

A Question of Multiplicity

Groundwork for the eighth edition of a multiauthor technical book will soon begin. In updating the nearly 120 chapters from edition to edition, authors have tended to add but not delete references. Many chapters now have about 100 references, and one has several hundred. An editor associated with the project perceives that some of the reference lists might be excessive but is unsure how to proceed. What do you advise?

Solutions

This is always a tough call. References serve many purposes, not the least of which is to avoid plagiarism. But how many references are needed? Some of the most influential clinical textbooks have only 25 to 50 references per chapter; some have none. As a book evolves from edition to edition, the authors have more time to improve and expand the content and accordingly the number of references.

Not knowing the technical nature or the culture of the readership of the book referred to in the example, I worry that an extensive list of references may be unnecessary. If I were to pick up a technical book, my primary reason for doing so would be to find the answer to my query without having to track down references to get to the bottom of the issue. But if I were conducting research and needed to follow the paper trail to offer an authoritative account of a topic, I would want to have the references listed. To be honest, I recall only a couple of instances in my career in which it was extremely important to track down the original source of content in a book chapter that I was reading for personal interest. In contrast, I have frequently needed to track down references in scientific, peer-reviewed journal articles.

I contend that the extent of reference citation in a book is more a reflection of the “style” of the book (and possibly the culture of its readership) than a need. Preferably, the style of a book is established early in the evolution of its editions. However, the rules can be changed at any time in response to publishing pressures (for example, costs related to the size of

the book or, in this case, the distraction that the uncontrolled number of references causes in the reader). When a substantial change in the style of the book is desired, it may be best (but sometimes dangerous) to combine this change with other structural changes (thickness of paper, color of sidebars, dimensions of book, cover design, and so on) that define a “shift in brand”. If there have been no substantial changes in the structure of the book in the previous seven editions, a brand shift may be warranted as part of a marketing strategy to give the book a fresh image.

I might suggest that you give the authors strict guidelines on the number of references allowed, citing the need to control the number of pages in the book and to shift emphasis toward content other than references. Set the bar low, but make it practical (for example, state that “it is expected that no more than 50 references will be cited in the reference list or no more than 75 references will be allowed”). Some authors will comply, others may not. Editorial judgment will have to prevail in the end, because the number of references needed for a chapter may depend on the nature of the content.

Donald Samulack

St Jude Children’s Research Hospital
Memphis, Tennessee

My rule of thumb is this: Don’t include any reference unless you, as the author of the paper (or book), used it as part of your direct research in the writing of it (you read the primary or secondary source—not a review of it—and found some application to your own work). You may include a reference by stating that a different author used it for his or her research, but in my opinion that dilutes the power of your research.

Peggy Browneller Paradis

Baylor College of Medicine
Houston, Texas

I have worked with several authors and editors of multiauthor texts over the years and have come across similar problems. These can become tricky issues when one is dealing with easily bruised egos.

My approach has been to encourage authors to include only the references necessary to support their statements. One statement in text should not require a multitude of references to justify it. The authors can be given a cutoff point for the number of references that will appear in the text. There usually are many studies of the same hypothesis, followed by studies confirming or disputing the findings of the original research and addressing the present or potential issues. Being very knowledgeable in their fields, the authors should be able to sift through the material and choose the most important findings to support their discussion. If the authors believe that the history of a topic is important, only the ground-breaking research should be included. There then could be a greater number of references illustrating the development of the field over the years. The majority of the references should relate to the most recent findings. For example, in a text on the use of beta-blockers in hypertension, the references on their effectiveness should be limited to the major clinical trials. Those drugs have been used in humans for many years; therefore, it isn't necessary to cite the early *in vitro* and animal research to support the authors' discussion. In addition, only a few studies that confirmed the overall results of the clinical trials are needed. A substudy of a topic, such as differing effectiveness of this drug class in different races, may have been discussed in the previous edition of the book; however, if a more recent original study on the topic has been performed, it should be included in the latest edition, and the substudy reference could be dropped. If the authors insist that all the references are necessary, they still should choose only the most important to appear in the text. The extra 100 or so could then be listed in a separate bibliography after the reference list. However, the chapters should be consistent: Either all or none should contain a bibliography.

Donna Thordsen

Harvey Whitney Books
Cincinnati, Ohio

References serve three purposes: as sources of authority for an argument, as a way to trace the history of the development of a school of thought, and as a place that a reader with specific needs can turn to for further information. If you decide which of those purposes each entry in a reference list serves, you can determine whether it is still relevant. (You can't simply delete the out-of-date references: If a reference is needed at all, the author—or the editor, with the author's approval—must replace the poor ones with better ones. And in the normal course of copyediting the editor will also note assertions that lack references and ask the author to supply them.)

The best authority on a given topic, if it is the subject of current research, will be someone living. If the topic has reached the point where its facts are not disputed, it's likely that the best authority will either be someone who published at the time when debate on the subject drew to a close or someone who uses the topic as a stepping-off point for other work and who has therefore thought through its issues. Another important characteristic of authoritative references is that they are readily available: Don't make the reader track down a 19th-century monograph or a Russian-language journal article if you can help it. Readers check this sort of reference to decide whether to trust the author's scholarship. Make it as easy as possible to do.

References that trace the development of ideas will naturally be spread out over time. Don't reinvent the wheel: If someone has written a good article-length account of events that you are summarizing in a page or a paragraph, cite it. In addition to directing the reader to a summary article like this, or a few of them—sometimes two or three tackle a topic from slightly different angles—you can cite one or two key publications from the time of a debate as well as articles that publish results or propose definitions that are picked up as canonical or as turning points in the literature.

The key with developmental summaries and citations is to decide whether the

intention of the text you are editing is to gloss a subject—giving the reader the gist, summarizing the key points, mentioning the key results and formulas, and perhaps summing up competing theories or explanations and the anomalies they attempt to account for—or to serve as an in-depth history of it. For a gloss, a handful of citations are plenty. Sometimes only one citation, to an article containing the in-depth history, will do the job. If no such in-depth history exists, and the topic is an important one that you need to gloss, the author may want to write the in-depth article, publish it in a journal, and cite it (“forthcoming in . . .”) in the textbook. I have seen this done often enough to think it is, or should be, a standard practice. (For an example of an in-depth article of this sort, see Derek Barton’s December 1969 Nobel Prize lecture, “The Principles of Conformational Analysis”, available at www.nobelprize.org/chemistry/laureates/1969/barton-lecture.html. Barton intended his lecture to gloss his subject, albeit at a level that required that his audience be familiar with organic chemistry: He cites two monographs that presumably trace the development of conformational analysis in detail.)

The third sort of reference, directed at readers with special needs, depends on your intended readers. Books that expect to attract readers unfamiliar with the basics of their field refer those readers to introductory or fundamental texts so that they can bring themselves up to speed to follow the discussion. Interdisciplinary books, published at the intersection of two or more disciplines, often include references intended to help scholars from one of the contributing disciplines make sense of the conventions of the others. These are “see” or “see also” references: Citations of this sort often include comments that help the reader know when to follow them up. Like authoritative references, they should be readily available.

To summarize: Authoritative references may date from the close of a debate, take the form of a review of a settled topic as a stepping-off point for other research, or, in the case of long-undisputed facts, be found

in a discipline’s standard reference works. They should be readily available to the intended reader. Historical references trace the development of ideas. Citations of this sort may span a long period, and the references themselves may be obscure. When possible, include references to secondary sources that provide a more detailed account of events than your gloss can. References directed at readers with special needs should be readily available and described in a way that helps the readers to make good use of them. Note that “readily available” means in print or available in reference libraries. These “see” and “see also” references usually have recent publication dates.

These principles should help you weed no-longer-current references from new editions of textbooks. Ask yourself, Is this reference still the authority? Is it still readily available? Does a better secondary account of this development exist? Have the intended readers changed? Are the “see” and “see also” references still the best available? Is the reference list short enough that a citation selected at random from it is likely to be useful, or do the obscure references crowd out the gems?

Patrick B Inman

Academic Editor, Translator,
and Writing Coach
Chapel Hill, North Carolina

New Question: A Question of Balance

A newspaper reporter you have met consults you about the following quandary: The reporter is writing an article about an environmental issue. Almost all the scientific evidence the reporter has found supports one point of view. However, the reporter’s editor has told her to give equal attention to “both sides of the story” so that her article will have “journalistic balance”. How do you advise the reporter?

RITA M WASHKO, a physician and graduate student in journalism at Arizona State University, compiled this column while a Science Editor intern.