Successful subheadings Fred Leise
Numbers in indexing Max McMaster

# Successful subheadings

# Fred Leise

Creating appropriate and useful subheadings is one of the particular challenges of indexing. After a brief discussion of what subheadings are and how they are used, Fred Leise explores ten heuristics to improve subheadings. He also explores some common problems in writing subheadings and briefly touches on editing them.

# What are subheadings?

Before any discussion of how to improve subheadings, we must first establish what subheadings are, why they are needed, and what they are supposed to do. Knowing their function will help establish guidelines for creating better subheadings.

Do Mi Stauber clarifies the usage of subheadings in her Second Rule: Make subheadings only for the purpose of breaking down the information in the main heading (2004: 128). That is, a long page span covering a single local metatopic needs to be broken down by use of appropriate subheadings. Do Mi discusses her injunction in detail and provides a number of examples which the reader of this article may explore for further information.

I would also add that subheadings can exist to disambiguate long strings of locators. We are all too familiar with the index that consists of nothing but main headings with lines and lines of undifferentiated locators. Subheadings provide a specific conceptual context for those locators so readers can more easily find the specific information they are looking for. In this case there is no single metatopic with a large page span that needs to be broken down, but rather separate discussions of a particular concept throughout a text, wgucg need to be collected and then provided with the appropriate context by use of subheadings.

In a book I recently indexed, for example, the theme of Chinese backwardness in the 19th and early 20th centuries ran through the entire text, resulting in 17 separate discussions of that concept. Subheadings were needed to disambiguate those discussions, even though there was no single section in the text devoted to that concept. That contrasted with Mao Zedong, who was discussed primarily in two full chapters, comprising over 50 pages in all. Clearly, appropriate subheadings were needed to break down the information in that page range into manageable chunks.

# Characteristics of successful subheadings

Given those two contexts for subheadings, what are some characteristics of successful subheadings? They need to exactly and concisely capture the particular focus of the main topic under discussion at this particular location or on these several pages. To create such subheadings, the indexer must identify the appropriate context in the text, understand how it differs from similar and related contexts, and finally translate the specific context into an appropriate and relevant wording that conveys that meaning to the reader.

In addition, good subheadings should:

- provide concept collocation
- be complete
- be differentiable
- offer good information scent
- exhibit audience relevancy
- be concise
- point to information
- demonstrate parallel construction
- · display the important concept first
- show a clear relationship to the heading.

Each of these ten characteristics will be discussed in turn.

## I. Collocation

In addition to collocation being one of the primary functions of an index itself – that is, it collects all the information about a concept in a single place (namely the heading devoted to that concept) – subheadings should also exhibit collocation. Consider the following two subheadings:

```
Sufism
during medieval era, 252–3
...
spread of, during Middle Ages, 267–8
```

The good indexer will recognize that these two subheadings can easily be combined, and for the sake of the reader they should be combined:

```
Sufism during medieval era, 252–3, 267–8
```

The fact that one page range discusses the spread of Sufism,

```
mental health (cont.)
    renewed distress, 107-108; sent to rest
    home by VB, 111-113 depression, 121,
    Fig. 17; collapse, 130; threatened after
    marriage, 13% manic-depressive state,
    155-159; attempts suicide, 159; recov-
    ery from suicide attempt, 160-161,
    163-166 168 progress 173 still pre-
    value of (Night and Day, 211; sense of
    self threatened, 222; depression threat-
    ens, 241 depression and mania,
    247-248; after Katherine Mansfield's
    death, 263; panic, 268-269; breakdown
    in miniature, 293; engulfed by horror
    that she overcomes, 295-297; To the
    Lighthouse as psycho-analysis, 302; Vita
    Sackville-West's infidelity threatens re-
```

Figure I Index sample from Reid (1996)

while the other discusses it in general, is not reason enough to have two separate subheadings, since both refer to the religion during the same time period. Better to combine them so the reader can see all of the relevant locators in one place.

lapse, 326; depressions, 329; depression

Consider another example. A biography on Virginia Woolf contains the following index subheadings (shown in context in Figure 1) (Reid, 1996: 564):

```
mental health
...
depression, 121
...
depression and mania, 247–8
...
depressions, 329
```

It would be easy enough to combine the subheadings.

```
mental health depressions, 121, 247-8, 329
```

Let us not be hasty, however. It is especially important to consider the context of any subheadings. (There are no rules, only contexts.<sup>1</sup>) In this particular case, what was important was not that Virginia Woolf suffered from a number of bouts of depression, but that it was a recurring and cyclical feature of her mental state. Thus, it was important to keep the mentions of depression separate in the long, chronological entry on Mrs Woolf's mental health.

## 2. Completeness

Subheadings must be complete. That is, if they are breaking down a large page span, there should be subheadings covering all of the span (other than introductory or summary sections, perhaps).

Consider the following fictional index entry:

```
Deng Xiaoping, 258–315
Communist Party work, 310–315
during Cultural Revolution, 262–265
early life, 258–260
education, 260–261
```

What about the content on pages 265 through 309? There are no subheadings directing the reader to any content on those pages. Thus, the entry has a subheading hole that leaves the reader with no clue of what happened to Mr Deng on 45 pages that are part of the long page span devoted to him. Obviously, this is an extreme example, but subheadings should in most circumstances cover all the pages in the relevant discussion.

Subheadings must also be complete in the sense that they should include all indexable mentions of the concepts rather than just a chosen few. Cherry-picking easy or obvious mentions of indexable concepts without a thorough analysis of their appearances throughout the text is one mark of a poor indexer.

## 3. Differentiable

Subheadings must be differentiable: that is, if subheadings are about different concepts, that difference must be clear to readers. Consider, for example the following subheadings. Is there a real difference between them?

```
projects
planning for, 14
preparing for, 21
thinking about, 2
```

Most likely not. At least there don't appear to be any major differences that are readily apparent to the reader. A good editing process would transform the above entry to:

```
projects planning for, 2, 14, 21
```

Here, the subheadings are *not* differentiable; they are about the same concept so should be combined. On the other hand if subheadings are about different concepts, that conceptual difference should be obvious.

#### 4. Good information scent

'Information scent' is a term borrowed from the field of information architecture. In her classic 1989 paper, 'The design of browsing and berrypicking techniques for the online search interface,' Marcia Bates proposed a new model of how people search online. Rather than the clas-

sical single-query, single-answer model, Bates showed that online users begin with an initial query, get some information, modify their query, find some additional information, and so on through an iterative loop until they finally find information that satisfies them.

As a result, website labels must provide good information scent: they must provide a strong connotation so that users can quickly understand what type of material the label points to.

Similarly in indexes, subheadings should also carry a strong information scent. Consider the first subheading in the following entry.

```
pomegranates
about, 24
cooking with, 26
```

There is nothing wrong with the 'about' subheading. In fact, it is one that Julia Child made famous in her indexes to indicate general material about a topic.

But what if the actual information on page 24 is more specific than just a general discussion of what pomegranates are? In that case, the subheading also needs to be more specific so the reader is clear about the information the subheading points to.

```
pomegranates
ancient Romans' use of, 24
cooking with, 26
```

Using 'about' in this context offers only a weak information scent and actually hides important information from the reader.

# 5. Audience relevancy

Subheadings must use language that is appropriate to the expected readers of the text. Will the audience be trained professionals? College students? Grade-school students? Each of those audiences may require that the indexer use different language for the same concepts. Without knowing your audience, you risk creating subheadings that are meaningless.

What would you think if you came upon the following entry in an index.

```
Wakuénai dzúdzuápani, 25, 38–40, 44, 46
```

You might be thinking that it's time to murder the indexer. Or you might think that you have opened the wrong book entirely, and what is it doing in your library anyway? On the other hand, compare the following (Kuss, 1996: 396):

```
Wakuénai peoples (in Venezuela) dzúdzuápani ('wheel' dance-songs), 25, 38–40, 44, 46
```

Through the judicious use of glosses, the indexer has matched the level of information in the subheading (and heading) to the anticipated knowledge of the text's audience,

in this case, a general readership interested in indigenous music.

## 6. Concision

Subheadings should be concise. Note that concise is not necessarily the same thing as short, however. Rather, a concise subheading is one that provides the most specific, relevant information to the reader while still completely encompassing the entirety of the concept under discussion. The trick for concise subheadings is to offer a good information scent without being so precise that the subheading becomes filled with extraneous verbiage.

Consider the following two entries (the first is from the index to Doron Swade's *The cogwheel brain*, 2000):

```
Difference Engine (No. 2)
building of as vindication and commemoration of
Babbage's work, 225, 226
```

```
Difference Engine (No. 2) importance, 225, 226
```

Does the verbiage in the first example really provide important information for the reader, or is it sufficient that the reader be given the more concise second version and find out why the machine was important when they get to the text? The wordy first example is overkill, and exhibits this indexer's tendency to copy information from the text without doing proper conceptual analysis.

Concision is also closely related to the next characteristic of good subheadings, namely 'pointing.'

#### 7. Point

The term 'index' literally means 'pointer.' Good subheadings should point or lead the reader to information in the text; they should not repeat that information (unless, of course, a short phrase from the text perfectly encapsulates the context being discussed). Look at the following subheading.

```
mark of Cain
as symbolic of propensity toward evil and performing evil
deeds, 37, 218
```

Immediately we see a series of phrases and clauses. Many times, that is an indication that the subheading needs to be shortened because it is repeating too much information from the text. This much shorter entry is both more concise and serves the purpose of an index by directing readers to the appropriate information in the text. Readers will find the details when they follow the locators.

```
mark of Cain symbolism of, 37, 218
```

Here's another example, again from The cogwheel brain:

```
Difference Engine (No. I)
problem of resetting machine for each new run of
calculations and solution, 94–96
```

Again, we see too many phrases, alerting us to a subheading that has been copied from the text. Does the reader really need to know in the index when the problem of resetting occurs, as opposed to the fact that it is a problem? Not really. The following subheading is much more concise and just as useful.

```
Difference Engine (No. 1) problem of resetting machine, 94–96
```

## 8. Parallel construction

The best subheadings generally exhibit parallel construction whenever possible and are logical throughout an index. The parallelism should comprise form, part of speech, and verb tense.

Subheadings with parallel form use the same type of construction for similar events, occurrences, objects, and so on. An example of problematic subheadings is:

```
health issues
during WWI, 24
during World War II, 28
```

The subheadings should use either the short or long form for both wars, but not mix the two forms in one index. The latter makes the user wonder if there is some intrinsic difference between the entries and 'makes them think,' that is, interrupts their flow of using the index to find the information they are looking for.

Subheadings should also establish a preferred part of speech for constructing entries whenever possible, for example, gerunds or infinitives, nouns or gerunds, or nouns or verbs. The following examples first show the inconsistent subheadings, then those showing parallel construction:

```
gestures
```

for changing applications, 18 for deletion of email, 141

## gestures

for changing applications, 18 for deleting email, 141

Clement, Joseph confrontation with Babbage, 66–7 demands compensation, 65–6

Clement, Joseph confronts Babbage, 66–7 demands compensation, 65–6

Similarly, verb tense should be parallel throughout an index.

Gorbachev, Mikhail Sergeevich failed to end Afghan conflict, 198 supports new Union treaty, 107

Gorbachev, Mikhail Sergeevich failed to end Afghan conflict, 198 supported new Union treaty, 107

## 9. Important concept first

Subheadings should be constructed so that the important concept is placed at the beginning of the subheading. This allows readers to find those concepts when they are scanning an index. Which part of a subheading is the more important is naturally dependent on context. The indexer must determine, for example, whether the action or the item acted upon is more important.

```
Orthodox Christianity
relationship of church and state in, 187
Orthodox Christianity
```

church-state relationship in, 187

The second example would most likely be preferable, but without the context of the specific text, it is really impossible to say.

Consider also the following entries. In this case, because the verbs are only one of many possible synonyms that could be used, putting the objects of the actions first makes for better subheadings.

```
script writing
creating characters, 124 (could be 'developing' or 'imagining,' etc.)
determining plot, 287, 342
planning structure, 28

script writing
characters, creating, 124
plot, determining, 287, 342
structure, planning, 28
```

One caution here is that most readers don't think in inversions. That appears to be an occupational habit of indexers. So don't invert unnecessarily.

# 10. Clear relationship to heading

Probably the most important of all the characteristics of good subheadings is the fact that the relationship of the subheading to its heading must be clear and unambiguous.

```
Napoleon
Russia, 276–280
```

What is this passage about? Without any verbal clues, either through prepositions or additional terminology, it is impossible to determine. That means the readers have no idea whether or not this passage answer the particular question they have in mind. Here are some much better, and clearer, subheadings.

```
Napoleon
in Russia, 276–280

Napoleon
Russia, views on, 276–280

Napoleon
Russia, failed invasion of, 276–280
```

## Common subheading problems

As an instructor for the University of California, Berkeley online indexing course, I see many indexes from those beginning their explorations of indexing. Often, these indexes exhibit similar problems. Four problems stand out for the frequency of their occurrence in the work of student indexers.

#### 1. Repeating the text, not pointing to it

See item 7 above.

#### 2. Confusing/awkward construction

In some cases a subheading might not be incorrect, but it is worded so awkwardly that it is impossible for the reader to determine exactly what is meant:

```
encephalitis organ recipients developed
```

Here, the heading-subheading pair is clearly meant to be read in inverted order: 'organ recipients developed encephalitis.' No doubt that is taken directly from the text itself. But consider how much clearer and easier it is to understand either of the following wordings for the subheading.

```
encephalitis
organ recipients' development of, 276–280
encephalitis
development of, in organ recipients, 276–280
```

#### 3. Indexing what the reader does not already know

This problem is a subtle one, and while it might not happen as often as the others, it should provide a caution to be avoided. Consider the following entry.

heuristic evaluations automated aids to, 192–193 criticisms of, 190–192 methodologies for, 186–193 ten usability heuristics, 167–179 user control and, 172 visibility of system status in, 167

How in the world is the reader supposed to know how many 'usability heuristics' there are? What if this entry were much longer – would any reader look up the word 'ten' to find 'usability heuristics'?

#### 4. Orphan locators after a heading that has subheadings

This problem is the bane of many experienced indexers and one that is especially vexing to the user.

```
arms race, 39
consequences, 212
influence of nuclear weapons on, 174
relationship to Cold War, 196
```

What is happening on page 39? Is it a definition? A passing mention? A primary discussion? A discussion so complicated the indexer quit trying to capture it in a reasonably worded subheading? Is it the first place to look or the last place to look? In the absence of a headnote, there is no way to understand why the locator is positioned after the heading.

Note that this issue is not the same as when the page ranges for a chapter or a long continuous discussion are given after the heading.

```
arms race, 39–72
consequences, 70
influence of nuclear weapons on, 43
relationship to Cold War, 39, 51-54, 69, 87
[plus lots of subheadings on the other subtopics within pages 39 through 72]
```

That usage is clear and is generally accepted practice, which the orphan locators are not.

## Subheadings in the editing process

In addition to creating subheadings from the start that follow the characteristics above, indexers may use the editing process to improve subheadings before the final index goes out the door. In addition to passes that focus on validation of cross-references, verification of locator formation, parallel double-postings, and checking for proper locator structure, one or more passes may be used to do a final check on subheading formation.

The indexer should check subheading wording for collocation, differentiation, information scent and clarity; should review subheadings for parallel construction; and ensure that all subheadings reveal a clear relationship to the heading.

These passes will ensure that your index will be as strong as possible and that your subheadings will indeed be successful.

#### Note

1 Fred Leise's #1 rule of indexing.

#### References

Bates, M. (1989) 'The design of browsing and berrypicking techniques for the online search interface.' *Online Review* 13 (October), 407-24. http://comminfo.rutgers.edu/~tefko/Courses/e530/Readings/Bates%20berrypicking.pdf

Kuss, M. (2004) *Music in Latin America and the Caribbean*. Austin, Tx.: University of Texas Press.

Reid, P. (1996) Art and affection: a life of Virginia Woolf. Oxford: Oxford University Press.

Stauber, D. M. (2004) Facing the text. Eugene, Ore.: Cedar Row

Swade, D. (2000) The cogwheel brain. New York: Little, Brown.

Fred Leise is a consultant in taxonomy and content strategy design, and an instructor for the UC Berkeley indexing course. Email: fredleise@contextualanalysis.com