

# LIBRARY RESOURCES & TECHNICAL SERVICES

Vol. 23, No. 1

Winter 1979

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AMERICAN LIBRARY ASSOCIATION  
RESOURCES AND TECHNICAL SERVICES DIVISION

## Collection Development: A Summary of Workshop Discussions

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**A**T THE PRECONFERENCE Institute on Collection Development in June 1977, five workshop sessions were held on various aspects of collection development. Highlights of those workshops are reported here. Copies of the "Guidelines for the Formulation of Collection Development Policies"<sup>1</sup> and drafts of more specialized guidelines relating to the selection process, allocation, evaluation, and weeding were considered and formed the basis of much discussion in the workshops, as noted below.

The workshop on collection development policy statements noted that:

1. A collection development policy statement must take into account the realities of who controls the budget when it isn't the library. Specifically, "How do you deal with faculty groups that control their own funds?"
2. Quantitative standards for levels of coverage need further study in view of the difficulties and possible pitfalls of such standards.
3. The specification of subjects presented in the "Guidelines" was subject to considerable criticism on the basis of unevenness. In addition to the breakdown by LC classification, there is need for a good set of descriptions.
4. The objectives of the parent institution should be included as part of the policy statement.
5. Interdisciplinary areas present special and difficult problems of description by LC class, as do area studies.
6. A collection development policy may be used for many purposes, so it should be made as useful as possible in a variety of ways by including data that is of interest to (and comprehensible to) all possible users, including administration.
7. The levels of collecting should be defined further, especially at study level and below.

8. The public librarians' group thought that the policy guidelines could be adapted to public libraries. They also mentioned the need for flexibility, specifically to be able to respond to special opportunities as they arise.
9. Developing a collection development statement takes more time than you think it will take, no matter how much time you think it will take. By far the most effective way to go about it is to have a part-time or full-time person who has full responsibility for at least the gathering and organization of the basic data.
10. The problems of curatorship by departments of special collections, as they affect and conflict with subject responsibilities, should be clearly delineated, if possible.
11. The guidelines seem to be more focused on monographs than serials and are slanted toward the humanities and social sciences.

The workshop that discussed the draft "Guide to Selection Tools" concluded that:

1. The development of lists of reviewing journals in specific subject fields and of a guide to selection tools for foreign materials should be encouraged.
2. Both Appendix 1, the checklist for describing and evaluating selection tools, and Appendix 2, suggested elements for inclusion in a review, are good, and Appendix 2 should be sent to as many editors of reviewing tools as possible.

The workshop on the allocation of library materials budgets generated these comments:

1. The guidelines on the allocation of library materials budgets seemed to be pushing the formula approach unduly. (Not all agreed with this assessment.)
2. There was general approval of the openness and organization of the guidelines.
3. It is important not to confuse formulas for internal allocations in libraries with formulas for total dollar allocation to libraries, e.g., the Clapp-Jordan and Voigt formulas, and the latter should be removed from this set of guidelines.
4. A concern was expressed that a formula can be used adversely by one who fared worse in the formula than his/her present budget reflects.
5. There is a danger of overallocating, i.e., of allocating to too many very small, specialized departments or units, with a resulting loss of flexibility.
6. There is need to allocate in a way that reflects actual selection and selecting patterns.
7. There was a sentiment for a strong statement naming collection developing officers as those responsible for collection development. This was largely for smaller libraries, to establish their credentials with faculty.

8. There was a feeling that these guidelines and other guidelines were prepared simply in response to budgetary cuts and not in order to facilitate better planning.
9. The public librarians' group expressed concern about the generally poor budget allocation programs in public libraries and also discussed the possible applicability of the McGrath formula.

Comments from the workshop on evaluation included the following:

1. There is a need for overall evaluations or impressions of collections by users, in addition to the detailed statements on separate parts of the collection
2. Guidelines should give more help as to what should be evaluated and how a field should be defined.
3. Criteria for establishing adequacy of an evaluation should be set before starting. Is a holding of 50 percent of items on a list to be considered "good"?
4. A great need was expressed for sample lists on specific subjects, for evaluative purposes, with a clear statement of their scope and quality.

The workshop on the role of weeding of library materials for storage or discard noted that:

1. Weeding for discard is a very emotional subject, and the term *weeding* should not be used in the guidelines, especially when referring to storage.
2. The guidelines have a generally negative tone, with an excessive emphasis on discarding. Rewriting for clarification as well as for a change of tone was suggested.

#### References

1. "Guidelines for the Formulation of Collection Development Policies," *Library Resources & Technical Services* 21:40-47 (Winter 1977).

## Specificity in Subject Headings

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*In addition to discrete terminology for more specific headings, Library of Congress achieves specificity by means of adjectival and phrase modifiers, compound headings, dates, and subdivisions. Examples and problems of subject heading specificity are presented and discussed.*

FROM CUTTER to the present time, writers on subject heading theory have recommended that subject headings be as specific for a given work as the material in the work. Reversely stated, the specificity of the subject heading to cover it. Generally speaking, this concept is accepted and is questioned only occasionally by someone who objects to the dispersal of subject material in subject headings to the point where subject headings are represented by few items for a particular subject heading. This paper presupposes the desirability of specific headings, even when it results in headings having only one or two titles entered under them. Subject heading usage has developed so that headings are not only specific but also direct in form; that is, a work on the Canada goose is entered under the heading **Canada goose**, not under **Zoology—Ornithology—Birds—Water-birds—Geese—Canada goose**.

This study is an examination of the methods by which specificity is achieved in Library of Congress subject headings, examples of the application of these methods in particular headings, and a brief discussion of problems of consistency and level of specificity. The study was based on the eighth edition of *Library of Congress Subject Headings (LCSH)*. A sample used for the study consisted of the boldface headings on pages ending with the cipher 4, thus covering approximately one-tenth of the headings in *LCSH*, but the study was not limited to the sample. To determine how the headings are applied, the 1965-69 cumulation of *Library of Congress Catalog: Books; Subjects (LCCBS)* was consulted.

The most obvious way to achieve specificity is to use terminology

Manuscript received January 1978; accepted for publication April 1978.

Volume 23, Number 1, Winter 1979

appropriate to the various levels, of which the example of **Canada goose** being five steps more specific than **Zoology** is pointed out in a previous paragraph. Four other examples of series of headings in order of specificity are:

**Recreation; Amusements; Play; Games; Cards; Poker**  
**Transportation; Vehicles; Automobiles; Ford automobile**  
**Language and languages; Speech; Phonetics; Consonants**  
**Agriculture; Dairying; Dairy products; Cheese; Swiss cheese.**

Sometimes the degree of specificity is not apparent from the terminology. One might assume that the heading **Buildings** is more specific than **Architecture**, but the reverse is true. According to an LC scope note, **Buildings** is used for general works on structures while **Architecture** is used for works on style and design and **Building** for works on construction.

Many subject headings are formulated as modified forms of other headings. The English language lacks enough unique terminology for every subject treated in books, so much use is made of modified terminology. In the foregoing examples such modified headings as **Water-birds**, **Ford automobile**, and **Dairy products** appear. The modifiers may be adjectives or nouns used as adjectives, and the form may be direct or inverted. Two-word headings are very common. In the sample from *LCSH* there are 1,742 two-word direct headings and 189 two-word inverted headings, the direct headings outnumbering the inverted headings approximately 9 to 1. Some of the headings are repetitious in that the first word is repeated in a variety of headings. For example, there are thirteen direct two-word headings beginning with *animal* on the page chosen for the sample; there are eighteen more such headings on adjoining pages not counted in the sample. Other direct two-word headings of which a number of cases occur include the first words **Business**, **Educational**, **Mine**, and **Social**.

Many two-word direct headings begin with a national, linguistic, or ethnic modifier, such as **Flemish drama**, **Hungarian fiction**, **Indic literature**, **Japanese poetry**, **Latvian language**, **Malayan languages**, **Nabaloi dialect**, **Persian philology**, **Polish newspapers**, and **Russian periodicals**. Of the above forms *drama*, *fiction*, and *poetry* are more specific than *literature*, and all are modified by a proper adjective. In the sample there are 124 modifications of *language*, 23 of *languages*, 34 of *literature*, and 22 of *poetry*.

Grammatically some of the two-word direct headings are nouns modified by adjectives, but they are not instances of headings modified to make them more specific. Distinction must be made between true modifiers and modifiers that are part of usage. Examples of the latter are **Alimentary canal**, **Black death**, **Dust devils**, **Fancy work**, **Specific gravity**, and **Worthier title**, all terms that have become established usage in particular fields.

When nouns are used in two-word direct headings, the meaning of the heading can be translated in various ways. **Bookbinding machin-**

**ery**, **Bookkeeping machines**, and **Forging machinery** can be translated as "Machinery for bookbinding," "Machinery for bookkeeping," and "Machines for forging." **School physicians**, **School nurses**, **School phychologists**, and **School secretaries** can be translated as "Physicians [Nurses, Psychologists, Secretaries] in schools." **Insect control** and **Wound healing** have the meaning "control of insects" and "healing of wounds" and could be set up as subdivided headings: **Insects—Control** and **Wounds—Healing**. In the heading **Children's art**, it is not readily apparent whether the heading refers to "art of children" or "art for children"; the scope note indicates it is the former.

The 189 instances of two-word inverted headings in which the modifier follows the noun comprise 9.8 percent of the total two-word headings in the sample. Fifty-four of the modifiers are national, linguistic, or similar modifiers, as in **Authors, American**; **Educators, Muslim**; **Engineers, Jewish**; **Hymns, Spanish**; and **Refugees, Algerian**. Thirteen headings have modifiers relating to historical period, such as **Artists, Medieval**; **Geography, Ancient**; **Maps, Early**; and **Swords, Prehistoric**. In fourteen headings the modifier is **Fossil**, as in **Monkeys, Fossil**. Samples of other inverted headings are **Authors, Blind**; **Columns, Wooden**; **Distilling, Illicit**; **Lampshades, Glass**; and **Salmon, Canned**.

Approximately one-fifth of the inverted headings in the sample (from **Explorers, American** through **Jurisdiction, Territorial**) were checked to see if the noun occurs also in the unmodified form. Most of them do; there are four exceptions, with three of the exceptions being related to one noun: **Fees, Consular**; **Fees, Ecclesiastical**; **Fees, Professional**; and **Groups, Continuous**.

There are 218 examples of three-word direct headings. Many of them are formed by adding a word to a direct two-word modified heading. Thus, with the addition of a word, **Balsa wood**, **Birth control**, **Collective bargaining**, **Crime prevention**, **Mule deer**; **Music box**, **Particle board**, and **Sunflower seed** become **Balsa wood craft**, **Birth control clinics**, **Collective bargaining unit**, **Crime prevention surveys**, **Mule deer hunting**, **Music box music**, **Particle wood industry**, and **Sunflower seed oil**.

The sample includes forty inverted three-word headings, which comes to 15.5 percent of the total three-word headings, an appreciably higher percentage than for the inverted two-word headings. The usual form is a two-word heading followed by a comma and a modifier. Examples are **Cardiovascular instruments, Implanted**; **Durable goods, Consumer**; **Piano quartets, Arranged**; **Poliomyelitis vaccine, Oral**; and **Textile fibers, Synthetic**. Only two headings in the sample consisted of one word and a two-word modifier: **Artists, Physically handicapped** and **Refugees, East Indian**.

A large proportion of the modifiers are national, linguistic, and ethnic, the total being twenty-four of the forty. Examples of such

headings are: **Buddhist sermons, Chinese; Emperor worship, Roman; Folk literature, Arabic; Processional crosses, Coptic; and Talking books, Swedish.**

The large proportion of inverted three-word headings having national, linguistic, and ethnic modifiers raised the question whether three-word headings with such modifiers are always inverted, and a search was made for exceptions in which the heading was direct. Only a few were found, the most numerous being **English [etc.] prose literature**, but it is analogous to **English drama** and **English poetry**. An atypical heading is **American books abroad** in which the word *abroad* appears to be an adverb, although the dictionary indicates it may be either an adjective or an adverb. There is a heading **Chinese examination essays**, a heading for a topic that is peculiar to Chinese culture. Direct three-word headings with religious modifiers are **Hindu [Islamic; Jewish] devotional calendars** and similarly modified **Devotional literature**.

In the sample from *LCSH* there are sixteen four-word direct modified headings, of which the following are examples: **Charge account bank plans, Interconnected electric utility systems, Real estate investment trusts, and Saline water conversion plants**. The sample includes one inverted four-word heading (**Air traffic rules, International**) and two five-word direct headings (**Fleet ballistic missile weapons systems** and **Multiple independently targetable reentry vehicles**).

In addition to noun and adjective modifiers, a noun may be modified by a prepositional phrase. There are 441 instances of such headings in direct form in the 203-page sample. The preposition *in* is by far the most frequently used with a total of 301 headings. There are forty-three headings using the phrase *in art*, **Dragons [Emotions, Fur garments, etc.] in art**, and seventy-three examples of similar headings using the phrase *in literature*. Although enclosed in parentheses, the phrase *in religion, folk-lore, etc.* serves the same purpose as *in art* and *in literature*; there are twenty-four examples in the sample. Other headings of the same nature but of which there are only a few examples include **Characters and characteristics in moving-pictures; European War, 1914-1918, in motion pictures; and Fleeing in the Bible**.

Geographic specificity may be achieved with a prepositional phrase using *in*. The sample includes twenty-two headings that add *in foreign countries* to such typical headings as **Japanese property, Lithuanian literature, and Polish students**. There are thirty-seven headings for which a particular country is specified, e.g., **Finnish language in Sweden, French students in Great Britain, Javanese in Sumatra, and Malay race in Ceylon**.

In forty-nine headings the *in* prepositional phrase specifies the application of a process or a material in a particular field, e.g., **Echo sounding in fishing, Explosives in forestry, and Radio in fire prevention**. Other prepositional phrases with *in* include **Amines in the**

**body, Intussusception in children, and Scab disease in cattle**.

If the *in* prepositional phrase is intended to make the heading more specific, it is logical to expect that there are other headings beginning with the same word or words. This is generally true in those headings for which the specification is *in art* and *in literature*, for headings specifying *in foreign countries* or in a particular geographical area, and for headings specifying application in a particular field of endeavor. But there are a few in which it is not true. For example, **Dampness in buildings** is the only heading beginning with *Dampness*. There is a *see* reference from **Buildings, Dampness in** and a *see also* reference from **Buildings—Protection. Group guidance in education** is the only use of *Group guidance* although the heading **Group counseling** is used. **Humor in advertising** and **Humor in education** are the only headings beginning with *Humor*, but there is a reference from **Humor** to **Wit and humor**, the usual wording of the heading.

In a few headings the *in* prepositional phrase does not seem to make the first word more specific but rather the reverse in that the first word is the more specific term. In **Duplicates in libraries** the prepositional phrase does not make **Duplicates** more specific by distinguishing it from other duplicates but rather names a specific facet of library practice. A similar interpretation could be placed on **Dampness in buildings. Herding behavior in animals** does not distinguish it from herding behavior in other creatures, but it is a more specific heading than **Animals, Habits and behavior of**. In **Interaction analysis in education** the prepositional phrase is useful for establishing the context. In the heading **Dedications (in books)** the prepositional phrase in parentheses is a gloss.

In the 441 examples of prepositional phrases, the next most commonly used preposition is *of* with 67 examples in direct form and 12 in inverted form. The direct form includes **Absorption of light, Conservation of natural resources, Heredity of disease, and Offset printing of newspapers**. A few headings are questionable examples of increasing specificity but are more likely terms of common usage: **Abstracts of title, Lost tribes of Israel, Origin of species**. The sample includes twenty-four headings **Photography of animals [art; automobiles; etc.]** with seven similar headings on the following page. Samples of the inverted headings are **Chess players, Rating of; Matter, Kinetic theory of; and Search, Right of**.

Twenty-five headings in the sample use *as* in a phrase to make a heading more specific, of which eleven refer to profession, as in **Ship-building as a profession**. Other typical headings are **Fleas as carriers of disease, Monkeys as laboratory animals, Oats as feed, and Wild animals as pets**.

There are eighteen headings in the sample with *for* prepositional phrases. The object most often is a particular category of people: **Basketball for women, Camps for the handicapped**. In a few headings, things follow the preposition, as in **Fenders for docks, piers, etc.**

and **Indicators for gas and oil engines**. Only one of the eighteen examples could not be included in either of these groups: **Packing for shipment**.

Other prepositions are represented in the sample by only a few examples for each preposition: **Metals at high temperatures**, **Export duties on canned fruit**, **Jurisdiction over aircraft**, **Legal assistance to service men**, **Monologues with music**, **Absence without leave**.

The sample includes twelve headings relating to the effect of something on something else, usually a substance or a part of the body. These headings include three prepositional phrases and are inverted: **Cement, Effect of temperature on**; **Skin, Effect of radiation on the**; **Plankton, Effect of water pollution on**.

Another manipulation of terminology to increase specificity is to use a modifier in parentheses following the subject. The modifier may be an adjective as in **Infants (Newborn)** and **Infants (Premature)** or it may be a noun as in **God (Hinduism)** and **God (Judaism)**. In the headings for infants the parentheses can be omitted and the modified heading made either direct or inverted: **Newborn infants** or **Infants, Newborn**. Legal subject headings are made more specific by adding the system of law in parentheses, such as **Oaths (Canon law)** and **Oaths (Greek law)**. Parentheses are also used to enclose a gloss designating the field to which the terminology is applied: **Categories (Mathematics)** and **Categories (Philosophy)**. Strictly speaking, this is not intended to make the heading more specific but to distinguish between homonyms used in more than one field.

Sometimes the word or words in parentheses is added to a heading that is already modified in some way: **Manuscripts, Latin (Medieval and modern)**; **Manuscripts, Russian (Old)**; **Hymns, Greek (Classical)**; **Pacemaker, Artificial (Heart)**; **Swiss newspapers (German)**. Sometimes a word may be omitted from the parenthetical designation. For example, the headings **Reading (Adult education)** and **Reading (Higher education)** are used and also **Reading (Elementary)** and **Reading (Primary)**.

**French drama (Comedy)** and **French drama (Tragedy)** are examples of noun modifiers used to make the headings modified by a linguistic adjective more specific. On the surface it can not readily be seen how to effect the specification otherwise; however, since **Comedy** and **Tragedy** are established headings in *LCSH*, why not use **French comedy** and **French tragedy**?

In subject headings for music scores, which are really subject form headings, parentheses are consistently used to enclose precise specifications of kinds and numbers of instruments following the musical form, thus: **Rondos (Clarinets (4))**; **Variations (Violin and violoncello with string orchestra)**; **Piano music (Pianos (2) 8 hands)**; **Septets (Piano, clarinets (4), kettledrum, percussion)**.

When the subject heading covers a subject in relation to something else, the heading is formed by two nouns connected by the conjunc-

tion *and*. Such headings include **Church and state**, **Crime and the press**, **Music and literature**, **Religion and science**, and **Television and sports**.

Many headings are made more specific by adding a date or inclusive dates, the date or dates being separated from the rest of the heading by a comma. As may be expected, events in history are the principal headings so modified. In some cases there is only one heading in the *LC* list, but it is nevertheless modified by the date, such as **Korean resistance movements, 1905-1945**; **Saxon emigration, 1838-1839**; **Krupp trial, Nuremberg, 1947-1948**. In the case of **European War, 1914-1918**, and of **World War, 1939-1945**, there are cross-references from **World War, 1914-1918**, and **European War, 1939-1945**. But in other headings the specifying date is used to distinguish between two events of the same name: **Peasants' War, 1524-1525**; **Peasants' War 1595-1597**; **New Orleans, Battle of, 1815**; **New Orleans, Battle of, 1862**; **Aix-la-Chapelle, Peace of, 1668**; **Aix-la-Chapelle, Peace of, 1748**. Often the date is added to an event used as a subdivision under the name of a city as in **Antwerp—Siege, 1584-1585**; **Philadelphia—Riots, 1831**; **Johnstown, Pa.—Flood, 1889**. In one instance the day of the month is also specified, although no other similar heading is listed: **Monguagon, Mich., Battle of, Aug. 9, 1812**.

A date is sometimes added to a heading that is not a historical event but for which the date distinguishes the time treatment: **Campaign songs, 1840**; **United States—Appropriations and expenditures, 1966**. In a few instances both an ordinal numeral and a date are used: **United States—Census, 18th, 1960**; and **Crusades—First, 1096-1099**.

A major means of achieving specificity in a subject heading is by a subdivision separated from the heading by a dash. The four generally recognized types of subdivisions are form, topical, geographic, and chronological.

A form subdivision is added to a subject heading when the treatment of the subject matter is other than a discussion of the subject or when the work is an example of a particular form or a collection of that form. The list of most commonly used subdivisions (*LCSH*, p.xviii-lxxii) includes 130 such subdivisions. The user wanting to know what is available in a particular field may consult the heading with subdivisions **Bibliography**, **Book reviews**, **Abstracts**, and **Indexes**. One who is interested in humor relating to a particular subject should be looking for subdivisions like **Anecdotes**, **facetiae**, **satire**, etc.; **Cartoons**, **satire**, etc.; **History**, **Comic**, **satirical**, etc.; and **Humor**, **caricatures**, etc. Graphic presentations are represented under headings with the subdivisions **Charts**, **diagrams**, etc.; **Designs and plans**; **Drawings**; **Iconography**; **Pictorial works**; **Portraits**; and **Photographs from space**. The literary forms used as subdivisions under a heading include **Drama**, **Fiction**, **Legends and stories**, and **Poetry**. Types of presentation helpful to students include **Handbooks**, **manuals**, etc.; **Laboratory manuals**; **Observers' manuals**; and **Out-**

**lines, syllabi, etc.** The person interested in words may consult the subdivisions **Concordances; Dictionaries; and Glossaries, vocabularies, etc.** These are only a sample, and not all are used under any heading.

Entering a work under a heading with a form subdivision not only sets it apart for the user who wants it but also for the user who doesn't want it; one can ignore forms in which one is not interested. A few subdivisions are included as form subdivisions although they are discussions of the subject because it is assumed they may have particular appeal for certain users. They include **Early works to 1800, Juvenile literature, and Popular works.**

Topical subdivisions in LC's list of most commonly used subdivisions number 431. The variety of the subdivisions can hardly be imagined, and they cover the span of human thought and activity. Some can be categorized as events followed by the year in which they occurred (**Avalanche, Flood, Storm**); structures (**Churches; Hotels, motels, etc.; Walls**); public facilities (**Bathing beaches, Hospitals, Schools**); and procedures (**Abstracting and indexing, Cooling, Street-cleaning**). But many resist categorization and include such diverse subject aspects as **Biblical teaching, Diseases and pests, Seal, and Valuation.**

Many of the topical subdivisions are peculiar to a particular field of study or category of main heading. LC furnishes two lists for subdivision under place-names, one of 179 subdivisions to be used under names of regions, countries, states, etc., and the other, 217 subdivisions, under names of cities. Each list includes both form and topical subdivisions and subdivisions that are further subdivided. Many of the subdivisions in the two lists are identical.

The topical subdivision **History** can be modified to make it more specific: **Church history; Constitutional history; History, Military; and History, Naval.**

Among the hundreds of commonly used subdivisions listed in *LCSH* there are eighteen that can be used either as form or as topical subdivisions; that is, LC uses them both for samples of the form and for discussions of it. Some of these subdivisions are **Autographs, Law and legislation, Nomenclature, Programmed instruction, and Trade-marks.**

Place or geographic subdivision is added to a subject heading whenever it is appropriate. This pertains to any subject that is treated from a local point of view or when the data is limited to that of a local area. The greatest problem in place subdivision is whether to make it direct or indirect. In indirect subdivision the name of a larger geographic area is inserted between the subject heading and the smaller geographic area, as in **Music—Wisconsin—Milwaukee**, the direct form being **Music—Milwaukee**. Examples of subject fields for which *LCSH* specifies indirect subdivision are **Botany, Folk literature, Geology, and Music**, while **Architecture, Opera, Taxation, and Theater** are given direct place subdivision. The trend in recent years is to use

more direct than indirect subdivision.

An interesting example of place specification being achieved in several ways is exemplified by the heading **Negroes**. No place designation is added when the subject covered is Negroes in the United States. When the subject is Negroes in a specific location in the United States, the subject is subdivided by place: **Negroes—Alabama** and **Negroes—Philadelphia**. When the subject covered is an area outside of the United States an *in* phrase is added: **Negroes in Canada**.

Subject headings that lend themselves to chronological, usually historical, treatment have subdivisions to reflect the subject content of works dealing with a particular time era. The specific time divisions are chosen to reflect the appropriate time divisions of the particular subject.

Time subdivisions are listed under the **United States** topical subdivisions **Church history; Civilization; Description and travel; Economic conditions; Economic policy; Foreign relations; History; History, Military; History, Naval; Politics and government; Religion; Social conditions; and Social life and customs**. Examples of the form are **United States—Civilization—19th century; United States—History—Colonial period, ca.1600-1775; United States—History—Civil War, 1861-1865; United States—Religion—To 1800; and United States—Social life and customs—1865-1918.**

Period subdivision is used under all subjects that are treated from a historical point of view and in which the treatment of a particular treatise may relate to one particular period of time. Even the heading **History, Modern** is subdivided by the various centuries, such as **16th century**. The heading **Music** is subdivided by **History and criticism**, which has period subdivisions: **To 400; Medieval, 400-1500; 16th century; etc.** Examples of time subdivisions in which history is implied but not stated include: **Bibliography—Early printed books—16th century; English language—Middle English (1100-1500); English language—Grammar—1500-1800; and Religious thought—Middle Ages, 600-1500.**

A topic on which much has been written will have subdivisions of all four types. **American literature** is divided directly for geographic subdivision; a list of chronological subdivisions is included; and the form subdivision **Bibliography** with further subdivisions and several topical subdivisions is listed. The wide range of subdivisions actually used is shown in *LCCBS* for 1965-69. Form subdivisions include **Addresses, essays, lectures; Bibliography; Dictionaries; Outlines, syllabi, etc.; and Translations from French**. There are topical subdivisions such as **Catholic authors; History and criticism; and Study and teaching**. The period subdivisions include **Colonial period, Revolutionary period, 19th century, Early 19th century, and 20th century**. The heading **American literature** is subdivided geographically by cities, states, counties, and areas, e.g., **Boston; North Carolina; San Diego County, Calif.; and Southern States**. All of the subdivisions

may be further subdivided. For example, the form subdivision **Bibliography** is further subdivided by the form subdivisions **First editions** and **Periodicals**. The topical subdivision **Jewish authors** is subdivided by the form subdivision **Addresses, essays, lectures** and the topical subdivision **History and criticism**. The period subdivisions have such form subdivisions as **Bibliography** and **Addresses, essays, lectures** and most of them have the topical subdivision **History and criticism**. Several of the geographic subdivisions are further subdivided by **History and criticism** and form subdivisions such as **Addresses, essays, lectures** and **Bibliography**.

To this point, this study has been concerned with methods of achieving specificity. The applications of these methods to the subject fields of architecture, cookery, and children will now be shown.

In the field of architecture the more specific headings by terminology include headings for particular kinds of buildings (**Castles, Clubhouses, Factories, Monuments, Theaters**); parts of buildings (**Domes, Floors, Gables, Walls**); and concepts in architecture (**Modular coordination (Architecture)**); **Orientation (Architecture)**). The buildings may be specified by their use: **Archive buildings, Farm buildings, and Office buildings**.

The heading **Architecture** is modified in direct headings such as **Church architecture, Landscape architecture, Library architecture, and Military architecture** and in inverted headings such as **Architecture, Domestic** and **Architecture, Industrial**. The inverted modified headings include those with national adjectives, styles of architecture, and cultural modifiers: **Architecture, Italian; Architecture, Egyptian; Architecture, Gothic; and Architecture, Shaker**.

The adjective *architectural* is used as a modifier in both direct and inverted forms: **Architectural acoustics; Architectural drawing; Architectural models; Architectural societies; Decoration and ornament, Architectural; Lighting, Architectural and decorative; Photography, Architectural**.

There are a few compound headings with the conjunction *and*, such as **Architecture and climate, Architecture and religion, and Architecture and society**. Others have the order reversed: **Liturgy and architecture, Music and architecture**. Another kind of compound heading relates architecture to persons having special needs: **Architecture and mentally handicapped children, Architecture and the aged, Architecture and the physically handicapped**.

Comparatively few prepositional phrases are used. They include **Architecture as a profession, Architecture in art, Architecture in literature, Color in architecture, and Light in architecture**. In one heading the phrase is in parentheses: **Architecture (in numismatics)**.

The subdivisions under **Architecture** include form subdivisions—**Collected works, Congresses, and Designs and plans**—and topical subdivisions appropriate to the field, such as **Conservation and restoration, Orders, and Psychological aspects**.

**Architecture** is subdivided geographically, with various place subdivisions further subdivided by an assortment of subdivisions similar to those listed under **Architecture**. The word *architecture* may be a subdivision under **Indians** and similar headings like **Indians of North America**. The subdivision **Study and teaching** has direct geographical subdivision, resulting in the heading **Architecture—Study and teaching—Italy** (meaning study and teaching of architecture in Italy) instead of **Architecture—Italy—Study and teaching** (meaning study and teaching of the architecture of Italy), whereas the history topical heading is **Architecture—Italy—History**.

History of architecture is designated in various ways. For general overall histories of architecture the subdivision **History** is used with **Architecture**; it is also used with inverted headings like **Architecture, Baroque** and **Architecture, Domestic**, with geographic subdivisions of **Architecture, Domestic**. However, for the major time divisions in history, the inverted headings **Architecture, Ancient; Architecture, Medieval; and Architecture, Modern** are used. **History** is used as a topical subdivision under **Architecture, Modern**, but for specific centuries the heading is subdivided by **17th–18th centuries, 19th century, and 20th century** as appropriate.

The methods of achieving specificity under **Cookery** are interesting. Specific terminology for procedures include **Baking, Broiling, and Roasting (Cookery)** and for finished products, **Bread, Pizza, and Stews**. The direct modified headings are used for methods relating to equipment: **Electric cookery** and **Pressure cookery**. The inverted headings **Cookery, Marine** and **Cookery, Military** are used for cookery in the armed services. All other inverted modified headings with **Cookery** are national, ethnic, or cultural (**Cookery, Danish; Cookery, Greek; Cookery, Mennonite**) except **Cookery, International** and **Cookery, Tropical**. Another section is devoted to cooking of particular food materials in which the specifying term is enclosed in parentheses: **Cookery (Beans), Cookery (Cheese), and Cookery (Veal)**. Works on quantity cooking have the heading **Cookery for institutions**, etc. Other headings with the preposition *for* relate to cookery for people with dietary problems: **Cookery for cardiacs, Cookery for diabetics, and Cookery for the sick**. There is one heading using the preposition *in*: **Cookery in literature**.

Specification in subject headings relating to children is diverse. The main heading **Children** has topical subdivisions like **Care and hygiene, Employment, Language, and Religious life**. More specific headings of different terminology include **Boys, Girls, Infants, and Stepchildren**. Direct modified headings include **Abandoned children, Exceptional children, and Runaway children**. The direct modified headings include ethnic modifiers: **Jewish children; Negro children, and Oriental children**. Sometimes the subdivision **Children** is added to ethnic headings: **Eskimos—Children; Indians of North**



**America—Children**; and **Maoris—Children**. Some inverted modified headings are: **Children, Adopted**; **Children, Blind**; and **Children, Vagrant**. Some headings include a gloss in parentheses for specific kinds of law: **Children (Hindu law)**, **Children (International law)**, and **Children (Islamic law)**.

The relationship of children to other subjects is expressed by compound headings: **Children and animals**, **Children and death**, and **Children and politics**. In some headings the wording is reversed: **Comic books and children**, **Dancing and children**, and **Traffic safety and children**.

Prepositional phrase headings include **Children as actors**, **Children as musicians**, **Children as witnesses**, **Children in art**, **Children in classical antiquity**, **Children in Egypt**, **Children in foreign countries**, and **Children in the Bible**. Headings including the preposition *of* relate to the kind of parents: **Children of immigrants**, **Children of the rich**, **Children of working mothers**. In some headings *children* is the object of the preposition: **Books and reading for children**, **Education of children**, **Etiquette for children and youth**, and **Social work with children**.

Two similar headings with somewhat different meanings are **Radio and children** and **Radio programs for children**. Analogous headings are used for television and moving-pictures.

There are a number of headings in direct form with the possessive *children's* modifying a noun, as in **Children's clothing**, **Children's dreams**, **Children's museums**, and **Children's rights**. These can be reworded with *of* or *for* as "Clothing for children"; "Dreams of children"; "Museums for children"; and "Rights of children." **Children's literature** is literature for children; **Children's writings** are writings of or by children. Occasionally the order is reversed: **Children's librarians**, but **Libraries, Children's**. Library of Congress uses **Portraits and Prayer-books and devotions** as subdivisions under **Children**. Why not "Children's portraits" and "Children's prayer-books and devotions"? There is a heading **Children's missals**.

The word *children* is a topical subdivision in **World War, 1939-1945—Children**. Another subdivision with a somewhat different meaning is **United States—History—Civil War, 1861-1865—Juvenile participants**.

In addition to headings with *children* phraseology, there are a few with *child* or *juvenile*: **Child study**; **Child welfare**; **Juvenile courts**; **Juvenile detention homes**; **Opera, Juvenile**; and **Press, Juvenile**. The word *juvenile* is also used in some form subdivisions: **Dictionaries, Juvenile** and **Juvenile literature**.

There is a lack of consistency in the formation of specific headings in some facets. In formulating headings relating to research, perhaps the most common form is a modified direct phrase: **Botanical research**, **Historical research**, and **Linguistic research**. Three-word headings are also relatively common: **Small business research**, **Social**

**sciences research**, and **Solar energy research**. There is only one heading in which the heading is inverted: **Research, Industrial**. Instances in which *research* is a subdivision are common: **Banks and banking—Research**; **Children—Research**; and **Nutrition—Research**. In the field of music the pertinent heading is **Musicology** to which there are cross-references from **Musical research** and **Research, Musical**.

For exhibitions the form is usually the subdivided subject: **Book industries and trade—Exhibitions**; **Engineering—Exhibitions**; and **Photography—Exhibitions**. A few headings are modified and direct: **Agricultural exhibitions**, **Horticultural exhibitions**, and **Livestock exhibitions**. There are no inverted headings relating to exhibitions. Specialized headings are **Dog-shows**, **Flower shows**, and **Horse-shows**. There are *see* references from **Libraries—Exhibitions** and **Library displays** to **Library exhibits**. The heading **Library exhibits** apparently relates to exhibits in libraries, rather than to exhibits concerning libraries.

Some headings are not as direct as one might expect. **Branch banks** is a subdivision of **Banks and banking**. It might well be a subject by itself, just as **Chain banks** and **Savings-banks** are separate headings. Likewise **Children's dances** is a subdivision of **Dancing** and could be a separate heading like **Children's art** and **Children's songs**.

We may be inclined to smile when we encounter a heading as specific as **Leaflets dropped from aircraft**. On the other hand, there are some which are less specific than we might expect. Sometimes two topics that are related are covered in a compound heading, as in **Clocks and watches**, although more specific headings are listed for each, such as **Calendar watches** and **Tower-clocks**. *LCSH* combines **Encyclopedias and dictionaries** instead of making two separate headings. A heading may consist of two opposites, as **Belief and doubt**. This heading treats belief from a philosophical standpoint; works relating to religious belief and doubt are assigned the one-word heading **Faith**. In some headings an object and a process may be combined, as in **Wine and wine making**, or an establishment and its business, as in **Banks and banking**. In each case there are more specific headings that indicate the subject could be divided.

Some subdivisions are worded to lump various designations together, and, when the subdivision closes with *etc.*, the subdivision can be quite broad. Examples are **Auditoriums, convention facilities, etc.** and **Stores, shopping centers, etc.** There is a subdivision **Cases, clinical reports, statistics** to be used under medical headings, but **Statistics** is the subdivision to be used when the work consists of only a compilation of statistics. Subdivisions dealing with two aspects that could presumably be treated as two separate subdivisions include **Collectors and collecting**, **Diseases and pests**, and **Emigration and immigration**.

Formulation of broad headings is sometimes a difficult problem.

LCCBS cumulations covering 1950-69 do not include the heading **Children's paraphernalia**, but in the more recent cumulation it is used for two titles: *Antiques of American Childhood* and *The Age of Innocence; An Exhibition of the Child and His World*. The heading is subdivided by **Collectors and collecting** and **Exhibitions**. Other examples of broad headings used by LC are **Earth sciences** and **Life sciences**, but not *Behavioral sciences*.

The problem of achieving specificity is very real and urgent for the cataloger who must assign one or more headings to a work. With the subject of the book and its usefulness in mind, the cataloger must establish the degree of specificity and then express that specificity by appropriate terminology, which may be specific terminology, terminology with adjectival or phrase modifiers in direct or inverted form or added in parentheses, or subdivision appropriate for form, topic, place, and/or period, or by a combination of methods. The user of the catalog must be aware of the variations in specificity and the terminology, with the added realization that search under a less specific heading may be rewarding. Specificity is a major problem in subject heading formulation.