The July 1975 issue of Drexel Library Quarterly is dedicated to current issues in serials librarianship. Two contributors present conflicting opinions on means of bibliographic control, specifically main entries and the International Standard Bibliographic Description (Serials) (ISBD(S)). International issues are discussed, as are major national activities in the National Serials Data Program (NSDP) and the Conversion of Serials (CONSER) project. Other articles deal with costs and budgets, the education of serials librarians, and ways in which librarians may influence the form of publication of materials. (LS)
Current Issues in Serials Librarianship

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Introduction

Any attempt to identify the important current issues in the field of serials librarianship is a Herculean task. Dozens of potential issues and ideas were considered. How do you limit the field of serials — do you include secondary and tertiary serials, or limit the topic to the primary literature? How about binding problems, storage costs, new forms of serials, such as publications available only in microform? What about the copyright controversy? The options were either a nets serial on current issues in serials or some strict guidelines to focus the issue.

The title of this issue indicates the emphasis on current issues in serials librarianship. We have found that it is often difficult for working serials librarians to identify current sources of information directly related to their work. Topics which are both timely and which affect the working serials librarian were selected. We chose not to include historical survey articles, but rather to ask selected individuals to write on the most recent developments in areas of vital interest to the serials library community Wherever it was appropriate, we asked our contributors to emphasize the manner in which serials librarians can have an impact upon the issues under discussion.

The many acronyms and strings of letters appearing in the literature—CONSER, OCLC, NSDP, ISBD(S), ISSN, CODEN—are difficult enough to identify Keeping up with the many projects and activities is even harder In this issue, we have attempted to identify the state-of-the-art in serials librarianship We have not overlooked the controversial issue of copyright, but we felt it was inappropriate to include an article on this topic pending a definitive Supreme Court decision or Congressional action.

Bibliographic control is one major area of concern. Joseph H. Howard and C Sumner Spalding have kindly allowed us to reprint their articles which appeared in the LC Information Bulletin for November 22, 1974. Mr. Spalding’s article was originally prepared for International Cataloguing. These two articles represent conflicting opinions on the choice of entry for serials.
Introduction

Joseph W. Price's article discusses the important international implications of the choice of entry issue and expands the discussion to the broader area of international cooperation in serials.

There are three major national activities in the field of serials. The editors had hoped to include an article on MARC Serials by Elaine Woods. Unfortunately, due to illness, this article was not available. NSDR and CONSER are described in a series of three articles.

No issue on serials librarianship would be complete without a discussion of costs. We decided to ask a representative from a jobber to provide a view from the private sector. F. F. Clasquin's article focuses on costs of serials for use in budget projections.

It is appropriate that this issue of the Drexel Library Quarterly begins with an article focusing on the serials librarian as activist and ends with one recommending ways to improve the education and training of serials librarians. We are interested in providing a collection of information to encourage well-informed information specialists to take a more active role in exercising true bibliographic control over serials.

Toni Carbo, Bearman
Benita M. Weber
The title of this article is intended to have mild shock value. One does not expect serials librarians (or any other librarians, for that matter) to be activists. Librarians are the mild, earnest types. We protest the stereotypes, yet we tend to hold them ourselves. It is more than merely a matter of librarians' personality.

In the delivery of information from author to consumer, there are relatively active and passive roles. By active and passive, I am not referring to the degree of difficulty or expertise or prestige identified with the roles, but the degree of initiative used and control over the information network exercised. Of all the roles, the librarians' and the indexer's are least active. Authors and editors and publishers create, shape and produce ideas in information packages. Librarians and indexers describe, classify, locate and give access to the information. The reader, the consumer of the information, is more aggressive. The reader comes looking for the information.

Indexers, particularly in the sciences, have developed a form of index which has made profound changes in the packaging of information. The Key-Word-In-Context index first required authors to write their titles in such a way that they would be self-indexing, using the key terms necessary as descriptors.

Can or should librarians change their role to have a similar effect on the form of publication? Most decidedly, yes. We have already accomplished much with CIP, ISBN's, and ISSN's. But much remains to be done, particularly with serials. Publications must be designed and produced with bibliographic requirements in mind. It is not sufficient to note, after much research, that there are two New Left Notes, both published by SDS, one in Boston and the other in Chicago. We need to do all that is possible to avoid the appearance of such bibliographic headaches in the first place. Rather than describe their quirks, we need to make sure they are not quirky. On behalf of bibliographic control, a value important to authors, publishers, and readers (even if they have never heard of it), librarians have the duty to be activists.
Traditionally and realistically, librarians have reacted to bibliographic control problems by improving their policies and procedures. The constituents we hope to serve would be amazed at the metaphysical arguments librarians have over subtleties of the cataloging rules on their behalf. It scarcely occurs to us to seek to solve bibliographic problems by attacking their source in the production of library materials.

Has it ever occurred to anyone that, if the cataloging rules are to work, the publishers must know them almost as well as librarians? How many publishers know that the official title, according to library cataloging rules, is not the cover title, but the title page title or masthead? Common sense? Not necessarily to a publisher trying to sell his product with a classy cover. How many publishers realize that, by the Anglo-American Cataloging Rules, a title change ceases an old publication and begins anew one, even if the volume numbering continues? That news would surprise many of our publishing friends.

Publishers do care about the records we create. They do know that the library network creates the permanent, worldwide historical record which makes possible scholarly acceptance and guarantees bibliographic access. But we have not been aggressive enough in telling them of the importance of standardization. We need to educate them to and demand of them publishing standards. Despite the stereotypes, recent library history demonstrates that librarians are full of salt and vinegar. Can librarians forget the upheavals in ALA only two or three years ago, the fine publications Sipapu, Synergy, Booklegger, Revolting Librarians, The Emergency Librarian, SRRT Newsletter, Librarians for Social Change, or CALL—Current Awareness, Library Literature, experiments such as High John, the growth of library unions, the growing women's consciousness-raising, that incredibly energetic whirlwind, rumored to be only one man, named Sanford Berman, or the courageous stands made daily by librarians for intellectual freedom? We can be activists.

**Nonstandard Serials Are Too Expensive**

Many librarians, although I cannot believe serials librarians are among them, may not be aware they have anything to be activist about. They may be so immersed in their procedures that they are not aware of the enormous difficulty and expense nonstandard serials publication practices cause libraries and library users.
Lengthy, interesting theoretical debates can be held whether latest entry or successive entry cataloging is best for serials that change titles. Most librarians would probably agree that the user is better served by successive entry, while most also regret the loss of tidiness of the historical record in one place. But theory is probably not the reason that the Library of Congress and many other libraries have adopted successive entry. It was adopted because it was a less time-consuming way to catalog and the flood of title changes could not be handled the old way.

How many serial title changes are there? No one even knows how many serials are being published.* Of course, one of the reasons it is so difficult to determine such a figure is the fact that serials are always changing titles.

My experience at Michigan State University indicates that a minimum of 2 percent of an active list of serials will change their titles each year. (Calculating it another way, as many as 5 percent a year change titles. If you look at any list of serials which are 10 years old or older, half will have changed their titles sometime in the past ten years. This could indicate that serials which change their titles have a lower mortality rate than serials which do not.)

At Michigan State University, it cost us an estimated $14 to identify, catalog, and change the receiving records, public catalog, serials holding list, and branch library records for each title change. About one title in ten changes without our recognizing it. This causes us to place duplicate orders, claim unnecessarily, discard wanted material, and of course keeps serials which we are purchasing for the use of students and faculty off the shelf.

Even after we have finished the expensive job of changing a title, there is a permanent interruption in the bibliographic continuity of the publication. Any large union list of serials is full of confusing cross references or “continued by” and “superseded by” references. The expense of providing bibliographic control at the national and international level is uncounted, but the cost of keeping up with serial title changes is very high. The expense to scholars is also very great and also incalculable.

*I estimate 200,000 serials are being published annually in the U.S. alone, of which only 100,000 are cataloged in libraries. Guesswork, yes, but based on the number of entries in New Serial Titles, and on the certain knowledge that every company personnel office, union, church, and local organization in the country publishes a newsletter and perhaps an annual directory.
The Serials Librarian as Activist

Numbering problems do not usually cause as much confusion because library staff at least can identify the publication. But needless trouble and correspondence is caused individually to subscribers, library binding departments, claimers, missing issue replacers and users when publishers arbitrarily skip numbers or forgetfully repeat them.

Many of the "nonstandard" problems with serials are associated with lack of expertise. A designer plays with the initials of a periodical and places an artful monogram on the title page—not knowing that, by library cataloging rules, she or he is changing the title. A printer, copying the format of the previous issue, mistakenly forgets to change the date or numbering.

Unlike books, which require a large capital investment, most serials are published by amateurs with more knowledge of the content matter than of the art of publishing. Even small presses make their mistakes in publishing books one at a time. But small publishers of serials have to correct themselves as they learn.

Many of the hundreds of thousands of serial publishers have to "reinvent the wheel" as they encounter problems. Their ingenious solutions to bibliographic problems leave librarians breathless. The publishers of Hawaii, University, Cooperative Extension Service, Miscellaneous Publication, and Hawaii, Agricultural Experiment Station, Miscellaneous Publication, are one and the same. It makes good sense to this publisher to number these bulletins consecutively as one series, not two. Thus the Cooperative Extension Service has numbers 91-95 and 97 but number 96 is the Agricultural Experiment Station. There is no way the cataloging rules of any library can anticipate and allow for this simple solution to a bibliographic problem. Nor is there any way, short of constant correspondence, that an acquisitions librarian can feel confident in his library's record of holdings.

"Many will resent my lumping ordinary serial title changes with other bad examples as "nonstandard." There are many "good" reasons for serial title changes to avoiding confusion of one publication with another with the identical or a similar title, the changing terminology of a discipline, changed scope, or even the struggle for survival. As a serials librarian, I tend to be hardhearted. The first problem should have been avoided from the start, the second and third are based on the fallacy that the title of a serial must exactly describe all its contents, and as for the last, I can only quote Scrooge. If only a title change can save them from dying, then "they had better die and decrease the surplus population."
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One series published at the Michigan State University International Studies Center turned out to be the invention of the departmental secretary in charge of inventory control. The "series" turned out to be volume 1 only of four different series and volumes 1 and 2 of a fifth. There is no doubt in my mind that the secretary's numbering was much more efficient than the learned doctors' who created a new series title for nearly every new publication. There is also no question that her series title and numbering did not appear on the publications and therefore did not officially exist.

Another ingenious solution is the "interim" title to ease the reader gently into a title change. What does a publisher know about libraries having to make two title changes in their records? What can we do with the publisher who is searching desperately for the formula for success and tries five different titles in three years? He welcomes subscriptions, but he really thinks of each issue as a "book" to be sold on its own ability to grab buyers and advertisers. (Buckinghamshire and Berkshire Countryside.)

One scientific publisher changes his title apparently to be certain that it reflects all past title elements and all current professional interests of his readers (Corrective and Social Psychiatry and Journal of Behavior Technology, Method, and Therapy.) Another uses artistic magic to slide his publication gradually from one title to another. When did the old title leave off and the new title begin? (Nursing Care) Other publishers create a joint issue of two different publications, with dual issue numbering and paging. (The Ecologist, v. 4 no. 9, November 1974, and Resurgence, v. 5, no. 5, November-December 1974.)

Hundreds of examples could be given but these will suffice. Non-standard serial publishing practices are bibliographically confusing and expensive to librarians and readers. Our efforts to make clear, understandable, trustworthy bibliographic records for these publications are frustrated by the fact that the publications are bibliographically reeling from one publishing decision to the next.

How Do Librarians Tell Them?

If it is impossible, and it is, to make sound cataloging decisions about publications (information packages) because of the contrariness of the packages of variations in their design, how will the producers of the packages know that unless librarians tell them? But how do we tell them? Why would publishers be ready to listen to us on the subject of publishing?
The simplest of all methods of affecting publication is to write a letter to the editor or publisher. Disarmingly simple, it is nevertheless surprisingly effective for two reasons. Serial publishers do not often get letters from knowledgeable people about their publications, except for responses to articles. The letter is therefore unexpected and often read with an open mind. Several letters from different persons begin to have a great impact. The problem is that most publishers do not know of the existence of bibliographical standards and the havoc wrought without their guidance, and therefore, the information the letter writer can give is useful to its reader and can lead to the intended change.

Thoughtful letters which do not descend to name-calling accomplish more than one might expect, but not enough. We also need to devise strategies for reaching the decision-makers before the decisions are made. To do this, we will have to work together.

Publishers use consultants. (See the listing in Literary Market Place.) Why don't we create a board of librarians who have unquestionable knowledge about the problems of bibliographic control for serial publications and who will agree to consult with publishers for reasonable fees? Perhaps a grant could start the program and provide publicity. Thereafter a percent of consultations fees could be used for advertising.

Publishers have as many meetings as librarians. Could we not suggest to various publishing associations that a session on the requirements of bibliographic control should be a part of their next conference, and that the people to lead such a session are available?

Could we not promote public relations between librarians and publishers concerning the need for bibliographic standards? Libraries are buyers. They can and should inform their suppliers of their needs. We make specifications for all equipment purchases. Why not specify bibliographic standards when we order and when we write about orders for library materials?

We could create a manual for serial publishers, complete with hints on financing, promoting, writing, editing, layout, art work, mailing, keeping records, accounting, and bibliographic requirements. Many publishers and editors find themselves responsible for a publication without much knowledge of these things. (In the last five years I have been asked for advice from ten different people, all faculty members, who by virtue of an office in an association...
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unexpectedly became in charge of a serial.) Too often the people who give them advice are not knowledgeable about the matters that concern us. They will not pay for consultants, but they would pay for a good serial publisher's manual.

Who is the “we” in these paragraphs? It could be any existing association of librarians, ALA, SLA, CLA, ASIS, or whoever; or it could be an association of librarians who come together for this purpose. It would be better to work with existing library groups, but if that is not possible, the “we” could be the group that forms to accomplish the goal.

We can also support, encourage and participate in standards activities. The American Library Association’s Bookdealer-Library Relations Committee (in the Acquisitions Section of the Resources and Technical Services Division) has written two standards which are published and available from the American Library Association Guidelines for Publishers, Agents, and Librarians in Handling Orders for In-print Monographic Publications. These excellent standards deserve wide dissemination. They require high standards of librarians as well as publishers and agents, and, if followed, would avoid many of the business problems which often sour our relationships.

The American National Standards Institute is the best hope for creating strong, widely recognized standards. Its Z39 Committee on Library Work, Documentation, and Related Publishing Practices, chaired by Jerrold Orne of the University of North Carolina, is composed of representatives of associations of publishers, librarians, and learned societies, and has produced about twenty standards. The most pertinent one for serial publishing is Z39.1-1967. Periodicals: Format and Arrangement, which is now being revised by a subcommittee chaired by Edward J. Huth of the American College of Physicians in Philadelphia. Now, while the writing is in process, is the time for serials activists to make our concerns felt. We should be acquainted with existing standards and make suggestions for their improvement.

If standards are good, we should make sure our libraries adopt them and follow them and insist that our suppliers follow them.

One such group which has formed I know about because I am in it. Librarians United to Fight Costly, Silly, Unnecessary Serial Title Changes. The serial publication associated with it is Title Varies, which exists to discuss serial problems and the kinds of solutions mentioned in this article.
Working through standards will be, in the long run, our, most effective way of producing serial publications capable of being bibliographically controlled.

Every new and original idea about serials work that has excited me in the past five years has turned out, upon study, to be only a rediscovered or repeated idea. Every complaint, every proposal, every angry author was anticipated in the literature by an earlier one. Likewise, I am sure nothing original will be found in this article. Yet, one key idea, if not new, has not been said enough. Librarians can, and indeed must, influence the form of publication of library materials. It is too late to be concerned about bibliographic control after publication. If it is unrealistic for us to believe we can standardize all publishing, it is unprofessional for us not to try.

Note,

1 Charles Dickens, A Christmas Carol" in Five Christmas Novels (New York Heritage Press, 1939), p 22
The nature of serials is such that, in both the ALA Cataloging Rules for Author and Titles Entries and the Anglo-American Cataloging Rules (AACR), there are special rules for choice of entry for serials that differ from the rules for monographs. While the Statement of Principles Adopted at the International Conference on Cataloging Principles (Paris Principles) leaves much room for interpretation and controversy regarding serials, it also provides for special rules for choice of entry. It mentions serials three times. The first statement says that main entry should be under corporate body for those "serials whose titles consist of a generic term (Bulletin, Transactions, etc.) preceded or followed by the name of a corporate body, and which include some account of the activities of the body." The second statement concerning serials requires main entry under title for those "works (including serials and periodicals) known primarily or conventionally by title rather than by the name of the author." The third statement, also referring to title main entry, but not addressing itself specifically to choice of entry says, "When a serial publication is issued successively under different titles, a main entry should be made under each title for the series of issues bearing that title, with indication of at least the immediately preceding and succeeding titles. For each such series of issues, an added entry may be made under one selected title. If, however, the variations in title are only slight, the most frequently used form may be adopted as a uniform heading for all issues."

Various cataloging codes from around the world have interpreted this minimal guidance in different ways and some have chosen to ignore it, either totally or in part. The North American text of AACR departed from the principles because the committee held that the inclusion in the title of a serial of the name or part of the name of the issuing corporate body is too powerful a criterion to be nullified when, in unusual cases, no account of the activities of the body is included in the publication. It also held that "known primarily or conventionally by title is too vague a criterion."
Cooperation and standardization on both a national and international scale are becoming increasingly more imperative in the world of rising costs and with the continued expansion of the body of knowledge, thereby making bibliographic control more expensive, difficult, and complicated. Serials are no exception.

Recent activity in the philosophical and procedural approaches to serials cataloging and processing is evident in the appearance of new acronyms and abbreviations such as ISSN (International Standard Serial Number), ISDS (International Serials Data System), and ISBD(S) (International Standard Bibliographic Description for Serials).

All are directly or indirectly concerned with cataloging and, to a varying extent, all differ from our national standards and practices, and sometimes they differ with each other. In an attempt to cooperate, simplify, and standardize on an international level, many people have been involved in efforts to resolve these differences. Some of these efforts have been successful but many are still pending. The question of "entry" for serials remains a major problem.

Recording of the Title

Only the ISBD(S) and the Guidelines for ISDS are directly concerned with rules for cataloging. Since the ISBD(S) concern is solely with the rules for "description," it is discussed here only as it defines what is meant by "title." It is important to clarify the meaning of title because the recording of the title relates directly to the choice of entry.

The ISBD(S) requires a "distinctive title" but does not define distinctive title as American librarians have defined it in the past. The ISBD(S) distinctive title is the title as it appears on the piece and, in the case of a generic term, the term plus the name of the issuing body (also as it appears on the piece) preceded by a space-hyphen-space. Another way of looking at it is that there will no longer be generic titles, rather there will be only generic terms followed by an issuing body—thereby making the title distinctive. For example, "Journal - American Medical Association."

The IFLA Working Group that developed the ISBD(S) sought to achieve compatibility with the Guidelines for ISDS. Thus, in most
Main Entry for Serials

cases, the distinctive title of ISBD(S) is the same as the key title of ISDS. For those serials which have identical or common titles, however, ISDS adds qualifying elements to the key title whereas ISBD(S) generally includes the qualifying elements in the imprint area. While there are other conflicts between Guidelines for ISDS and ISBD(S), the appropriate committees are committed to their resolution.

Changes have been made in AACR to make the rules compatible with the ISBD(S). With the dropping of rule 162B (as announced in Cataloging Service, Bulletin 108, April 1974), the title is no longer truncated as it was in the past. For example, AACR 162B allowed the cataloger to truncate Journal of the American Medical Association to Journal because the entry was the American Medical Association. With the disappearance of 162B, the title is recorded in full while the entry remains the same. Another major hurdle has been resolved between ISBD(S) and AACR (announced in Cataloging Service, Bulletin 109, May 1974) since AACR now requires that the author statement be added to titles which consist solely of generic terms. The two elements are separated by a space-hyphen-space.

With these two changes, the ISBD(S) and AACR are in basic agreement on how to record the title. The ISBD(S) has nothing to do with rules for choice of entry, however, the Guidelines for ISDS are concerned with entry and require the key title approach as the main entry for serial publications, thereby coming immediately into conflict with the U.S. standard, AACR.

Choice of Entry

The difference in entry between AACR and the Guidelines for ISDS is a major problem when it becomes involved with changes in serials because ISSN's are assigned on the basis of title (rather than bibliographic entry) and a new ISSN is assigned only to a new title, not to a new entry which, under AACR, may be made for either change in issuing body and/or title.

For example, a serial entitled Estimates of Employees by Province and Industry was entered, following AACR, under "Canada. Bureau of Statistics." The Guidelines for ISDS require that the entry be under the title and that the ISSN be assigned to the title. When the corporate body changed its name, a new AACR entry was required under "Canada. Statistics Canada. Monthly Employment,"
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Payrolls, and Labour Income Section. Since the title did not change, there would be no new entry nor ISSN under the Guidelines for ISDS—only an addition to the existing record to reflect the changed name of the corporate body.

There are at least two alternatives that would solve this problem. One would be to make the ISBD(S) distinctive title the entry element for all serials and make added entries for any necessary issuing bodies. The other alternative would be to enter serials that consist of generic terms plus the issuing body under corporate body and enter all other serials under title with an added entry for any necessary issuing body. Drafts of a revision of AACR rule 6 reflecting these alternatives follow.

Alternative 1
(6) Serials

Preliminary note. This rule for serials (including numbered monographic series) applies also to entries for unnumbered monographic series and to series added entries (cf. 33N) made for monographs in a series (whether numbered or not).

(A) Enter a serial under its title.

If an added entry is required for a serial, and if the title of the serial is identical with that of another serial, add in parentheses the city of publication. If this addition is insufficient, add also the years of publication.

For serials issued by or under the authority of a corporate body, make an added entry for the corporate body.

For serials by a personal author, make an added entry for the personal author.

(B) If the title of a serial changes, make a separate entry for the issues appearing after the change. If, however, the change is of a very minor character, it is simply noted on the existing entry (see 167K).

If the corporate body accorded an added entry for a serial changes or undergoes a change of name, make an added entry also under the new body or the new name of the body.

If the personal author accorded an added entry for serial changes, make an added entry also under the new personal author.

Alternative 2
(6) Serials

Preliminary note. This rule for serials (including numbered monographic series) applies also to entries for unnumbered monographic series and to series added entries (cf. 33N) made for monographs in a series (whether numbered or not).

(A) Enter a serial under its title.

If an added entry is required for a serial, and if the title of the serial is identical with that of another serial, add in parentheses the city of publication. If this addition is insufficient, add also the years of publication.

For serials issued by or under the authority of a corporate body, make an added entry for the corporate body.

For serials by a personal author, make an added entry for the personal author.
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personal author, make an added entry for the personal author.

Exception:

(1) If the title of a serial as it appears on the piece consists solely of
generic term, enter under issuing body if there is one.

(2) If the title of a serial as it appears on the piece begins with a
generic term followed only by the name of the issuing body
(initialisms and acronyms are not to be considered names of
bodies), enter under issuing body named in the title.

(B) If the title of a serial changes, make a separate entry for the issues
appearing after the change following the specifications for entry
as given in 6A. If, however, the change is of a very minor character,
it is simply noted on the existing entry (see 167K).

If the corporate body accorded an added entry for a serial changes
or undergoes a change of name, make an added entry also under
the new body or the new name of the body.

If the personal author accorded an added entry for a serial
changes, make an added entry also under the new personal au-

Under both alternatives, as well as the existing rule, a solid definition
of "generic term" is needed so that catalogers can come
closer to agreement of both choice of entry and in recording of the
title. Generic term is not defined either in AACR or the ALA Glossary of Library Terms, and catalogers have many problems. Are
single subject word titles such as "History," "Science," "Economics" generic? Are "Science Newsletter," "Research and Development Report," or "Bibliographical Series" generic? Are they
perhaps common titles instead? Opinions differ widely.

For the purpose of discussion, the following guidelines, based on
unpublished ISDS guidelines which have been adopted by all ISDS
centers, are given:

1 ISDS definition of generic term. "one which indicates the kind
and/or periodicity of a publication"

Examples: Annual conference proceedings, Annual report, Annual
reports, Budget in brief, Bulletin, Circular, Journal, Membership
directory, Occasional newsletter, Official report, Pamphlet, Pre-
liminary report, Proceedings of the conference, Program, Record,
Research paper, Review, Special report, Transactions

2 Titles which contain (or consist of) terms indicating subject con-
tent or coverage are not to be considered generic.

Examples: Anthropological reports, Seismological bulletin, Astron-
yomy, Behavioral science series, Chemical bulletin, Clinical
science, Science bulletin, Medical series bulletin
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3 Titles which include words other than those indicating periodicity or kind of publication are generally not to be considered generic.

Examples: Average monthly weather outlook, External trade statistics, Employment statistics, Nationalities papers, Staff papers series, Services and organization guide, Summary of general legislation, Technical services program, Training and methods series, Tutorial lecture series, State salary survey

4 Titles which contain (or consist of) acronyms or initialisms are not to be considered generic.

Examples: B E A staff paper, B I S report, Research report ADM, Bulletin GT

5 In general, titles consisting of more than five words (exclusive of "empty words") are not to be considered generic.

Examples: Directory of faculty, professional and administrative staff, and students, Appropriation statements by departments and agencies, All funds, Annual descriptive report of program activities for vocational education, Annual report National resources and recreation agencies

6 When there is doubt that a term is generic, it will be considered that it is.

Solving the problem of entry is, however, not only a problem on the international scale, but also a major problem on the national and local levels.

In any cooperative effort, whether it be international, such as ISDS and CONSER (CONversion of SERials), or national, or local, it seems to me to be imperative that the rules for choice of entry be such that they can be interpreted in the same way by everyone. Time could be better spent in new cataloging rather than in the now prevalent necessity of recataloging to resolve differences of opinion concerning choice of entry. This is necessary because the existing rules are such that, in a sizable number of cases, differing choices for entry can be made by different catalogers for the same title depending on differences in interpretation, a misunderstanding of the rules, or what issues are in hand at the time of cataloging. Let me illustrate
Main Entry for Serials

If a cataloger is working on *External Trade of Liberia: Exports*, issued by the Department of Planning and Economic Affairs of Liberia, he has several decisions to make. If he does not know the frequency of the publication he may decide that it cannot be a yearbook and does not seem to fit the definition of periodical as given in the glossary of AACR. He makes his entry under issuing body. A second cataloger could decide that the publication is indeed, a periodical, so his entry is under title. A third cataloger, working perhaps from different or additional issues of the same publication, finds information that the frequency is annual. He decides that he has a yearbook in the terms of the definition in the *ALA Glossary of Library Terms* and his entry, too, is under title. A fourth cataloger, knowing the publication is annual, may feel that he cannot consider the publication a yearbook because as footnote 8 to AACR 6 says that “the term ‘yearbook’ is to be understood to exclude a work the content of which is necessarily the expression of the corporate thought or activity of the body,” and so he uses the issuing body as his main entry.

None of these catalogers is clearly wrong, but they wind up with two different choices of entries and four rationalizations for the choices. It seems obvious that choice of entry should not depend on data elements which may not be apparent from the piece in hand such as frequency, nor should choice of entry depend on the cataloger’s being able to identify a serial as a member of classes of publications which are impossible to define precisely, such as periodical or yearbook.

Another example concerns catalog versus bibliography. It had never occurred to the serials catalogers at the Library of Congress that a distinction needed to be made between the two until it was brought to their attention that the *ALA Glossary of Library Terms* limits the use of bibliography to “a list of books, maps, etc., differing from a catalog in not being necessarily a list of materials in a collection, a library, or a group of libraries.” Under this definition *New Serial Titles* and the *National Union Catalog* should be entered under author as required under AACR 6B2 as “any other serial.” Is this distinction necessary? How many libraries have made the same mistake as the Library of Congress?

Legal serials, conferences publications cataloged as serials, and other special types of serial publications, present another problem in compatibility between libraries. Nowhere in AACR is it stated that any rule for entry other than AACR 6 is to be used for serials.
Main Entry for Serials

Therefore, libraries following AACR 6 may be at variance with the Library of Congress practice of using AACR 20-26 for many legal serials, or other rules, for other special types of serials.

It may be argued that a corporate body main entry for some serials is necessary so that serial entries will "conform" to entries for monographs. AACR 6, however, does not allow serials to be entered in a way that will match the entries for monographs as detailed in the other rules. For example, bibliographies and indexes which are monographs are usually entered under the compiler, as serials, they are usually entered under title. We have been able to live with this inconsistency and other similar ones, and therefore it should not be any harder to abandon the principle of entry under authorship for serials entirely and enter all of them under title than to live with the inconsistencies perpetuated by the present rules.

A thorough discussion of the title main entry concept can be found in M. Nabil Hamdy's *The Concept of Main Entry as Represented in the Anglo-American Cataloging Rules: A Critical Appraisal with Some Suggestions Author Main Entry vs. Title Main Entry.*

The foregoing examples illustrate only some of the situations in which it is impossible to achieve compatibility in choice of entry from cataloger to cataloger. They also serve to show that the existing rules are impracticable and impossible to apply uniformly, thereby requiring expensive editorial work by a single authority in any cooperative effort in order to reconcile the differences between varying choices of entry.

Why should catalogers be required to split hairs in regard to interpretations of rules and definitions? How can an accessioner who is working with a check-in file based on AACR be expected to deal with these meaningless variations in either recording an issue of a serial or setting up a preliminary check-in entry which will in many cases be overturned by the cataloger who is also using AACR? Do patrons understand the rules? Do reference librarians? Do all catalogers even understand? I submit that they do not. It is my personal opinion that the rules, which are intended to recognize the importance of authorship by affording it the main entry, are in practice and in a sizeable number of instances, not achieving this end. What is wrong with recognizing the importance of authorship by rewarding it with an added entry? The patron is served.
Main Entry for Serials

Notes


2. Ibid., p. 101

3. Ibid., pp. 115-116

4. AACR p. 3

5. The ISBD(S) will be used as the basis for the revision of Chapter 7 of the Anglo-American Cataloging Rules

6. Exclusive of words indicating grammatical linkage—for example, "of the", "de la", and "des"
The International Meeting of Cataloguing Experts, convened in Copenhagen in 1969 under the auspices of the IFLA Committee on Uniform Cataloguing Rules (later Committee on Cataloguing), set in motion the first major development in continuation of the success achieved by the Paris International Conference on Cataloguing Principles (1961) in the matter of the principles and general rules for entry and heading. Taking under consideration the study of “Bibliographical Data in National Bibliography Entries” prepared by Michael Gorman, the experts of the Copenhagen meeting set up a working group, with Jack Wells as chairman, charged with drafting an international standard bibliographic description for monographic publications. There was common agreement that the objective was the development of specifications for the necessary data elements, their order of presentation, and the punctuation to delimit them. These specifications should be designed to satisfy all the needs of national bibliographies, and, with whatever judicious trimming might be desirable, the needs of the libraries of the entire world. It was further agreed that these bibliographic descriptions were to be made quite independently of the heading under which they might appear in listings. The working group succeeded in its task and brought forth its provisional ISBD(M) in 1971, the first standard edition was published earlier this year. The success of this standard is manifested by the continuing increase in the number of countries that have adopted it.

At the Liverpool meeting of IFLA in 1971, a joint working group of the Committees on Cataloguing and on Serial Publications was set up to draw up an International Standard Bibliographic Description for Serials, taking the ISBD(M) as a model as far as practicable. As might be expected, the special problems presented by serial publications made the task of developing an ISBD(S) a difficult assignment which the joint working group tackled with great energy and
devotion The successive drafts were prepared by the Chairwoman and the Secretary, Mlle M.-L. Bossiaut and Mlle M. Pelletier, respectively.

Probably no data element presented such a severe problem as the title. The seemingly countless "Mitteilungen," "Mémoires," "Proceedings," "Bulletins," "Trudy's," and the like seemed to demand some useful and standardized way to be particularized. A solution to this problem was found in the adoption of a device which consisted of marrying the author statement to the generic title proper with a wedding ring consisting of a space-hyphen-space and dubbing the happy couple the "distinctive title."

With the completion of international standards for the bibliographic description of both monographs and serials and with their adoption by national bibliographies and national cataloging agencies, the ultimate goal of one-time creation of bibliographic descriptions, which could then be distributed, exchanged, and utilized in any country of the world, should be achieved. True, there is still the intractable problem of the languages and writing systems used by the producing agencies in the terms of physical description and in the bibliographical notes but this is really of secondary importance. The achievement of these new standards is the ultimate that can be hoped for within the limitations of the world as it is or is likely to be in the foreseeable future.

Somewhat offsetting the caveat on the language and writing system problem mentioned above is the clarification the new standard punctuation brings to descriptions in languages that are foreign to users of the descriptions. Just as it makes these descriptions more understandable to human beings, the punctuation can also make the various bibliographic areas and elements of the areas understandable (that is, codable) to the obedient computer if it has been provided with the needed sophisticated input programs. This, in turn, will mean a great reduction in otherwise essential human effort in the process of converting descriptions to machine-readable form. All of this is totally new. We never had it so good!

By completely separating the bibliographic description from the heading under which it might appear in a catalog, the descriptions became entirely self-sufficient as such. Heretofore, this had commonly not been the case because it was not thought always to be necessary to repeat in the description the name of the author given in the heading. This was particularly true when there was no
explicit grammatical statement of authorship but only an implicit attribution at the head of the title.

This new self-sufficiency of bibliographic descriptions, particularly of serials, is now leading, ironically, to an attack on another IFLA standard, namely one of those embodied in the "Statement of Principles for entry and heading that were adopted by the International Conference on Cataloguing Principles in 1961 at Paris. The beginnings of this turn of events, which was perhaps not entirely unforeseeable, are to be found in the establishment of the International Serials Data System (ISDS) by UNISIST, a UNESCO/International Council of Scientific Unions program. The ISDS is a registry responsible for the assignment of international standard serial numbers to serial publications. Assignment is based on the key title, normally identical with the ISBD(S) distinctive title. Any change in the key title, other than in an article or preposition, warrants a new serial number. The ISDS registry of serials also includes a basic set of bibliographic data elements. Insofar as possible, the functions of the ISDS are decentralized by delegation to a network of national centers with responsibility for the serials of their own countries. Even at the national level, there is a need for reporting by various libraries to the national center in order that the coverage may be as complete as possible. In all of this work, corporate author is at least irrelevant and is sometimes inconvenient.

In addition, there is a strong movement in North America for a cooperative effort to build an on-line machine-readable data base of live serials as a means of reducing duplication of effort, advancing automated methods of control, and building a national record of holdings. Those involved in this effort have set up a project called CONSER (Conversion of Serials), and the coordinator of the project, Richard Anable, has recommended to his Advisory Group that the criterion for setting up a new record when a serial undergoes a change be that of change in key title. Under cataloging rules, the criterion for a new record would be not only that kind of change but also a change in the name of the corporate body under which the serial is entered. The occurrence of changes in the names of corporate bodies with the concomitant conflict between these different criteria for setting up a new record, is sufficiently frequent to have led to demands for a change of cataloging rules for serials to require entry under title in all cases.

Apparently this movement is not peculiar to North America. As far back as the Grenoble meeting of IFLA in 1973, the Committee on
Serials set in motion a "Study of the Function of Corporate Bodies in a Serials Catalogue" which is being coordinated by Maria Valentí. This study, in turn, is being coordinated with the Committee on Cataloguing, with the Committee of Official Publications, and with Eva Veronan who is engaged in an analysis of the function of headings for corporate bodies in cataloging.

The international cataloging standard for entry and heading is in the "Statement of Principles" adopted by the ICCP in Paris in 1961. Delegates to that conference were concerned not just with the cataloging of monographic publications, not just with cataloging of serial publications, but with the cataloging of both for display in a common catalog, in most cases governed by common principles and rules. Fundamental principles that were agreed to at this conference were 1) that cataloging requires a system of multiple entries, one of which is treated as the main entry and others of which are treated as secondary, 2) that the main entry should be the author when there is a personal author, and 3) that the main entry for works that represent the expression of collective activity of a corporate body should be the corporate body. Just as there is no principle covering monographs, as such, there is no principle covering serials, as such. Serials are mentioned twice. The first time is in a footnote to the principle setting forth the conditions of main entry under corporate body. The footnote specifies conditions for entering serials under a corporate body even when the body functions more as editor than as producer of the content, the controlling criterion here being the presence of the name of the body in the title of the serial. The other occurrence is in the principle covering entry under title. Here serials that are known primarily or conventionally by their titles are to be so entered (even if they are the products of corporate bodies).

What, then, is the impact of the demand for arbitrary entry of all serials under title on the IFLA Paris Principles? First, it proposes a rule of entry that is based on type of publication rather than on bibliographical conditions. This kind of a rule runs counter to the whole history of cataloging rule development in the last half of the 20th century. It runs counter to the fundamental principles laid out by Seymour Lubetzky as the guidelines for this historical development. Second, it introduces an element of irrationality into cataloging with the proposition that if a product of corporate activity is issued in monographic form, the body is to be considered responsible but if it is issued in serial form, it is, in effect, anonymous. The Library of Congress List of Subject Headings, for example, would
be entered under the heading for the Library because it is a mono-
graphic work but the Annual Report of the Librarian of Congress
would be entered under title. The corporate responsibility is the
same but the cataloging treatment would be different. The pro-
posal has the effect of completely undermining the theory of cor-
porate responsibility as justification for main entry—not just for
serials but for monographs as well.

It will be useful to examine some of the reasons that have led to the
proposed change in the cataloging of serials. We know that some
major bibliographies and union lists of serials are organized by
title, the World List of Scientific Periodicals and the Catalogue
collectif des périodiques of the Bibliothèque Nationale, for exam-
ple. We observe that the impetus for arbitrary entry of all serials
under title comes not from catalogers of general library materials
but from librarians whose responsibilities are focused on the bib-
liographical control of serials. The investigation of the role of
corporate bodies in the catalogs of serials is the project of the IFLA
Committee on Serials. The world control of serials by key title is the
responsibility of the International Serials Data System. The call for
change of cataloging rules in North America comes, by implica-
tion, from the Coordinator of the COONSER Project. Support for this
proposal comes from serials librarians and builders of machine-
readable data bases for serials.

Let us consider serials work in libraries for a moment. One striking
fact is the separateness of serials work from other library activities.
This results from the highly special nature of the serial publications
and the special requirements for processing them to bring them
under control and to make them accessible for use by readers.
Whereas a monograph is processed once and for all, a serial must
be processed again and again, issue after issue. The daily volume
of processing operations on serials units exceeds the operations
on monograph units many, many times over. A sorter, normally not
a professional librarian, must consider for each issue he handles:
1) would this be entered under a corporate body? 2) if so, what
would be the entry-word? The recorder will record the issue in his
share of the sort and for those issues for which he finds no record
will have to reconsider what other reasonable possibilities of entry
must be searched. Once entered in the record of serials, most of
the issues will have to be matched and stored with the accumula-
tion of previous issues of the serial until enough have been re-
ceived for binding. Again this will involve identifying the correct
alphabetical word-string under which the preceding issues of the
serial have been stored.
Many of those whose duty it is to supervise these operations feel that a substantial simplification would follow from recording and storing serials by their titles. With the issue in hand, what could be more straightforward than matching the title with the title in the record or the title under which the earlier issues are stored? This reasoning is persuasive, qualified only by the observation that relatively slight changes in the wording of titles can create insurmountable difficulties in matching whereas the same changes would be easily manageable if entry under the responsible corporate body were in effect.

Finally, I should call attention to the involvement of considerations of automation in this matter. The ISDS is an automated system. The Nationals Serials Data Program, as the American node of ISDS, reports serials and assigns their ISSN's by key title. The CONSER Project contemplates the eventual build-up of a national machine-readable data base for live serials. This project does not underestimate the importance of retrieval approach by responsible corporate body but sees no need for main entry under such bodies. Further, CONSER proposes that only a change in key title should trigger the creation of a new record whereas a change in name of corporate main entry, even when there is no change in key title, would require a new record under present cataloging rules.

How can this conflict in the principles of cataloging for the universal catalog, monographs, serials, and all sorts of non-book materials, and the needs of those whose universe consists solely of serials be resolved? The matter needs attention and debate by thoughtful librarians in order that the wisest course may be discerned and decided upon. The Library of Congress is urging this attention by the profession in North America. Thus, although my title is Assistant Director (Cataloging) of the Processing Department at the Library, the recommendations I shall make below are to be regarded as my personal view on this issue, not those of the Library, which, at this point in time, has not taken a position on the matter.

Of course, I shall side with the IFLA 1961 decision to accord main entry under corporate bodies for the publications resulting from their corporate activity, monographic or serial. I find the case for arbitrary entry under title to be essentially weak. If those who process incoming serial issues and those who store them can do their work better by using the title as the means of organizing the records and the stock of serial issues, they should do so. The
Present cataloging rule does not prevent this. Hence, the need for such a change is not an argument for changing the cataloging rule. It would not be amiss, however, to caution that whatever the advantages that will accrue from using title as the criterion for recording and storing, reference demands on the record and on the store may sometimes be very difficult to fill in the class of serials with generic titles such as "Bulletin," "Proceedings," and "Report" because the inquirer will not have the piece in hand but will be inquiring from a citation or else from memory and small errors or omissions may make the serial unfindable. Absolute accuracy will be a necessary condition for positive response from a single-entry record or a single-entry store of serials by their titles.

As for the situation in the machine mode, the question of main entry by title or main entry by responsible body is practically irrelevant. A positive response will occur whichever the approach. As for output, printout by title is possible whether or not main entry is by title. In some cases, however, the converse would not be true.

The only remaining difficulty is the need for making a new record under present rules when the corporate main entry heading changes, and the title does not. Under the proposed rule the existing entry would be updated and retained. Clearly rather more work is involved under the present rule. Another record will have to be accommodated in the computer store. There is, however, no problem in relating these records in the computer. So this is all the issue seems to hang on. Must we undermine a fundamental principle in our existing cataloging system because a certain class of change in serial publications could thereby be handled somewhat more simply? I think not.
Recent international developments in serials have revealed issues and accentuated areas where common agreement, if obtained, will facilitate international cooperation in serials identification, description and control. The purpose of this article is not so much to chronicle events in the development of international serials activities but to present the issues, to report on progress in cooperative resolution of problems and areas requiring international agreement and acceptance, and to discuss the prospects for near term advances in international cooperation in serials.

Issues

One of the enriching aspects of professional activity comes from an exchanging of different points of view. This is no less true for librarians who are involved with serials. Frequently such exchanges are frustrated by a lack of common agreement as to concepts and terms. Standardization becomes a prime requirement for identification and productive discussion of issues. A number of international organizations are working towards improved standardization and are thusly facilitating an expression of the more substantive over the terminological aspects of current issues in serials.

Choice of Entry

An important issue for all serials librarians is that of choice of entry for serials. This subject is discussed in greater depth in the articles in this issue written by Mr. Howard and Mr. Spalding. However, there are important international implications which should be mentioned. The Anglo-American Cataloguing Rules (AACR) allow for choice of entry to be title or issuing body, depending upon certain criteria, such as type of serial; frequency of issuance, and the generic/nongeneric characteristic of the title words (i.e., Journal, Bulletin, etc.). These criteria have often been criticized as being so vague that they are too often inconsistently applied. However, with the development of national authority files and with continuing widespread acceptance of Library of Con-
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When going beyond the Anglo-American community to a broader international arena, there is less acceptance of what constitutes an issuing body and what represents responsibility for authorship. There is little agreement across national borders on how names should be expressed, especially when institutions translate official names from other languages into the language or languages of their country. Problems like this have led groups like the International Serials Data System (ISDS) to promote the use of a consistently applied rule of always entering a serial under its title, with additional added entries for issuing bodies and variant forms of title as needed for access. This approach is not without its problems, of course, especially when generic word titles are involved and when one considers the single entry file. It is offered, however, as a solution to the problem of inconsistent application of complex rules and to the lack of international agreement on issuing bodies.

Choice of entry is under review in the United States by the Cataloging Code Revision Committee of the American Library Association, which is currently considering the pros and cons of changing AACR Rule 6, "choice of entry for serials."

Form of Entry

Given that the issue of choice of entry can be resolved, there is the matter of "form of entry" to be considered. "Form of entry" is the manner in which the data "chosen for entry" is expressed. This can range from a literal transcription of the data from the publication to an entry structured according to rules and practices which do not always require that the data used in the "construct" be obtainable from the item being cataloged. There are pros and cons for either extreme, as demonstrated in the Howard and Spalding articles. Serials, being of a temporal nature, compound the problem since there is no guarantee of constancy from issue to issue. In some international circles a solution has been suggested by support of literal transcription of entry information as it appears on the publication. This view contends with the problems of issue-to-issue variation by using broad guidelines to distinguish between "major" and "minor" variations. Minor variations result in variant forms of entry as added entries and major variations result in new records. While proponents of this view would have had a difficult time justifying the expense of preparing and filing the additional
records for manual files required by this approach, their case is made stronger by the development of cooperative consortia linked by commonly shared and supported computer-based data collection systems, such as the CONSER Project on the OCLC system. Such cooperative networks allow for resource sharing and low-cost product distribution on a scale which allows the small as well as the large library to benefit from the provision of multiple access points to bibliographic files.

**Bibliographic Description**

In bibliographic description, a lack of standardization of terms and concepts has been particularly problematic. The difficulties are accentuated in recent attempts at international standardization. The *International Standard Bibliographic Description for Serials (ISBD(S))*, drafted and released under the auspices of the International Federation of Library Associations (IFLA), is an attempt to introduce international standardization in descriptive cataloging of serials. Relying primarily on the consistent use of punctuation to "delimit" bibliographic elements, ISBD(S) seeks to group logically related information in such a way as to facilitate recognition of the various components of the description even by persons unfamiliar with the language used in cataloging. It is also hoped that the delimiting punctuation will allow for ease in converting bibliographic data into machine-readable form via mechanized text scanning techniques.

ISBD(S) is currently undergoing revision (a revision meeting is scheduled for October 1975 in Paris). An important aspect of this revision is reconciliation of some difficulties still existing between the first edition of ISBD(S) and the slightly older approach represented in the Guidelines for ISDS. Although these two documents shared some common parentage, their purposes, audiences and channels of review and acceptance have differed enough to allow continuance of a few dissimilarities.

Since the ISDS is a system, its current Guidelines are intended to be the first edition of a collection of specifications and instructions for those institutions participating in the system. As the number of participants increase and the levels of participation expand, the collective experience is to feed back and influence the further development of guidelines. The guidelines do not constitute an official standard—hence their review and acceptance is of a different channel than that followed by standards. However, they
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are based on an internationally ratified standard, ISO 3297. Documentation—International Standard Serial Numbering, which speaks only to the data elements comprising a bibliographic record and does not address implementation. The standard does, however, authorize the ISDS to set up a system to implement the standard and the goals it represents.

ISBD(S) is not an internationally ratified standard as yet. However, it is well on its way. It is anticipated that after revision and a period of time for reaction, the revised version will be submitted to the International Organization for Standardization (ISO) for consideration as a standard. It is important to note here that if ISBD(S) becomes an ISO standard it will not substitute for the rules of interpretation and implementation which constitute cataloging codes. In other words, it will not tell you what to choose for your main entry, but it will tell you where the author statement should be placed when printing or displaying the bibliographic description. In a sense then it will be similar to ISO 3297 in that it will defer to some other authority for implementation.

The details of ISBD(S) will not be presented in this article. Essentially the current edition of ISBD(S) defined six "areas," separated by the reserved punctuation "full stop, space, dash, space" (-). These areas are:
1. Title and statement of authorship area,
2. Imprint area,
3. Collation area,
4. Series area,
5. Notes area,

The North American position on ISBD(S) revision, drafted by U S. and Canadian representatives and transmitted to the ISBD(S) draft revisers at the Bibliotheque Nationale in Paris, proposes the addition of a seventh area called "Numerical/Chronological Extent Area." This proposed area consists of the issue or volume number and, or the date of the issue or volume by which pieces of a serial are identified.

It is anticipated that the final version of ISBD(S) will resolve remaining dissimilarities in approach between the Guidelines for ISDS and the ISBD(S). In the meantime, the ISDS Bulletin, a bimonthly publication available by subscription from the ISDS International Center (CIERS, 20 rue Echaumont, 75002-Paris), lists ISSN as:
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Assignments according to order of data elements and the punctuation prescribed in the current edition of ISBD(S).

Identifying Devices for Serials

There are currently two identifying devices in use in serials control systems, CODEN and ISSN. A CODEN is a five character code and an optional sixth character for machine checking which is intended to designate the title of a specific serial publication. CODEN was originally intended to be a mnemonic equivalent to the titles but as the scope of its application broadened, it was necessary to extend the originally conceived four characters to five and to allow for special sequences not mnemonically based. CODEN was proposed in 1953 by Dr. Charles Bishop and in 1961 the American Society for Testing and Materials (ASTM) assumed responsibility for its maintenance. In January 1975, the Chemical Abstracts Service of the American Chemical Society, a major CODEN user, accepted the responsibility and continues the assignment of CODEN for its own computerized serials control system and on request and payment of a one dollar service fee per title. The emphasis for CODEN assignment has been titles in science and technology.

The International Standard Serial Number (ISSN) was developed to be a more universal serial publication identifier and to correct what were considered to be problems in the CODEN concept. The ISSN is a seven digit code and a required eighth check character, which is assigned to a unique title (key title) of a serial publication. The first seven digits can range over the Arabic numerals 0 to 9. The check character, which is considered part of the number, also ranges 0 to 9, but it can have the value X whenever the modulus 11 (8-2 weights) based calculation results in a check digit value of 10. Unlike CODEN, the ISSN is an arbitrarily assigned number containing no mnemonic or intrinsic meaning. ISSN are assigned on a decentralized basis with each operating ISDS center using a different block of numbers allocated to them by the International Centre of the ISDS (Paris). The ISSN is printed or displayed as two groups of five characters separated by a hyphen.

Using an arbitrarily assigned number like the ISSN solves the problems of inconsistency of mnemonic meaning encountered by CODEN. Decentralized assignment of ISSN will facilitate a labor sharing which will permit the extension of identifying devices to disciplines other than science and technology, a prospect which could be overwhelming for centralized CODEN assignment.
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The use of the ISSN is not without its problems. These are discussed in the article on NSDP by Mary Sauer. Also, CODEN and ISSN should not be viewed as one against the other. It is expected that the two systems of identifying will coexist for some time. The ISSN is new and not fully deployed and institutional investments in CODEN use should not be threatened. Both data elements are defined for many machine-readable data collection efforts and systems. Concordance tables are being prepared so that, when enough ISSN exist, those systems currently using CODEN should find a switch over to the standard, the ISSN, a much easier task.

The International Serials Data System

The emergence of the International Serials Data System (ISDS) is illustrative of international cooperative activity in serials. It also demonstrates how components of the information services community, such as libraries and the abstracting and indexing services, can work together. The establishment of the ISDS marked the convergence of developmental activities in serials identification and control in the United States and in Europe.

In January 1968, Phase I of a National Serials Data Program (NSDP) was initiated at the Library of Congress. This event followed years of investigation sponsored by numerous organizations within the United States, including the National Science Foundation (NSF), the Committee on Scientific and Technical Information (COSATI) of the Federal Council for Science and Technology, the Council on Library Resources (CLR), the Association of Research Libraries (ARL), the Joint Committee on the Union List of Serials (JCKLS), committees within the American Library Association (ALA), and the three national libraries—the Library of Congress (LC), the National Agricultural Library (NAL), and the National Library of Medicine (NLM). Much of the early thinking in the U.S. is documented in the Creager and Sparks report, A Serials Data Program for Science in Technology. The article by Mary Sauer in this issue reports on the current status and activities of the NSDP.

In parallel with efforts in the United States towards the establishment of an NSDP, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council of Scientific Unions (ICSU) were collaborating on the planning of a world science information system called UNISIST. UNISIST is a non-acronym which represents both the initial feasibility study and the recommended future working groups and programs needed to
implement the system. In July 1968, UNISIST and the Abstracting Board (AB) of ICSU established a joint UNISIST/ICSU-AB Working Group on Bibliographic Descriptions. This group was asked "to identify, describe and recommend the form and content of the elements of bibliographic data." The Working Group acknowledged a need for an internationally acceptable coding system for serials and proposed a study which was subsequently carried out under contract to INSPEC, The Institution of Electrical Engineers, in London. The final report of this effort, Report on the Feasibility of an International Serials Data System, was published in April 1970, and was the topic of a September 1970 meeting of the UNISIST Central Committee which eventually led to the establishment of the ISDS.

While these organizational activities were occurring, work on the establishment of an internationally acceptable identifier for serials was progressing. In the U. S. the American National Standards Institute (ANSI) through its Committee on Standardization in the Field of Library Work, Documentation and Publishing Practices (ANSI Z39) organized, in May 1968, Subcommittee 20 for the purposes of developing a standard code for periodical and serial publications. In late 1970, ANSI approved the work of this subcommittee and in 1971, ANSI Z39.9-1971, American National Standard Identification Number for Serial Publications, became a U. S. national standard. At its June 1970 meeting in Oslo, Norway, the International Organization for Standardization (ISO) through its Technical Committee 46 Working Group 1 (TC 46/WG1) recommended international review of the then pending ANSI standard. After several meetings of the Working Group, ISO/TC 46 approved a draft international standard of the International Standard Serial Number (ISSN) at its meeting at The Hague in October 1972. The draft standard was circulated among member organizations for ratification and, following the 1974 meeting of ISO in Helsinki, Finland, the standard for ISSN, ISO 3297, was accorded full status as an internationally accepted standard.

ISO 3297 International Standard Serial Numbering (ISSN)

In some respects the ratification of ISO 3297 International Standard Serial Numbering (ISSN) was the event that brought these national and international activities to convergence. Unlike its earlier ratified U. S. counterpart, ANSI Z39.9-1971, upon which it was largely based, ISO 3297 goes a step further by identifying an authorizing organization responsible for its implementation—the International Serials Data System. In addition, it identifies data ele-
ments essential to a minimal standardized description for a serial publication, thus establishing a point of tangency with the developing International Standard Bibliographic Description for Serials, ISBD(S), which is likely to be considered in the future as a candidate for ratification as an ISO standard.

ISSN, when considering the ISO standard, means both the International Standard Serial Number as described above (see “Identifying Devices”), and the process of International Standard Serial Numbering. In the second meaning, a system (ISDS) is directed to specify at least a minimal description of a serial publication and apply the ISSN to it as a unique and unambiguous identifier. The standard requires the following data elements as essential to a minimal description:

1. Date of Entry (or most recent change)
2. Centre Code
3. ISSN
4. Key Title
5. Variant Title(s)
6. Start Date
7. Country of Publication
8. Alphabet of Original Title
9. Imprint

Additional data elements are specified as being of use in a standardized bibliographic description. These are:

10. CODEN
11. Publication Status
12. Type of Publication
13. End Date
14. Frequency
International Cooperation in Serials

The manner in which these data elements are obtained and coded is left to the ISDS to specify through its Guidelines for ISDS. For the most part, because of the definition of such elements as the key title (which is essentially the title as it appears on the piece, qualified as necessary by place, then date, in order to render it unique), examination of the publication or a surrogate is required. Furthermore, because authority for ISSN assignment is decentralized by country or region, ISDS centers requiring ISSN assignment for titles published outside of their borders must accompany such requests with a required issue or surrogate. It is important to restate that neither ISO 3297 nor the Guidelines for ISDS specify how the bibliographic data is to be printed or displayed. Instead ISDS defers to ISBD(S) thus establishing another link in the developing pattern of international cooperation in serials.

**Current Status of the ISDS Network**

As of the time of this writing, 11 centers, in addition to the International Centre (Paris), have been declared. These are:

- **National Serials Data Program**
  - Serial Record Division
  - Library of Congress

- **National Serials Data Centre**
  - British Library
International Cooperation in Serials

Australian National Centre for ISDS
National Library of Australia

Moscow Regional Centre for ISDS
International Centre for Scientific and Technical Information

Centre National ISDS
Bibliothèque Nationale

Japan National Centre
National Diet Library

ISDS/Canada
National Library of Canada

National Centre for ISDS
Federal Republic of Germany
Deutsche Bibliothek

Centro de documentación científica
Consejo nacional de investigaciones científicas y tecnica

National Centre for ISDS
Helsinki University Library

Yugoslavenski bibliografski institut
Institut bibliographique yougoslav

Five of the national centers are operational at this time: the National Serials Data Program, ISDS/Canada, the United Kingdom National Serials Data Centre, the Australian National Centre for ISDS, and the Federal Republic of Germany National Centre for ISDS. In addition, The Netherlands and Italy have indicated a desire to establish centers.

Prospects for Future Cooperation

The intent of this writer has been to surface various issues in international serials control and to highlight cooperative activities. What then of the future? Will events continue the rapid development shown in the past few years? In concluding this article, we hazard a brief excursion into an extension of present trends into future possibilities.

International Serials Data System

It is expected that the International Serials Data System will con-

*Includes the USSR, the People's Republic of Bulgaria, the Czechoslovak Socialist Republic, the German Democratic Republic, the Hungarian People's Republic, the Mongolian People's Republic, the Polish People's Republic, the Republic of Cuba.

ERIC
InternationaCooperationinSerials

International Co-operation in Serials

continue to grow in size and intensity in function. It is expected that the developing countries in Asia, Africa and South America will share in the system at least on a nonautomated exchange basis. The role of data exchange between national centers in the ISDS should increase, especially as new technologies become available. For example, the U. S. National Center (NSDP) and ISDS/Canada, by sharing a common computer linkage via OCLC/CONSER, will be able to exchange requests for ISSN assignment and reporting of systematic numbers by retrieving and posting information to their combined on-line data files. If the United Kingdom and the International Centre (IC) of ISDS in Paris were to tie into the OCLC or similar systems, direct communication and exchange would be possible among four of the major ISDS centers. At the least, magnetic tape exchange, which is already in existence between NSDP and the IC, will probably take place among the other centers.

Members of the ISDS community will also be intensifying their efforts to persuade publishers of serials to print the ISSN on the issues and to inform ISDS centers of major changes to the bibliographic attributes of their publications. This has begun to some extent in the NSDP, with the establishment of a publishers relations function, and with expected cooperation with planned projects designed to explore and develop alternatives for communication and persuasion in promoting the use of the ISSN.

Uniting the Information Community

The development of the ISDS represents a combining of forces between libraries and the abstracting and indexing community. It is expected that as the ISDS and other cooperative activities, such as CONSER, demonstrate the potential benefits to be gained from cooperation in serials control, other members of the information community, such as the subscription agencies and publishers, will find it in their interests to become involved. As it stands now, those subscription agencies which have developed automated systems are eager for the advantages to be obtained from having libraries order serials by ISSN printed in their catalogs. Also, the use of a standard journal citation identifier, containing the ISSN as an integral part, is expected to increase, aided greatly by its adoption by such internationally available, on-line retrieval systems as MEDLINE at the National Library of Medicine.
Network Sharing

The CONSER network, mentioned repeatedly in this article, may well usher in the wave of the future in serials control—global network sharing. The CONSER network is international in scope, with Canada and the U. S. joined in participation. Delays in its development demonstrate the lag between development of technological capability and its deployment across institutional and organizational boundaries. Now that it has been demonstrated that this type of computer-based network sharing can be done, it is only a matter of time until we see all kinds of serials consortia combine their incremental resources to generate a larger whole, a system granting more benefits than any one institution could obtain on its own. As of this writing, we have only cooperatively contributed cataloging data. Soon we will have, in effect, a computer-based union list of serials, with computer-assisted inter-library loan ordering and dispatching. It is not too far a leap then to consider document delivery via facsimile transmission of articles identified by querying a common data base built through a shared network. These things are possible now. The technology exists, it is only a matter of time until our institutions agree to link together in these ways.

Universal Bibliographic Control

It is only fitting to conclude this prospective view and this article by a mention of Universal Bibliographic Control (UBC) which is the latest watchword on the international scene. According to Dorothy Anderson, Director, IFLA International Office for UBC, the substance of UBC is not new. It has been developing over the past twenty years in the projects sponsored by such international organizations as IFLA and UNESCO. It has been within the past four years that the appellation “UBC” has been consciously applied to these collective efforts. Once these steps were taken, universal bibliographic control became more than just projects and activities; it became a concept, a system, an objective.”10 So be it also with international cooperation in serials, which is one aspect of UBC. As we review past cooperative activities in serials we can see that the major steps have been taken. By no means are all the problems solved nor all the details worked out, but international cooperation in serials has gone far beyond isolated or simply bilateral projects and activities. International cooperation in serials has moved from concept to system in pursuit of the objective of universal bibliographic control.
International Cooperation in Serials

Notes

1 International Federation of Library Associations, ISBD(S) International Standard Bibliographic Description for Serials (London IFLA Committee on Cataloging, 1974)


6 William A. Greager and David E. Sparks, A Serials Data Program for Science and Technology (Reading, Massachusetts, Information Dynamics Corporation, 1965).


10 Dorothy Anderson, "IFLA's Programme for UBC The Background and the Basis," IFLA Journal (1-1975-1) 4-7
Organization

As the U.S. representative to the International Serials Data System (ISDS), the National Serials Data Program (NSDP) was initially implemented in April 1972 as a cooperative project under the joint support of the Library of Congress, the National Agricultural Library and the National Library of Medicine. With the advent of the CONSER project, in which each of the three national libraries and other research libraries are contributing directly to the development of a national serials data base, responsibility for the NSDP was transferred to the Processing Department of the Library of Congress, in 1974. Subsequent efforts to coordinate the serials processing functions of LC with the ISDS functions for which NSDP is responsible led to the logical decision to incorporate the program as a section of the Processing Department's Serial Records Division. This administrative reorganization has contributed to the successful development of LC's responsibilities as a major CONSER participant and has served to facilitate the identification of those areas in serials control on local, national and international levels which merit study and evaluation.

NSDP's Role as an ISDS National Center

The International Serials Data System, as established within the framework of the UNESCO/UNISIST program, is an international network of national and regional centers responsible for the creation and maintenance of computer-based data banks which contain essential information for the identification of serials. The goal of the ISDS is to provide a comprehensive and reliable registry of serial publications in all languages covering all subject areas. The system is responsible for assigning to each serial, published under a given title, a unique and unambiguous numeric code identifier, the International Standard Serial Number (ISSN).

As the U.S. representative to the ISDS, NSDP is responsible for the control and assignment of ISSN to all serial publications issued in...
the United States. Other national or regional centers are responsible for the registration of ISSN in their respective countries. Serial publications issued by intergovernmental organizations (such as the United Nations, Pan American Union, etc.) are registered by the ISDS International Centre in Paris. The International Centre, established by the French government and UNESCO, is the central operational agency for the ISDS and is also responsible for the registration of ISSN for publications issued in those countries where national or regional centers have not yet been organized. Mr. Price's article in this issue discusses in more detail the organization of ISDS and the relationships between the International Centre and national centers.

NSDP as the U.S. national center is therefore charged with a dual responsibility of registering U.S. publications as quickly and efficiently as possible and for obtaining ISSN for foreign imprints from other ISDS centers as these numbers are needed by institutions in this country. Since early 1973 currently cataloged serials processed by the three national libraries have been registered by the ISDS. NSDP assigns ISSN to those titles published in the U.S. and requests ISSN for all others from the appropriate ISDS centers. Routine communications with other ISDS centers are currently accomplished through the mail and are therefore subject to the usual delays and attendant problems associated with international postal communications. However, it is an adequate system for the present as an interim measure until more efficient methods are implemented. Urgent requests may be communicated by telephone or telex provided that supporting documentation is subsequently provided. This documentation, which must accompany every request for an ISSN, consists of an ISDS transmittal form containing bibliographic information essential to the identification of any given title and a physical representation of a current issue of volume. This can be either a sample issue or a surrogate of the issue (e.g., reproductions of the cover, title page and/or masthead).

With the development of the CONSER project NSDP is extending its national coverage to include responsibility for assigning ISSN to U.S. imprints input by all CONSER participants. ISDS/Canada is undertaking the same commitment for Canadian imprints, and ISSN needed by CONSER participants for serials published in countries other than the U.S. or Canada are requested from the appropriate ISDS center by either NSDP or ISDS/Canada. In addition to registering titles input by the three national libraries
National Serials Data Program

and other CONSER institutions, NSDP was awarded a grant by the National Science Foundation for the "Development of an Automated National Data Base on Serials in Science and Technology." This two-year program is utilizing the CONSER project as a mechanism for developing a machine-readable file of scientific and technical serials abstracted by the major U.S. abstracting and indexing services. The development of this data base will substantially augment the international corpus of serial titles registered by the ISDS to the benefit of all user communities.

National centers of the ISDS are also responsible for promoting the use of ISSN within their territories. Thus they are charged with establishing communications with publishers of serial literature and for making every effort to obtain their active participation. NSDP has long recognized the need for this approach and has recently been able to undertake a more concerted effort in this direction. The full benefits of this system for the various user communities (libraries, abstracting and indexing services, subscription agents and publishers) will be fully realized only when ISSN are carried on the issues or volumes of the serials themselves. Thus the NSDP section now has a publishers liaison assistant who is working directly with publishers to encourage the correct use of the ISSN. For ISDS purposes a publisher has been defined as any person, company, partnership, association or group of any kind issuing and publishing a serial. As with anyone requesting an ISSN, publishers are asked to provide either a sample issue or surrogate of the issue as documentation for assigning the ISSN and creating an accurate ISDS bibliographic record. There is no fee for this service. Once it has been assigned, publishers are expected to print the number in a prominent position on or in each serial issue, preferably in the top right-hand corner of the cover. If a serial issue has an ISBN as well as an ISSN (as may be the case with monographic series), the two numbers should appear together, each with its own prefix. Publishers are also encouraged to cite the correct ISSN in advertisements, promotional literature or catalogs and it is recommended that the number follow immediately, or be immediately below the title as advertised. Since a new ISSN must be assigned if the title of a serial changes, this stipulation is emphasized at the time a publisher is notified of the registration.

An additional responsibility of ISDS national centers is the dissemination of information from their national files. They may also maintain duplicate files or subsets of the international file in order to serve their user communities. To fulfill this aspect of NSDP's
responsibility as a national center, an ISSN Register is in the process of being prepared for publication. It will list all serials in the NSDP files to which ISSN have been assigned through 1974.

ISSN with their appropriate key titles are also available through the MARC distribution service in records for those serials cataloged by LC for which numbers are available at the time of cataloging. Catalog cards produced for distribution by LC's Cataloging Distribution Service Division also carry the ISSN when it is available prior to printing the cards.

With the final development of the CONSER project and utilization of the OCLC facilities by the Library of Congress as a CONSER participant, current and up-to-date information on all ISSN assigned or validated by NSDP will also be available through that vehicle.

International Standard Serial Number

The International Standard Serial Number (ISSN) is an eight-digit number which provides a universally accepted brief, unique and unambiguous identification code for serials. An ISSN consists of seven digits plus a check digit (which is regarded as an essential and inseparable part of the number) and is written in the form: ISSN 1234-5679. The check digit is always located in the right-most (low order) position and is calculated on a modulus 11 basis, using the weighting factors 8 to 2. The purpose of the check digit is to avoid errors generated by incorrect transcription of numbers and is calculated as follows:

1. Take the digits of the base number: 1 2 3 4 5 6 7
2. Take the weighting factors associated with each digit: 8 7 6 5 4 3 2
3. Multiply each digit in turn by its weighting factors: 8 14 18 20 20 18 14
4. Sum these products: 8 + 14 + 18 + 20 + 20 + 18 + 14 = 112
5. Divide this sum by the modulus 11: 112:11 = 10 remainder 2
6. Subtract the remainder from 11: 11 - 2 = 9
7. Add the remainder to the right-most (low order) position of the base number: 1234 - 5679

If the remainder is 10, a Roman numeral "X" is recorded in the check digit position.
National Serials Data Program

The ISSN does not attempt to incorporate any significance other than the unique identification of a serial. Thus it does not reflect any characteristics of a serial, such as subject, language, publisher or country of publication. Blocks of numbers are allocated to each ISDS national or regional center by the International Centre and these numbers are then assigned to titles as the publications are processed.

ISSN are assigned to serial publications, defined by the ISDS as a publication in print or nonprint form, issued in successive parts, usually having numerical or chronological designations and intended to be continued indefinitely. It should be noted that this definition does not include works produced in successive parts for a period predetermined as finite (e.g., multi-volume monographs or books-in-parts) and that it does allow for the inclusion of unnumbered series. However, NSDP does not generally assign ISSN to unnumbered series unless specifically requested to do so by another ISDS center.

Utilization of the International Standard Serial Number offers solutions to many problems generated by the different identification conventions of libraries, abstracting and indexing services, and publishers or distributors. In the early stages of the development of the ISSN as an international standard, it was determined that all users of bibliographic information on serials would benefit from the existence of a large file of titles to which ISSN had been assigned. It was in that spirit and with that goal in mind that the R. R. Bowker Company was authorized to assign ISSN to approximately 60,000 titles in the Bowker Serials Bibliography (which is composed of Ulrich's International Periodical Directory, 14th edition, and the Irregular Serials and Annuals, 2nd edition) as well as 6,500 titles in the Bowker Serials Bibliography Supplement (1972). It was also in that same spirit that the ISDS International Centre authorized NSDP as the U.S. national center to negotiate the assignment of ISSN to 220,000 titles in the twenty-one-year accumulation of the Library of Congress New Serial Titles, 1950-1970. A great deal of technical and editorial work on the part of the Bowker Company was involved in this project and their efforts have produced a valuable source of bibliographic information on serials. However, the ISSN registered by Bowker for titles included in these publications were assigned to entries based upon various cataloging codes or conventions which were not always compatible with the bibliographic specifications of ISDS. Therefore some erroneous assignments were unavoidable and inevitable. Recognizing this possibility it was determined that, for ISDS control purposes,
I. National Serials Data Program

The numbers assigned by Bowker would be considered provisional until validated by the appropriate ISDS centers. This policy does not unduly jeopardize the validity of these numbers, and their use is both advocated and encouraged. Only a small percentage of the numbers are proving to be invalid, and these are fairly easy to identify if the following guidelines are used:

1. If the publication in question is issued in more than one part but only one ISSN was assigned by the Bowker Company, the number is probably invalid because separate ISSN are generally assigned to each section or part.

   Example:
   
   Comparative biochemistry and physiology
   Registered in a Bowker publication as ISSN 0010-404X
   This number was cancelled by ISDS and replaced by:
   - Comparative biochemistry and physiology A: ISSN 0300-9829
   - Comparative physiology ISSN 0305-0481

2. If a title was inadvertently numbered twice within the Bowker Publications (i.e., once in Ulrich's and once in NST), the lower number is generally considered the valid ISSN and the higher one(s) are cancelled by the appropriate ISDS center.

   Examples:
   
   Medical assistance
   Registered in Ulrich's under title as ISSN 0047-6455
   Registered in New Serial Titles under issuing body as ISSN 0472-7967
   Valid number ISSN 0047-6455

   Biological reviews of the Cambridge Philosophical Society
   Registered in Ulrich's under title as ISSN 0006-2652
   Registered in Ulrich's under author as ISSN 0045-4079
   Valid number ISSN 0006-2652

3. If a serial was entered under issuing body in a Bowker publication, and that body changed, generating another entry under the new name or names, a new ISSN was computer assigned to the new Bowker entry. If the title did not change and if the title is not a generic term, one of the ISSN is potentially invalid. Again, the lowest ISSN is considered valid and all others are cancelled by the appropriate ISDS center.
Example: (as found in New Serial Titles)

*Argentine Republic Servicio Forestal Nacional*
*Anuario de estadistica forestal*
ISSN 0570-8834 Continued by
*Argentine Republic Administracion Nacional de Bosques*
*Anuario de estadistica forestal*
ISSN 0518-4142
Valid number ISSN 0518-4142

### ISDS Bibliographic Conventions

In order to regulate the allocation of ISSN, it was internationally agreed that a citation acceptable to all ISDS participants would be used for serials to which ISSN are assigned. The concept of the key title as a control citation was incorporated as the "handle" to which the ISSN is assigned in any given ISDS bibliographic record. Specifications for the transcription and construction of the key title are included in the *Guidelines for ISDS*. It is based upon the title as it appears on an issue or volume, with the addition of an author statement if the title consists of a generic term. In those instances where two or more publications have the same title, the key title is further constructed by adding qualifying information to resolve the conflict and to create a unique citation in the ISDS files. This qualifying information can be place, or place and-date if place alone is not sufficient, or other information suitable to resolution of the conflict (e.g., reprint edition or microfilm edition). A new ISSN is assigned and a new record is generated only when the key title undergoes what has been defined by ISDS as a major change. Definitions of what constitute major and minor changes to key titles are also provided in the *Guidelines for ISDS*.

According to these same *Guidelines*, each key title is "inseparably associated with its ISSN" as an internal control mechanism within the ISDS network. As the citation to which the ISSN is assigned, the key title thus becomes a kind of "main entry" in ISDS files. Effective use of the ISSN by libraries, indexing services and subscription agencies is obviously facilitated if the key title concept is incorporated in the files of these various communities. However, it is not a mandatory requirement for successful utilization of the ISSN.

One of the greatest benefits of the ISSN system is its ability to provide a brief and unambiguous means of identifying a serial, regardless of the type or form of citation used. The number serves as a common denominator which links the varying identification
conventions of libraries, abstracting and indexing services, subscription agents and publishers or distributors.

What is essential, however, is that the bibliographic entity created according to any given set of cataloging rules or conventions be compatible with the bibliographic entity created by a key title. Addressing the current discrepancies between the Anglo-American Cataloging Rules (North American Text) and the key title concept in his article elsewhere in this issue, Mr. Howard's second proposal would provide for that necessary compatibility in this country. In this proposal it was suggested that the AACR be amended to require title main entry for all serials except those titles which consist of a generic term or which begin with a generic term followed only by the name of the issuing body, in which case the serial is entered under author. This provides for compatibility between an AACR bibliographic record and an ISDS record, since a change in an AACR main entry would also be considered a change in the key title. Additional specifications for resolving the differences between what constitutes major and minor changes according to the AACR and ISDS would still be desirable in order to assure complete compatibility between the two systems. This is not an unrealistic expectation, and the problem is being dealt with by the appropriate committees.

To support the ISSN and key title in an ISDS bibliographic record, additional data elements, considered essential to the identification of any given serial, are also included. They are specified in the Guidelines for ISDS as follows.

<table>
<thead>
<tr>
<th>Essential ISDS Data Elements</th>
<th>MARC Serials Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of entry (or most recent amendment)</td>
<td>008</td>
</tr>
<tr>
<td>ISDS Centre code (i.e., the center responsible for assigning or validating the ISSN)</td>
<td>008</td>
</tr>
<tr>
<td>ISSN</td>
<td>022</td>
</tr>
<tr>
<td>Key title</td>
<td>222</td>
</tr>
<tr>
<td>Variant title(s)</td>
<td>246</td>
</tr>
<tr>
<td>Start date</td>
<td>008</td>
</tr>
</tbody>
</table>
### Essential ISDS Data Elements

<table>
<thead>
<tr>
<th>Country of publication</th>
<th>MARC Serials Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>008</td>
<td>Country of publication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alphabet of original title (alphabet of the title as it appears on the issue. This is particularly applicable for non-Roman titles which require romanization for input.)</th>
<th>008</th>
</tr>
</thead>
</table>

| Imprint | 260 |

Additional data elements are provided for in an ISDS record, although they are not required unless available. These include items such as the frequency, type of publication, language, abbreviated title, linking entries, etc.

The bibliographic requirements of ISDS are not as full nor as detailed in their specifications as are those of the AACR, since the ISDS network intends to provide a basic bibliographic record which meets the general needs of an international community. Each national center, however, is permitted and encouraged to augment the basic ISDS record in its own files with the necessary data elements required to meet the needs of national users. This includes such bibliographic data as structured author headings and subject headings.

Thus an ISDS record as provided by NSDP and other ISDS centers serves as the basis for documenting ISSN registration and also provides an internationally acceptable "building block" upon which national cataloging agencies and others can base a complete bibliographic record suitable to the needs and requirements of their constituencies.
After years of study, reporting, proposals and counter-proposals, but little actual activity, librarians have, for the past three years, witnessed a tremendous amount of activity in the area of bibliographic control of serials. This has been true not only at the national level, but also at the multinational and international levels. This active pace has been nurtured by library interests, traditional as well as advanced, and it has actually been precipitated by the very aggressive commitment and involvement of the information industry and the abstracting and indexing (a & i) services. It is perhaps this strange (should it be?) overlapping of interests at just about the same time that has caused furor and fear among those who look at bibliographic control of serials as primarily a problem of cataloging, cataloging rules and card catalogs. The end does not seem to be the achievement of the type of bibliographic control that can best serve the ultimate user but maintaining the "integrity" of the card catalog. Aside from the check-in, claiming, ordering, locating, shelving, binding, listing and union listing, what library depends solely on the card catalog for providing access to serial materials?

The CONSER Project (CONversion of SERials), established under the Council on Library Resources, is responsible for building an automated core data base of bibliographic records for serials which will be available as an authoritative source for use at all levels, local, national and international. In this paper, I shall not be providing a detailed description of the origin, the organization, or the detailed operational concepts and procedures of CONSER. These have been published recently in many papers. I have sought, however, to provide an analysis of the CONSER Project from the point of view of an academic librarian, and as one who has been involved in reference service functions in various capacities. I have sought to minimize looking at this topic from a biased point of view, but I must admit that the analyses and conclusions presented here could not be as comprehensive were it not for my two and a half years' experience as Director of the National Serials Data Program and my previous experience as the Assistant Chief of the Serial Record Division and Head of the Newspaper and Periodical Sec-
The CONSER Project: An Analysis

At the Library of Congress I, therefore, do not apologize for the fact that the views presented here may be biased by the many discussions, formal and informal, that I have held with all types of librarians, information specialists, automation specialists, reference service providers and users, and a myriad of individuals whose life has been dedicated to serials at both the national and international level. This analysis is based on one premise, one that I have not been original in espousing, but one which has been stated as the goal of many. Namely, this is the establishment of a national data base of bibliographic information on serial publications that is flexible enough in its utilization to permit subscription agencies, librarians, information centers, the abstracting and indexing services and the primary user to have an unencumbered access to the information being sought. This national data base should be established with adequate flexibility to permit maximum utilization of information being produced by other foreign national data services and to increase the ability to bring about universal bibliographic control.

Serials and the Card Catalog

In most situations where serials are concerned, the integrity of the card catalog is fictitious because of local conditions. I have had extensive work in the bibliographic identification of and searching for serial titles in the Library of Congress and can state that only a fool, or one who does not know better, would rely solely on either the LC Main Catalog or the LC Official Catalog to identify or locate serials in the Library of Congress. One has to look in the Official Catalog (forget the Main Catalog), the Serial Record, the Serial Division Catalogs (including the Binding Catalog), and then hope that one has had enough sense to distinguish between the myriad changes in structure that private, and public publishing organizations go through. Those may or may not be reflected in any one of the sources (and there may be only one source) mentioned.

Perhaps other libraries have better control of the situation, but then that is only possible where serials have been given a priority in concern. That has not been the fact in the Library of Congress. There have been good signs, in the past few months, of a significant change in evidence of LC's commitment that provides hope to those who are concerned with serials. A new administration in the Library of Congress cannot ignore the clamor and the action and the momentum that has been generated in the past two to three years. CONSER is the personification of the fact that the Library of
The CONSER Project: An Analysis

Congress has dropped the ball (shoved into its hands many times) and that the library and information communities were desperate and determined enough to see it dropped for the last time. That ball is now in CONSER's hands. It is in the interests of the communities that it not be dropped again. All those who agree and those who disagree, have too much at stake to go through other traumas with a variety of ball carriers. CONSER must be made to succeed! That does not mean an end to the catalog. What it means is that efforts must be made to see that CONSER, at a minimum (without getting too deeply into the details), achieves its primary scope. Let's face it. What is the alternative? We have been talking, writing, and rewriting since 1965 about an automated serials data base. Well, we don't have a better idea, and since we don't, let's make this idea better.

Why Have an On-Line System for Serials Controls?

Any efficient utilization of serial publications, whether on a local autonomous basis, or in any cooperative venture, requires a definitive and standardized program of bibliographic control. Efforts toward achieving this end by libraries have varied, depending upon individual needs, traditions and the inevitable idiosyncrasies of existing manual systems. Perhaps the most common source of control for most research institutions is the traditional card catalog—an immobile, stationary system limited to in-house use, and built upon the cataloging code operative at any point in time by any one organization. Cumbersome policies of superimposition (necessary to accommodate changes in cataloging procedures over a period of time) and difficulties in maintaining a card file that grows in direct proportion to the growing population of new and changed serial titles led many libraries to pursue other possibilities of bibliographic control.

A fairly recent innovation, in terms of wide acceptability, is the book catalog which permits greater mobility, ease of maintenance and hence easier access to an institution's serials collection. Supplementary to (and in some cases as a substitute for) the card file or book catalog, many libraries and other research organizations provide individually produced directories of holdings which provide a ready reference and quick access to serial holdings via records containing minimal data sufficient to identify any one title. These directories are highly portable, easier to develop and maintain, and facilitate the dissemination of local holdings information beyond the physical confines of a building. They may be produced in hard copy or in fiche form. In a cooperative vein, union listings of
serial publications on local, regional and national levels became more and more necessary. An inherent problem in the compilation of these union catalogs is the inevitable difficulty encountered in trying effectively to merge records from different sources which have been created according to different cataloging codes and bibliographic traditions into one, cohesive and consistent bibliographic tool. The format, coverage and content of these lists varies, depending upon bibliographic resources available, financial support and the needs of the cooperating institutions.

Supplementary, but equally important, are the types of bibliographic control generated and used by the numerous abstracting and indexing services. Many services are separately published in bulletins, which are printed periodically in the form of current awareness programs, KWIC indexes, table of contents publications and abstracts or indexes, others are issued in card form only; some appear as a regular feature in a journal, a number of services are issued in a multiplicity of forms—printed bulletins, cards, magnetic tape or microfilm. Unfortunately, the a & i services do not always utilize the same form of entry for access to serial publications that libraries do. To attain optimal efficiency in coordinating the efforts toward bibliographic control between libraries and the a & i services, a standard and compatible means of citation and bibliographic description acceptable to both is mandatory.

Heretofore, many libraries, research institutions and the a & i services have been hampered by built-in handicaps inherent in any system which depends upon manual development, maintenance and dissemination. The growing emergence of computer technology and the application of automated data processing techniques to bibliographic systems promise greater ease in meeting the demands of the varied user community. In the absence of nationally and internationally recognized standards, most of the efforts in this direction have been isolated, individualistic approaches on a local or regional level resulting in duplication of effort in many instances, a lack of coordination in format and content, and a resulting inability to cooperate and interact with other systems efficiently, despite the fact that this is the end most often sought by those actively pursuing this approach.

As computer technology increased in sophistication and availability to libraries and other institutions concerned with serials, use began to be made of it in an effort to provide some means of local serials control. Initially, these efforts concentrated on the production of various title finding lists. There are obvious advantages to
The CONS-ER Project: An Analysis.

using a computer for this function since it would easily produce volumes of lists in multitudinous copies at rapid speeds. Schemes for designating various levels of specification to an institution's holdings were included next. Eventually, some institutions, who had the computing power and financial resources, carried over into other areas of library serials control, such as binding, routing of issues, claiming of issues and even prediction of arrival of serial issues. Two basic characteristics are noticeable upon comparison of most of these systems.

1. They generally contain information which is subject to immediate obsolescence as soon as it is added to the machine file, due to the fact that the systems operate in a batched environment for information which is subject to frequent changes.

2. They are all highly customized systems which were developed for procedures and operations in one institution or, at the most, an interlibrary loan consortium-type group of several institutions.

Fault is not to be found in these earlier efforts. The computer was emerging as a tool of use to libraries and serials was one area where it could be effectively utilized. Systems were batch processed because there was either nothing but batch processing done at the host computer facility or, on-line real-time interactive processing was supported, sufficient know-how, justification or political weight did not exist to bring about an on-line operation. Probably the greatest misfortune, however, was that most of these developmental activities took place on an individual basis with no coordination or cooperation in evidence.

The technology and availability of sophisticated on-line interactive oriented computer systems now makes it imperative to conform to an on-line system for serials if the job of serials control is to be done right. This is true not only for the benefit of currency of data, which an on-line environment facilitates, but also in the potential for more effective cooperation in file building and file sharing which this type of capability provides. These two ideas, cooperation and the benefits of on-line processing, are dominant in the CONSER philosophy and form the basis of its very existence.

What Is the CONSER Project?

From a recommended Cooperative Conversion Project which resulted from the deliberations of an Ad Hoc Discussion Group in Serials Data Bases' came a Conversion of Serials Project called the
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CONSER Project. Discussions on the detailed implementation aspects of the project moved so fast that reports and documentation were out of date by the time of dissemination in print. The fact that up-to-date information would not keep up with the momentum of the Project left the profession uninformed. Several recent documents present the status and future plans as CONSER becomes operational.

The stated purpose of CONSER is "to build a core data base of bibliographic information on serial titles to be available for use on the international, national, regional, and local levels." In order to eliminate confusion over existing programs, the Council on Library Resources (CLR), the organization coordinating and managing CONSER, has made it clear that "this is a file-building project; it is not intended to become an ongoing national or international serials data system."

CONSER File-Building

The Council on Library Resources has stated that "the intention of the Project is to establish a comprehensive data base of serial titles in such a way as to accommodate the past, present, and future standards of format, description, and identification where they can be ascertained. It is not the intention of the Project to establish new standards in any area." The Council will, of course, utilize existing standards as they are, where possible without modification, as in the use of the international standard for the communications format at level one (structure) namely ISO/2709.

At the second level, that is, tags and content designators, there existed minor differences in the formats utilized in LC MARC Serials format, the Canadian MARC Serials communications format, and the National Serials Data Program's internal format. Adjustments have been made to reconcile these differences. Thus, standardization has been achieved at two levels. It is at the third level, i.e., the contents (of the actual bibliographic data), where compromises had to be made. The major compromise was between having an authoritative file of records in CONSER from the very beginning and then building on that by requiring participants to adhere strictly to a set of practices in a prescribed manual, and having participants input records as they see fit and as they tie in.
with their own catalogs and cataloging practices. The compromise was to distinguish between current and retrospective records. CONSER participants are required to input records for titles that are newly revised or newly cataloged at their institutions according to a set of agreed-upon principles established by CONSER. Hopefully, participants will thus be able to know if that title already has a record because they should be using the same entry. Even if they do not, the system does provide for alternative searching mechanisms. Therefore, the proliferation of records for a particular new title hopefully will be avoided. It is expected that Library A will not feel that its Anglo-American Cataloging Rules choice for heading is a better choice than Library B. Eventually, the Library of Congress and the National Library of Canada, as the CONSER designated Centers of Responsibility, will get this type of problem resolved.

The major compromise in CONSER was in what has been called the retrospective conversion. With the exception of the Library of Congress and the National Library of Canada, CONSER participants will be allowed to input their cataloged records as they exist. They will not be asked to verify that the form of heading is according to AACR, nor will they be asked to split up their latest title cataloging in the AACR-required successive entry practice. The primary argument for a CONSER type of project has been the sharing of responsibilities and the sharing of costs. In reality, in the build-up of a file of records for retrospective (previously cataloged) titles, the participating institutions will not be contributing to the cost of establishing a file of authoritative records. The primary burden will still be borne, through what has been called a post-editing process, by the Library of Congress and the National Library of Canada. In effect, there has been an agreement to disagree on the implementation of the set of agreed-upon principles describing the data elements—tagging, content designator, contents. Essentially, „dirty” records will be input to be cleaned up at some date by LC or NLC. The participants will be building up this file utilizing the 80,000 records from the Minnesota Union List of Serials (MULS) and the composite records from the LC-MARC Serials as the foundation. It is understood that non-AACR records which exist in the MARC Serials files will be expunged. This is not true of the MULS file. While a limited effort has been undertaken to break out latest-title entries into successive entries, there still exist many records which are under latest title, as well as many records which still do not conform to the AACR form of heading.
What Does CONSER Mean to the User Community?

While participation in CONSER is initially limited to a small number of research libraries, the data base created thereby is available to a large number of library systems which are tied into OCLC. The Library of Congress will, of course, distribute through MARC Serials all the records it has input (essentially what is now already available through MARC Stapes),† records it has updated, authenticated and, or to which it has attached its location or relocation symbols. These are essentially titles for which records have been input by any participant and which LC has changed for which it has verified any data element or authenticated the name fields, U.S. key titles and ISSN, or to which it has added NST location symbol(s) on the basis of reports from libraries throughout. It is not clear whether LC will be inputting, after verification, all reported titles coming into the existing New Serial Titles mechanism.

Thus, depending on the commitment that it is able to dedicate to this effort, the Library of Congress could provide those institutions which are not OCLC or CONSER participants with bibliographic data in machine-readable form, in card form (if they are wanted), in printed form (book catalogs) or in microform.

The faster LC moves in authenticating the essential data elements within records that it has not input, the faster the community as a whole can benefit from CONSER. The problem is that LC is again expected to bear the brunt of the workload, granted, through a refined mechanism. The Library of Congress has failed the community in the past because of a lack of commitment. LC's participation in a national serials program has been lacking in enthusiasm. LC's participation in a program which is not only sponsored by the Council on Library Resources but enthusiastically initiated and spurred on by the National Library of Canada and joined in with

*CONSER participants are the Library of Congress, the National Library of Canada, the National Library of Medicine, the National Agricultural Library, the State University of New York (SUNY), New York State Library, University of California, University of Minnesota, Yale University (a member of the Research Library Group and NELINET), and Cornell University (also representative of the Five Associated University Libraries system).

†All serials cataloged at the Library of Congress are included, that is, all languages and alphabets in a romanized form, as well as series which are processed as collected sets and whose parts are not analyzed for monographic cataloging.
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great expectations by some of the most influential library systems in the U.S., will, perhaps, ultimately elicit the commitment needed to succeed.

It is questionable whether the Library of Congress can acquire adequate staffing to clean up the resulting file. The Library of Congress has been designated as a Center of Responsibility for all name fields, key titles and ISSN. Thus, it is planned that LC will have a prime post-editing responsibility for providing headings according to AACR which it has in ALA form. The ALA form will also remain in the CONSER record.

There still lies the problem of the principles of successive entry vs. latest title. It is expected that participants will enter a record under latest title and will not be breaking it up into successive entries. Will the Library of Congress, in addition to its responsibility for de-superimposition of the headings, undertake to split up latest title records into successive entry records? This is the more comprehensive an undertaking and may be more difficult to resolve once a record has been entered in the data base. In some instances, LC may not be able to provide AACR forms of heading unless a latest title record is split. The resolution and the speed with which such records are made authoritative by LC remains to be seen.

What Does OCLC Offer to CONSER and Vice-Versa?

The OCLC Serials Control system is operational, although the program for the printing of catalog cards for serials is not expected to be available at OCLC until summer 1976. The system not only permits the searching for and input of bibliographic data on serials but also provides the check-in capability. Thus, OCLC, which is serving as the de facto national cataloging resource for monographs for an ever expanding number of user institutions (over 400), and which is now extending its coverage to serials, is the only existing on-line interactive system capable of handling the magnitude of data and the variety of interests shared by CONSER participants. Therefore, OCLC provides the mechanism which would otherwise have had to be created. Also, the large number of participants in the OCLC system expedite the process of creating a large data base. This, of course, has its own disadvantage, especially in dealing with bibliographic records on serials. How much duplication will there be? How much confusion will this create?

It is true that many of the CONSER participants are also OCLC.
users. Those who are OCLC users will also have the check-in capability. CONSER participants will not, unless they negotiate separately with OCLC. CONSER participants will input their records into the OCLC system, then notify the Center of Responsibility (LC or NLC) by submitting a surrogate (reproduction of title page, cover, or masthead) which will serve as the triggering mechanism for authentication and/or assignment of main entry, key title and ISSN. The Library of Congress and the National Library of Canada will also, of course, be inputting their own records and thereby upgrading records which may already exist in the file.

Thus, OCLC participants will benefit from the input of some of the nation's foremost bibliographic centers as well as from the authoritative records provided by LC and NLC. They will also benefit from the input provided by the participating members of the National Federation of Abstracting and Indexing Services, who will be inputting data through the National Serials Data Program (NSDP). NSDP is also currently working on a special project supported by the National Science Foundation to produce an authoritative bibliographic data base of scientific and technical serials.

The basic questions that remain unanswered are. Will the nation's library and information systems be satisfied, after many years of waiting, to continue to wait until an authoritative data base is created? Will OCLC users be satisfied with locating a variety of records for a serial title and selecting one of those records for use, or will they wait until there is a record with the LC seal of approval? We, as OCLC participants, have not answered these questions in trying to determine how to achieve maximum benefit from the OCLC Serials Control System. But we have to answer, we have to find the way, because there ain't no other horse in sight, and we gotta ride, we gotta move.

Notes

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9. Ibid.

10. Ibid.


The following statements are keyed to the diagram in the chart.

1. The interim responsibility for the management of the CONSER project rests with the Council on Library Resources. The Council also provides partial funding for the project. During the project, a more permanent arrangement will be made.

2. There is two-way communication between the CONSER Advisory Group and the CONSER management staff at the Council on Library Resources.

3. It is the responsibility of the CONSER Advisory Group to inform the U.S. and Canadian library communities, the publishers, and the abstracting and indexing communities in both countries. The Advisory Group is also responsible for informing CONSER management of the reactions to CONSER from these communities.

4. The Ohio College Library Center's system is the interim host site for the CONSER data base. OCLC's staff and management work closely with the CONSER management, Centers of Responsibility, and the Advisory Group to implement the project.

5. The initial files are loaded from magnetic tape in a batch mode. Shown are the Minnesota Union List of Serials, the LC MARC serials, and the Canadian MARC serials. There may be other initial files.

6. After the initial files are loaded from tape, the CONSER participants shown in the left semicircle begin their input on-line.

7. Periodically, on prior arrangement with OCLC, each user institution may get tapes of its own records from OCLC. These may differ from other CONSER records in that they contain local data.

*This material originally appeared in the LC Information Bulletin 34 (no. 22, May 30 1975) A87-89.
8 This shows that Yale is also a member of the Research Library Group and NELINET Cornell University is a CONSER representative of the Five Associated University Libraries system.

9 Other OCLC users who are not CONSER participants also input serials records to the database and have on-line access to these records.

10 After the initial files are loaded, there is a constant interaction between, on the one hand, OCLC and, on the other, the Library of Congress and the National Library of Canada. These two libraries input their own serials records; they receive separate tapes of their MARC serials records for MARC distribution. They also act as Centers of Responsibility for certain bibliographic content of the records.

11 Periodically during the project and at its end, the Library of Congress and the National Library of Canada will receive the CONSER files and distribute them as they do their MARC serials.

12 The National Serials Data Program (NSDP) within the Library of Congress, and the ISDS/Canada within the National Library of Canada, provide records from CONSER to the International Serials Data System (ISDS) International Center in Paris. In addition, these two activities receive from the ISDS records prepared by other national centers and by the ISDS Center itself. These records become part of CONSER. The NSDP and the ISDS/Canada have the responsibility for providing the ISSN and Key Titles to CONSER for serials published in the two countries, and for authenticating and locking these data elements. These two centers also provide to the CONSER records additional data elements required by the international system.

13 The National Federation of Abstracting and Indexing Services provides input to CONSER by way of the National Serials Data Program, and receives CONSER records in the national distribution system.

14 The Library of Congress and the National Federation of Abstracting and Indexing Services inform U.S. publishers concerning CONSER and request their assistance in using the International Standard Serial Number. The National Library of Canada has the same relationship with Canadian publishers. The International Serials Data System in Paris and other National Centers perform this function for foreign publishers.
15. The National Science Foundation provides some of the funds and guidance for the National Serials Data Program so that it may satisfy the requirements of the abstracting and indexing services primarily and of the scientific and technical community generally.

16. The ISDS Center in Paris is responsible for communication with the international library and abstracting and indexing communities. It has other functions not related to CONSER.
CONSER Inter-Relationships
One of the basic functions of the librarian in the field of administration is that of preparing, defending and implementing the library budget. Serials and journals continue to grow in numbers and price and, depending upon the institution or clientele served, might require as much as 80 percent of the reading material budget. Research, scientific and technical journals, plus the references and research tools intended to make the use of these journals less complex, have an average price far in excess of the similar discipline in the book collection. College and research libraries formed within the past 10 years, particularly, must allocate a greater portion of their funds for the maintenance of the periodical collection rather than for monographs.

The general rule controlling the acquisition of books—that every book should have gone through the appropriate decision-making process as proof that it has a right to be in the library—applies to an even greater degree to serials since this decision is an annual affair. Zero budgeting as a discipline is an exciting experience because of the reward of conviction that you have prepared a budget which meets the current needs and demands. But for library administrators preparing such a budget for serials, information which will provide both a detailed analysis of the rate of inflation on serials and justification that the list of periodicals desired serves the institution’s information needs is difficult and expensive to obtain.

Broad industry price indexes are not necessarily applicable to the individual institution because the rate of inflation is not at all similar in each educational or scientific discipline. Departmental support at colleges and universities is often lacking because the various departments cannot be brought into the budget process without an inordinate added amount of clerical time and expense on the part of the interested department head. Public libraries, too, servicing the broad needs of a town or a city, need the full support of all sectors of the community to develop and maintain journal collections in special fields of interest.
The total resource of serial literature, current and past, varies widely from subject to subject. Hence, the method of selection, or collection development, should reflect the departmental requests, student population by subject fields, the academic standards of the institution in each discipline, and the final limiting factor of funds appropriated for each discipline or funded unit. Also, the quality control of publications in each subject field varies and must be recognized as an important selection factor, as is the form and maintenance of back files.

Thus, departmental division and cost-related library activities on a list of serials, such as binding and acquisition of microfilm, should be scrutinized annually, title by title, by both the library staff and department heads (who have a vested interest in the quality and quantity of serials and journals in their fields of interest) to develop a supportable budget.

However, restatement of the problems faced in the control of serials and journals in the budget process serves no purpose unless greater in-depth definition will direct the attack for a solution. The use of a retrospective price study employing modern forms and methods of information storage and retrieval will provide that direction in the budget process. The data presented here was accumulated by F.W. Faxon Company. An agency serving a wide variety of library clientele has access to unique sets of records which, if properly structured, can use industry-wide standards as a basis to produce very finely-tuned records for specific institutions.

For those libraries where ready-made industry standards now serve as a subject or departmental journal structuring base, titles can be easily distributed into these broad subject or authority categories. An updated price-study chart of such standard-authority groups of titles for the years 1973, 1974, and 1975, showing comparative average prices for the purchase of one of each title in the subject authority follows (Table 1). Also, an average weighted price per title shows that selectivity (use and need) of the publication plays an important part in the development of an average price.

*Average weighted price is the number of copies of orders of all journals in each authority group multiplied by the one-year price. The dollar total of all orders is divided by the number of copies to arrive at the average weighted price.
The next display (Table 2) shows the prices of specific lists of titles for various classes of selected libraries either based upon the authority groups in Table 1 or upon the institution's own selection of titles in the same discipline.

<table>
<thead>
<tr>
<th>Institution (listed above)</th>
<th>Subject Category</th>
<th>Number of Titles 1973</th>
<th>Number of Titles 1974</th>
<th>Number of Titles 1975</th>
<th>Average Price per Title 1973</th>
<th>Average Price per Title 1974</th>
<th>Average Price per Title 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) University of Houston</td>
<td>Applied Science &amp; Technology</td>
<td>60</td>
<td>66</td>
<td>67</td>
<td>25.47</td>
<td>29.68</td>
<td>34.25</td>
</tr>
<tr>
<td>2) University of Miami</td>
<td>Applied Science &amp; Technology</td>
<td>105</td>
<td>106</td>
<td>125</td>
<td>24.16</td>
<td>24.14</td>
<td>25.54</td>
</tr>
<tr>
<td>3) University of Georgia</td>
<td>Applied Science &amp; Technology</td>
<td>105</td>
<td>106</td>
<td>106</td>
<td>17.24</td>
<td>18.11</td>
<td>20.80</td>
</tr>
<tr>
<td>4) Fairfield University</td>
<td>Art Index</td>
<td>36</td>
<td>35</td>
<td>35</td>
<td>11.75</td>
<td>15.86</td>
<td>21.08</td>
</tr>
<tr>
<td>5) University of Georgia</td>
<td>Art Index</td>
<td>29</td>
<td>35</td>
<td>40</td>
<td>16.33</td>
<td>18.40</td>
<td>20.40</td>
</tr>
<tr>
<td>6) University of Georgia</td>
<td>Art Index</td>
<td>77</td>
<td>78</td>
<td>72</td>
<td>14.54</td>
<td>15.98</td>
<td>18.41</td>
</tr>
<tr>
<td>7) Wilmington Public Library</td>
<td>Business Periodicals Index</td>
<td>92</td>
<td>89</td>
<td>87</td>
<td>19.36</td>
<td>21.40</td>
<td>22.85</td>
</tr>
<tr>
<td>8) Haverford School</td>
<td>Business Periodicals Index</td>
<td>18</td>
<td>126</td>
<td>130</td>
<td>13.31</td>
<td>14.52</td>
<td>17.45</td>
</tr>
<tr>
<td>9) Richland County Schools</td>
<td>Business Periodicals Index</td>
<td>24</td>
<td>28</td>
<td>31</td>
<td>20.85</td>
<td>27.93</td>
<td>27.69</td>
</tr>
<tr>
<td>10) University City Schools</td>
<td>Readers' Guide to Periodical Lit</td>
<td>454</td>
<td>471</td>
<td>503</td>
<td>7.47</td>
<td>8.92</td>
<td>9.14</td>
</tr>
<tr>
<td>11) University of Houston</td>
<td>Readers' Guide to Periodical Lit</td>
<td>101</td>
<td>146</td>
<td>86</td>
<td>12.75</td>
<td>15.82</td>
<td>15.82</td>
</tr>
<tr>
<td>12) University of Houston</td>
<td>Readers' Guide to Periodical Lit</td>
<td>83</td>
<td>77</td>
<td>80</td>
<td>15.75</td>
<td>19.88</td>
<td>20.86</td>
</tr>
<tr>
<td>13) University of Houston</td>
<td>Readers' Guide to Periodical Lit</td>
<td>808</td>
<td>803</td>
<td>764</td>
<td>7.69</td>
<td>6.93</td>
<td>8.39</td>
</tr>
<tr>
<td>14) University of Houston</td>
<td>Readers' Guide to Periodical Lit</td>
<td>306</td>
<td>293</td>
<td>293</td>
<td>17.99</td>
<td>6.05</td>
<td>10.27</td>
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</table>

<table>
<thead>
<tr>
<th>Subject Category</th>
<th>Number of Titles 1973</th>
<th>Number of Titles 1974</th>
<th>Number of Titles 1975</th>
<th>Average Price per Title 1973</th>
<th>Average Price per Title 1974</th>
<th>Average Price per Title 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>296</td>
<td>311</td>
<td>314</td>
<td>51.84</td>
<td>62.10</td>
<td>67.36</td>
</tr>
<tr>
<td>Biology</td>
<td>276</td>
<td>292</td>
<td>331</td>
<td>48.03</td>
<td>60.11</td>
<td>71.19</td>
</tr>
<tr>
<td>Biology</td>
<td>406</td>
<td>395</td>
<td>379</td>
<td>27.39</td>
<td>31.88</td>
<td>34.17</td>
</tr>
<tr>
<td>Chemistry</td>
<td>82</td>
<td>84</td>
<td>89</td>
<td>56.40</td>
<td>65.88</td>
<td>58.40</td>
</tr>
<tr>
<td>Chemistry</td>
<td>107</td>
<td>115</td>
<td>120</td>
<td>127.07</td>
<td>156.31</td>
<td>163.07</td>
</tr>
</tbody>
</table>
Once a yearly average price has been determined for standard authority groups of titles, such as those in Table 1, these prices have value as budget controls to those institutions who build their journal collection around the title base of these authority groups—.

If an institution elects to structure its journal collection around an academic discipline or departments of study, or administration-funded units, then the annual average price will not be similar to those in Table 1, as evidenced in Table 2, but neither is there a control relationship to the criteria for price indexes for library materials. Price Index for Periodicals 

Note the wide average price differences between similar subject-disciplinary groups in Table 2.

There appears to be no substitute for at least a minimum three-year price study for each title purchased in a library. That is, the retrospective price comparison method can be used as one source of intelligently developing a budget for a periodical collection. Price trends will develop for each academic discipline if the total number of titles in each group is large enough not to be distorted by abnormal price increases of a few titles. In order to understand some of the wide discrepancies between the average price of similar groups of titles in Table 2, Table 3 gives the final average.

### Table 2—continued

<table>
<thead>
<tr>
<th>Institution</th>
<th>Subject Category</th>
<th>Number of Titles</th>
<th>Average Price Per Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Library Management</td>
<td>Chemistry</td>
<td>61</td>
<td>64</td>
</tr>
<tr>
<td>3 Library Management</td>
<td>Physics</td>
<td>139</td>
<td>168</td>
</tr>
<tr>
<td>4 Library Management</td>
<td>Sociology</td>
<td>36</td>
<td>40</td>
</tr>
</tbody>
</table>
Serials: Costs and Budget Projections

Price for all periodicals at these and other institutions, the total number of titles in the price study, and the ordering plan used. Plan A is one-year. Plan D prices all titles for three years.

Table 3

Average Price - Selected Institutions

<table>
<thead>
<tr>
<th>Plan</th>
<th>Institution</th>
<th>No. of Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>University of Houston</td>
<td>4,270</td>
</tr>
<tr>
<td>A</td>
<td>Fairfield University</td>
<td>978</td>
</tr>
<tr>
<td>A</td>
<td>Memphis Public Library</td>
<td>1,418</td>
</tr>
<tr>
<td>A</td>
<td>New Orleans Public Library</td>
<td>1,661</td>
</tr>
<tr>
<td>A</td>
<td>Wilmington Public Library</td>
<td>560</td>
</tr>
<tr>
<td>A</td>
<td>Haverford School</td>
<td>222</td>
</tr>
<tr>
<td>A</td>
<td>Richland City School System</td>
<td>2,122</td>
</tr>
<tr>
<td>D</td>
<td>University City School System</td>
<td>675</td>
</tr>
<tr>
<td>A</td>
<td>U.S. Dept of Interior</td>
<td>1,454</td>
</tr>
<tr>
<td>A</td>
<td>Univ of Mass-Med School</td>
<td>1,674</td>
</tr>
<tr>
<td>A</td>
<td>Mass General Hospital</td>
<td>551</td>
</tr>
<tr>
<td>D</td>
<td>Tufts University</td>
<td>1,548</td>
</tr>
<tr>
<td>A</td>
<td>MIT</td>
<td>1,991</td>
</tr>
<tr>
<td>D</td>
<td>Univ of Bridgeport</td>
<td>1,981</td>
</tr>
</tbody>
</table>

Table 4 develops the average price for the titles subscribed to in each of the following classifications of libraries for the period July 1974-April 1975.

Table 4

<table>
<thead>
<tr>
<th>Colleges and Universities</th>
<th>Jr. High Schools</th>
<th>Primary Schools</th>
<th>Public Libraries</th>
<th>Special Libraries (Govt)</th>
<th>Special Libraries (Business)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges and Universities Hospitals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$34.34</td>
<td>$38.99</td>
<td>$14.00</td>
<td>$15.61</td>
<td>$19.49</td>
<td>$57.71</td>
</tr>
</tbody>
</table>

Table 5 shows the price categories which will help to focus attention on the price fields which should command maximum scrutiny. Note that almost 40 percent of the funds in colleges and universities are needed to acquire 5 percent of the total periodical collection. (See the last three entries July 1974-March 1975.)
<table>
<thead>
<tr>
<th>Subscriptions</th>
<th>Percent of Total</th>
<th>Processed</th>
<th>Expenditure</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8 8</td>
<td>8 10</td>
<td>6 14</td>
<td>8 13</td>
<td>3.7</td>
</tr>
<tr>
<td>7 6</td>
<td>6 7</td>
<td>6 2</td>
<td>1 3</td>
<td>6.2</td>
</tr>
<tr>
<td>6 7</td>
<td>9 7</td>
<td>12 2</td>
<td>1 3</td>
<td>6.2</td>
</tr>
<tr>
<td>7 1</td>
<td>11 1</td>
<td>7 3</td>
<td>3.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Less than 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table: Serials: Costs and Budget Projections

Average Price:

College & University Libraries

Public Libraries
For those smaller public libraries, primary and secondary schools, Table 6 shows the value in buying the list of titles in Readers' Guide to Periodicals at the longest term rates offered by the publishers.

### Table 6

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NO. OF PRICED TITLES</th>
<th>AVERAGE WEIGHTED PRICE</th>
<th>AVERAGE WEIGHTED PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 Yr.</td>
<td>2 Yr.</td>
<td>1 Yr.</td>
</tr>
<tr>
<td>1973</td>
<td>117</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>1974</td>
<td>111</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>1975</td>
<td>106</td>
<td>14</td>
<td>24</td>
</tr>
</tbody>
</table>

**Notes**

1) Declining number of periodicals in Readers' Guide having 3 year rates
2) Average weighted price increase of 14% in 1975 over 1974 vs 4.2%, 1974 over 1973 using maximum number of 3 year rate offers. Indicates publishers concern over rate of future inflation
3) Average weighted price increase is 8% in 1975 over 1974 vs 6.7%, 1974 over 1973 and 3.4% 1973 over 1972 using the one year rate only

The one year rate increase pattern does not need a hedge for future inflationary expense.

The retrospective price comparison method on a subject or departmental basis is an aggressive budgeting tool as well as a defensive mechanism for fairly distributing library financial resources. Several institutions using this method report reduction in numbers of titles not deemed necessary by the user departments and proof to their financial officers that all appropriate care had been exercised to keep responsible control over serial maintenance and purchases.

**Notes**


2 See ANSI Z39 20-1974-5, 5.2 Method of Compilation (2)
Background

The relative merits of education vs. experience has been a topic of discussion between practitioners and educators of librarianship for quite some time. As recently as July 1975 at the ALA Conference in San Francisco, a series of meetings was held to pursue this theme. I, too, have often been caught up in this controversy, as I am one who had several years of experience working with serials before I obtained my formal library education and degree. I was very fortunate, however, to have a library director who had once been head of a serials department in a large university library. Over the years she served as my "mentor" in the area of serials, offering me what amounted to a series of mini-courses covering the various aspects of serials. Consequently, when I finally entered library school, I felt my professional education to be at once supplementary and complementary to my previously acquired on-the-job experience.

The precipitating factor that caused me to conduct the survey with which this article deals was a course in serials offered at Drexel University's Graduate School of Library Science in summer 1973. This course, taught by Stella Keenan (then Executive Director of the National Federation of Abstracting and Indexing Services), was one of the first of the few existing serials courses to be offered by an accredited library school. While certainly most, if not all, other courses mentioned the special problems involved with serials, no course went further than that. Class lectures on selection, acquisitions, bibliography/resources, reference, automation, cataloging and copyright all included a parenthetical sentence, something along the lines of, "But in serials the problems and procedures are quite unique, unfortunately we do not have sufficient time to delve into these. And this is true, serials and monographs represent two different worlds of reality in the library, both of which cannot be covered adequately in a single course.

How gratified I was, then, to take a course dealing specifically with serials which covered their physical and bibliographic manage-
Education of Serials Librarians

...ment, their use in bibliometrics, national and international standards related to serials, copyright problems here and abroad, etc. Out of this course came solutions to problems I had encountered in my work, as well as brand new dilemmas which forced me to re-think some of my previously developed notions about serials. This seemed to be ideal preparation for a serials librarian: hard-core on-the-job experience enhanced by a course covering both the practical and theoretical designs in serials.

A Survey of Serials Librarians

Having derived great benefits from the Drexel serials course, it occurred to me that there could not be very many working serials librarians who had had such a course, as the few serials courses in existence had only recently been offered. At about the same time, I began to wonder what specific courses had prepared serials librarians for their jobs, what kind of serials orientation was available to them before they assumed their positions, in what areas they felt the need for more education, and other questions of this sort. In my final academic quarter before graduation from Drexel (spring 1974), I had an opportunity to determine the answers to these questions. I conducted a national survey of serials librarians as an independent study project under the guidance of Stella Keenan. The purpose of the project was two-fold. To determine the state of the art in training for serials librarians, and to evaluate the serials course then offered at Drexel against the actual needs of serials librarians. It was hoped that the results of this survey would identify the areas in which library schools are meeting (or not meeting) the special needs of serials librarians.

Methodology

Using the 1972/73 American Library Directory to identify potential recipients of the questionnaire, I selected 1538 libraries which met specific criteria for number of volumes in the library and budgeted amount for periodicals. With the idea that the needs of serial librarians in college and special (including medical) libraries might be different, separate statistics were kept for the two groups. In most cases statistics for the two groups correlated closely (Public libraries were not included in the survey.) A 40 percent sample was selected by means of a random number table, keeping the percentage of college and special libraries the same as in the original population. 69 percent college libraries, 416; 31 percent special libraries, 189; for a total of 605 libraries.
A questionnaire was developed that was intended to be short and yet allow for as much individual response as possible (see Appendix). A covering letter was included to explain the background and purpose of the survey. Wherever it was possible to ascertain the name of the serials librarian from the American Library Directory, the questionnaire was addressed to that individual. Where a serials or periodicals librarian was not listed, the letter was simply addressed to ATTN Serials Librarian.

Results

The response to the survey was most rewarding, to say the least. Three hundred and sixty-one responses were received, amounting to a 60 percent return. No follow-up requests were sent.

In response to the first question, every conceivable job title was listed ranging from serials librarian, periodicals librarian, reference librarian, acquisitions librarian, head of technical services, public services librarian, library clerk to head librarian. Responses from all returns were totaled, although in retrospect, a truer picture might have been gleaned by just counting those who were titled serials or periodicals librarian.

Question two intended to identify the area or areas in which most serials librarians are involved (see Table 1). By far, acquisitions, binding and selection were the areas most frequently checked, and reference was a close fourth choice.

<table>
<thead>
<tr>
<th>Areas in Which Serials Librarians Are Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas</td>
</tr>
<tr>
<td>Selection</td>
</tr>
<tr>
<td>Acquisitions</td>
</tr>
<tr>
<td>Cataloging</td>
</tr>
<tr>
<td>Indexing/Abstracting</td>
</tr>
<tr>
<td>Reference</td>
</tr>
<tr>
<td>Automation</td>
</tr>
<tr>
<td>Binding</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

I asked the third question because at the time the survey was done I was acutely aware of my classmates efforts to seek employment in a field of their choice after graduation. It seemed that most were...
Education of Serials Librarians

looking for positions as reference librarians, catalogers, audiovisual librarians or children's librarians. I do not recall one person saying that he or she wanted a position in serials. The response to my question seems to bear this out only 20 percent of the college group and 10 percent of the special libraries group actively sought a position in serials work. It seems rather obvious that one would tend to seek a position for which one is adequately prepared through education, background and experience. When such a small percentage of the sample admitted to seeking a serials position, it can be inferred that few people feel prepared to assume the demands of serials work compared to other fields of librarianship.

Since a great number of library employment advertisements specify another subject specialty in addition to a library degree, I wanted to find out how many people working in serials were required to have a second subject specialty when hired. Six percent of the college group and 27 percent of the special libraries group responded affirmatively. The majority of the subjects listed were in the sciences or engineering. Apparently, at least in college libraries, a second subject specialization requirement has not yet become a trend in employment practices.

Seventy-nine percent of the respondents in the college group had earned a master's degree in library science, as had 74 percent of the special libraries group. In all, 50 different library schools were listed, 44 of which were accredited. More than one third (34 percent) of the total respondents had earned their degree since 1970, 24 percent during 1966-1969, 23 percent during 1960-1965, 15 percent in the 1950s, four percent in the 1940s, and one in the 1930s. Of the remaining percentage of respondents who said they did not have a master's degree in library science, many were still titled serials or periodicals librarian.

Questions six and seven were intended to determine the extent of further education and professional development that serials librarians have attained. Twenty percent of the college group and 16 percent of the special libraries group indicated they held other graduate degrees, most were master's degrees in various subject areas, and a few mentioned PhD's. In response to the question about attendance at post-graduate courses, seminars, workshops or other continuing education courses related to serials, 31 percent of the college group and 28 percent of the special libraries group cited various courses they had attended. Several references were made to the LARC seminar as well as the Allerton Park work-
shop, in addition, courses or seminars in government documents, computer programming, medical librarianship and unspecified serials workshops were frequently cited. A significant number of respondents indicated that they would be very interested in attending such courses, but no opportunity had been made available to them in their area or state.

Question eight was an attempt to determine the extent to which library administrations feel a responsibility to help a newly hired serials librarian assume her/his position. Obviously, not all newly hired persons are novices, some having held similar positions previously. The results of the survey showed that 24 percent of the college group and 21 percent of the special libraries group received some specialized on-the-job training directly related to control and handling of serials. The scope and depth of this training could not be quantified in this type of survey.

The results of the survey showed that there is a core of courses that helped prepare the respondents for their work in serials. The following courses were listed in question nine by nearly the same percentage of respondents: bibliography/resources in science, humanities and social sciences, cataloging and classification, reference, government documents, technical services, library administration, automation, computer programming or data processing. Only 10 respondents listed a serials course as being specifically helpful to their needs.

Table 2
Areas Not Adequately Covered by Library School Courses

<table>
<thead>
<tr>
<th>Area</th>
<th>College Libraries Group (265)</th>
<th>Special Libraries Group (98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>29%</td>
<td>25%</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>34%</td>
<td>26%</td>
</tr>
<tr>
<td>Serials Cataloging</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>Serials Reference</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Manual handling</td>
<td>42%</td>
<td>33%</td>
</tr>
<tr>
<td>Automation</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Indexing/Abstracting</td>
<td>29%</td>
<td>23%</td>
</tr>
<tr>
<td>Bibliometrics</td>
<td>6%</td>
<td>19%</td>
</tr>
<tr>
<td>Copyright</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Question 10 was included in an attempt to isolate those specific areas of serials work which library schools have not adequately covered for the needs of serials librarians (see Table 2). The most surprising result here is that, even in today's increasingly automated library world, 40 percent of the respondents checked manual handling of serials files. I hope that as a result of this particular statistic, serials librarians will feel in good company on a day when they are especially overwhelmed by bulging kardexes and bindery files. Manual handling of serials files is an area that has been taken for granted and overlooked, much to the detriment of a large percentage of serials librarians.

Table 3

Areas in Which Continuing Education is Desired

<table>
<thead>
<tr>
<th>Areas</th>
<th>College Libraries Group (265)</th>
<th>Special Libraries Group (96)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloging</td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Bibliometrics</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Selection</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>(Manual) Serial Record</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Circulation</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Indexing/Abstracting</td>
<td>16%</td>
<td>7%</td>
</tr>
<tr>
<td>Automation</td>
<td>38%</td>
<td>34%</td>
</tr>
<tr>
<td>Binding</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Microforms</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Budgeting</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Publishing/Editorial Practices</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Reference</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Copyright</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Gov t Documents</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>-</td>
<td>5%</td>
</tr>
</tbody>
</table>

The results of question 11 (see Table 3) could be used in two ways. (The percentages for each line are smaller due to the fact that this was an open-ended question) First, each of the topics listed could be used as the theme of a continuing education workshop, seminar, or course. Many such courses have been and continue to be offered by library schools and other professional organizations. Second, the areas listed by the respondents in question 11 represent a very accurate picture of the world of serials; should future serials librarians be denied the opportunity to learn in library
school courses as much as possible about these problems before being expected to tackle them in a real serials position?

The results for question 12 confirm the ever-growing trend in automation of serials files. In the college group, 32 percent reported that their libraries have some type of automated serials file; 36.5 percent of the special libraries group also answered this question affirmatively. These percentages have probably increased by now, however, as 26 percent of the college group and 24 percent of the special libraries group indicated future plans for automated serials files.

In question 13 I wanted to determine the extent of the respondents' serials experience. Twenty-seven percent of the total had one to two years' experience, 25 percent had three to five years, 17 percent had five to ten years, and 20 percent had over ten years' experience. The sample proved to be a good cross section of experienced and less experienced serials librarians.

Additional Comments by Respondents

When I asked for additional comments concerning the theme of this survey, I truly did not expect much response from busy, over-worked serials librarians. It quickly became apparent, however, that this is a subject that generates extremely varied and thought-provoking ideas in serials librarians. Approximately 50 percent of the respondents took the time to give me additional information, ranging from a few terse clarifying statements to beautifully articulated philosophies of serials librarians and serials in general. Several people used the opportunity to complain about many of the problems now treated in publications such as *Title Varies*. Others, anticipating my recommendations, gave detailed syllabi for a hypothetical serials course. One remarkable serials librarian sent an 11-page typed response that is worthy of publishing in itself.

By and large a few recurring ideas were expressed in the additional comments. Business management courses were seen as mandatory for serials librarians by many respondents. "Library science students should be made aware of the fact that library management is Big Business," said one librarian, "and [they] should be told that [they] may well become responsible for hundreds of thousands of dollars and hundreds of staff members." Another person lamented, "Serials now represent 73 percent of my library's materials budget, and I had no formal training in regard to them. Something's wrong."

Still another librarian stated that he owed
his success in serials administration to 20 years of prior experience in the business community.

Another important idea brought out by many people was the necessity for more effective communications, both inter-institutionally between serials librarians and inter-departmentally within the institution.

Finally, there were many comments concerning who should teach a serials course and how it should be conducted. Many felt that the course should be the responsibility of an experienced serials department administrator, as only this type of person could be familiar with both the theory and practices involved in serials work. Also, it was generally expressed that any serials course should include some type of hands-on experience in a library or a lab section where problems can be explored in depth.

Although many other valuable thoughts and suggestions were included in the written comments, space limitations prevent the mention of all of them. My hearty thanks go to all who took the time and trouble to express their ideas.

**Conclusions and Recommendations**

While the results of this survey can by no means be called conclusive, it is my belief that they do point out the deficiencies in the formal education received by many working serials librarians. To expect a person to cope with the convoluted reality in the serials world without ever having even heard the word "serials" mentioned in library school courses is cruel, unprofessional, wasteful, and foolish. Is there any other field of librarianship that presumes so much? It is true that most librarians will experience pangs of anxiety and uncertainty when faced with a new job, but at least they can fall back on some basic theories and bibliographic tools learned in courses related to their specialties. As serials take over the major portion of many libraries' materials budgets, and as OCLC, CONSER, ISSN, NSDP, ISBD(S) become part of serials librarians' everyday vocabulary, can professional library educators continue to neglect this vast area of librarianship?

In a separate survey of all the ALA accredited library schools conducted in spring 1974, Stella Keenan and I learned that only eight graduate library schools offer a course on serials. (There are now 62 accredited library schools.) Of these eight courses, for which we received the syllabi, only three included serials as a part of a larger
course on technical services or organization of special materials

in summary, I would like to make three recommendations

1 The ALA Serials Section Policy and Research Committee, which has had this topic on its agenda at the 1974 and 1975 annual conferences, should take steps to issue a position statement expressing its concern about this matter to the curriculum committees of all accredited library schools that do not offer a serials course. If the committee should find it within its aegis to do so, a proposed suggested syllabus could also be prepared.

2 Library school administrators should examine their course offerings to determine how the growing area of serials librarianship can be effectively integrated into the curriculum.

3 To ensure continuing communication among serials librarians and to promote professional development, workshops, such as those held by LARC and the Library of Congress, should continue to flourish. These should be made available at as low a cost as possible, and varying geographical areas should be selected as sites. Professional library organizations should make every effort to cater to the needs of serials librarians as they have done for other special interest groups in the past.
serials course evaluation survey

1. title of your position

2. Please check the areas with which you are involved in serials:
   - Selection
   - Acquisitions
   - Serials cataloging
   - Serials reference
   - Indexing/abstracting
   - Reference
   - Binding
   - Automation
   - Others (Please specify)

3. Did you actively seek a position in serials work? 
   - Yes ___ No ___

4. When you were hired, did your job require a subject specialty other than a library science qualification? 
   - Yes ___ No ___ Which subject's ___

5. Do you have a Master's degree in Library Science? 
   - Yes ___ No ___

6. If your answer is Yes, please specify name of school and year received:
   - School ___ Year ___

7. Do you have other graduate degrees? 
   - Yes ___ No ___

8. If your answer is Yes, please specify other degrees held:

9. Have you attended any post-graduate courses, seminars, workshops, or other continuing education courses related to serials? 
   - Yes ___ No ___

10. If your answer is Yes, please specify:
    - Title of course (exact title not necessary)
    - Where was course given
    - Who taught the course

11. In addition to the usual training received by newly hired employees to acquaint them with local procedures and policies, did you receive any specialized on-the-job training directly related to control and handling of serials? 
    - Yes ___ No ___

12. What other graduate courses do you feel specifically helped to train you for work in serials? Please list in order of most important first (exact titles not necessary)

13. Which areas do you feel your library school courses did not adequately cover in aiding you with your current job in handling of serials?
    - Selection ___ Acquisitions ___ Serials cataloging ___ Serials reference ___ Indexing/abstracting ___ Manual handling of serial files ___ Bibliometrics ___ Copyright ___ Automation ___ Others (Please specify)

14. In which areas would you like to receive continuing education to assist you in handling serials better?

15. Does your library have any type of automated serials file? 
    - Yes ___ No ___

16. Are there future plans for implementation of an automated serials file? 
    - Yes ___ No ___

17. How long have you worked in serials? Include present position and all previous positions held in serials:
    - In yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___ yrs. ___

18. Your additional comments concerning training for serials librarians will be welcomed and carefully considered. Please use the other side of this sheet if necessary.

Thank you.

April 1974

[Signature]
Toni Garbo Bearman is Executive Director of the National Federation of Abstracting and Indexing Services. She has also worked at the Brown University Physical Sciences Library and Biological Sciences Library, at the University of Washington (Seattle) Engineering Library, as a subject specialist in the technical report literature and for Mathematical Reviews. She served as project coordinator for an NSF-funded project in cooperation with the Antwerp (Belgium) Library School to identify and evaluate technically-oriented serials published by private industry. Mrs. Bearman has been active in the American Society for Information Science and the Special Libraries Association. She has a BA degree in literature from Brown and an MS from Drexel University and has done advanced studies both at Drexel and at the University of Pennsylvania's Wharton School of Business.

Frank F. Josquin is Executive Vice-President of the F. W. Faxon Company and General Manager since 1961. He graduated from Washington University, St. Louis, in 1938 and spent 23 years in the chemical industry. Direction and design of automated services at Faxon through four generations of computers has been his principal concern in applying business methods and practices to serials records and control in libraries.

Joseph H. Howard is Assistant Director, (Cataloging) in the Processing Department of the Library of Congress. He has also served as Chief of the Serial Record Division and Chief and Assistant Chief of the Descriptive Cataloging Division. Prior to joining the LC staff, he served as Head of the Catalog Department, Washington University, St. Louis, in the Peace Corps, Kuala Lumpur, Malaya, and at the University of Colorado.

Lawrence G. Livingston is Program Officer at the Council on Library Resources, Inc. for Automation, Networks, and National Library Services. He is active in a number of national and international programs having to do with standardization to enhance bibliographic exchange. The Council is a not-for-profit operating foundation chartered in the District of Columbia.

Joseph W. Price is currently Chief of the Serial Record Division at the Library of Congress. Mr. Price joined the Library in 1972 as Senior Systems Analyst for the National Serials Data Program. In 1974 he was named Assistant Director and then Acting Director. Mr. Price is an honors graduate in music from Sam Houston State University, Huntsville, Texas, and holds a master of library science degree from the University of Texas at Austin. He has also done work in computer science at Boston University and in public administration and information science at American University, Washington, D.C. Mr. Price came to the Library from the U.S. Air Force where he was in charge of library automation development at the Air Force Cambridge Research Laboratories in Bedford, Mass. He has also served as
a systems analyst with Sacramento State University and with Rice University when that institution was one of the pilot participants in the Machine-Readable Cataloging (MARC) Pilot Project.

Mary E. Sauer held various positions in the Library of Congress from 1965 to 1969 and has been with the National Serials' Data Program since its inception in 1972. As of January 1975, she is Head of the NSDR Section in LC's Serial Record Division. From 1970 to 1972 she served as Assistant Director for Serials at the St. Louis University Library in St. Louis, Missouri. Ms. Sauer is a member of the ANSI Z39 Subcommitteee on Serials Holdings Statements and serves on several committees of the American Library Association, including the RTSD Catalog Code Revision Committee.

C. Sumner Spalding was Assistant Director of the Cataloging Department of the Library of Congress from 1968 until his retirement this year. He represented LC at the 1961 International Conference on Cataloging Principles in Paris and was general editor of the Anglo-American Cataloging Rules based on the Paris principles. In 1969, he represented LC at the international Meeting of Cataloguing Experts in Copenhagen from which the International Standard Bibliographic Descriptions evolved.

David C. Taylor is Undergraduate Librarian at the University of North Carolina in Chapel Hill, and the editor, since 1973, of Title Varies. From 1970 to August 1975, he was Serials Librarian and Head of the Receiving Section at Michigan State University. At the American Library Association's Annual Conference of 1974, he announced the first Librarians United To Fight Costly, Silly, Unnecessary Serial Title Changes (LUTFCSUSTC) Worst Serial Title Change of the Year Award, an award that has since become an annual tradition.

Paul Vassallo has been Dean of Library Services at the University of New Mexico since November 1974. Prior to that, he was Director of the National Serials Data Program for over two years, Chief of the Congressional Reference Division for four years, he has held several other positions in administration, reference, and technical services at the Library of Congress since going there as a Special Recruit in 1962, after graduating from the University of Michigan School of Library Science. He holds a BA and has done graduate work in political science at Wayne State University.

Benita M. Weber graduated from Drexel University's Graduate School of Library Science in 1974. She began working with serials at the Montgomery County Community College Library in December 1968 and is currently Serials and Binding Librarian. On various occasions she has guest-lectured about serials at Drexel. A member of Beta Phi Mu and the American Library Association, she was recently nominated for Secretary of the Serials Section of RTSD.