

Source Retrieval

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One of the most common experiences in the life of a physicist is the discovery of a lead to further information on some aspect of his current research project. He writes down his reference and goes to his library to look for it. Many times he cannot locate the source journal or the source document* by his own unaided efforts.

At this point the librarian comes into the picture because the physicist has run into a problem common to all sciences but unrecognized by most scientists. The problem is not one of finding the journal or document itself—that can be relatively easy. The more basic problem is one of identifying the source journal or document from the citation. Citations in footnote references and bibliographies are often so condensed and so abbreviated that identification can be extremely difficult. In some cases, identification is simply impossible from the references given. It follows that if the source journal or document cannot be identified, it cannot be located, and the information in the document cannot be used.

An example may be found in the following citation, which appeared as a footnote reference in an article in *The Physical Review*:

Ann Phys

This could refer to any of the following:

1. *Annalen der Physik*. Vol. 1-76, 1799-1824. Ser. 2, Vol. 1-160, 1824-76. New Ser., Vol. 1-69, 1877-99. Ser. 4, Vol. 1-87, 1900-28. Ser. 5, Vol. 1-43, 1929-43. Ser. 6, Vol. 1-20, 1947-57. Ser. 7, Vol. 1—, 1958—.
2. *Annales de Physique*. Ser. 9, Vol. 1-20, 1914-23. Ser. 10, Vol. 1-20, 1924-33. Ser. 11, Vol. 1-20, 1934-45. Ser. 12, Vol. 1-10, 1946-55. Ser. 13, Vol. 1—, 1956—.
3. *Annals of Physics*. Vol 1—, 1957—.

One wonders how many times a scientist leaves the library without information because he is convinced that the paper has not been published in the source to which he was referred. If neither he nor his librarian is aware of the multiple sources

to which many journal citations can refer, this must happen in more cases than one cares to contemplate.

Sometimes, but not always, the identification problem may be solved by the provision of additional clues—series, section, dates, volume numbers. Even if a footnote reference includes none of these factors, a quick check in an abstract journal may help, since the abstract journals in their list of abbreviations for journals abstracted often provide the entire or correct title of a journal.

Unfortunately, some of the "titles" given are actually added titles or translations of titles.* *Astronomischer Jahresberichte*, in particular, is notorious for translated titles. The *Union List of Serials*, *New Serial Titles*, and the *National Union Catalog* are reliable library tools for finding actual titles of journals.

When a citation provides enough bibliographic information to indicate which of several alternatives is the required one, the scientist knows immediately what he is looking for when he goes to the library. Here, however, he may run into another roadblock. Because there are so many journals with nondistinctive titles (see Table 1), they are listed under the name of the issuing body in the *Union List of Serials*, *New Serial Titles*, the *National Union Catalog*, the *British National Bibliography*, and in the catalogs of all reputable libraries in the United States, Canada, and Great Britain, as well as those in any other country where the library either follows the Anglo-American Code in cataloging or buys its cards from the Library of Congress. Arrangement of the journals on the library shelves may be governed by this rule.

For library catalogs or for the other bibliographies mentioned above, there are three special cases:

1. Serial publications, which are entered under the name of the issuing body as author, or under title, in the form that will stand the longest without

* "Document" is defined here as any monographic work such as a laboratory, government, or private research report, bibliography, preprint, reprint, supplement to or single issue of a journal or other serial publication, etc.

* For example, the journal issued by the Suomalainen Tiedakatemia, Helsingfors, is correctly titled *Toimituksia. Annales in Mathematical Reviews*, but in *Science Abstracts A: Physics Abstracts* it is listed by its subtitle, "Annales Academiæ Scientiarum Fennicæ".

Table 1. Titles which cannot stand alone

Proper identification requires inclusion of either the name of issuing body or full indication of rest of title if no issuing body is involved.

Abhandlungen	Discussions	Rad
Acta	Doklady	Rapport
Actes		Record
Acts	Foerhandlingar	Rendiconti,
Anales	Forhandler	Rendiconto
Annaes		Report
Annalen	Handlingar	Research
Annales		publications
Annali	Informe	Review
Annals	Izvestiia	Revista
Annual report		Revue
Arbeiten	Jahrbuch	Rivista
Archiv	Jahresberichte	
Archives	Jornal	Schriften
Archivos	Journal	Scientific papers
Arkiv		Scientific
Arquivos	Mededelingen	proceedings
Atti	Mémoires	Sitzungsberichte
Avhandlingar	Memorias	Skrifter
Ärbok	Memorie	Soobshcheniia
	Mitteilungen	Special publication
Berichte		Spisy
Boletim		
Boletín	Nachrichten	Transactions
Bollettino	Notas	Trudy
Bulletin	Notes	
Circular	Occasional papers	Verhandlingen
Collection		Verhandlungen
Comunicaciones	Papers	Veroeffentlichungen
Communications	Práce	Vestnik
Commentationes	Praktika	
Comptes rendus	Proceedings	Yearbook
Contribución	Publicaciones	
Contributions	Publications	Zapiski
		Zentralblatt
Denkschriften	Quarterly journal	Zhurnal

change. They are never entered under editor because the editors change so frequently.*

2. Serial publications, such as *Advances in . . .* or *Progress in . . .* are entered under title because very often editorships change from volume to volume.
3. Conferences and symposia are entered under the name of the conference or symposium as author, almost never under editor or sponsoring body. Whether the conference volume has a distinctive title or is called the "proceedings", it is ordinarily entered under the name of the conference for the sake of consistency.

Individual items in the document or report literature are the most difficult to find. Existing

* In this respect, a serial, which is a publication with no foreseeable end, should not be confused with a monographic work issued in parts. Since the monograph has a foreseeable end and usually is carried to completion by the original editor, it is entered under the name of the editor as author.

footnotes, references, or citations for reports typically include one or more authors, no title, and a few hieroglyphics for publisher and place as part of the report number, sometimes followed by date, and always by pages.

The scientist who comes to the library with a reference to a report or a foreign journal not in the library's collection may notice that the librarian turns pale when he presents it. Scientific and technical literature does not yet have a standardized descriptive method or its own centralized analysis point. There is no single organization in the United States to identify, analyze, and list new documents in the way printed books are dealt with by the Library of Congress. Whatever the difficulties, however, references must normally be verified in some standard bibliographic source before they can be purchased or requested on interlibrary loan. Verification requires the following information:

Journals

- Full name(s) of author(s) of article
- Full title of article
- Full title of journal (if possible)
- Section, series, volume number of journal
- Year of publication of pertinent volume
- Exact pages covered by article

Reports

- Full name(s) of author(s)
- Full title of report (if possible)
- Full name of issuing body (if possible)
- Full report number, code reference (if any)
- Date of publication

Conference papers

- Full name(s) of author(s) of paper
- Full title of paper
- Full name of conference
- Full title of work if other than proceedings (otherwise indicate as "Proceedings")
- Place conference was held
- Date of conference
- Pages

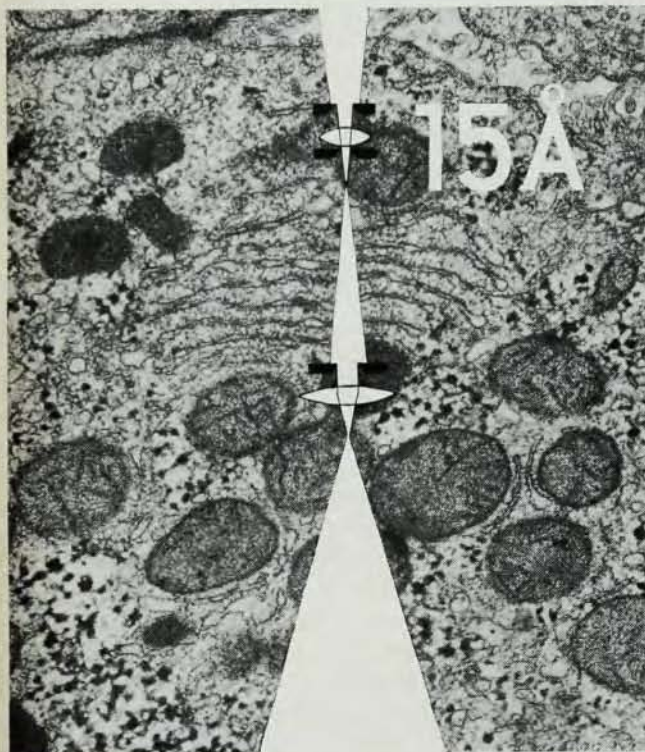
Books

- Full name of first author cited on title page
- Full title (including *all* words)
- Publisher
- Place and date of publication
- Edition (if other than the first)

Report series codes—special problems

Everyone has felt that something was necessary for better identification of the hundreds of thousands of technical reports issued since World War II. The Rio Grande Chapter of the Special Libraries Association did something about it. Under the able editorship of Helen F. Redman and Lois E.

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Godfrey, they compiled a *Dictionary of Report Series Codes** which has an excellent introductory section giving much needed background information about such reports and their issuing agencies. It has two main indexes, one identifying issuing bodies from the letter codes given with document numbers and the other supplying codes for known issuing bodies. A reference can be traced either way: RTP T- GT. BRIT. MIN. OF AIRCRAFT PRODUCTION (TRANSLATION), or GT. BRIT. MIN. OF AIRCRAFT PRODUCTION (TRANSLATION) RTP T-

The code index is especially useful because it provides information about the source of the report. Armed with this information it becomes possible to check other bibliographic sources for accuracy of author and title, and availability information. Unfortunately, the *Dictionary* covers only publications related to government-sponsored research (foreign and domestic).

What happens when the meaning of the report code cannot be found in the *Dictionary of Report Series Codes*? The document can be requested from the governmental sales agencies, but if there is a discrepancy in the number, the document purchased may not be the one desired. This happens often enough to make prior identification mandatory, but the dilemma posed by the incomplete reference makes identification virtually impossible.

This brings into focus the main problem involved in source retrieval of scientific reports and journal articles. If authors' names are misspelled, as so often happens with Russian names, or where report code numbers have become altered by mistakes in copying, or where serious omissions or ambiguous abbreviations in a citation are present, it is virtually impossible to find the reference in an abstract journal, when no title of the paper is given. At present, one can only search for a known report or article by *author* in most indexes.

What can you do to help yourself and your librarian obtain quicker access to the material you need? The chief thing is to copy citations fully and accurately, omitting nothing. Even better, when making citations in your own papers, put down enough information to make the source material easily recognizable. If this is done, much of the delay and confusion contributing to the scientific literature "crisis" can be eliminated. Here is a point where a few minutes spent by each writer in improving his input data will yield infinitely better output for every user of his work.

* Special Libraries Association, Rio Grande Chapter. Report Series Dictionary Committee. *Dictionary of Report Series Codes*. Edited by Helen F. Redman and Lois E. Godfrey. New York, Special Libraries Association, 1962.