## On the current presentation of scientific papers: 3. Referencing

## **Denys Wheatley**

Editor in Chief, Cell Biology International; Cell Biology International Reports; Cancer Cell International; Oncology News; Chairman and Director, BioMedES (www.biomedes.co.uk); Leggat, Keithhall, Inverurie, Aberdeen AB51 OLX, UK wheatley@abdn.ac.uk

Problems with referencing published works are largely due to the poor adherence of authors to guidelines set by individual journals. Further complicating the problem is that editors and publishers have not agreed on a universal format for bibliographies. Even within the same publishing house journals have differing formats. A consensus is definitely needed that goes further than the following two conventions adopted for citations.

The Harvard system uses the authors' names with the year in each text reference. An example is Fish and Pond (2007). If there are three or more authors, the citation will read Fish *et al* (2007), with the following being written where several articles appeared in the same year (Fish, 2007a, 2007b, 2007c). Care is needed to comply with a target journal's format. Some prefer "et al", others "et al."; some use italics and others do not. Whatever obtains, text referencing must be consistent throughout a paper. The advantage of the Harvard system is that a citation is not anonymous; the reader often recognizes the previously cited article. With a year reference, there is no need for the following bad habit that is now becoming all too common, and needs to be expunged:

Fish and Pond **recently**\* reported that there was no evidence to support the hypothesis that cancer arises from a single mutation (Fish and Pond, **2002**).(\*Recent?)

The disadvantages of the Harvard system are that (i) it takes up more text space than the second system, and (ii) the reference list at the end of the article has to be put in alphabetical order.

The Vancouver system is neater than the first one in that the text citation is simply a number, running as a sequence from 1 to whatever the last reference is. Each number is enclosed within brackets, eg [1] or (1), but a superscript can also be used. With the bracketed citation, make sure the type is consistent and a clear space precedes the first bracket. It is best to give multiple references that are in sequence as [2-7], not [2, 3, 4, 5, 6, 7]. One drawback of a number citation is that the reference list has to be consulted to recognize an article, which I find annoying; but compiling the list is so much easier than having to put them in alphabetical order.

## Compiling a reference list (bibliography)

Many authors believe their papers should include as many references as possible. Comprehensiveness is not a prerequisite in primary research articles with just one or two main points. The problem of compliance with a journal's requirements should by now have been eliminated because modern software allows references stored in any format to convert to a desired format by providing a template into which their list is copied.

In journals trying to use space efficiently, the title of a cited article may not be included. Another way of saving

space is to include the first one, two or three authors and then add "et al" rather than include them all (particularly useful where there are 50 or 100 authors on a paper!). In general, the following essential information is needed in a reference – authors' names and initials, title of the article, title of the journal, year, volume number, possibly issue number, and first and last page numbers. Publisher's name and place is needed when citing a book (eg Cornell University Press, New York). It would be too tedious to mention here all the variations that journals use in setting out references. As a typical example, however, note the precision required – the order, font, punctuation, spacing, and so on.

Fish D, Pond ND, Newt RD. The micro-habitat of the caddis fly larva. *Journal of Freshwater Ecology* 2010;45(3):17–23.

Look out for punctuation, which is sometimes needed after each initial of an author. The year often comes just after the author names. See if the title is needed, and whether a different font (italics?) is used. While the title of the journal can be in full, accepted abbreviations are often used; they may be normal or italic font. The volume number does not have to be in bold, and the issue number may not be needed. The punctuation and spacing around these details must be carefully noted. Some journals require you to include a "doi" (digital object identifier). A reference with a unique doi can be quickly located. It was even thought that reference lists might become simply compilations of doi's.

If reference is made to a database or some other online source (eg BLAST), this can usually be included under a text number in the Vancouver system, but when using the Harvard system it is best to simply insert its URL in the text.

## Resubmitting a paper to another journal

Editors frequently get manuscripts that were rejected elsewhere and submitted to a new journal without reformatting. These papers should be sent back to the authors to make them comply, with a note asking them to indicate in which journal(s) the authors tried to get it published. For a paper that is not obviously too weak to consider at triage, this practice can greatly assist in review because correspondence with editors who rejected it can provide valuable details regarding its unsuitability. Editors will sometimes delay going back to the authors to get them to comply where the paper looks sound, as this may best be done *after* peer review if the paper is worth accepting.

Finally, remember that many mistakes can be made in the compilation of a reference list. The most common errors are omissions and superfluous inclusions. The former is where a citation in the text is not in the reference list, and the latter is the opposite. Editors and publishers usually check this, but it is better to instruct authors to do this as part of their final checklist before submission.