recording itself as the preferred source in all cases. The criterion for alternative sources, such as a cassette container, disc slipcase, or inlaid textual material, is the presence of a collective title when none at all is found on the label. Maxwell’s interpretation of this rule is somewhat flexible, calling for an alternative source that furnishes any such title not duplicated elsewhere, presumably allowing for differences in wording.³ The potential problems are sometimes minute in distinction but still worrisome. Disc labels often carry a series title in place of the collective work title, foreign translations of the original title, or other anomalies in conflict with more appropriate information on the slipcase. For cassettes, the rule takes no notice of the dual purpose served by inlaid notes: in clear plastic, these might be considered part of the container. But the real nature of the difficulty is the carry-over of the passepartout idiom in score packaging, with needed information scattered among sources. C. P. Raviliou, one of the engineers of the music sections of AACR2, sees an inconsistency between rules 6.0B1 and 5.0B1 and believes that the admittedly imperfect principle of a chief source that furnishes the fullest information might be applied more empirically to recordings.⁴

Although most filing irregularities contingent in music titles proper are provided for by uniform title headings, there is a possible exception in the transcription of parallel titles. Quite frequently generic titles combine the accepted noncharacteristic name of a composition in one language with enumerations and designations of key and instrumentation
in another. When the scheme is incorporated in a parallel title arrangement, e.g., “Dritter Mazurka = Troisième mazurka = Mazurka in E major, op. 6, no. 3,” the order becomes critical. This native problem has been referred to as “partial parallelism” and is not fully accounted for in the general rules.⁵

The sections in chapter 5 bearing upon statements of responsibility are basically reliable, but one might be cautioned to pay more attention than usual when referring back to the rules in 1.1F. Redfern notes that the ordering of this information on vocal scores typically separates composer and librettist and requires a judicious application of rules 1.1E5 and 1.1F8⁶ The first rule stating that “other title information must be placed after the part of the title” — with music this can and frequently does mean parallel title — “to which it belongs” can invite overuse of the second rule allowing explanatory interpolations when lines of responsibility are unclear. Again, music bibliographical data can be lost in the transcription: not only in vocal scores but in many reductions and similar rearrangements, the less integral responsibility is habitually stated first. A delicate balance of the general rules should be maintained to keep these elements in reasonable order.

The AACR2 policy toward performers as authors of recordings will likely be extremely frustrating in practice. By allowing inclusion of performance credits in a statement of responsibility only “if the participation . . . goes beyond that of performance, execution, or interpretation of a work [italics mine],” rule 6.1F1 is the direct repercussion of 21.1B2(e).⁷ All of the aesthetic imponderables informing any interpretation of “interpretation” apply equally to description as well as access points. In any case, the placement of a performer’s name in the former will have some influence on choices for the latter. Ravilious’ objection, although odious in its analogy, should suffice: “The status of the performer is in fact close to that of a translator of a text, and modern cataloguing codes—including AACR2—are at one in regarding it as inappropriate to relocate the contributions of translators to a footnote.”⁸

The order of presentation of bibliographic elements is likewise the key to disagreements over the content of edition, collation, note, and terms of availability statements. A satisfactory formula for specific material designation remained the object of persistent disagreement during the preparation of ISBD(PM): first considered and then rejected as edition area material,⁹ such designations as “score” were later made an option for Area 3 while remaining a standardized element of Area 5.¹⁰ This decision means that catalog data following the option may give the element in two places and even two languages depending on the language of the agency: e.g., Area 3, “Partition”; Area 5, “1 score + 4 parts.” Placement of publishers’ catalog numbers brings up still another conflict. Printers’ plate and recording serial numbers have been transferred by AACR2 from the imprint to the note area, reflecting the musicological consensus that these are no longer dependable as clues to dating first editions. ISBD(PM), on the other hand, assigns the numbers in lieu of a standard number complex to Area 8, a move seen by many as justifiable but out of phase with general AACR2 principle.¹¹ Others protest that plate numbers are still valuable for verification of elements other than date and
were rightly considered imprint data in the first place.\textsuperscript{12} For the present, the Library of Congress has indicated that its catalogers will disregard 6.7B19 and position recording numbers, at least, as the first note.\textsuperscript{13}

\textbf{ACCESS POINTS}

Much as the transcriptive predilection of AACR2 has the potential of complicating attempts to describe music publications with consistency, so its bias toward personal authorship will affect consistency in attribution. The fundamental statement under rule 21.1A is that composers are to be considered as authors of the works they create, and rule 22.1 provides for their entry on the basis of familiar terms, "the name by which he or she is most commonly known." Trouble can surface when the seemingly contradictory provision (e) under 21.1B2 determines the principal author to be a performer other than the composer and particularly when this performer is the member of a group, or when the "most commonly known" name chosen differs from other entries in the file.

The retroactive impact of the rules for corporate entry on those for the description of sound recordings has already been mentioned. The last category of 21.1B2 simply reiterates the criterion of group responsibility extending beyond "mere performance" or execution. Exceptions to this brief formula have been raised, chief among them successive recorded performances of aleatoric or "chance" concert pieces and free adaptations of compositions by one popular music group in the style of another.\textsuperscript{14} Moreover, the need to have a more consistent provision for the republication of recorded music in print form has been cited, since the reissuing of separately composed works under collective title is addressed by 21.7B.\textsuperscript{15} If the original recorded form lacks such a title, opposed entries may result.

Once the "interpretation" hurdle has been cleared and main entry is to be decided on the basis of performance, there remains the task of assigning the status of principal performer. A footnote to 21.23A identifies principal performers as those accorded prominence on the chief source of information, that is, the recording label: as has been demonstrated for both discs and cassettes, this leaves less room for information than for doubt. LC catalogers have endeavored prodigiously to arrive at workable definitions of performing status that are less rigidly bound to printed information sources. According to Ben Tucker, performers are first of all persons or bodies whose performance is audible on the work being cataloged, and principal performers are present on those recordings "clearly intended primarily as a showcase of the art of one or more performers."\textsuperscript{16} The latter part of his definition will be especially helpful in allowing the most logical, accessible headings to be chosen for highly stylized jazz recordings of single works, often reinterpretations of established concert repertoire such as \textit{Le Sacre du printemps} or \textit{Peer Gynt}, as recorded by Hubert Laws and Duke Ellington respectively. He goes on to suggest that conductors and accompanists ought not be considered as merely members of groups, thus permitting their receipt of added entries per rule 21.29D.\textsuperscript{17} The determinant for a "showcase" of a conductor's art, however, remains necessarily uncertain.

Somewhat more puzzling is Tucker's distinction between group
names containing and not containing a personal name. In a statement of responsibility such as “J. D. Crowe and the New South,” the performer named is not to be entered as a member of that group. This conclusion is evidently a means of avoiding redundant added entries, yet taken at face value his statement has the onus of altering the main entry form for this kind of group name. The possibilities for abuse are obvious enough when the personal name-and-group designation is arbitrary (spurious reissues like Tony Sheridan and the Beatles have countless counterparts), inverted (The Jazztet Featuring Art Farmer and Benny Golson), or fictitious (Bob E. Soxx and the Blue Jeans). They are less obvious for a long-lived performing unit in which one of the members grows in stature. One is hard put, for example, to determine where to file works by the Supremes following Diana Ross’ principal billing in conjunction with recordings made by Ross after leaving the group.

Tucker’s guidelines, then, may be characterized as LC policy at its most prescriptive. First, group names incorporating personal names have remained common practice in popular music for so long that LC is really contemplating a losing battle. Second, the model for such names, however disappointingly prosaic it may be to certain musicians so named, is clearly the conventional idiom for corporations with founder figures like that bane of the filing section, E. I. DuPont de Nemours. In other words, the personal name included in a corporate main entry is an integral part of the corporate name and not a separate point of access. The inverted cross-reference formula for this type of name has survived several codes and is retained by AACR2 without exceptions for artistic “corporate bodies” of any kind. If most retail record and tape shops follow the wisdom of filing solo recordings by surname and group recordings including the same person by first word, most library users will respond to the same wisdom.

The case of principal versus group performer is perhaps the latest guise for the classic perplex of mixed responsibility, arrangement versus adaptation. AACR2 rules 21.18B and C are much more nonspecialized and approachable in terminology than the corresponding rules (231 and 232) in the first edition, but their exemplification of musical arrangements and adaptations represents a departure from the all-purpose definitions given to “modifications of other works” at 21.9 The latter rule separates adaptations, in which “the modification has substantially changed the nature and content of the original or . . . the medium of expression has been changed,” from basic types of rearrangement, abridgment, and so forth in order that the adapter’s heading will be generally appropriate for entry. One of the dichotomies of music is that changes of medium are exclusive neither to arrangements nor to adaptations. To this dichotomy AACR2 rule 21.21 adds an artificial one by treating added accompaniments as a special exception to 21.18. “Additional parts” are included in the definition for accompaniments, all of which are to be entered under the composer of the original. Ravilious’ disputation of 21.21 centers on examples such as Gounod’s added-part-writing to Bach’s Meditation, the result of which bears little stylistic resemblance to the earlier composer. Since the new rules do not draw the
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distinction, musically trained catalogers will probably be called on as before to apply specialized knowledge of the work in hand to discern the presence of an originally composed part in the "accompaniment": for the rest of us, keeping in mind directives three and four under 21.18A should prove helpful.

While the code apparently brings few new problems of an intrinsic nature to forms of entry, there are instances in printed music where the principle of familiarity in rule 22.1A is not entirely compatible with 22.2A's governing concept of predominance. One notorious case in point is the romanization of "Tchaikovsky," currently a major concern of music catalogers beginning to adjust backlogs and revise their authority files. LC has, of course, surprised no one in revising "ChaikovskiY, Petr Ilích" as "Tchaikovsky, Peter Ilich."21 That composer is familiar, but his grandnephew Boris is not. Catalogers invoking predominance and following LC's recommendations in choosing reference sources will likely not find Boris' name and thus be forced to retain the old form "ChaikovskiY," creating undue separation in filing.22 Conversely, the familiarization of famous composers' headings can also bring entries too close together: an instance of this is Mozart's son Wolfgang, whose full name is identical to the required AACR2 heading for his father. Problems such as these would seem to make use of the dating option under 22.18 mandatory in order to avoid unforeseen conflicts.

UNIFORM TITLES

The international, meta-linguistic aspect of musical expression makes the formulation of uniform titles a crucial step in the music cataloging process. It is therefore inevitable that the policy changes pertinent to music titles in AACR2 will occasion the most immediate controversy. Before proceeding with a discussion of specific rules, a word about their presentation may be helpful. Chapter 25 covers uniform titles in all fields of publication including music, rather than grouping the applicable rules in a comprehensive music chapter as in AACR1: this reorganization serves to highlight the relationship of music titles to other titles as well as to point out unique procedures. Furthermore, the initial statements under 25.1 ("Use of uniform titles") and 25.25 (the general rule for music) merit some reflection. Whether one formulates a uniform title at all will depend on such matters as familiarity of the work, extent of editions held, library and clientele specialties, and choice of main entry. How one constructs a music title in turn will depend on the degree of congruence between general rules 25.1–7 and the specific rules for music materials: the latter must be followed in cases of contradiction.

Rule 25.26A's lengthy definition of a music title attacks the important problem of discriminating between characteristic and generic labels, especially when a particular title is a hybrid of the two. The deciding factor is a preference for the composer's original title rather than the original publisher's title. Accordingly, adjectival designations of number, ordination, medium, and key are treated as subordinate to the composer's intended description of a work whether that description includes such designations or not. Usually this formula functions to the advantage of
user recognition: Berlioz' Symphonie fantastique would not be entered as “[Symphony, op. 14],” nor would Stockhausen’s Gesang der Jünglinge become simply “[Gesang].” It is not always so easy, however, to judge whether titles such as Clavierübung or “Fünf Orchesterstüke” originated with the composer, and full implementation of 25.26A will often require considerable research on even the experienced cataloger’s part.

So far, the code’s directions on language (25.27) have engendered the most comment. With the implicit purpose of cracking AACR1’s monopoly of Western languages in music catalogs, this rule bases uniform titles on the language in which the composer’s original title was formulated unless a later title in the same language is better known. The supporting argument might be that a balance is struck between the requisites of familiarity and accuracy, but some critics have decided that the compromise is not really consistent—no allowance is made for the existence of a better-known title in a better-known language. The irony of the situation is amply illustrated by LC’s decision to change Chaikovski’s [Sleeping beauty] to Tchaikovsky’s [Spiššchajka krasavitsa].23 The representation of original language editions in a library’s collection is another factor, one that could be overlooked if 25.1 is presumed to be at odds with 25.27. Much of the present literature is united in opposition to this exception to the familiarity principle: as Ravilious puts it, “Libraries with a non-specialist clientele . . . may well decide to transgress this rule, and with some apparent justification. Among the general public a library which insisted on filing entries for well-known orchestral works under uniform titles like ‘Haugtussa’ (The mountain maid) and ‘Z ceskych luhu a haju’ (From Bohemia’s woods and fields) would soon become a byword for pedantry.”24

The remaining major area of contention is the rules under 25.32, “Parts of a musical work.” The text is initially confusing for two reasons. First, there is what amounts to a blind reference from 25.32B1 to general rule 25.6B: if one goes on undaunted to parallel rule 25.6B1, the instructions are still contradictory. Both Ravilious and Redfern counsel the adoption of uniform titles from the complete work, not from the cycle containing the complete work as might be inferred in the case of Wagner’s Lohengrin.25 Secondly, the vagueness of the specific rules stems from a substitution of the term “parts,” which has a distinct and different musical connotation, for “excerpts” in the previous code. LC seems to be going the way of corporate-heading complexity in its treatment of excerpts within excerpts: noting the irreconcilability of rules relevant to music and to other print materials, their most recent statement on this matter suggests subordinate entry of the excerpt after “both larger titles.”26 The usage works well in LC’s example of Praetorius’ Cantiones sacre, since a certain amount of leading from collective titles does increase accessibility to sections of sacred song cycles, and in most instances the movements of generically named components of a symphonic cycle. The same cannot be said for theatrical works, where tempo indications or formal designations such as “Aria” are often the only available identifiers of excerpts. To summarize, the inclusion of more than one larger title as an uncategorical rule appears of limited utility at best from the user’s standpoint.
CONCLUSION

It need not be construed from the preceding study that the new Anglo-American rules are grossly ill equipped to deal with music: clearly, the number and variety of encouraging innovations outweigh the problems. Access in uniform title headings to medium of performance is finally winning over the previous convention of filing under “Works,” and the movement in main entry points is definitely toward integral authorship—no small feat for a participatory art form. Indeed, the concept of performer as author is a hapless latecomer to traditional cataloging, and the fact that AACR2 attempts to grapple with it is by itself a step forward. Its failure to mediate it attests above all else to the undeniable differences between stave and paragraph. Sonneck’s axiom for music catalogers, while hardly metaphysical, is more figurative than it looks.

REFERENCES

5. Ibid., p.12.
17. Ibid., p.6.
18. Ibid.
Letters to the Editor

From: Ronald A. Gardner, user advisor, User Services Division, OCLC. — I would like to make a correction to a statement in an article in *Library Resources & Technical Services*, Vol. 25 No. 3, July/September 1981. The incorrect statement appears in "The Year's Work in Serials: 1980" by Dorothy Glasby, page 316. The statement reads, "Although symbols of holding libraries would be input to OCLC, the work would not be done by way of OCLC's union-listing capability (not yet available at this writing) but would be carried in a special field in each bibliographic record."

OCLC installed the Union Listing capability in November, 1980, and it has been available since that time for any union list group that wants to use this latest Serials Control enhancement.

From: Helen H. Spalding, head of technical services, University Libraries, University of Missouri. [Abridged] — My name is misspelled in the "Index to Library Resources & Technical Services," appearing in the October/December 1981 issue of *Library Resources & Technical Services*. On the article itself in 24:352-60, my name is spelled correctly, Helen H. Spalding. The index misspells my last name so that it appears as "Spaulding."...

[The compiler of the index and the editor regret the error.]

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.
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