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LIBRARY RESOURCES AND TECHNICAL

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A Summary of the Treatment of Bibliographic Relationships in Cataloging Rules

Barbara B. Tillett

History has shown no rationale and little consistency in how we relate bibliographic entities. An analytical study was conducted to examine the cataloging rules through the Anglo-American Cataloguing Rules, 2d ed., to reveal practices for indicating bibliographic relationships in catalog records, and to identify types of relationships. Each type of bibliographic relationship has had several linking devices used to connect bibliographic entities. The technology available to create and maintain a catalog has greatly influenced the types of linking devices included in the catalog and prescribed in cataloging rules.

In designing future computerized library systems, it would be very helpful to have a conceptual model to guide our efforts. One part of that model would be the various relationships we want to express, including bibliographic relationships, access point relationships, etc.

With regard to bibliographic relationships, history has shown no rationale and little consistency in how we relate bibliographic entities. A review of cataloging rules since 1841 reveals differing methods and devices used over the years to show bibliographic relationships, but also reveals a lack of any theoretical rationale for the devices prescribed. Cataloging rules change with changing technologies and pressures of traditions in large libraries, such as the introduction of filing titles

when card catalogs came into vogue and the disappearance of dashed-on notes with the introduction of machine-readable bibliographic records. Perhaps we should now work toward a more theoretical approach.

METHODOLOGY

In the mid-1980s an analytical study was conducted to examine the cataloging rules through the Anglo-American Cataloguing Rules, 2d ed. (AACR2) to reveal practices for indicating bibliographic relationships in cataloging records and to identify types of relationships. Consideration was given to both the historic rationale and the future importance of expressing bibliographic relationships in catalogs.

An effort was made to identify all major

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Editor's Note: Library Resources & Technical Services is pleased to present the second in a series of research reports on the topic of bibliographic relationships. These reports are derived from the author's 1987 Ph.D. dissertation, "Bibliographic Relationships: Toward a Conceptual Structure of Bibliographic Relationships Used in Cataloging."

cataloging codes and sets of rules used in the United States. Panizzi's rules were also included, since they have been acknowledged as the basis for cataloging codes used in the United States. From the codes and rules identified, twenty-four principal cataloging codes were selected for review. Codes with well-recognized influence on cataloging at both the Library of Congress (LC) and major libraries in the United States were preferred. For codes covering only serials, Pierson's Guide to the Cataloguing of the Serial Publications of Societies and Institutions, second edition, was selected to represent serials cataloging at LC. The codes that were analyzed are listed in appendix A.

The glossaries of the various cataloging codes were inspected, along with the ALA Glossaries, 2 to further identify types of bibliographic items and types of linking devices. The ALA Glossaries provided additional terms for bibliographic items not explicitly mentioned in the codes, terms that proved useful in developing the taxonomy of relationships.3 Once these terms for bibliographic items were listed, they were examined to determine whether any natural categories for a taxonomy might result. Indeed, the categories of bibliographic items provided a very useful perspective on possible structures for the taxonomy of bibliographic relationships.4

After identifying categories of bibliographic items that could be related, cataloging codes were analyzed to select rules pertaining to bibliographic relationships and linking devices. This was accomplished through a chronological reading and annotation of copies of each of the twenty-four cataloging codes, noting all rules that mentioned making a link between bibliographic records or mentioned relating an item being cataloged to some other item or larger work.

Cataloging rules cover a wide range of topics pertaining to the description of bibliographic items and catalog entry. Some rules are specifically about relating items, such as rules calling for series notes. Some rules combine relationship information with nonrelationship information, such as rules calling for entry under a specific name and title with an added entry for a

related item's name and title. Some rules combine several types of relationships, such as rules for serials that call for notes on all types of relationships with other serials. Some rules are not associated with any bibliographic relationships, such as simple rules on the measurement of the size of an item and complex rules on some of the decisions for authorship. The rule review was complicated by the different styles and changing viewpoints of individual cataloging codes, a circumstance that has been well observed by others. 5 The copies of the rules were highlighted in color coding to flag any mention of specific devices used to link bibliographic records. Then followed an analysis of the selected and highlighted rules to document both the evolution of the use of linking devices and any underlying rationale for their use. Associated findings from an accompanying empirical study will be presented in the fourth article of this series.

As a result of identifying types of bibliographic items and reviewing cataloging rules dealing with relationships, the taxonomy of bibliographic relationships was created.6 The taxonomy categorizes bibliographic relationships as follows:

- 1. equivalence relationships
- 2. derivative relationships
- 3. descriptive relationships
- 4. whole-part (or part-whole) relationships
- 5. accompanying relationships
- 6. sequential relationships
- 7. shared characteristic relationships

Using these categories of bibliographic relationships, we see what linking devices historically have been prescribed by cataloging rules.

EQUIVALENCE RELATIONSHIPS

Equivalence relationships are those that hold between exact copies of the same manifestation of a work, or between an original work and reproductions of it, as long as intellectual content and authorship are preserved. The idea of equivalence is essentially a mathematical concept. However, in the mathematical sense, an equivalence relationship is strictly an identity relationship and could be used for only exact copies. If we require only intellectual content and authorship to be identical, then the idea of equivalence can be expanded for our purposes to include reproductions. However, in the case of reproductions, we must be certain that neither the intellectual content nor authorship is altered by the reproduction, for when that occurs, the reproduced item is no longer equivalent, but derivative. Even alterations of color for motion pictures or irretrievable changes of scale for microfilmed maps transform the relationship from equivalence to derivative, because such changes can be said to modify the intellectual or artistic content.7 Consequently, equivalence relationships exist only between exact reproductions or copies of the same work from the same printing, either in the same format or in other formats, subject to the provisos above.

The cataloging rules have suggested six methods using linking devices to indicate equivalent items in bibliographic records:

1. A dash entry for the equivalent item on the record for the original item;

2. A note on the bibliographic record for the

original item acknowledging the equivalent item;

3. A note on the bibliographic record for the equivalent item acknowledging the original:

4. Notes to link separate bibliographic records for the original and related items;

5. The same uniform title heading used in the records for both the equivalent item and the original; or

6. A holdings annotation about the equivalent item in the bibliographic record for the original or on the shelflist for the orig-

The linking devices of notes and uniform titles are used to relate publications in the bibliographic universe in general, whereas the linking devices of dash entries and holdings annotations are used to relate the particular holdings of a given library. The third article in this series will describe the evolution of each device.

Equivalence relationships are not specifically handled in cataloging codes until 1905, although in practice linking devices for equivalence relationships were used much earlier. For instance, the 1841 Brit-

ACONTIUS KOVER (STEPHANUS), Archbishop of Sinnia.

Vita S. A. K. postulante equite A. Raphael, scripta Armenice atque Latine. 2 pt. Venetiis, 1825. 8°

ACONZIO. See Acontius.

AÇORES. See Azores.

ACOROMBONI or ACOROMBONUS (HIERONY-MUS). See Accorombonius.

A COSTA. See Costa.

ACOSTA (CHRISTOVAL).

Tractado de las drogas, y medicinas de las Indias Burgos, 1578. 4° Orientales, con sus plantas.

Another copy.

The same. Ital.

Venetia, 1585. 4°

Another copy.

Another copy.

Tratado en loor de las mugeres. Venetia, 1592. 4°

ACOSTA (DUARTE NUÑEZ DE). See NUÑEZ.

Figure 1. Example of Indented Form, "Another copy" (from the 1841 British Museum catalog. p.94).

ish Museum catalog based on Panizzi's rules shows the inclusion of "Another copy" as an indented entry (see figure 1), essentially a dash entry without the dash.

To best perceive the inconsistencies that have characterized linking devices for equivalence relationships, we can systematically examine bibliographic items in these relationships. The items are copies and impressions, issues and reissues, facsimiles and reprints, photocopies, microforms, and other reproductions.

For copies and impressions, early rules specified the addition of a note "dashed on" the main card, e.g., "- Copy 2" (see figure 2). The 1949 LC rules were unique in considering both published and unpublished issues of a dissertation to be copies, unlike earlier and later rules, which considered them to be different editions of the same work, to be cataloged separately. By the time of the 1978 AACR2, second or other subsequent copies were usually not mentioned at all in the bibliographic record, although the rules allowed for the seldom-used addition of a note (holdings annotation) describing a specific library's holdings. For manuscripts that are copies or consist of copies, the later rules insisted that the note indicate exactly what type of copy (e.g., carbon copy, photocopy, or transcript with handwritten or typewritten specified) as well as the location of the original, if it could be readily ascertained.

Thus we see a change from once including copies on the bibliographic record with a dash entry to now either citing a general note of a given library's holdings or omitting copies from the bibliographic record altogether. Dash entries were associated with card and book formats, and once the MARC format was introduced, the dash entry disappeared.

Issues and reissues have been treated by the rules as different editions, different issues, or as copies. For treatment as different issues or copies, the dash entry was employed. For motion picture films, the dash entry, "Another issue," was used only when variations occurred in size, color, or other physical characteristics. The implication was that such variations did not affect content. This treatment separates equivalent items from those exhibiting a derivative relationship, although it might be said the introduction of sound and color change the intellectual content of a film. They certainly change the artistic content.

Facsimiles and reprints are either issued as exact duplicates or have material in addition to the exact copy of an earlier item. By 1908 such materials appeared in the rules and were consistently treated in subsequent cataloging codes. The bibliographic description of a facsimile reproduction is based on the original with a note about the reproduction, unless new material is introduced, where the bibliographic

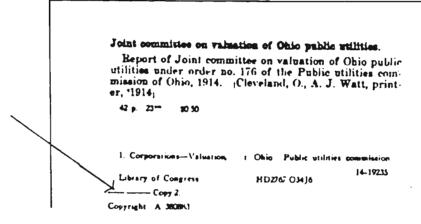


Figure 2. Example of a Dash Entry, "Copy 2" (from the National Union Catalog, base set).

record is made for the reproduction with a note about the original. When not linked through notes, facsimiles and reprints are linked to their originals through the use of the same uniform title, such as for facsimiles of manuscripts of the Bible.

When photocopies were first introduced, the cataloging rules (1941) treated them as copies by describing them on the bibliographic record for the original. By 1949, if the photocopy had its own title page or other additional matter, it was given its own entry with a note about the original, thereby treating them as facsimiles, which is how the 1978 AACR2 treats them. The 1967 AACR rules permitted photoreproductions other than facsimiles to be viewed as copies and treated with a dash entry. However, there is also the practice in AACR2 rule 4.7Bl of making a note about photocopies of manuscripts or manuscript collections on the bibliographic records for such items, with a note indicating the location of the original, if such information can be readily ascertained.

Microforms were first mentioned in the 1949 LC rules, which called for describing the original and making a note for the microfilm. The 1967 AACR allowed for either a note about the microform or a dash entry, but the 1978 AACR2 describes the reproduction with a note for the original (the same procedure as used for photocopies). Of special mention is that LC issued a policy statement in its fall 1981 Cataloging Service Bulletin reversing the rule for microreproductions instead to describe the original with a note for the reproduction.

For other kinds of reproductions, such as pictures, generally the main entry heading is the same as that for the original work; or a note for the reproduction is made, including indications of physical changes (microform, sound, etc.) that do not affect the intellectual content. When a different medium is employed for a reproduction of art, cataloging rules consider the work no longer a copy, but rather an adaptation (therefore having a derivative relationship, not an equivalent relationship) with an added entry link to the original artist and work.

SUMMARY OF DEVICES USED FOR EQUIVALENCE RELATIONSHIPS

As we can see from the review above, equivalent bibliographic items historically have been linked through the following devices: a dash entry, a note, or a uniform title entry. Otherwise, equivalent items have been ignored in the bibliographic record altogether and merely included in a statement of the library's holdings, often only on a shelflist.

It is worth noting the disappearance of the once prominent dash entry device. We also observed that although reproductions have been treated somewhat inconsistently, the general practice, as reflected in the aforementioned 1981 LC policy statement, has been to include photomicro-reproductions on the bibliographic record for the original item, with other reproductions receiving their own bibliographic records using the main entry heading of the original item and a note about the original item to link them.

DERIVATIVE RELATIONSHIPS

Derivative relationships are those that hold between a bibliographic item and a modification based on that item. They are called horizontal relationships in the UNI-MARC definitions.8 One item is derived from another when it enlarges, abridges, or otherwise modifies the entire item or portions of it. As was noted under equivalence relationships, the derivative relationship excludes relationships for exact reproductions or copies, but includes relationships between an original work and a variation (versions, translations, editions, variations of slight modification), a change of genre, an adaptation or arrangement, and a new work based on the style or thematic content of the original.9

SUMMARY OF DEVICES USED FOR DERIVATIVE RELATIONSHIPS

Derivative relationships encompass the range of relationships from nearly identical to distinctly separate. The pervasive connection among such diverse relationships is the fact that there is some original work

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from which another work is derived. whether in intellectual content, style, or thematic content. Considering the diversity of relationships in this category, it is not surprising that an equal diversity of devices has been used to express these relationships in a catalog. These include references, dash entries for added editions. edition statements, notes, uniform titles, subject headings, main entries held in common (here called common main entries), filing titles, and added entries. There is no rationale in the rules for preferring one particular device over another for linking bibliographic items and their derivations, and indeed, the rules are often inconsistent.

DESCRIPTIVE RELATIONSHIPS

A descriptive relationship holds between a bibliographic item or work and a description, criticism, evaluation, or review of that item or work, such as that between an item and a book review describing it; we also include here criticisms, casebooks, annotated editions, and commentaries on other works. For our purposes, a description is a bibliographic item that gives a mental image of a work through a textual medium. Criticisms and reviews, then, are special kinds of evaluative descriptions that reflect upon the original work. A review is defined in the A.L.A. Glossary of Library and Information Science as "an evaluation of a literary work, concert, play, etc., published in a periodical or newspaper."10

It is rare that catalogers who make bibliographic entries for books will make an entry for a review that is an article, but occasionally a review is an important component within a larger work; for instance, in an anthology of book reviews, an individual review may be described through an analytical entry. But regardless of whether the review is given a bibliographic entry or not, the review still will have a descriptive relationship to the bibliographic item it

Whenever a description is published with the text it describes, and the text is emphasized, the catalog rules have consistently recommended bibliographic entry of such descriptions under the heading for

the work being described.¹¹ However, when the description itself is emphasized, the rules have called for an added entry or subject entry for the original work or works. For the reverse relationship, from the work described to the description, the only applicable rules¹² are those for incunabula, manuscripts, or maps that have a well-known bibliographic description published in some reference source, with the reference source cited in a note on the record for the item described.

SUMMARY OF DEVICES USED FOR DESCRIPTIVE RELATIONSHIPS

Linking devices for descriptive relationships include notes about the described item on the analytical entries for the "description," common main-entry headings, notes about the description, and added entries or subject entries for the original work. When a description is published together with the item it describes. cataloging rules emphasize cataloging the item being described with a note about the description. When the description is predominant or issued separately, cataloging rules use notes and added entries or subject entries to link the description with the item being described. On rare occasions, particularly for incunabula, manuscripts, and maps, the descriptive item, such as a reference source, is noted on the bibliographic record for the item being described.

WHOLE-PART RELATIONSHIPS

The whole-part (or part-whole) relationship holds between a component part of a bibliographic item or work and its whole, such as between a short story and the anthology in which it is contained. The components might be parts of some particular physical manifestation of a work, that is, parts of a bibliographic item, or they might be parts of some abstract work. For instance, The Wife of Bath's Tale is a component part of The Canterbury Tales. When a library has a separately published edition of The Wife of Bath's Tale and wants to show its relation to The Canterbury Tales, the relationship may be under-

stood to hold between a physical item (the edition the library has) and the work as an abstract whole.¹⁴

For the purpose of this discussion, three subrelationships of the whole-part relationship are recognized. They are categorized into those dealing with relationships between two physical items or between a physical item and an abstract work, as follows:

Whole-Part Relationships
Physical Whole
Containing Relationships (1)
Extractive Relationships (2)
Abstract Whole
Abstract Relationships (3).

The category "containing relationship" specifically refers to those relationships involving the component parts of a physical unit other than extracted parts. A containing relationship characterizes monographs and their individual chapters, and published sets and their individual volumes, as well as series and their subseries. The series-subseries relationship typically is more complex than the other two examples of containing relationships, because a series may include collections or sets of monographs, or may be part of a larger series in a series hierarchy. In any case, the use of the term containing relationship to identify this category connotes actual parts of some physical unit.

When the parts of an item have been extracted and issued separately as individual selections, the relationship between the extracted items and the whole is categorized as an "extractive relationship." This category obviously excludes exact

reprintings of a whole edition. Such reprintings are considered equivalent works, whereas extracts must be considered precisely equivalent only to passages, lines, or other small portions of a work. As for detached copies that are parts of a larger work, their relationship to the *part* they copy is also an equivalence relationship, while their relationship to the *whole* work from which they are detached is wholepart. Early rules called for identifying detached copies as a dashed-on note as shown in figure 3.

"Extractive relationships" also include offprints and reprints of articles. The A.L.A. Glossary of Library and Information Science definition for offprint is:

A separately issued article, chapter, or other portion of a larger work, printed from the type or plates of the original, usually at the same time as the original. Synonymous with separate. ¹⁵

The same glossary defines reprint as:
A separately issued article, chapter, or

other portion of a previously published larger work, usually a reproduction of the original, but sometimes made from a new setting of type. ¹⁶

Both offprints and reprints are portions taken from previously published larger works. When an item is *not* taken from a particular edition or physical item, it is considered part of an abstract whole, and therefore included in the third category of whole-part relationships, "abstract."

The "abstract relationship" holds between parts of a work and the work. Work here is to be understood as an abstraction. The term abstract relationship is used

Cole, Ralph Dayton, 1873-1932.

Custer, the man of action; address by Colonel Ralph D. Cole.

(In Ohio archæological and historical quarterly. Columbus, O., 1932. 23cm. vol. XLI, p. 634-654. illus. (ports.))

——Copy 2, detached.

Figure 3. Example of a Dash Entry. "Detached copy" (from the 1941 A.L.A. Rules, p.226).

therefore to connote a relationship to some abstract whole rather than some physical item. This relationship is further described in the discussion of the uniform title linking device in the next article in this series.

SUMMARY OF DEVICES USED FOR WHOLE-PART RELATIONSHIPS

A wide variety of linking devices have been used to portray whole-part relationships within bibliographic records, depending on the type of whole-part relationship expressed: containing relationships, extractive relationships, or abstract relationships. The devices include:

- 1. Contents notes listing specific parts;
- 2. Dash entries for detached copies of parts:
- 3. Analytical entries for the parts;
- 4. Added entries for either the encompassing work or the part;
- 5. Multilevel descriptions and dash entries to incorporate all components within one bibliographic description;
- Uniform title headings for the larger work acting as the main entry headings for the parts; and,
- 7. Explanatory references identifying the parts of a work.

This variety illustrates the diversity in cataloging treatment for parts of a whole. The simplest method to show the whole-part relationship is to describe the larger work and indicate its contents in some way; here, one record is made for both the whole and its parts. However, when the parts require additional description beyond that provided in the record for the whole, the method used is to make multiple records, so that each part is given a separate bibliographic record citing the whole.

ACCOMPANYING RELATIONSHIPS

The accompanying relationship holds between a bibliographic item and the bibliographic item it accompanies, such that the two items augment each other equally or one item augments the other principal or predominant item. Indeed, such a relationship usually exists between a predominant item and a subordinate one; however,

when neither predominates, as in the case of some kits, the items are said to be accompanying only when they are intended to be used as a unit. In the typical situation of accompanying items, where there is a predominant and subordinate item, the subordinate item may

- Extend the content of the principal item (as in updating supplements, continuations, or additions to a text);
- Supplement the principal item (as with appendixes, addenda, supplements, teacher's guides);
- 3. Illustrate the principal item (as with an added atlas, plates, or portfolio of illustrations); or
- Add in some other way to the usefulness of the principal item, as do indexes and concordances, for example. In other words, accompanying relation-

ships hold between an item and a supplementary or an associated item.

In AACR2 there are separate rules for accompanying and supplementary items—rule 1.5E for accompanying material and 1.9 for supplementary items—but the treatment for both is the same. Both are included in accompanying relationships as long as the supplement really augments the other work rather than continues it; there must be no continuing or preceding relationship involved. Once an element of continuation is introduced, the relationship becomes sequential, so some items called supplements might in fact be sequentially related to another item rather than actually accompanying another item.

The dictionary definition of supplement, "that which supplies a want or makes an addition to something already organized or set apart," 17 provides the necessary connotation to exhibit what we call an accompanying relationship to the previous bibliographic item. Only in the sense of being an augmentation is a supplement an accompanying item. The criterion of being physically separate is not required for an accompanying item, but it is usually a factor considered by catalogers when determining the bibliographic unit to be cataloged.

To reiterate, a "supplement" does not include a continuation of some original item: a continuation would indicate a

sequential rather than an accompanying relationship. 18 But, as long as there is a predominant component for a supplement and the supplement is merely augmenting rather than continuing the predominant item, a supplement is said to accompany the predominant item.

SUMMARY OF DEVICES USED FOR ACCOMPANYING RELATIONSHIPS

Cataloging codes have always incorporated rules for accompanying materials. The devices used to express accompanying relationships are:

- 1. Addition to physical description,
- 2. Notes,
- 3. Dash entry,
- 4. Multilevel description, and
- 5. Separate records with linking notes.

All but the dash entry have survived in present cataloging rules. The reader will recall that dash entries disappeared with AACR2, which used instead a separate record or multilevel description.

SEQUENTIAL RELATIONSHIPS

Sequential relationships hold between bibliographic items that continue or precede one another but are not considered derivative. Examples of bibliographic items exhibiting sequential relationships are series, serials, and sequels. The A.L.A. Glossary defines a series in four ways as:

1. A group of separate bibliographic items related to one another by the fact that each item bears, in addition to its own title proper, a collective title applying to the group as a whole. The individual items may or may not be numbered. (AACR2) 2. Each of two or more volumes of essays, lectures, articles, or other writings similar in character and issued in sequence, e.g., Lowells's Among my books, second series. (AACR2) 3. A separately numbered sequence of volumes within a series or serial, e.g., Notes and queries, 1st series, 2nd series, etc. (AACR2) 4. In archives, a record series.²⁰

A serial is defined in the A.L.A. Glossary as:

1. A publication in any medium issued in successive parts bearing numerical or

chronological designations and intended to be continued indefinitely. Serials include periodicals; newspapers; annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc., of societies; and numbered monographic series. (AACR2)²¹

The A.L.A. Glossary defines sequel as: "literary or other imaginative work that is complete in itself but continues an earlier work." 22

The sequential relationship is called the chronological relationship in UNIMARC. This is somewhat of a misnomer, because we recognize that all works are fixed in time by virtue of their date of publication and can therefore be placed in a chronological order. However, the important factor for a sequential relationship is that a set of items is sequential in nature, i.e., follows a sequence, not that it can be arranged in chronological order. Thus, the term sequential seems preferable to chronological.23 Such works include monographs that are true sequels (by virtue of continuing the theme of some first work in the series), as well as serials that have earlier and later components or title changes.

SUMMARY OF DEVICES USED FOR SEQUENTIAL RELATIONSHIPS

Briefly, the devices used for sequential relationships are:

- 1. Notes of all earlier titles,
- 2. Notes of all later titles,
- 3. Notes of immediately preceding or succeeding titles,
- 4. Assembling added entries, and
- 5. Uniform titles.

Successive title entry with linking added entries to the next preceding and succeeding title is currently the preferred method to link sequentially related items.

SHARED CHARACTERISTIC RELATIONSHIP

The shared characteristic relationship holds between a bibliographic item and another bibliographic item that is not otherwise related but coincidentally has a common author, title, subject, or other characteristic used as an access point in a

catalog. Such items file or collocate around a shared heading. Other than the access points prescribed by present cataloging rules, there may be additional characteristics, such as language, publication date, or country of publication that would be useful to cluster bibliographic records in future catalogs. Indeed, some online catalogs now provide retrieval of records by language or date. This type of relationship is the most pervasive of all relationships, because it occurs whenever an access point is duplicated in a given file. Duplicated headings have been studied by others, such as the 1981 study by McCallum and Godwin on the LC MARC files that counted the number of multiple headings for personal, corporate, conference names, and subject headings files.24 This is clearly a topic deserving further study.

REMARKS

As we have seen, cataloging rules have provided a wide variety of linking devices to relate bibliographic entities. Even each type of bibliographic relationship has had several linking devices used over the past century and a half to connect bibliographic entities. The identified linking devices have been notes (including contents and holdings annotations), references, added entries, uniform titles and other filing devices, analytical entries, common main entry headings, dash entries, edition statements, series statements, additions to the physical description area, subject headings, and multilevel description.

The technology available to create and maintain a catalog has greatly influenced the types of linking devices included in the catalog and prescribed in cataloging rules, as we will see in more detail in the next article in this series. The computerized environment should offer us still more possibilities, and we must carefully select those that provide the most effective links, the best pathways to desired information in future information systems. It is hoped that identification of the types of relationships we wish to convey will prove useful to future systems designers and makers of cataloging rules.

REFERENCES AND NOTES

- This study was documented in the author's Ph.D. dissertation: "Bibliographic Relationships: Toward a Conceptual Structure of Bibliographic Information Used in Cataloging." (Ph.D. diss., Univ. of California, Los Angeles, 1987).
- 2. The ALA Glossaries are the Committee on Library Terminology of the American Library Association, A.L.A. Glossary of Library Terms, With a Selection of Terms in Related Fields, (Chicago: American Library Assn., 1943); and Heartsill Young, ed., A.L.A. Glossary of Library and Information Science (Chicago: American Library Assn., 1983).
- 3. All of the cataloging rules focused on a basic core of materials: primarily monographs, but also serials, music, maps, atlases, incunabula, and eventually all types of materials found in a library. The degree of attention given these materials reflects the predominance of the bibliographic items in the library collections when the rules were written. For example, Panizzi's rules gave emphasis to literary works, laws, and the Bible. Cutter's rule's had the same basic focus but mentioned a much wider variety of materials, including epitomes, scholia, and chrestomathies, which, in turn, disappeared in modern rules. In 1941, photostats and photomechanical copies appeared in the A.L.A. Rules, with microforms added in 1949. These materials were followed in the 1978 AACR2 rules with machine-readable data files, now called computer files in AACR2R. The broad conclusion one draws is that each set of rules added new materials and sometimes omitted old materials to reflect the types of bibliographic items being cataloged at the time. However, despite the changing types of materials, the types of relationships among materials remained constant.
- 4. The ALA Glossaries usually reflected definitions found in cataloging codes but on some occasions provided better definitions. Thus, the comprehensive ALA Glossaries were most often cited as the source for definitions in this study.
- 5. The reader is referred especially to the comparative studies of cataloging rules (such as those by Hanson, Gorman, and Frost listed below) and the reviews of descriptive cataloging rules and principles conducted at the Library of Congress during the 1940s and 1950s, as well as Osborn's famous "Crisis in Cataloging."

Carolyn O. Frost, "A Comparison of Cataloging Codes for Serials: AACR2 and Its Predecessors," Cataloging & Classification Quarterly 3, nos.2/3: 27-37 (1983).

Michael Gorman, "Changes in Cataloguing Codes: Rules for Entry and Heading," Library Trends 25:587-601 (1977).

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J. C. M. Hanson, A Comparative Study of Cataloging Rules Based on the Anglo-American Code of 1908: With Comments on the Rules and on the Prospects for a Further Extension of International Agreement and Co-operation (Chicago: University of Chicago Pr., 1939).

Seymour Lubetzky, Cataloging Rules and Principles: A Critique for the A.L.A. Rules for Entry and a Proposed Design for their Revision (Washington, D.C.: Processing Department, Library of Congress, 1053)

Andrew D. Osborn, "The Crisis in Cataloging," Library Quarterly 11:393-411 (1941).

Studies of Descriptive Cataloging: A Report to the Librarian of Congress by the Director of the Processing Department. (Washington, D.C.: Govt. Print. Off., 1946).

- Barbara B. Tillett, "A Taxonomy of Bibliographic Relationships," Library Resources & Technical Services 35:150-58 (1991).
- 7. An example of a reproduction that is not equivalent is a map in microformat, provided it cannot be magnified to the original scale, because it has lost its scale characteristic, which is deemed essential to its intellectual content. In some libraries adjustments may be made to handle even slight modifications as equivalent copies of the original.
- 8. UNIMARC: Universal MARC Format, 2d ed., rev. (London: IFLA, International Office for UBC, 1980), p.58. Note that the UNIMARC horizontal relationships might also include what I consider "shared characteristic relationships" of siblings along the same horizontal plane of a hierarchy of works and manifestations that are all related because they are derived from the same work.
- For detailed explanation of each of these subcategories, see Tillett, Bibliographic Relationships, p.43-56.
- 10. A.L.A. Glossary of Library and Information Science, p.194.

- 11. Tillett, Bibliographic Relationships, p.57-8.
- 12. In addition to the rules, the MARC format includes a note field, "510," for a citation. This is particularly common in serial records to cite abstracting and indexing services that cover the title in question. However, AACR2 does not specify such a note within chapter 12 for serials.
- 13. Whole-part relationships are called vertical relationships in UNIMARC, p.58-59, and hierarchical relationships in Paula Goossens and E. Mazur-Rzesos, "Hierarchical Relationships in Bibliographic Descriptions: Problem Analysis," in Hierarchical Relationships in Bibliographic Descriptions: INTERMARC Software Subgroup Seminar 4 (Essen: Gesamthochschulbibliothek Essen, 1982), p.14. The Goossens' definition follows the UNI-MARC definition: "1. Vertical-the hierarchical relationship of the whole to its parts, and the parts to a whole, e.g., downward link: a serial to its subseries or to individual volumes of the series; upward link: the individual volume to its subseries and/or series" (p.58). The UNIMARC hierarchical relationship covers series, subseries, supplements, parent of supplement, issued with, set, subset, piece, and piece-analytic.
- 14. A work is an abstract entity, which a physical item embodies.
- 15. A.L.A. Glossary of Library and Information Science, p.156.
- 16. Ibid., p.192.
- 17. Webster's New Collegiate Dictionary (Springfield, Mass.: G. & C. Merriam Co., 1981), p.852.
- 18. This usage differs from that in the A.L.A. Glossary. For supplement, the A.L.A. Glossary provides the following definition:

"A complementary part of a written work which brings up to date or otherwise continues the original text and is sometimes issued with it, in which case it is more extensive than an addendum, though usually issued separately. The supplement has a formal relationship to the original as expressed by common authorship, a common title or subtitle, and/or a stated intention to continue or supplement the original. Synonymous with continuation (p.222).

A continuation is defined in the same glossary as: "A part issued in continuance of a monograph, a serial, or a series" (p.57).

9. There also may be a whole-part relationship to a collective whole work when there is a collective title, or there may be no collective title and only a sequential relationship among the parts.

- 20. A.L.A. Glossary of Library and Information Science, p.204.
- 21. Ibid., p.203.
- 22. Ibid.
- 23. All items in the *UNIMARC* chronological relationship are included in the sequential relationship.
 - "3. Chronological—the relationship in time between issues of an item, e.g., the relation of a serial to its predecessors and successors. UNIMARC, "p.58.
- 24. Sally H. McCallum and James L. Godwin, "Statistics on Headings in the MARC File," Journal of Library Automation 14:194-201 (1981).

APPENDIX A. CHRONOLOGICAL LIST OF CATALOGING RULES EXAMINED

- 1841 Panizzi, A. "Rules for the Compilation of the Catalogue." Catalogue of Printed Books in the British Museum. London: Printed by order of the Trustees, 1841 v.1, p.[v]-ix.
- 1853 Jewett, Charles Coffin. On the Construction of Catalogues of Libraries, and Their Publication by Means of Separate Stereotyped Titles, With Rules and Examples. 2d ed. Washington, D.C.: Smithsonian Institution, 1853.
- 1867 Rules for Catalogueing [sic] in Congressional Library, May 1867. Unpublished manuscript.
- 1876 Cutter, Charles Ammi. Rules for a Printed Dictionary Catalogue. Washington, D.C.: Govt. Print. Off., 1876.
- 1883 "Condensed Rules for an Author and Title Catalog." prepared by the Cooperation Committee of the American Library Association. In Library Journal 8:251-54 (1883).
- 1889 Cutter, Charles Ammi. Rules for a Dictionary Catalogue. 2d ed. Washington, D.C.: Govt. Print. Off., 1889.
- 1891 Cutter, Charles Ammi. Rules for a Dictionary Catalogue. 3d ed. Washington, D.C.: Govt. Print. Off., 1891.
- 1899–1940 (approx.) [Library of Congress Rules on Cards] including Supplementary rules, preliminary rules, etc. (The incomplete set of printed cards examined was dated from 1902 to 1940 and included a reference to earlier rules from 1899.)
- 1902 A.L.A. Rules—Advance Edition. Condensed Rules for an Author and Title Catalog, prepared by the Cooperation Committee of the American Library Association, 1883, revised by the Advisory Cat-

- alog Committee, 1902, issued by the Library of Congress. Washington, D.C.: Govt. Print. Off., Library Division, 1902.
- 1904 Cutter, Charles Ammi. Rules for a Dictionary Catalog. 4th ed., rewritten. Washington, D.C.: Govt. Print. Off., 1904.
- 1904 A.L.A. Rules—Advance Edition. Condensed Rules for an Author and Title Catalog, prepared by the Cooperation Committee of the American Library Association, 1883, revised by the Advisory Catalog Committee, 1902, issued by the Library of Congress. Washington, D.C.: Govt. Print. Off., Library Division, 1904.
- 1905 Library of Congress. Supplementary Rules on Cataloging, 1-11 [March 1905].
- 1906 Library of Congress. Special Rules on Cataloging, 1-21: To Supplement ALA Rules. Advance ed. Washington, D.C.: Govt. Print. Off., Library Division, 1906.
- 1908 Catalog Rules, Author and Title Entries, compiled by Committees of the American Library Association and the (British) Library Association. American ed. Boston: American Library Assn. Publishing Board, 1908.
- 1931 Pierson, Harriet Wheeler. Guide to the Cataloguing of the Serial Publications of Societies and Institutions, 2d ed. Washington D.C.: Govt. Print. Off., 1931.
- 1941 A.L.A. Catalog Rules, Author and Title Entries, prepared by the Catalog Code Revision Committee of the American Library Association, with the collaboration of a Committee of the (British) Library Association. Preliminary American 2d ed. Chicago: American Library Assn., 1941.
- 1949 A.L.A. Cataloging Rules for Author and Title Entries, prepared by the Division of Cataloging and Classification of the American Library Association. 2d ed. Ed. by Clara Beetle. Chicago: American Library Assn., 1949.
- 1949 Rules for Descriptive Cataloging in the Library of Congress, adopted by the American Library Association. Washington, D.C.: Library of Congress, Descriptive Cataloging Division, 1949.
- 1959 Cataloging Rules of the American Library Association and the Library of Congress: Additions and Changes, 1949-1958. Washington, D.C.: Library of Congress, 1959.
- [1961] International Conference on Cataloguing Principles, Statement of Principles, adopted at the International Conference on Cataloguing Principles, Paris, October, 1961. Annotated ed., with commentary and examples by Eva Verona, assisted by

- Franz Georg Kaltwasser, P. R. Lewis, and Roger Pierrot. London: IFLA Committee on Cataloguing, 1971.
- 1967 Anglo-American Cataloging Rules, prepared by the American Library Association, the Library of Congress, the Library Association, and the Canadian Library Association. North American text, with supplement of additions and changes. Chicago: American Library Assn., 1967.
- 1974 Anglo-American Cataloging Rules, Chapter 6: Separately Published Monographs, incorporating chapter 9, "Photographic and Other Reproductions," and revised to accord with the International Standard Bibliographic Description (Monographs), prepared by the American Library Association, the Library of Congress, the Library Association, and the

- Canadian Library Association. North American text. Chicago: American Library Assn., 1974.
- 1975 Anglo-American Cataloging Rules, Chapter 12 Revised: Audiovisual Media and Special Instructional Materials. North American text. Chicago: American Library Assn., 1975.
- 1978 Anglo-American Cataloguing Rules, prepared by the American Library Association, the British Library, the Canadian Committee on Cataloguing, the Library Association, the Library of Congress. 2d ed. Ed. Michael Gorman and Paul W. Winkler. Chicago: American Library Assn., 1978.

NOTE: Since the study, the 1988 revision of AACR2 has appeared.



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