

3. FORMAT FOR CITATIONS FOR BB MQPS AND THESES

3.1. General Rules

Citation or bibliographic styles you may have used in humanities papers are not acceptable in scientific writing, including an MQP. Do not use footnotes, *op. cit.*, or *ibid.* for citing references. Instead, cite by author and year (section 3.2) in the text, and then cite the full reference in the Literature Cited list (section 3.3).

Use of numbered references (by order of appearance in the text) is discouraged. Although some journals do list references by number, that telegraphic style is generally used only when space is limited. It conveys less information than the author/date format and is very difficult to add to or delete from once the list is numbered.

Every reference from which you draw information, ideas, diagrams (whether adapted or copied directly), or direct quotes must be acknowledged **twice**: once in the text of your report, in abbreviated form, and once in the Literature Cited list at the end of the report, in complete form. Scientific writing, unlike writing in the humanities, does not make use of a “Bibliography” of works consulted but not directly cited.

3.2. Reference Citations in the Text

3.2.1. General Rules

Refer to a publication by its author(s) and date of publication. Authors are listed in the order in which they appear on the published paper. Note that the period at the end of the sentence comes **after** the parentheses.

Wax and Johnson (1988) encapsulated these proteins in liposomes for uptake by liver cells...

OR

Such proteins were encapsulated in liposomes for uptake by the liver (Wax and Johnson, 1988).

3.2.2. More Than One Reference

Separate those by the SAME authors with commas, and OTHER authors with semicolons:

...by the liver (Wax and Johnson, 1988, 1990; Mop and Glo, 1989; Pinesol, 1992).

Multiple citations can be arranged chronologically, alphabetically, or in order of importance; just be consistent.

3.2.3. *Three or More Authors*

Many papers have so many authors it is cumbersome to list them all in the text each time the paper is cited. The abbreviation *et al.*, which stands for the Latin *et alia* (and others), is often used, so that Johnson, Mercury, Evinrude, Honda, and Diesel, 1975 would become Johnson *et al.*, 1975. Note that “*et al.*” is italicized and that there is a period after “*al.*” but not after “*et*”.

3.2.4. *MQP, Thesis, or Dissertation*

Cite author and year as above.

3.2.5. *Chapter from Book or Symposium Proceedings*

Cite the author of the chapter and date of the publication of the book, e.g. (Thorndyke, 1989).

3.2.6. *No Author*

Use the title or a shortened version of the title:

...is able to fly even in a vacuum (Kryptonian Flight, 1995).

3.2.7. *Unpublished Observations*

Cite as personal observations, personal communications, or unpublished. *They are not included in the Literature Cited unless they have been accepted for publication.* For citation in the text, they take this form:

...subsequent trial samples were transferred to polycarbonate tubes because polystyrene tubes became brittle during treatment (personal observation).

OR: (Dr. P. Slivovitz, personal communication).

OR: (Student and Advisor, unpublished).

3.2.8. *Direct Quote*

Direct quotes are used very rarely in scientific writing, and generally only when there is something very unique about the words being quoted. Try to avoid direct quoting by paraphrasing, but if you find it absolutely necessary to include a direct quote, cite the page numbers in parentheses near the quote, as follows:

In the immortal words of Watson and Crick (1952), “It has not escaped our notice that the structure we have proposed immediately suggests a mechanism for its replication” (p. 71).

3.3. Reference Citations in the Literature Cited List

3.3.1. General Rules

Although the general format is the same for most journals, they will vary on the details: some will insist that the names of all authors be inverted, but most require inversion of the first author's name only; each journal has a preference, whether a period, comma, or double space follows the date, and whether the journal name in the citation is underlined, italicized, etc. Your primary duty in literature citation is to be consistent and to follow your advisor's wishes about the details. Pick a journal that you would hope to publish your work in and use its reference format.

This is a typical journal citation:

Price, D.A., and M.J. Greenberg. (1977). Structure of a molluscan neuropeptide. *Science* 197: 670-671.

Note that the first line, with the author names, extends to the left of the others. This convention makes the beginning stand out and eliminates the need for double spacing between citations. Learning how to use the Ruler feature of your word processing software will make such "hanging indents" much easier.

Avoid formats where the date comes at the very end of the citation, e.g.,

Price, D.A., and M.J. Greenberg. Structure of a molluscan neuropeptide
Science 197: 670-671 (1977).

Burying the date at the end of the citation makes it difficult for the reader to locate a particular reference among several by the same author(s).

3.3.2. Order of Author Names and Dates

Your Literature Cited list should be alphabetized by the last name of the first author. If an author has more than one paper, list them all in chronological order, **before** any works by this author in collaboration with others. Then list works with co-authors, then list works *et al.*, with **all** authors cited (Evinrude et al., 1985, from the text should be cited as Evinrude, B., A. Johnson, P. Mercury, and J. Diesel. 1985).

Johnson, A. (1988).
Johnson, A. (1993).
Johnson, A., and Q. Johnson. (1974).
Johnson, A., and Q. Johnson. (1992).
Johnson, A., and B. Wax. (1990a).
Johnson, A., and B. Wax. (1990b).
Johnson, A., L. Pledge, and B. Wax. (1985). [listed as Johnson *et al.*,
1985 in text]

3.3.3. *Citing Print Sources*

3.3.3.1. Citing Journal Articles

Article titles are not capitalized except for the first word, proper names, and genus names; in other words, capitalize as if you were writing a sentence:

Comparative aspects of structure and action of molluscan neuropeptides.
(title of journal article)

See your chosen journal for abbreviations of journal names. These examples are from *Biological Bulletin*. Note that journal titles are italicized, and every major work is capitalized.

Biol. Bull.; *Comp. Biochem. Physiol.*; *Science*; *Nature*; *Cell Tiss. Res.*

The volume and page numbers of a journal article are all-important; the pages are usually (but not always!) numbered consecutively regardless of the issue number, so

Biol. Bull. 184: 125-143.

generally conveys all the essential information, even though you will occasionally see citations that include the issue number in parentheses. If you are citing one of the rare journals where each issue starts with page 1, the issue number must be included:

Marine Fish. Rev. 37(5): 11-19.

Note that the journal title and volume number are italicized, but the issue number and page number are not.

3.3.3.2. Citing Book Chapters and Books

As is the case with journal article titles, book chapter titles are not capitalized except for the first word, proper names, and genus names; in other words, capitalize as if you were writing a sentence:

Comparative aspects of structure and action of molluscan neuropeptides.
(title of book chapter)

Book titles are cited in italics, with every major word of the title capitalized.

Comparative Aspects of Neuropeptide Function. (book title)

When citing a book chapter, give chapter author, date, chapter title, and pages for the chapter, followed by an *in* and the information about the book itself. Note that any citation of a book ends with “City: Publisher”.

Thorndyke, M.C. (1989). Peptides in invertebrates. Pp. 203-228 in *The Comparative Physiology of Regulatory Peptides*, S. Holmgren, ed. New York: Chapman and Hall.

When citing a book without reference to a specific chapter, use the same format but without the chapter information, and with the book author's name replacing the chapter author's name. Here is the book citation for the same book.

Holmgren, S., ed. (1989). *The Comparative Physiology of Regulatory Peptides*. New York: Chapman and Hall.

3.3.3.3. Citing MQPs, Theses, and Dissertations

You may need to cite background, methods, or results from previous MQPs that are pertinent to your own research. Inasmuch as MQPs, like thesis, are filed in the library and available to the public, they can be cited like published papers, e.g.,

Meury, T. (1989). Environmental factors affecting juvenile *Limulus polyphemus*. Major Qualifying Project, Worcester Polytechnic Institute.

3.3.3.4. Citing a Book With No Author Listed

List the title where you would normally list the author.

Handbook For the Recently Deceased (407th ed.). (1924). New York: Macabre Press.

3.3.4 Citing Internet Sources

3.3.4.1. General Rules for Citing Internet Sources

In an Internet periodical, volume and issue numbers often are not relevant. If they are not used, the name of the periodical is all that can be provided in the reference. Note that there are no page numbers.

Whenever possible, the URL should link directly to the article. Break a URL that goes to another line after a slash or before a period. Do not insert (or allow your word-processing program to insert) a hyphen at the break.

Consult with your advisor to determine whether an Internet source you are considering using is a credible source. Most journal articles are peer-reviewed, a process that provides at least some assurance of accuracy and validity. In contrast, anyone can post anything on the Internet, and it is up to the user to assess the credibility of the source. Caveat emptor (let the buyer beware)!

3.3.4.2. Citing an Internet Article Based on a Print Source

VandenBos, G., Knapp, S., & Doe, J. (2001). Role of reference elements in the selection of resources by psychology undergraduates [Electronic version]. *Journal of Bibliographic Research*, 5, 117-123.

VandenBos, G., Knapp, S., & Doe, J. (2001). Role of reference elements in the selection of resources by psychology undergraduates. *Journal of Bibliographic Research*, 5, 117-123. Retrieved October 13, 2001, from <http://jbr.org/articles.html>

3.3.4.3. Citing an Article in an Internet-Only Journal

Fredrickson, B. L. (2000, March 7). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment* 3, Article 0001a. Retrieved November 20, 2000, from <http://journals.apa.org/prevention/volume3/pre0030001a.html>

3.3.4.4. Citing an Article in an Internet-Only Newsletter

Glueckauf, R. L., Whitton, J., Baxter, J., Kain, J., Vogelgesang, S., Hudson, M., et al. (1998, July). Videocounseling for families of rural teens with epilepsy -- Project update. *Telehealth News*, 2 (2). Retrieved from <http://www.telehealth.net/subscribe/newslettr4a.html>

3.3.4.5. Stand-Alone Document, No Author Identified, No Date

If the author of a document is not identified, begin the reference with the title of the document.

GVU's 8th WWW user survey. (n.d.). Retrieved August 8, 2000, from <http://www.cc.gatech.edu/gvu/usersurveys/survey1997-10/>

3.3.4.6. Document available on University Web Site

If a document is contained within a large and complex Web site (such as that for a university or a government agency), identify the host organization and the relevant program or department before giving the URL for the document itself. Precede the URL with a colon.

Chou, L., McClintock, R., Moretti, F., & Nix, D. H. (1993). Technology and education: New wine in new bottles: Choosing pasts and imagining educational futures. Retrieved August 24, 2000, from web site of Columbia University, Institute for Learning Technologies: <http://www.ilt.columbia.edu/publications/papers/newwine1.html>

3.3.4.7. Electronic copy of a journal article retrieved from database

When referencing material obtained by searching an aggregated database, follow the format appropriate to the work retrieved and add a retrieval statement that gives the date of retrieval and the proper name of the database.

Borman, W. C., Hanson, M. A., Oppler, S. H., Pulakos, E. D., & White, L. A. (1993). Role of early supervisory experience in supervisor performance. *Journal of Applied Psychology*, 78, 443-449. Retrieved October 23, 2000, from PsycARTICLES database.

3.4. If You're Stuck

The Literature Cited section of almost any article in a scientific journal will provide examples of citations from books and journals, by single authors and multiple authors, in most of the permutations you might need to emulate. Following examples from a journal that you and your advisor have agreed upon is the easiest way to produce an acceptable reference list.

3.5. A Last Word about Honesty and Ethics

Now that you know proper citation formats, there are a few “fine points” of citations that are important to academic honesty.

Do not simply copy reference citations from the back of papers you have read. In the first place, they will not be consistent in format if the papers are from different journals. More importantly, you are expected to have seen the papers you are citing, not just references to them in some book, review, or other paper. Passing off research summaries compiled by others as your own work is plagiarism. If a paper is not available, an acceptable way to acknowledge it is, for example:

but without an increase in day length, the moths will not eclose
(Proctor and Gamble, 1979: reviewed in Colgate, 1992).

Then in the Literature Cited, you give full references for both of these; you have avoided implying you have read something you haven't, and you have still told the reader exactly where the information can be found, in both the primary source and the source you used.

A shortened citation, with no title and only the beginning page number, e.g.,

Price, D., and M. Greenberg. 1977. *Science* 197: 670.

is a clear indication that you got the citation from a secondary source and didn't see the original. Don't do that.

4. ACKNOWLEDGEMENTS

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5. LITERATURE CITED

Avoiding plagiarism. (n.d.). Retrieved Feb. 18, 2002 from the web site of OWL: the Online Writing Lab of Purdue University:

http://owl.english.purdue.edu/handouts/research/r_plagiar.html

McMillan, V. 2001. *Writing Papers in the Biological Sciences*, 3/e. Boston: Bedford Books.

WPI Judicial Policies V. Academic Honesty Policy. 2002. Retrieved April 16, 2002 from the WPI web site: <http://www.wpi.edu/Pubs/Policies/Judicial/sect5.html>