

CHAPTER 15 ---

How to Cite the References

Manuscripts containing innumerable references are more likely a sign of insecurity than a mark of scholarship.

—William C. Roberts

RULES TO FOLLOW

There are two rules to follow in the references section, just as in the acknowledgments section.

First, list only significant published references. References to unpublished data, abstracts, theses, and other secondary materials should not clutter up the references or literature-cited section. If such a reference seems essential, you may add it parenthetically or, in some journals, as a footnote in the text. A paper that has been accepted for publication can be listed in the literature cited, citing the name of the journal followed by “in press” or “forthcoming.”

Second, ensure that all parts of every reference are accurate. Doing so may entail checking every reference against the original publication before the manuscript is submitted and perhaps again at the proof stage. Take it from an erstwhile librarian: There are far more mistakes in the references section of a paper than anywhere else.

Don't forget, as a final check, to ensure that all references cited in the text are indeed listed in the literature cited and that all references listed in the literature cited are indeed cited somewhere in the text.

ELECTRONIC AIDS TO CITATION

Checking that every reference is accurate, and that all cited items appear in the reference list, has become much easier in the electronic era. Common word-processing programs include features for tasks such as creating, numbering, and formatting footnotes and endnotes. These features can aid in citing references and developing reference lists. Some journals, however, say not to use these features, which can interfere with their publishing process. Check the journal's instructions to authors in this regard.

Perhaps more notably, citation-management software—such as EndNote, Reference Manager, and RefWorks—lets a researcher develop a database of references and use it to create reference lists in the formats of many journals. Rather than keying in the information on each reference, you may be able to import it from bibliographic databases. Once the information is accurately entered, it should remain correct whenever it appears in a reference. Do, however, still check references. Electronic gremlins sometimes lurk. So does human error; if somehow you indicated the wrong reference, the wrong reference will appear.

If you are not using reference-management software, consider looking into doing so. Using such software can especially save you time if you will cite some of the same references in multiple publications or if journals in your field have a variety of reference styles. If you study or work at a university or other research institution, you might easily be able to obtain such software through it. Also, some universities provide instruction in using such software, for example, through their libraries. Consider checking.

CITATIONS IN THE TEXT

Many authors use slipshod methods in citing literature. A common offender is the “handwaving reference,” in which the reader is glibly referred to “Smith’s elegant contribution” without any hint of what Smith reported or how Smith’s results relate to the present author’s results. If a reference is worth citing, the reader should be told why.

Even worse is the nasty habit some authors have of insulting the authors of previous studies. It is probably all right to say “Smith (2015) did not study. . . .” But it is not all right to say “Smith (2015) totally overlooked. . . .” “Smith (2015) ignored. . . .” or “Smith (2015) failed to. . . .”

Some authors get into the habit of putting all citations at the end of sentences. This is wrong. The reference should be placed at that point in the sentence to which it applies. Michaelson (1990) gave this example:

We have examined a digital method of spread-spectrum modulation for multiple-access satellite communication and for digital mobile radiotelephony.^{1,2}

Note how much clearer the citations become when the sentence is recast as follows:

We have examined a digital method of spread-spectrum modulation for use with Smith's development of multiple-access communication¹ and with Brown's technique of digital mobile radiotelephony.²

REFERENCE STYLES

Journals vary considerably in their style of handling references. O'Connor (1978) looked at 52 scientific journals and found 33 different styles for listing references. Some journals include article titles within references, and some do not. Some insist on inclusive pagination, whereas others print the numbers of first pages only.

If you use an electronic reference management system, and if that system includes the styles of all the journals in which you might like to publish, you might not need to concern yourself in detail with differences among reference styles. In that case, perhaps just skim—or even skip—the sections of this chapter that discuss formats for citing and listing references. If, however, you might at least occasionally be preparing and citing references by traditional means, we advise you to read these sections.

Whether electronically or otherwise, the smart author retains full information about every item that might be cited. Then, in preparing a manuscript, he or she has all the needed information. It is easy to edit out information; it is indeed laborious to track down 20 or so references to add article titles or ending pages when a journal editor requires you to do so. Even if you know that the journal to which you plan to submit your manuscript uses a short form (no article titles, for example), you would still be wise to establish your reference list in the complete form. This is good practice because (1) the journal you selected may reject your manuscript, and you may then decide to submit the manuscript to another journal, perhaps one with more demanding requirements, and (2) it is more than likely that you will use some of the same references again, in later research papers, review papers (and most review journals demand *full* references), or books. When you submit a manuscript for publication, make sure that the references are presented according to the instructions for authors. If the references are radically different, the editor and referees may assume that this is a sign of previous rejection or, at best, obvious evidence of lack of care.

Although there is an almost infinite variety of reference styles, most journals cite references in one of three general ways that may be referred to as name and year, alphabet-number, and citation order.

Name and Year System

The name and year system (often called the Harvard system) has been very popular for many years and is used by many journals and books, including this one. Disciplines in which it is popular include the social sciences. Its big advantage is convenience to the author. Because the references are unnumbered, references can be added or deleted easily. No matter how many times the reference list is modified, “Smith and Jones (2015)” remains exactly that. If there are two or more “Smith and Jones (2015)” references, the problem is easily handled by listing the first as “Smith and Jones (2015*a*),” the second as “Smith and Jones (2015*b*),” and so on. The disadvantages of name and year relate to readers and publishers. The disadvantage to the reader occurs when (often in the introduction) many references must be cited within one sentence or paragraph. Sometimes the reader must jump over several lines of parenthetical references before he or she can again pick up the text. Even two or three references, cited together, can distract the reader. The disadvantage to the publisher is obvious: increased cost. When “Higginbotham, Hernandez, and Chowdhary (2015)” can be converted to “(7),” printing costs can be reduced.

Because some papers are written by an unwieldy number of authors, most journals that use name and year have an “et al.” (meaning “and others”) rule. Commonly, it works as follows. Names are always used in citing papers with either one or two authors; for example, “Smith (2015),” “Smith and Jones (2015).” If the paper has three authors, list all three the first time the paper is cited, for example, “Smith, Jones, and Nguyen (2015).” If the same paper is cited again, it can be shorted to “Smith et al. (2015).” When a cited paper has four or more authors, it should be cited as “Smith et al. (2015)” even in the first citation. In the references section, some journals prefer that all authors be listed (no matter how many); other journals cite only the first three authors and follow with “et al.”

Alphabet-Number System

This system, citation by number from an alphabetized list of references, is a modification of the name and year system. Citation by numbers keeps printing expenses within bounds; the alphabetized list, particularly if it is long, is relatively easy for authors to prepare and readers (especially librarians) to use.

Some authors who have habitually used name and year tend to dislike the alphabet-number system, claiming the citation of numbers cheats the reader. The reader should be told, the argument goes, the name of the person associated with the phenomenon; sometimes, the reader should also be told the date, on the grounds that a 1914 reference might be viewed differently than a 2014 reference.

Fortunately, these arguments can be overcome. As you cite references in the text, decide whether names or dates are important. If they are not (as is usually the case), use only the reference number: "Pretyrosine is quantitatively converted to phenylalanine under these conditions (13)." If you want to feature the name of the author, do it within the context of the sentence: "The role of the carotid sinus in the regulation of respiration was discovered by Heymans (13)." If you want to feature the date, you can also do that within the sentence: "Streptomycin was first used in the treatment of tuberculosis in 1945 (13)."

Citation Order System

The citation order system is simply a system of citing the references (by number) in the order in which they appear in the paper. This system avoids the substantial printing expense of the name and year system, and readers often like it because they can quickly refer to the references, if they so desire, in one-two-three order as they come to them in the text. It is a useful system for a journal that is basically a "note" journal, each paper containing only a few references. For long papers, with many references, citation order might not be a good system. It might not be good for the author because of the substantial renumbering chore that can result from adding or deleting references. It might not be ideal for the reader, because the non-alphabetical presentation of the reference list may result in separation of various references to works by the same author.

The first edition of this book (Day 1979, p. 40) stated that the alphabet-number system "seems to be slowly gaining ascendancy." Soon thereafter, however, the first version of the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" appeared, advocating the citation order system for the cooperating journals. Several hundred biomedical journals have adopted the "Uniform Requirements," which have evolved over the years and have now been retitled "Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals" (International Committee of Medical Journal Editors 2014). Thus, it is not now clear which citation system, if any, will gain ascendancy. The "Uniform Requirements" document, as it still is often known, is impressive in so many ways that it has long had a powerful impact. It is in substantial agreement with a standard prepared by

the American National Standards Institute (1977). With regard to literature citation, however, other usage also remains strong.

TITLES AND INCLUSIVE PAGES

Should article titles be given in references? Normally, you must follow the style of the journal; if the journal allows a choice (and some do), we recommend that you give *complete* references. By denoting the overall subjects, the article titles make it simple for interested readers (and librarians) to decide whether they need to consult none, some, or all of the cited references.

The use of inclusive pagination (first and last page numbers) makes it easy for potential users to distinguish between one-page notes and 50-page review articles. Users may wish to proceed differently depending on the number of pages involved.

JOURNAL ABBREVIATIONS

Although journal styles vary widely, one aspect of reference citation has been standardized: abbreviations of journal names. As the result of widespread adoption of a standard (American National Standards Institute 1969), almost all of the major journals and secondary services now use the same system of abbreviation. Previously, most journals abbreviated journal names (significant printing expense can be avoided by abbreviation), but there was no uniformity. The *Journal of the American Chemical Society* was variously abbreviated to "J. Amer. Chem. Soc.," "Jour. Am. Chem. Soc.," "J.A.C.S.," and so forth. These differing systems posed problems for authors and publishers alike. Now there is essentially only one system, and it is uniform. The word "Journal" is now always abbreviated "J." (Some journals omit the periods after the abbreviations.) By noting a few of the rules, authors can abbreviate many journal titles, even unfamiliar ones, without referring to a source list. It is helpful to know, for example, that all "ology" words are abbreviated at the "l." ("Bacteriology" is abbreviated "Bacteriol.;" "Physiology" is abbreviated "Physiol.," etc.) Thus, if one memorizes the abbreviations of words commonly used in titles, most journal titles can be abbreviated with ease. An exception to remember is that one-word titles (*Science*, *Biochemistry*) are never abbreviated.

Appendix 1 lists the abbreviations for commonly used words in periodical titles. If you are unsure how to abbreviate a journal title, you can often discern the correct abbreviation from a listing in a bibliographic database, from information in the journal, or from a previous citation of the journal. Abbreviations for the titles of many journals in the biomedical sciences and related fields can

be obtained from the PubMed journals database (www.ncbi.nlm.nih.gov/nlm/catalog/journals).

SOME TRENDS IN REFERENCE FORMAT

Not all journals abbreviate journal titles in references. For example, APA style (*Publication Manual of the American Psychological Association* 2010, p. 185) calls for stating periodical titles in full. More generally, journals may increasingly be including full journal titles in references. Earlier, when journals appeared only in print, publishers favored abbreviating journal titles because it saved valuable space, thus saving paper costs or allowing more papers to be published. Today, with many journals appearing mainly or solely online, the space saved may be less of a consideration than are convenience to authors and clarity to readers. Writing out journal titles in full may serve especially well in journals that publish interdisciplinary papers and thus have readers who might not understand the abbreviations of some words in the titles of cited journals.

If a journal article has been published online, either exclusively or as well as in print, the publisher may have assigned it a Digital Object Identifier (DOI), which specifies a persistent link to its location on the Internet. If an article has a DOI, commonly it appears on the first page. Some reference formats include providing the DOI, if one exists, at the end of the reference. Additional information about DOIs is available at www.doi.org.

EXAMPLES OF DIFFERENT REFERENCE STYLES

So that you can see at a glance the differences among the three main systems of referencing, here are three sample references as they might appear in the references section of a journal. (In some journals, references in these systems will look somewhat different from those below because journals differ among themselves in items such as how, if at all, they use italics and boldface in references.)

Name and Year System

Álvarez GA, Suter D, and Kaiser R. 2015. Localization-delocalization transition in the dynamics of dipolar-coupled nuclear spins. *Science* 349:846–848.

Bern C. 2015. Chagas' disease. *N. Engl. J. Med.* 373:456–466.

Shipman WM. 2015. *Handbook for science public information officers*. Chicago: University of Chicago Press.

Alphabet-Number System

1. Álvarez, G. A., D. Suter, and R. Kaiser. 2015. Localization-delocalization transition in the dynamics of dipolar-coupled nuclear spins. *Science* 349:846–848.
2. Bern, C. 2015. Chagas' disease. *N. Engl. J. Med.* 373:456–466.
3. Shipman, W. M. 2015. *Handbook for science public information officers*. Chicago: University of Chicago Press.

Citation Order System

1. Bern C. Chagas' disease. *N Engl J Med.* 2015;373:456–66.
2. Shipman WM. *Handbook for science public information officers*. Chicago: University of Chicago Press, 2015.
3. Álvarez GA, Suter D, Kaiser R. Localization-delocalization transition in the dynamics of dipolar-coupled nuclear spins. *Science.* 2015;349:846–48.

In addition to its non-alphabetical arrangement of references, the citation order system differs from the others in its advocacy of eliminating periods after abbreviations (of journal titles, for example), periods after authors' initials, and commas after authors' surnames.

CITING ELECTRONIC MATERIAL

The Internet increasingly contains material appropriate for citation. In particular, many scientific papers now are appearing in electronic journals or being posted online as well as appearing in print. In addition, some reports, databases, and other items accessed online can be valid to cite.

Accordingly, formats have been developed, and are continuing to be developed, for citing electronic materials. These formats appear in recent editions of style manuals and in the instructions to authors of some journals. If you wish to cite electronic material, begin by consulting the instructions to authors of your target journal. These instructions may show the format(s) to use or direct you to a source of guidance in print or online. Also, you may find it useful to look in the journal for examples of references listing electronic materials.

ONE MORE REASON TO CITE CAREFULLY

Accurate citation is part of being a rigorous researcher. Whether you use reference management software or prepare references by traditional means, ensure that the right reference is cited in the right place, that all information in every

citation is accurate, and that content from the cited sources is accurately reported. Such accuracy is important in ensuring that your paper is useful to readers.

And, on a very practical note, careful citation helps keep you from alienating those evaluating your paper. Commonly, some of the referees (peer reviewers) chosen by editors are researchers whose work your paper cites. If your reference section lists their writings inaccurately, or if your text misrepresents their findings or conclusions, they might well question whether you are a careful researcher.

So, take the same care with your references that you do with other aspects of your work. The effort is likely to serve you well.