

Chapter 1

Creating Elegant Subheadings: Or, Everything You Ever Wanted to Know About Subheadings and Were Afraid to Ask

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Subheadings reside below the level of the main heading but are critical to the function of an index. Subheadings qualify and analyze the main heading. Creating elegant subheadings (sometimes called subentries) is a part of the challenge to improving the quality of an index. Given that indexes are not concordances or just alphabetical word lists, the art of indexing comes from both the explicit structure of the index (the relationships of main headings to each other and the cross-reference linkages) and the implicit structure that develops as we refine the subheadings. Our focus in this chapter is on the relationship of the subheadings to the main headings and the creation of useful, accurate, and concise subheadings.¹ When we evaluate quality in our indexes, we are concerned with the conciseness, comprehensiveness, and consistency of the indexes.² Simply put, indexes are created to assist users in finding information. Our purpose in an ideally structured index is to “minimize the time that a user will require, on average, to find (or fail to find) the entry [or information] that is being looked for” (Lipetz, 1993, p. 8).

By using “elegant” in the essay title, we allude to the discourse on elegance within the indexing world. *Webster’s Dictionary* defines elegance as “refined grace or dignified propriety; ... tasteful richness of design or ornamentation; ... dignified gracefulness or restrained beauty of style; ... scientific precision, neatness, and simplicity.” The H.W. Wilson Award for Excellence in Indexing includes elegance as one of its criteria.³ In that instance, elegance is defined as “succinctness; the right word in the right place—even if the word isn’t found in the text; ‘a certain charm’; visual appeal; a sense that the index contains exactly what it needs to, no more, no less; simplicity; grace. Elegance is the quality that makes an exceptional index more than the sum of its parts.” We would argue that elegance as related to

subheadings comes from both the large and small components of an index. Indeed, elegance comes from a multitude of small parts: for example, attending to the sort (e.g., alphabetical or chronological order) of the subheadings, readability, grammatical structure, and simple language that captures complex bits of concepts. It also surfaces in large components: appropriate uses of parallel construction under similar main headings, main and subheading relationships that provide clarity of meaning, and a richness of language used in concise and accurate ways throughout an index.

Expert Tip

Elegance manifests itself in the balance of art and science in an index.

THE EXPERTS DEFINE THE TERMS

Before venturing further into discussions of when to use or not use subheadings and how to construct them, we feel it is important to review the basics. What do the indexing experts say about subheadings?

[A subheading is] a modifying *heading* subordinated to a *main heading* in a *multilevel heading* [of an index]. (Wellisch, 1996, p. xvii) **[Ed: This page number is not cited in References. Please include.]**

Subheadings are the vassals of their headings and should always (like ordinary modifications) have a close connection with their lords and masters. (Knight, 1979, p. 54)

Subheadings (also called subentries) are entries that are subordinate to a main heading. (Fetters, 1996, p. 24)

[Subheadings are] the lines of indented text that immediately follow the main heading (and are not cross-references). (Mulvany, 2005, p. 18)

[Subheadings are] the second level in the entry hierarchy. (Stauber, 2004, p. 6)

In reviewing the scholarship of the field, such as the sources just cited, we observed confusion in the use of “subheading” or “subentry” as the term for this

component of the index entry array. In the publishing field, the term “subheads” is used to mean “headings, or titles, for sections within a chapter or an article” (*Chicago Manual of Style*, 2003, p. 838). In the *Chicago Manual of Style (CMS)*, the section written about subheadings in indexes is titled “Subentries” but then proceeds to use the terms interchangeably in the explanatory paragraph (18.9). Perhaps in the publishing field it is clearer to try to distinguish between subheads within the text and subentries within the index by using two distinct terms to differentiate the two elements. But in indexing literature, the experts have consistently used the term “subheading.” Indeed, both the British and American standards refer to subheadings, not subentries. Thus, in this essay, we use the term subheadings.

WHEN TO USE SUBHEADINGS

One of the first triggers as to when subheadings must be created is when the indexer observes or anticipates a long page range or a long string of undifferentiated page references. For example:

bookselling, 15, 84–86, 143, 189–191, 200–235, 432, 568–594

In order to be really useful, these page reference locators need to be broken out into descriptive subheadings. Another instance is to provide more information about a collection of discontinuous locators (e.g., 4, 19, 44, 100, 111, 176, 181, 191).

The second primary reason for creating subheadings is to illuminate the text’s treatment of a subject. Subheadings may indicate subdivisions or specific aspects of a main heading. Consider this example:

psychology, 18–22, 35–37, 54–59

Perhaps these locators could be differentiated by the following more useful subheadings:

psychology: behavioral psychology, 18–22; educational practices, 35–37; political advertisements and, 54–59

Alternatively, subheadings can synthesize a long list of subheadings into fewer concise yet still accurate subheadings. For instance, in a biography, the subject’s brothers and sisters are discussed on several different pages. The indexer can provide a more concise, accurate subheading to gather these together as “siblings of,” or if these small sections are about what the children did during their early years, the subheading might be “childhood of” (note also that in an alphabetical sort,

childhood would appear before siblings, a choice that might be preferred). The siblings would be listed under their individual names in the index as well. The principal impetus behind all that we do as indexers is to provide quicker access to accurate information. In summary, as stated succinctly by Glenda Browne and Jon Jerney, the two main reasons for subheadings are “to break up long strings of locators (page numbers)” and “to show aspects of the topic” (2007, p. 89).

Expert Tip

Use subheadings to break up long strings of locators or to show aspects of the topic.

WHEN NOT TO USE SUBHEADINGS

An indexer must avoid overanalyzing a topic that is contained to only one or two pages. In all things we need to bring balance to the components to create an elegant index. Consider the following index entry in a book on California history (Caughey, 1953, p. 660):

sheep raising: rise of in the fifties, 261; drives to California, 261

This entry could read simply “sheep raising, 261.” This is a case of multiple references all pointing to a single page. We always have to remember that we are directing the reader to the information not providing an abstract of the text in the index.

A similar case from this same text on California history might be:

sea otters: diet of, 173; habitat of, 172; trade in pelts, 171–175

This level of detail is not necessary in a book on the history of California. A simple heading of “sea otters, 171–175,” would suffice.

Occasionally an indexer may be asked to expand an index to fill a specific number of pages. Rather than creating unnecessary subheadings, it is more helpful to add additional main heading access points for the user. In the sea otters example, a main heading for fur trade or fur trading could be added. In short, subheadings should be designed to enhance the value of an index rather than clutter the index and make it more laborious to find specific information.

Expert Tip

Indexes should point to the information, not provide an abstract or repetition of the text.

NUMBERS, NUMBERS

One often-asked question is: “How many page locators are allowed before subheadings are needed?” The general answer is: “It depends.”⁴ *CMS* recommends: “An entry that requires more than five or six locators (page or paragraph numbers) is usually broken up into subentries to spare readers unnecessary excursions” (2003, 18.9). The number of allowable locators depends on the discipline of the text being indexed. Some publishers also have preferences in this regard. For some disciplines, indexers are required to create subheadings for entries with three or more locators. In general, three to six is acceptable, though in cases where you have a very strict overall length limit longer strings may become unavoidable.

Another consideration to keep in mind at all times is the audience. How many page locators will the user look up before giving up her search for information? Usability studies of online searching indicate that “47 of users who failed [to find the information they were searching for] only tried the search engine a single time. Another 30% tried twice. Less than 25% tried more than twice to get the search engine to produce a successful result” (Spool, 2001). Admittedly, this study focuses on an online environment rather than back-of-the-book index use. However, for all indexing we need to ask the questions: How many subheadings under a main heading are too many? How many undifferentiated locators, whether following a main heading or following a subheading, are too many for the user to sift through? In our busy, 21st-century lives, how much do our online habits carry over into the print environment?

There is no single overarching audience for most texts. Readers come to a text from a variety of directions. One audience is the author (and frequently your paying client) and others who are highly conversant with the topic, in which case they may be looking for something quite specific or for a particular perspective on a concept. Such users are likely familiar with the jargon in a given area. Another group may have past experience in using indexes in the field but are less familiar with specific terms in their knowledge base or background. Yet another group may be novices in the field, in which case their search terms may be quite different from a group with specific subject knowledge. An elegant index serves all types of users.

Let's consider the much-discussed issue of handling those undifferentiated, dislocated locators. What exactly do we mean by dislocated (or unruly) locators? In this example, they are some of the locators following the main heading "toys":

toys, 6, 8, 45, 122, 222–235
 design of, 65, 89, 159, 223–228
 materials for, 54, 168, 222–223
 production and distribution, 228–232
 safety regulations, 99, 232–235, 367

Readers generally understand that 222–235 represents either a chapter-length treatment or otherwise significant discussion of the topic. Note that all the pages within that range are also represented in the subheadings. We believe that readers do *not* understand what the other locators following the main heading represent (6, 8, 45, and 122). Are these the most important? The least important? To what do they point? We feel strongly that these undifferentiated references reflect poor indexing practice. Several scenarios could account for this result. Perhaps the indexer discovered after page 45 that this was an ongoing discussion that needed to be broken out into subheadings but failed to go back and provide subheadings for these earlier page references. Or the locators may have been passing mentions that could be deleted. Or they were minor mentions that should be captured in a subheading. At any rate, such dislocated locators are unhelpful and confusing to the index user. When subheadings are needed, each page locator must be assigned to one of those subheadings. Thus, the following is a much better entry array:

toys, 222–235
 design of, 65, 89, 159, 223–228
 importation of, 6, 8
 materials for, 54, 168, 222–223
 production and distribution, 122, 228–232
 safety regulations, 99, 232–235, 367

There are two instances in which we would allow ostensibly undifferentiated locators to follow the main heading, both of which would be distinguished typographically (this is in addition to the chapter page range). First, some texts contain illustrations (or figures) of people or places. If such pages are indicated with italicized page locators, those may be allowed to reside next to the main heading. Second, definitions are sometimes denoted with the use of a bold locator. They, too, could reside next to the main heading. In both cases, a headnote to the index should explain the use of italics and bold typography. (For more discussion on undifferentiated locators, see Chapter 2.)

In considering the issue of numbers, we must also consider how many subheadings under a main heading are too many, too few, or just enough. Hans Wellisch wrote that even the best-formulated subheading will be left unread if it appears too far away from its main heading (1993, p. 12). What is suitable for a back-of-the-book index may be different from best practices for an electronic or online display. For an indented format, Wellisch recommended that the indexer allocate no more than half of the total lines in a column to subheadings modifying a main heading. For a run-in (or paragraph-style) index, this number might be further limited by the complexity of the index. The run-in format already imposes great difficulty when sub-subheadings are needed (see next section plus further discussion in later section on formats). Indexers can make creative use of punctuation or phrasing in subheadings to avoid the use of sub-subheadings. Ultimately, Wellisch maintained that the issue of determining exactly what is a “manageable number” for a particular index has to be left to the “common sense of the indexer.” Ben-Ami Lipetz comments that Wellisch cited typography, physical format of the entries, and the complexity of the index as determining factors in deciding on the ideal ratio of headings to subheadings and offers a proposal for calculating this ratio (1993, pp. 8–9). Bella Hass Weinberg joined the discussion with a review based on usability studies and offered her sage comment that “the use of subheadings and sub-subheadings depends on the frequency of the term they are modifying” (1994, p. 13). When considering how many subheadings are too many, Margie Towery tries to keep the entry array to about a computer screen or about 30 lines in indented view but adds that imposing such a limit can be impossible for long, complex texts.

A NOTE ON SUB-SUBHEADINGS

Some texts necessitate the use of multiple levels of subheadings (beyond the more common two levels) in the index. These include complex legal, medical, and technical works. Indexes with multiple levels of subheadings are set in the indented format. The sub-subheadings must reflect the same principles as those of first-level subheadings, that is, they must be concise, unambiguous, and accurate. Many users of these kinds of complex indexes are sophisticated and well-versed in the field. Others, however, are less experienced, but the indexes need to be usable for both those with little or no subject-specific knowledge and those who are experts in the field. For example, indexes to federal statutory codes may include four subheading levels below the main heading. Attorneys who use these indexes have the knowledge base to connect the concepts through the various subheading levels.

Experts suggest that we can hold only seven bits of information in the front part of our memory at once (though there is little consensus on what constitutes a bit).⁵ Thus, the index user may have in mind a question for which he is searching for information (first bit), a general scheme of finding it in the index (second bit), a

main heading under which he is looking (third bit), a subheading that might be appropriate, although he continues to search (fourth bit), a likely subheading and possible sub-subheading (fifth bit), and the page locators (sixth bit). That is a quite a few bits of information. But if all of the parts of an index work elegantly, the sequence of bits forms a readable, logical chunk, thus assisting the user in his information search. Moreover, in cases where there are two or more levels of sub-subheadings in at least a few of the main entry arrays, various index formats can be utilized to increase ease of use (for examples, see the next section on formats). At any rate, this “bits of information” exercise highlights the importance of the subheading word choice as well as the relationship of the subheading to the main heading.

Once we have determined that we need subheadings and subsequently, how many levels of subheadings we need for each main heading, then we need to consider the grammatical structure and phrasing of the subheadings.

WORDS: NOUNS, GERUNDS, AND VERBS, OH MY!

While main headings are almost always noun forms (e.g., concepts, personal and place-names, organizations), subheadings can take a variety of grammatical forms. Consider the following examples:

- neuroplasticity: defined (subheading is verb)
- patriarchy: concept of (subheading is noun)
- creative tools: brainstorming (subheading is gerund)
- railroad cars: refrigerated (subheading is adjective)

Word choice is thus based on the dictates of conciseness and clarity. In the present section we consider two overarching components of subheading construction: the language used to capture complex bits of information, that is, the subheading in and of itself; and the equally important relationship of the subheading to the main heading.

Expert Tip

Subheadings have two overarching components: the subheading or wording in and of itself, and the relationship of the subheading to the main heading.

Subheading Word Choice

A subheading must be succinct, clear, easily understood, reflective of the subtleties of the text, unambiguous, and accurate. That is a tall order for a few words. It reflects the fact that indexing requires intellectual analysis. We read, analyze, digest, and format pointers to all the potentially useful information in a text. As we create indexes, we also consider other factors, such as the diversity of audiences who will use the index. Language is a lovely tool, though, and we can call on its flexibility in our task.

A subheading should be succinct without sacrificing clarity. Consider the frequent use of the following subheading: “Smith, Joan: influence of.” Is this an influence on Joan or her influence on something or someone? A clearer yet succinct rephrasing would be “influence(s) on” and “as influence.” Many indexers prefer to eschew the use of prepositions, but in this case the prepositions’ directional signals add clarity for the reader.

In alphabetical sort arrangements, the most important term in the phrase needs to come first whenever possible. The last example breaks this rule, but small function words can be easily read over. Alternatively, perhaps “influence by” would be a better subheading, or “influence on literary discourse” or “Person influenced by,” all depending on the text and structure of the index. One element that makes indexers so good at their jobs is their delight in playing with words to create the optimum entry. Which of the following subheadings would be best?

absence of color in

color absent in

At first glance, the second seems to place the most important word first. But what if the whole section focuses more on absences rather than color? Perhaps absence of light, absence of texture, absence of detail, and so on? Then the first might be a better subheading in that the “absence of *X*” subheadings would alphabetically sort themselves together under the main heading. Those kinds of decisions make an index elegant rather than merely adequate.

An indexer’s task is to digest the information and create the most useful entry possible. Digesting information, or to put it another way, intellectual analysis of the text, includes putting logic and common sense into the mix. In a recent book on a federal prison, subheadings included “arrest and indictment of” (the indictment when appropriate); “execution of” followed both sequential imperatives, that is, the alphabetical sort and logical order. Consider the following:

arrest and indictment of
associates of

“big shot complex” of
criminal activities of
escape attempts of
execution of (or, if appropriate, postrelease activities of, sentence of,
transfer of)

The subheadings are in both alphabetical and (somewhat) logical order. It is certainly not always possible to keep subheadings in such an order, but sometimes rewording helps make the alphabetical subheading order more logical, thus easier for the index user to grasp.

Expert Tip

Avoid inverted word order in subheading.

We prefer to avoid inversions in subheadings, which can create confusion (and add an extra bit of information to sort out in our memory as we read). In a literary criticism book on novelists’ writing techniques, a subheading of “dialect used by” (or dialect use of) is more direct than “use of dialect by” and places the most important word at the beginning of the subheading. “Use of ...” is almost always a weak start for a subheading. Occasionally, there is no way around it. In addition, “use of term” points to the author’s way of writing about a concept, as distinct from “definition of” or “concept of.”

working artists: use of term, 38. *See also* artists; art workers

The phrase “use of term” also provides a way to include controversial (or outdated) terms in an index while pointing to the term under which the main discussion falls.

Consider another example from Daniel Siegel, *The Mindful Brain*: “right brain hemisphere: integration of, with left.” Would this be less clear if the subheading was either “left hemisphere integrated with” or “integration with left”? The indexer must choose which subheading will be more useful, given the text, audience, and discipline.

In word choices, beware of misleading text subheadings that do not reflect the text. A simple example of this is the text subheading, “Apples and Oranges in Holiday Cooking,” with a page range of 8–15. The text may address apples on 8–12 and oranges on 12–15. The index must differentiate those two key elements. In other words, don’t take a shortcut, relying on the text subheading, and place the full

page range under both apples and oranges. You must analyze the text rather than make assumptions.

Alternatively, one finds in Larry Shiner’s *The Invention of Art* the text subheading, “The Image of the Artisan/Artist.” The section discusses the ideal qualities of a Renaissance artisan/artist. The term “image” holds a variety of meanings in discussion about art. Thus, the index, to avoid ambiguity, provides the entry: “artisan/artist: ideal qualities of Renaissance.” (This brings up the use of an adjective at the end of a subheading. We try to avoid it but use it on occasion when it lends clarity.)

The use of possessives in subheadings raises another sticky matter. Some publishers simply forbid it. Like so many other techniques in indexing, possessives should be used sparingly and when appropriate and unavoidable. Common sense must apply as well. Consider the following example from Anne Whiston Spirn, *Daring to Look*, a study of Dorothea Lange’s photography:

Adams, Ansel: circle of, 15; on heat and humidity effects, 324–325n66;
Lange compared with, 57; Lange’s photographs printed by, 32,
324–325n66; Lange’s work with, 47–48, 49; photographs of, 17, 57;
working methods of, 35

This entry array highlights two things: the appropriate use of possessives, which helps to sort three subheadings next to each other, and a note locator repeated in two subheadings, reflecting the dual nature of the note and its importance.

Ultimately we must apply indexing best practices in terms of avoiding jargon, choosing appropriate words (shorter can be better), considering diverse audiences, maintaining clarity and conciseness, rejecting ambiguity, balancing and refining entries, all after digesting and analyzing the text at hand. (For a list of possible subheadings, see the Appendix at the end of this chapter.)

Expert Tip

Make the relationship of subheading to main heading clear and unambiguous.

The Relationship of Subheading to Main Heading

Subheadings in award-winning indexes provide a logical relationship between the subheadings and the main heading. The meaning is evident to the user without any ambiguity or second-guessing. Useful subheadings are concise without being cryptic. The first word in the phrase is the most important so that people can quickly

grasp the meaning and avoid reading further into the entry. The heading and sub-heading relationship should also result in a readable and logical phrase. The indexer has a number of techniques available to achieve this clarity of phrasing.

Noun Versus Adjective Form for Term Phrasing

As noted earlier, main headings are usually nouns rather than verbs or adjectives (e.g., publicity, not publicize): “Generally, an adjective or adverb should not stand alone as an index entry” (Mulvany, 2005, p. 89). This advice is generally well understood when applied to forming main headings, but frequently you will see it break down in the formulation of subheadings. Use of noun forms distinguishes human indexes from automatically generated indexes or simple word lists or concordances. If we examine the following entry, this idea is clarified:

- acid
 - acetic
 - chemical characteristics
 - definition
 - free paper
 - hydrogen ion activity
 - neutralization
 - properties
 - rain
 - sulfuric

Clearly, the grammatical relationship of the main heading to the subheadings has been disregarded. At first glance, it looks fine, but the relationship of many terms to noun phrases has been ignored. We will return to this example momentarily. Meanwhile, take a moment to jot down what you think would be a corrected entry (or entries).

Nancy Mulvany provides a clear example of the right and wrong way to approach the adjectival relationships in headings to subheadings, utilizing the example of “public” (2005, p. 79). Here is another example:

- art
 - education
 - genres
 - materials
 - political context
 - public attitudes
 - works

Two alternatives correct the problems in this entry. The first may work in a text in which art may be a small part of the overall discussion; the second works in the case of a text with substantial discussions about art.

- art
 - education in
 - genres of
 - materials used
 - political context of
 - public attitudes toward
 - works specifically discussed

- art
 - genres of
 - political context of
 - public attitudes toward
- art education
- art materials
- art works

Adjectival noun phrases must remain intact in order to preserve the meaning.

It becomes more complicated and challenging in situations where we must address both subdivisions of a main heading topic and aspects of a given topic within the same entry and how to sort them out. Let's return to the "acid" example. We have two types of acids—acetic and sulfuric—as well as aspects relating to acid, such as chemical characteristics, definition, hydrogen ion activity, neutralization, and properties. In such instances, we recommend that you create two main headings. The first, perhaps acid, would contain the relevant aspects about the topic. The second main heading would contain topics that fall into categories or subdivisions of the main topic. For instance, the first entry array for aspects of the topic might concern "acid: chemical characteristics of; hydrogen ion activity; neutralization; properties of." The second entry array would subdivide the topic: "acids: acetic; sulfuric," or possibly "acids: acetic acid; sulfuric acid."

Now another question arises: Should the subheadings be displayed as noun phrases, or can they be written in the adjectival form? It is quite controversial, in terms of indexing decisions. If the meaning remains clear and allows for consistent usage across the index, either practice is acceptable. The indexer would probably also have double-posted main entries under the specific acid names (i.e., acetic acid and sulfuric acid). The acid example would make more sense as:

acetic acid

See also acids

acid-free paper

acid rain

acids

chemical characteristics of

definition

hydrogen ion activity and

neutralization of

properties of

See also acetic acid; sulfuric acid

sulfuric acid

See also acids

How does your version compare? You may or may not have included the function words in your entry.

Where there is no way to avoid repeating the term in the subheading, you face an instance where you continue to have the subdivisions and the aspects of the topic within the array, such as the following examples:

education

anti-bias education

costs of

elementary education

higher education

history of

sex education

Alternatively, this array may be edited as:

anti-bias education

education

college level

costs of

elementary level

history of

specific issues in (capturing the locators for sex and anti-bias education)

sex education

Returning to our example of acids, there are several compound-noun phrases, such as “acid rain” or “acid-free paper,” in which the indexer has disregarded the fact that in such instances acid becomes an adjective and therefore should not stand alone as a main entry.

Consistency and Parallel Construction

We subscribe to the notion that if we use consistency and parallel construction in our main and subheading components, users will intuitively understand the way an index is structured and will navigate the index more easily. This is especially true for indexes where the same type of information is repeated for different concepts or topics in the text. In other words, a parallel structure already exists in the text. For instance, in a book on wildflowers in Texas, you might find for each species of flower the subheadings: blooming period, description, and habitat; or in a book on sharks we might find breeding, mating, and migration patterns as subheadings for each species. It is much easier for users if the subheadings are standardized rather than varying the wording. That is, indexers should use the same term or terms for the same part of the topic.

Consistent and predictable structures can hold true at the level of the individual entry. It is quicker for the indexer and easier for the reader if, for a particular entry, the same grammatical forms appear in the subheadings. For instance, a computer text might contain a discussion of files that provides information on how to copy a file, how to create a file, and hints on how to edit or how to cut and paste a file from one place to another. In this array, if gerunds are used in all of the subheadings, it will read much more easily than if there are a variety of grammatical forms, as compared below:

files	files
copying	creation of
creating	deleted
deleting	edit tips and tricks
editing	how to copy
moving	moving files

Parallel construction can also be quite useful in biographical texts. The cumulative index for *The Letters of Matthew Arnold* (Lang, ed.) is 172 typeset pages. Parallel construction substantially aids in navigating the many entries for personal names, Arnold’s literary works, and specific periodicals. Some of the recurrent subheadings under Arnold’s works (the titles are main headings) include distribution of, importance of, publication of, responses to, reviews of, and writing of. (The section on formats provides another example of parallel construction in main and subheadings.)

Direct (Rather Than Inverted) Word Order

In recent years, direct phrasing has become much more common to use rather than inverted word order in main headings whenever possible (also noted briefly in the brain hemisphere example). When attempting to gather subdivisions of a topic together, you sometimes double-post these main headings at the subheading level. In the earlier example of psychology, there was an entry for psychology, behavioral. Had there been discussion of other types of psychology, such as child psychology or organizational psychology, then you might invert the order for the purpose of gathering topics that might otherwise be scattered. But usually it's best to avoid inverting word order in subheadings. Inversions can be very distracting and confusing for index users, especially in run-in style indexes. Look at this example:

Vietnam conflict: antiwar demonstrations; draft, evading of; draft, ending of; Hanoi, bombing of; peace talks; prisoners-of-war (POWs); protests against the war; under Johnson's presidency

Readers can comprehend phrases faster and move along without having to "rebuild" the line in their heads. Compare this rewrite:

Vietnam conflict: antiwar protests and demonstrations; Hanoi bombing; Johnson administration policy on; military draft during; peace talks; prisoners-of-war (POWs)

The index should facilitate research and not frustrate users by adding to their tasks.

QUALIFYING TERMS AND COMMON SENSE

Qualifiers have two basic purposes: to eliminate ambiguity, and to add value (or additional information) to our index entries. Earlier we emphasized that well-written headings eschew ambiguity. One technique in the indexer's toolkit that can remove ambiguity comes from adding qualifiers (or qualifying statements). Qualifiers can either be a subheading modifier to a main heading, or they can be parenthetical words or phrases added to either a main heading or a subheading. In addition to distinguishing possible meanings, subheading modifiers can provide precise context for the main heading and thereby clarify the meaning.

Dates are sometimes used to qualify subheadings, as seen in the following entry from Mary Blewett, *The Yankee Yorkshireman*:

strikes: Bradford (1824–25), 22–23; Bradford (1913), 77; Bristol (1910s), 74; Britain general (1926), 32–33; Centredale (1913), 79–80;

Esmond (1913), 78–79, 80, 180n80, 180n85; Greystone (1906), 69; Greystone (1907), 69, 70; Greystone (1910), 57, 70; Greystone (1912), 75, 76; Greystone (1913), 80; Harrisville (1910s), 74; Lawrence (1912), 57, 75, 78; Lawrence (1919), 90–91; ... *See also* labor unrest

By placing the years in parentheses, you avoid the confusion of numbers in both the years and page locators. Note that the location of the strikes was most important in this context; otherwise, the subheadings might have appeared solely as year of strike followed by appropriate locators. Such distinctions are all part of structuring an index to reflect the nature of the text.

Another instance where you might add a qualifier in a subheading occurs when two much-discussed people have the same last name and a variety of opinions on similar topics. They must be distinguished from each other in the index:

nanotechnology
 Johnson on
 E. Smith on
 J. Smith on
 Walker on

The indexer would force the two Smiths to sort on S rather than their first initials. Alternatively, the subheadings could be formulated thus:

nanotechnology
 Johnson on
 Smith (E.) on
 Smith (J.) on
 Walker on

Homographs

One of the most common uses of the parenthetical qualifier is to differentiate homographs (words with the same spelling but different meanings). One example frequently seen follows:

Mars (candy bar)
 Mars (deity)
 MARS (Multiple Antenna Relay System)
 Mars (planet)

In terms of subheadings, such qualifiers might be included unless the meaning is already unmistakable in the context of the main and subheading relationship.

Place-names

One of the most common uses of qualifiers is for geographic place-names: Las Vegas, Nevada, as opposed to Las Vegas, New Mexico, which might also appear in parenthetical form as Las Vegas (Nevada) or Las Vegas (New Mexico). In any case, for most indexes where place-names are given in an index, it is also recommended that those place-names be set in context—that a subheading or subheadings be added as appropriate. Why was that place-name included in this index? What was it about that place that was important? What is the topic of the discussion in the text about that place? So a better entry would be “Las Vegas (New Mexico), water rights,” or “Las Vegas (Nevada), gambling activities.” With a well-worded subheading the user is able to decide if she is interested in the specific topic about this specific geographical location.

Expert Tip

Qualify main heading place-names with a subheading to reveal the context to the reader.

Added Value

In this discussion of subheadings, perhaps the most important use of the qualifier is to add value to our index entries. In “A Paren’s Worth of Information,” Enid Zafran has given us a number of excellent examples of the appropriate use of parenthetical qualifiers in main headings (2008, pp. 83–84). She identifies the relational qualifiers within families in biographies, the dates for case law (equally important for legislative acts), location qualifiers for country designations of entities or organizations, geographical location qualifiers for firms or buildings, English translations of foreign terms (or vice versa), authors’ names for book titles, and identification of material types (e.g., film) when they are not well known to the reader. Relational qualifiers can also apply to subheadings.

Acronyms and Abbreviations

There are many occasions when you want to double-post an organization or entity under a subject heading as a subheading. We may have United Nations (UN) as a main heading with a cross-reference “UN. See United Nations,” but the acronym “UN” may also appear several other places in the index as a subheading. It is acceptable to use the abbreviation of the term in the subheading, such as “Cambodia, UN peacekeeping mission,” when you know the audience will know

that UN stands for United Nations. In works where there are a great number of acronyms and abbreviations, a number of tools are available to help guide the reader. A list of acronyms for the text as a whole may appear in the front matter, or a headnote may appear at the beginning of the index explaining the use of acronyms. In addition, cross-references within the index guide the index reader from acronyms or abbreviations to their full-text counterparts (or vice versa), unless they are simply double-posted. (Be sure to follow the abbreviation style used in the text: UN or U.N.)

Abbreviations in subheadings are also commonly used in biographies. In a biography about Thomas Jefferson, you would find headings such as:

Hemmings, Madison, slave (son of Sally Hemmings): on Sally Hemmings and TJ in Paris, 228; a fiddler, 438; resemblance to TJ, 439

In such cases, an explanatory headnote should preface the index: “*TJ is the abbreviation used to designate Thomas Jefferson.*”

PREPOSITIONS AND CONJUNCTIONS (ALSO CALLED FUNCTION WORDS)

In “Would You Read That Back to Me, Please?” Zafran addresses the specific topic of when it is necessary to add prepositions or conjunctions (also called function words) to subheadings in order to facilitate readability (2007, pp. 114–115). She provides several examples of the difference it makes in comprehension of particular index entries when we include or omit function words.

The Question of Prepositions

In her 1983 “Q and A Column” in *Key Words*, Barbara Preschel asked indexers for their views on the use of prepositions in indexes. Robert Palmer in his Letter to the Editor in response to Preschel’s column provides the clearest notion of when and why you need to use prepositions in subheadings (1983, p. 3). If you are truly concerned about the readability of index entries and whether the meaning of terms is clear and unambiguous to the reader, then you need to use function word modifiers in subheadings. But *when* is it appropriate to do so? Palmer suggests dividing subheadings into two categories with respect to the main heading (or parent term) that the subheading modifies. The subheading will either be a list relating to the parent term or a logical division of the main heading. In this example, the list items without prepositions are adjectives and therefore the relationship between the parent term and subheading is clear and does not need a preposition. The example from Palmer, which we have expanded on, is the concept of war:

war

- biochemical
- causes of
- guerilla
- nuclear
- prevention of
- terrorist

The subdivisions (causes and prevention) are nouns and require the preposition to complete the logical relationship. This concept came up earlier in the earlier section under “Noun Versus Adjective Form for Term Phrasing.” When you index books that have a number of lists, such as a cookbook’s list of ingredients, followed by the names of the recipes, or in a travel book where you would find a number of countries, followed by a common list of terms (also known as “recurrent subheadings”) for each location, you would not need the preposition. Consider this entry for a travel book:

Venice, Italy

- art galleries
- museums
- shopping

You do not have to write art galleries *in*; museums *in*; shopping *in*. The meaning is clear without the “in.” In fact in a recipe book featuring various ingredients you would want to avoid the practice of what is sometimes termed creating “rivers” in your index by not using prepositions. For instance, the use of the preposition “in” in the following example is superfluous, unnecessary, and creates a distracting “river.” This sort of distraction is a roadblock to users.

eggs

- in au gratin
- in crab cakes
- in cream sauce
- in Foo Yong

For further examples of the appropriate use of prepositions in cookbook indexes, you may wish to look at the indexes for Julia Child’s books on French cooking.

Terms that would be considered logical divisions of a parent or main term are usually given in the noun or gerund form. In these instances, to make the relationship of main heading to subheading clear requires the use of a function word. In his chapter on “Prepositions,” Wellisch also supports this point of view (1996, pp.

387–391). If, for instance, we have a main entry “bibliographies” with a subheading “indexing” (without a preposition), the meaning is ambiguous. Do we mean the indexing of bibliographies or bibliographies of indexing?

bibliographies
indexing of
of indexing

The use of prepositions in the this entry is essential to the clarity of meaning.

The Question of the Conjunction “And”

In general, we feel “and” is overused in indexes, occasionally indicating the lack of analysis by the indexer. The problem with “and” is its vagueness. “And” is uninformative to the reader, as it fails to illuminate the relationship of the main heading to the subheading. Yet, there are times when its use cannot be avoided. We would like to see “and” used *only* when it is (1) a discussion of truly equal concepts, or (2) when it is impossible to capture the idea succinctly. In the first case, where you have multiple discussions of equal concepts (e.g., gender and race), you may more effectively join the concepts into a new main heading, “gender and race nexus” (or some such), and then provide subheadings under that invented heading. In the second case, you have encountered instances when it is impossible to capture a difficult connection succinctly, in which case “and” at least points the reader to the place of discussion.

Perhaps discussed more than the question of when to use “and” is where to place it in the subheading: before or after? We both generally place it after the subheading, no matter whether the index is run-in or indented: “race: gender and.” Some argue for its placement at the beginning of the subheading if the index is run-in. That is certainly not wrong. We simply prefer it after, so that the most important word comes first.

Just as “and” is ignored for sorting purposes when it comes first, most other function words that start subheadings are skipped over for alphabetization. The debate over how to sort entries that begin with prepositions or conjunctions has largely been settled, especially since dedicated indexing software allows for ease of such sorting. In fact, *CMS* says: “Introductory articles, prepositions, and conjunctions are disregarded in alphabetizing subentries, whether the subentries are run in or indented” (18.66).

Expert Tip

If you are tempted to use “and” as you are creating an index, try instead writing the whole idea out. As you move through the text and edit the index, you may find a concise way to capture that idea and thereby avoid using “and.” Just don’t forget to go back and edit that long subheading!

READABILITY

A good way to test the readability of your index entries is to perform what may be referred to as “reading up and reading down” the index, as reflected in Zafran’s “Would You Read that Back to Me, Please?” (2007, pp. 114–115). Readability is also reflected in the grammatical relationship of subheading to main heading. The following example from Zafran’s articles highlights just that:

Catholicism: converts

The subheading is inadequate: Are these converts to or from Catholicism?
In double posting, such relationships should be maintained carefully:

geographers: as God

God: geographers as (*not* God: as geographer)

Expert Tip

Prepositions and conjunctions are tiny words, but they may change meanings in big ways.

SORTING POSSIBILITIES

There are several alternatives for sorting (or filing) subheadings. In this section we discuss not the alphabetization of the main headings (examples of word-by-word and letter-by-letter sorting of main headings can be found in the basic indexing literature as well as *CMS*), but the sort order of the subheadings.

The most common subheading sort is alphabetical order. The public housing entries in the following format section provide an example of this, albeit in several formats. Alphabetical sort is arguably the most intuitive for the index user. Indeed, the alphabet serves fortuitously as the indexer's friend when subheadings fall in a logical order within an alphabetical sort. The federal prison example highlights just that. Utilizing common sense and logic within an alphabetical sort fosters easier index use; for example, birth and childhood sort before death in both alphabetical and chronological sorts. A thesaurus makes an excellent companion in such endeavors.

Sometimes used in histories, biographies, and autobiographies, the chronological sort is illuminating in books where the linear flow of life is central to the text. The following example comes from Claire Tomalin's *Jane Austen* (we use it in its entirety despite its unruly page locators; note also the abbreviation JA for Jane Austen):

Sharp, Anne, 188, 191, 256; friendship with JA, 136–137; opinions of JA's works, 225, 238, 250; JA's last letter to, 263, 320; gifts from Cassandra after JA's death, 271, 279

Another sorting possibility relies on page order sort. Note that this example falls nearly in its natural page order, because the text itself takes a generally chronological approach. The following example of a page locator order comes from Fawn Brodie, *Thomas Jefferson*:

Emancipation: British promises of, 111, 160; in Pennsylvania, 138; Virginia law on, 289; in northern states, 342; Edward Coles' plan for, 432–433

Consider this example resorted in alphabetical order:

Emancipation: British promises of, 111, 160; Edward Coles' plan for (here whether you sort on Edward or Coles), 432–433; in northern states, 342; in Pennsylvania, 138; Virginia law on, 289

There's not a great difference between the two examples because the example is a small array. Applied to a more substantial entry, something that runs half a column, though, you may see the differences more clearly. One difficulty in the page locator sort happens when a later reference mentions an earlier event.

Inherently, the alphabetical sort *seems* more intuitive to the user, as noted earlier. But is it really? We may use alphabetical sort as our default approach and fail to consider other possibilities. The chronological example from the Austen biography

seems especially apropos of its material. Nonetheless, we continue to prefer alphabetical order in part confident in its intuitive sensible order and in considering diverse audiences who may or may not be familiar with the order of a set of events. The English alphabet, on which we rely, is used in many languages by many peoples.

Expert Tip

Check with your editor or publisher before utilizing a sort other than alphabetical order.

FORMATS

In this section we focus not on the differences between the two primary index formats (run-in and indented styles) but on how we can manipulate the run-in format (also called paragraph style) for optimum usability. (Examples of the run-in versus indented styles can be found in basic indexing texts). The indented style is preferred in many disciplines but must often, for space or economic considerations, be replaced with the run-in style. Moreover, the run-in (or paragraph) style is sometimes preferred in scholarly books.

In this section we use the same example throughout for comparative purposes. In *The New Urban Renewal*, author Derek Hyra compares public housing issues in Bronzeville (Chicago) and Harlem (New York) in the context of the urban renewal discourse. How might the indexer structure this index, given that there are many page locators for public housing in general as well as those related to Harlem and to Bronzeville (and to specific housing sites and agencies)? How can this information be parsed in such a way as to be accessible to the user? Accessibility of information requires accurate pointers and main headings as well as subheadings easily grasped by the user. There are several batches of information to consider for the examples here: details about Harlem, details about Bronzeville, public housing in Harlem, public housing in Bronzeville, and public housing reforms. How can the index be structured for best use? Should the indexer gather all of the Harlem (and likewise Bronzeville) details together? Or all of the public housing details together? In addition, which format will work best, given the comparative nature of the text?

Clumping, Gathering, Condensing, and Scattering

Several tactics play into this decision, techniques that in effect structure the index. If the public housing details are clumped together, then the Harlem and Bronzeville details are scattered, and vice versa. The seeds of clumping are in the flowers of

gathering, so to speak. As indexers, we sometimes create off-the-cuff (nontechnical) terms for ways we think about indexing. Clumping, gathering, condensing, and scattering are ways to think about the structure of an index. These techniques can be used effectively as you do the final edit of your index manuscript and strive for elegance in your indexes. What do these terms mean? A preliminary attempt at definitions follows.

Clumping is the practice of creating main headings with an eye to the alphabetical structure, wording concepts so that similar terms fall together in the index (this also applies to subheadings under the main head). Thus:

- hair coverings (hat, scarves)
- hair ornaments (barrettes, headbands, scrunchies)
- hair styles (dreadlocks, braids)
- head coverings. *See hair coverings*
- ***
- public housing
- public housing reforms (rather than housing reforms)

Gathering is the practice of creating larger categories to collect smaller ones. Hair ornaments in this example gathers disparate items (but see also the discussion on scattering that follows).

Condensing (sometimes referred to as synthesis) is the practice of creating larger categories out of smaller similar ones. Before editing the index, each of the following main headings included only two or three page locators:

- economic development
- economic sectors
- economy

Rewording the main entry as “economy and economic sectors” (the subheadings were also rewritten as needed) condensed a group of similar ideas and discussions into a more easily grasped single main heading. This example comes from a book in which several economic sectors were discussed (e.g., tourism), so cross-references direct the user to those specific sectors and only general economic entries fell under “economy and economic sectors.”

Scattering is the practice of including direct access to specific things. Types of ornaments are gathered under “hair ornaments.” But readers should also have direct access via main headings for barrettes, headbands, and scrunchies. The main heading “churches” provides another example:

- churches: architecture of; history of; visitor information, etc.

The actual name of each church appears as a main heading as well as (perhaps) the religious denomination.

Keeping these considerations in mind, let's return to the public housing example. Given the comparative focus, the indexer decided to gather the public housing details, with ample cross-references from Harlem, Bronzeville, and other entities, such as the respective public housing authorities (e.g., Chicago Housing Authority):

Harlem: (20 subs). *See also* community organizations; displacement; gentrification; "mom and pop" businesses; property values; protest politics; public housing, Harlem; real estate developers; tourism public housing; in Bronzeville; in Harlem; reforms in

This example is one of scattering Harlem topics (though at the same time you are gathering in a different place) throughout the index. Successful scattering relies on accurate and complete cross-references to highlight the index structure. It is especially useful when, for example, a large chunk of an index falls under a single alphabetical letter or when it is more appropriate to gather under a separate concept. Nonetheless, the problem of long strings of locators remains unsolved if all the entries remain under "public housing." The following formats offer suggestions on breaking them up into more manageable entries.

A different way to handle this situation is to keep the Harlem entries clumped together, as follows:

Harlem: subheadings and cross-references

Harlem public housing: break out locators into subheadings

It seems less satisfactory than gathering the public housing entries together, in which case there are possible formats to consider (as you peruse the possibilities, note the occasional parallel constructions).

Alternative A: Qualifying the Same Term for Separate Main Headings

public housing: BIDs and rebuilding of, 47–49; Chicago and NYC, compared, 85–88, 108–111, 153, 175; converted to mixed-income housing, 90–91; demolition of, 83–84, 186n2, 186n8; differences in, 6, 22, 24, 108–111; federal assessment of, 87, 100, 186n4; federal funds cut for, 188n39; in Manhattan, 36–37; recommendations on, 163; scatter-site type of, 140; Starbucks near, 29. *See also* displacement; gentrification; tenants

- public housing, Bronzeville: attitudes toward, 96–97; CHA plan for transforming, 88–93; condition of, 85–86, 87–88; displacement issues and, 84–85, 93–94; first impressions of, 2–3; historical context of, 96–100; location of, 85, 89; machine control of, 98–99; racial composition of, 110; redevelopment benefits and, 94–95; relocating tenants of, 91–93; vacant apartments in, 100; violence in, 89; waitlist for, 100, 187n25. *See also* Chicago Housing Authority (CHA); displacement
- public housing, Harlem: BIDs and, 46–49; condition of, 86–87; displacement issues and, 102–105; historical context of, 106–108; location of, 86–87; number and value of, 100–101; racial composition of, 110; redevelopment benefits and, 105–106; rehabilitation of, 84, 88, 100, 101–102, 108; tenant activism in, 101–102, 106–108; viability of, 6, 22, 102. *See also* gentrification; New York City Housing Authority (NYCHA)
- public housing reforms: centralized political machine and, 97–100; CHA plan for, 88–93; comparison of, 84–85, 108–111; context of, 83–85; displacement issues and, 93–94, 102–105; redevelopment benefits and, 94–95, 105–106; rehabilitation and tenant activism in, 101–102, 106–108

Alternative B: The Em-dash

- public housing: BIDs and rebuilding of, 47–49; Chicago and NYC, compared, 85–88, 108–111, 153, 175; converted to mixed-income housing, 90–91; demolition of, 83–84, 186n2, 186n8; differences in, 6, 22, 24, 108–111; federal assessment of, 87, 100, 186n4; federal funds cut for, 188n39; in Manhattan, 36–37; recommendations on, 163; scatter-site type of, 140; Starbucks near, 29. *See also* displacement; gentrification; tenants
- Bronzeville: attitudes toward, 96–97; CHA plan for transforming, 88–93; condition of, 85–86, 87–88; displacement issues and, 84–85, 93–94; first impressions of, 2–3; historical context of, 96–100; location of, 85, 89; machine control of, 98–99; racial composition of, 110; redevelopment benefits and, 94–95; relocating tenants of, 91–93; vacant apartments in, 100; violence in, 89; waitlist for, 100, 187n25. *See also* Chicago Housing Authority (CHA); displacement
- Harlem: BIDs and, 46–49; condition of, 86–87; displacement issues and, 102–105; historical context of, 106–108; location of, 86–87; number and value of, 100–101; racial composition of, 110; redevelopment benefits and, 105–106; rehabilitation of, 84, 88, 100, 101–102, 108; tenant activism in, 101–102, 106–108; viability of, 6, 22, 102. *See also* gentrification; New York City Housing Authority (NYCHA)

—reforms in: centralized political machine and, 97–100; CHA plan for, 88–93; comparison of, 84–85, 108–111; context of, 83–85; displacement issues and, 93–94, 102–105; redevelopment benefits and, 94–95, 105–106; rehabilitation and tenant activism in, 101–102, 106–108

Alternative C: Run-in From First Subheading in Overall Indented Index

public housing

BIDs and rebuilding of, 47–49

Bronzeville: attitudes toward, 96–97; CHA plan for transforming, 88–93; condition of, 85–86, 87–88; displacement issues and, 84–85, 93–94; first impressions of, 2–3; historical context of, 96–100; location of, 85, 89; machine control of, 98–99; racial composition of, 110; redevelopment benefits and, 94–95; relocating tenants of, 91–93; vacant apartments in, 100; violence in, 89; waitlist for, 100, 187n25. *See also* Chicago Housing Authority (CHA); displacement

Chicago and NYC, compared, 85–88, 108–111, 153, 175

converted to mixed-income housing, 90–91

demolition of, 83–84, 186n2, 186n8

differences in, 6, 22, 24, 108–111

federal assessment of, 87, 100, 186n4

federal funds cut for, 188n39

Harlem: BIDs and, 46–49; condition of, 86–87; displacement issues and, 102–105; historical context of, 106–108; location of, 86–87; number and value of, 100–101; racial composition of, 110; redevelopment benefits and, 105–106; rehabilitation of, 84, 88, 100, 101–102, 108; tenant activism in, 101–102, 106–108; viability of, 6, 22, 102. *See also* gentrification; New York City Housing Authority (NYCHA)

in Manhattan, 36–37

recommendations on, 163

reforms in: centralized political machine and, 97–100; CHA plan for, 88–93; comparison of, 84–85, 108–111; context of, 83–85; displacement issues and, 93–94, 102–105; redevelopment benefits and, 94–95, 105–106; rehabilitation and tenant activism in, 101–102, 106–108

scatter-site type of, 140

Starbucks near, 29

See also displacement; gentrification; tenants

Ultimately the indexer utilized Alternative A, basing the decision on the structure of the text, the length of the book, and the fact that everything else in the index had worked well in the run-in format. The least satisfactory for this text is Alternative C. It is a useful format to keep in mind though, and it is well-suited to the *CMS* (15th ed.) and *The History of Cartography*, volume three: *Cartography in the European Renaissance*.

MULTIPLE INCARNATIONS OF THE SAME INDEXABLE BIT

As indexers, our job is to point toward bits of information. The question becomes, then, where will the user *look* for the pointer in the index? This purpose reinforces the idea of multiple entry points. Concomitantly, we might add that each bit of information ought to appear in multiple incarnations. For example, in a book on disease in the colonial United States, the name of each disease will constitute a main heading (e.g., cholera) as well as a subheading under the place-name where it appeared, possibly in epidemic form. The informational bit may also occur under one or more individuals who died or who were physicians in the epidemic, in addition to later preventive methods (such as water supply issues). We would venture to say that almost every indexable bit can be *easily* located in two places in an index and likely in several other places.

Moreover, such an indexable bit must be fine-tuned by analyzing (i.e., digesting) the information and considering the diverse ways a user might look for it. In straightforward cases, direct multiple postings may work. Often, however, the indexer must use indirect multiple postings. One subheading under Mary Wollstonecraft (in Shiner, *The Invention of Art*) reads, “on women and genius, 121–122.” This indexable bit appears also under genius but in a different guise: “gender of, 121–123, 200,” and it appears as a direct double-posting under gender. The same subheading under Wollstonecraft crops up under Denis Diderot, Immanuel Kant, and Jean-Jacques Rousseau, though each is represented only by page 121. Consider another example, from Gail Fenske, *The Skyscraper and the City*:

consumer culture: basic ingredients in growth, 20, 322n32

economy: late nineteenth- and early twentieth-century changes in, 20, 322n32

five-and-ten-cent stores: economic context of, 20, 322n32

While such a practice highlights the usefulness of parallel construction in subheadings, the main point in this case is that each bit appears in the index in different ways (concepts, things, people, place-names, and so on). The key is to think in multifaceted ways about where the end user, our faithful reader, might seek such information.

Expert Tip

Create multiple pointers to important concepts.

CROSS-REFERENCES FROM SUBHEADINGS

We agree with the statement that “in general, *See* cross references from subentries should be avoided in an index” (Mulvany, 2003, pp. 7–8). This is especially true when *see* or *see also* cross-references have been used because the main heading is too broad. Mulvany gives the example of automobile manufacturers as a main heading, which then includes both lists of manufacturers like Chevrolet and Ford as well as logical subdivisions. In this instance, it is better to have a direct *see also* reference from the main heading to the manufacturing company (e.g., *See also* Chevrolet; Ford Manufacturing; General Motors). In some cases a generic cross-reference may be useful: *See also specific automobile manufacturers*.

An example of the appropriate use of cross-references from subheadings from a botanical reference book on the cactus family is illustrated in this entry on the genus orchid (*Epiphyllum*) (Anderson, 2001):

Epiphyllum, 66, 96, 286
ackermannii, see *Disocactus ackermannii*
acuminatum, see *E. oxypetalum*
anguliger, 58, 287
cartagense, 287
crispatum, see *Rhipsalis crispate*

At first glance the undifferentiated references following the main heading may appear to be unruly page locators. However, those are entries referring to the genus in general rather than specific species, which are broken out and differentiated in the subheadings.

BIAS IN INDEXING AS APPLIED TO SUBHEADINGS

Indexers must avoid reflecting any prejudices in their work. The only bias in the index should be that of the author as shown in the text. At times it is possible to avoid even the author’s bias in the index, although there is some debate on whether an indexer should attempt to avoid the author’s bias. Consider a book in which the author is discussing the homosexuality, bisexuality, and/or heterosexuality of a

variety of historical personages. Perhaps the author holds a prejudice against bisexuality. The indexer may avoid reproducing the author's prejudice, at least in some measure, by using a subheading of "sexuality of" for all people's sexuality. It's likely that the bias will show up under the main entries for each type of sexuality but at least the indexer can provide a bit of balance. Likewise, in other contexts, a subheading such as "reputation of" can cover a host of comments, both positive and negative.

Whether an indexer can avoid reflecting the author's bias in the index, it is absolutely critical that she keeps her own biases out of the index. Many years ago, when an author reviewed an indexer-prepared index for his book on gays in the military, he was appalled at the indexer-introduced biases—especially evident in the treatment of sexual activities. The publisher was forced to hire another indexer to provide a balanced index that did not reflect personal prejudices.

CONTINUING THE DISCOURSE

In this chapter, we have sought to bring together indexing best practices as related to subheadings. In some cases we have included our own (sometimes outspoken) professional views. Certainly ours will not be the last words on the topic. In 1990, Cecilia Wittmann presented a quantitative evaluation of indexes that had won the Wheatley Medal (the [British] Society of Indexers' equivalent of the Wilson Award). It would be very interesting to conduct a similar comparison study today of Wheatley and Wilson award-winning indexes to see if the trends and best practices of the 1990s are still current in contemporary indexing practices. Many of the facets presented here will continue to generate discussion, such as those unruly page locators, the use of "and," and parallel construction. Subheadings constitute a rather extensive subject, more so than we envisioned when we began our research. Indeed, many questions remain open, especially those concerning usability. As we look forward to continuing this discourse, we will have as a basis the centrality of well-formulated subheadings in an elegant index.

APPENDIX: POSSIBLE SUBHEADINGS FOR THE INDEXER'S TOOLKIT

- on *whatever* (e.g., Smith, Adam: on economy)
- accusations against (or by)
- background of
- biographical details (birth of, childhood of, career of, death of)
- career of (work life of, training of)
- categories of (categorization of)
- characteristics of

circle of (can include acquaintances, friends, colleagues, etc.)
closing of (or closure of)
commercialization of
comparisons (a: b compared with; b: a compared with)
concept of
context of
correspondence of (letters both to and from as well as telegrams and emails)
corruption of
criminal activities of (a gathering of murders, robberies, and auto thefts)
daily life of
definition of
demographics of
description of
development of
divisions in (or among)
documents on
education of
establishment of
family of (family and clan ties of)
goals of
heterogeneity of
hierarchy of
history of
implications of
isolation of
justification for
kafkaesque quality of
legacy of (or lessons of)
location of
mentioned
milieu of
motivations of
multifaceted nature of
notoriety of
opening of
paradox of (paradoxical nature of, conundrum of)
quoted
rationale for
reconsideration of (reevaluation of)
reflections on (if concept, or reflections of, if person)
remembered

reorganization of
reputation of
responsibilities of
significance of
successor(s) to
support for (use in political context)
threats against (or by)
timing of
transformation of
typology of
use of term
variability of
writings of (sometimes force-sorted to come last)
x-ray vision of
youth of
zero-growth policy of
works of (force-sorted as last subheading)

ENDNOTES

1. It seems appropriate here to note our different perspectives on indexing practice, a difference that we feel is valuable and illuminating in our discourse: Victoria Agee's background is in library science; Margie Towery's background is in history and publishing.
2. In her seminars on indexing, Jane Foxon-Maddocks advocated the "Four C's of Indexing": conciseness, completeness, consistency, and, perhaps most importantly, common sense.
3. Additional information about the Wilson Award is available on the website of the American Society for Indexing (www.asindexing.org).
4. This is a good answer for many indexing questions. This statement was first used by Wellisch in his article on subheadings when responding to a query by *Key Words* editor Anne Leach. It has more recently been associated with Fred Leise.
5. Do Mi Stauber discussed this information in her workshop, "Taming the Wild Project List," October 2008. There is considerable discussion of the "magic number seven" (plus or minus two) in the neuroscience field.

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