

Preferences for the settings of references in science journals: a modest proposal

James Hartley

School of Psychology, Keele University, Staffordshire, United Kingdom
j.hartley@keele.ac.uk

DOI: 10.20316/ESE.2016.42.022

Abstract: Science journals use a variety of referencing systems. Such a variety causes difficulties for authors, editors, sub-editors, proofreaders, and – in a different vein – computer-based data mining. In this article major differences are summarised and it is suggested that it would be helpful for authors and readers if the publishers of science journals could agree on one single reference style for their authors.

Keywords: Citations, references, text spacing

Introduction

Many different styles of citing previous research findings have developed over the years. National standards have been agreed in the USA, UK, Europe and China. However, few publishers appear to follow these standards precisely – perhaps because they each allow some degree of choice. Today variation seems rife, and this is made worse by the fact that reference management software such as *EndNote*, *Procite* and *Mendeley* encourage it. Currently *EndNote*, for example, has more than 6000 referencing styles (<http://endnote.com/downloads/styles>) although why anyone should want such a number is anybody's guess.

In point of fact there are several main ways of referencing in academic articles. Here I list four well-known ones and comment on the one currently used in *European Science Editing*:

1. The APA (American Psychological Association) style.

This system is also known as the Harvard or, more colloquially as the 'name (date)' system, and it is used in a huge variety of social science and science journals¹. Here an author's surname in the text is followed by the date of the publication in parentheses, and entries in the subsequent reference list are listed alphabetically, starting with the name and the initials of the author(s) followed by the date of publication for each entry. For example:

Article with a single author:

Zammuner, V. L. (1995). Individual and co-operative computer writing and revising: Who gets the best results? *Learning and Instruction*, 5, 101-124.

Book with multiple authors:

Speck, B. W., Johnson, T. R., Dice, C. P., & Heaton, L. B. (1999). *Collaborative writing: An annotated bibliography*. Westport, Connecticut: Greenwood Press.

Edited book title:

Sharples, M. (Ed.). (1993). *Computer supported collaborative writing*. London: Springer-Verlag.

Chapter in a book:

Tang, C. (1998). Effects of collaborative learning on the quality of assignments. In B. Dart & G. Boulton-Lewis (Eds.), *Teaching and learning in higher education* (pp. 102-123). Melbourne: Australian Council for Educational Research.

2. The MLA (Modern Languages Association) style.

This style is used in a huge variety of arts and social science journals, despite its 'Modern Languages' title. In this version the authors' surnames (with or without the dates) appear in the text and the first author's surname comes first in the reference list². This is then followed by his or her first name, but first names then come first for any additional authors. Dates of the publications are given after journal titles, or at the ends of the references for books, etc. The list is ordered alphabetically. For example:

Article with a single author:

Zammuner, Victoria L. "Individual and co-operative computer writing and revising: Who gets the best results?" *Learning and Instruction* 5 (1995) 101-124.

Book with multiple authors:

Speck, Bruce W., Teresa R. Johnson, Catherine Dice, and Leon B. Heaton. *Collaborative Writing: An Annotated Bibliography*. Westport, Connecticut: Greenwood Press, 1999.

Edited book title:

Sharples, Michael (Ed.). *Computer Supported Collaborative Writing*. London: Springer-Verlag, 1993.

Chapter in a book:

Tang, Catherine. "Effects of collaborative learning on the quality of assignments." *Teaching and Learning in Higher Education*. Eds. Barry Dart and Gillian Boulton-Lewis, 103-123. Melbourne: Australian Council for Educational Research, 1998.

3. The IEEE (Institute of Electronic and Electrical Engineers) style, commonly used in technical journals.

Here the references are *numbered* in the order of their appearance in the text, and the numbers are enclosed in square brackets in the reference list³. Again this numbered style is used in many different disciplines. Here the author(s) initials are presented first followed by their surnames. Dates of the publications are given after journal titles, or at the ends of the references for books, etc. Journal titles are sometimes abbreviated. For example:

Article with a single author:

- [1] V. L. Zammuner, "Individual and co-operative computer writing and revising: Who gets the best results?" *Learning and Instruction*, vol. 5, no.2, pp.101-124, 1995.

Book with multiple authors:

- [1] B. W. M. Speck, T. R. Johnson, C. P. Dice and L. B. Heaton, *Collaborative Writing: An Annotated Bibliography*. Westport, Connecticut: Greenwood Press, 1999.

Edited book title:

- [1] M. Sharples, Ed., *Computer Supported Collaborative Writing*. London: Springer-Verlag, 1993.

Chapter in a book:

- [1] C. Tang, "Effects of collaborative learning on the quality of assignments," in *Teaching and Learning in Higher Education*, B. Dart and G. Boulton-Lewis, Eds. Melbourne: Australian Council for Educational Research., 1998, pp.102-123.

4. The Vancouver style, popular in biomedical journals.

This style is named after its inception following agreements made during a meeting in Vancouver in 1987 by the International Steering Committee of Medical Editors, now International Committee of Medical Journals Editors (ICMJE) (<http://www.icmje.org>). Here, as with the IEEE system, the references are numbered in the text in the order of their appearance and the numbers are enclosed in square brackets in the reference list [4]. The reference list is numbered sequentially but the authors are listed surnames first, followed by their initials. Again the dates of publications are given after journal titles, or at the ends of the references for books, etc. The key feature of the Vancouver style is its 'sparse' typography and punctuation, and the use of abbreviated journal titles. For example:

Article with a single author:

- [1] Zammuner VL. Individual and co-operative computer writing and revising: Who gets the best results? *Learn Instruc* 1995;5 (Pt 2):101-24.

Book with multiple authors:

- [1] Speck BWM, Johnson TR, Dice CP, Heaton LB. *Collaborative writing: an annotated bibliography*. Westport, CT: Greenwood Press, 1999.

Edited book title:

- [1] Sharples M, editor. *Computer supported collaborative writing*. London: Springer-Verlag, 1993.

Chapter in a book:

- [1] Tang C. Effects of collaborative learning on the quality of assignments. In Dart B, Boulton-Lewis G, editors. *Teaching and learning in higher education*. Melbourne: Australian Council for Educational Research, 1998;102-23.

5. I wanted to include here the style currently used in *European Science Editing*. However, this appears to be an amalgam of other styles and is not consistently applied. In the May 2016 edition, for example, the references are numbered (without full stops or brackets); surnames come before initials (p29) or before full first names (p42), and dates of publication come before the publication title (p42) or after it (p35). At the moment authors are advised to follow the Instructions to authors on the ESE website (<http://europeanscienceediting.eu/journal-guidelines/>) but these are not specific when it comes to referencing for ESE. Maybe ESE should advise authors to use a well-known style and give examples. The production editor might then be asked to check that they do so, and to ask for revisions if necessary.

Each of these different styles of referencing has advantages and disadvantages for both readers and authors, and presumably for publishers. Some general points are, firstly, that the name/date system clutters the text when a long list of references is given. For example, 20 names and dates might be cited in a row in the text whereas, in a numbered system, one simply puts¹⁻²⁰. Secondly, it is difficult for readers to judge the date of publication of a citation with an in-text numbered reference system because there is no publication date in the text. Thirdly, when writing the text, getting all of the numbers in the correct sequence is tedious, and this is more so each time one revises or re-writes the text, especially if this is not computer-aided. Finally, abbreviated journal titles cause difficulty for readers and authors who are unfamiliar with such abbreviations and/or non-native speakers of the language in question.

The simple examples given above belie the massive complexities that accompany such reference systems, and each one is supported by voluminous manuals of instruction. I note with interest that the first printing of the 2011 *APA Manual*, 6th edition had to be withdrawn – and then re-issued – because of the mistakes they made within it! Overseas readers were not recompensed.

New ways of presenting references

The use of new technology, however, does not demand that journals stick to these standard print formats. In *Designing Instructional Text* (Hartley, 1994, p.131) [5] I showed how one could segment journal references to convey their contents more easily for visually handicapped readers using Braille. Essentially this meant putting each key segment on a separate line. I suggested that for these readers it might be best to put the title first (line 1), then the author(s) names (indented on line 2), and then the place of publication (similarly indented) on the next line.

Somewhat to my surprise something close to this setting appears in the *electronic* (but not the printed) version of the *Journal of Informetrics*. This is how the electronic references appear:

Cronin, B. (2001).

Hyperauthorship: A postmodern perversion or evidence of a structural shift in scholarly communication practices.

Journal of the American Society for Information and Technology, 52(7), pp. 558-569.

Glanzel, W. (2004) & Schubert, A.

Analysing scientific networks through co-authorship.

In H. F. Moed, W. Glanzel, & U. Schmoch (Eds.), Handbook of quantitative science and technology research (pp. 257-276). Kluwer Academic Publishers.

Katz, J. S. (1997), & Martin, B. R.

What is research collaboration?

Research Policy, 26(11), 1-18.

Lariviere, V. (2006), Gingras, Y. & Archimbault, E.

Canadian collaboration networks: A comparative analysis of the natural sciences, social sciences, and the humanities.

Scientometrics, 68(3), 519-533.

(Note: The date after the first author is signalled in blue and is an electronic link to the article: why this date/link cannot be given after the names of all the authors is anybody's guess.)

A modest proposal

Despite the above, calls for overall reform in the design of printed references fall on deaf ears. Accordingly, I would like to propose only a modest change. Rather than trying to persuade different disciplines to adopt one standard referencing style that satisfies all, we should try to persuade clusters of like-minded journals to adopt a single style. All science journals, say, might then adopt the one single style that they think is most helpful to authors and readers. I would nominate the spaced version shown above – well I would, wouldn't I – but no doubt others will advocate other space-saving but less friendly suggestions.

Acknowledgements

I am grateful to Blaise Cronin, Guillaume Cabanac and Ksenija Baždarić for providing helpful suggestions on earlier drafts of this article.

References

- 1 American Psychological Association (2010). *Publication Manual of the American Psychological Association*, 6th edition. Washington, DC: APA
- 2 MLA style. Available at: <https://style.mla.org/>
- 3 IEEE style. Available at: <https://www.ieee.org/documents/ieeecitationref.pdf>
- 4 NLM. Samples of Formatted References for Authors of Journal Articles. Available at: https://www.nlm.nih.gov/bsd/uniform_requirements.html
- 5 Hartley, J. (1994). *Designing Instructional Text*, 3rd edition. London: Kogan Page.

2017 EUROPEAN MEETING OF ISMPP

THE EVOLVING ROLE OF PUBLICATION PROFESSIONALS IN A MULTI-STAKEHOLDER ENVIRONMENT

17-18 JANUARY 2017 | ETC.VENUES ST PAUL'S - 200 ALDERSGATE | LONDON, UK

REGISTER NOW AT WWW.ISMPP.ORG

Love the venue, the people, the organisation...all brilliant!
—from 2016 post-meeting survey

ISMPP International Society for Medical Publication Professionals™

250 attendees from over 12 countries, representing 100+ organisations

ROUNDTABLES

SPEED RESEARCH

#ISMPP

Discount for EASE members

<http://www.ismpp.org/european-meeting>

Access the registration page using this link and enter code “EU17EASE10” in the “Discount Code” field box on the payment screen.

EASE members will receive a 10% discount off the Early Bird fee if you register online by 14 December 2016, or a 10% discount off the Standard fee if you register online by 4 January 2017.

This discount is for online registration only and will expire after 4 January 2017, at 23:59.