10, *Science* will include titles in references. These will be displayed in the online HTML version, but not in the print or the PDF versions of papers.]

*Science* uses a numbering system for references and notes. This allows explanatory or more detailed notes to be included with the references. Journal names are abbreviated using [common abbreviations](http://www.sciencemag.org/site/feature/contribinfo/prep/res/journal_abbrevs.xhtml) to save space.

On this page, we offer some guidelines for preparing manuscript reference lists in Science style. For additional examples, see recent issues of Science.

* [General Notes](http://www.sciencemag.org/site/feature/contribinfo/prep/res/refs.xhtml#general)
* [Creating the Reference List](http://www.sciencemag.org/site/feature/contribinfo/prep/res/refs.xhtml#list)
* [Style Examples](http://www.sciencemag.org/site/feature/contribinfo/prep/res/refs.xhtml#examples)

**General Notes**

* Place citation numbers for references and notes within parentheses, italicized: (*18*, *19*) (*18*-*20*) (*18*, *20*-*22*). Do not use superscript numbers. Citations are numbered sequentially, first in the text, then through the references and notes, then through the figure and table captions, and finally through the supporting online material. The acknowledgments follow as an unnumbered note.
* Each reference can be listed only once. Separate individual references from other references and from any text notes. (This is a change from our previous style to simplify referencing and facilitate online linking of references.) Each reference should have its own number and not include other text.
* Any reference to a personal communication should be given a number in the text and placed, in correct sequence, in the references and notes. It must be accompanied by a written letter of permission. At the time of publication, all cited references must be published. Papers that are "in press" can be cited in a submission, but the paper must be available to provide to reviewers, and an accepted paper will be held until all references are published. Data supporting the results or conclusions should be included in the paper or Supporting Online Material or must be archived in an [appropriate database](http://www.sciencemag.org/about/authors/prep/gen_info.dtl#datadep) at the time of publication and made available for reviewers.
* Notes should be used for information aimed at the specialist (e.g., procedures) or to provide definitions or further information to the general reader that are not essential to the data or arguments. Notes can cite other references (by number).
* Please do not place tables within notes.
* If you are including materials and methods in supporting online material, please cite this (wherever appropriate) as a single numbered note in the text, in the same fashion as other notes. For the note, use a form such as this: "Information on materials and methods is available on Science Online." (The correct Web address will be appended by Science staff.) For information on how to reference other supporting online material in the manuscript text, please see our specific [guidelines](http://www.sciencemag.org/site/feature/contribinfo/prep/prep_online.dtl) on this material.
* There should be one reference list that includes papers cited in the main paper and then papers cited only within the supporting online material. Citations in the supporting online material can cite papers already cited in the main paper by number. We will include the full reference list online.
* For cited papers that have been published only electronically, please include the DOI.

[Back to Top](http://www.sciencemag.org/site/feature/contribinfo/prep/res/refs.xhtml#content-block)

**Creating the Reference List**

**For journal articles**, list initials first for all authors, separated by a space: A. B. Opus, B. C. Hobbs. Do not use "and." Use *et al.* (italics) for more than five authors. Titles of cited articles can now be included, with words in lower case except for proper nouns, followed by a period (see samples). Journal titles are in italics; volume numbers follow, in boldface. Do not place a comma before the volume number or before any parentheses. You may give the full inclusive pages of the article. Journal years are in parentheses: (1996). End each listing with a period. Do not use *ibid.* or *op. cit.* (these cannot be linked online).

**For whole books, monographs, memos, or reports**, the style for author or editor names is as above; for edited books, insert "Ed.," or "Eds.," before the title. Italicize the book title and use initial caps. After the title, provide (in parentheses) the publisher name, publisher location, edition number (if any), and year. If these are unavailable, or if the work is unpublished, please provide all information needed for a reader to locate the work; this may include a URL or a Web or FTP address. For unpublished proceedings or symposia, supply the title of meeting, location, inclusive dates, and sponsoring organization. There is no need to supply the total page count. If the book is part of a series, indicate this after the title (e.g., vol. 23 of *Springer Series in Molecular Biology*).

**For chapters in edited books**, the style is as above, except that "in" appears before the title, and the names of the editors appear after the title. After the information in parentheses, provide the complete page number range (or chapter number) of the cited material.

**For research first published in *Science* Express, online journals, and preprints available on the Internet**, see the examples below. These are considered published work.

**Acknowledgments**are a brief statement at the end of the references and notes labeled "Acknowledgments." The acknowledgement note is no longer numbered. It should comprise the following:

* A brief list of all funding information for the results reported in the paper.
* A statement indicating or describing where the data reported in the paper are available including accession numbers. (For example, "The data reported in this paper are tabulated in the Supporting Online Material and archived at the following databases….")
* Any clarification regarding conflicts of interest of the authors.
* An optional note describing the roles or responsibilities of the authors.

[Back to Top](http://www.sciencemag.org/site/feature/contribinfo/prep/res/refs.xhtml#content-block)

**Style Examples**

**Journals**

1. N. Tang, On the equilibrium partial pressures of nitric acid and ammonia in the atmosphere. *Atmos. Environ.***14**, 819-834 (1980). [one author]

2. William R. Harvey, Signe Nedergaard, Sodium-independent active transport of potassium in the isolated midgut of the Cecropia silkworm. *Proc. Natl. Acad. Sci. U.S.A.***51**, 731-735 (1964). [two or more authors]

3. F. H. Chaffee, Jr., The discovery of a gravitational lens. *Sci. Am.* **243**, 60-68 (November 1980). [journal paginated by issue]

1. K. Jasmin, D. Casasnto, The QWERTY effect: How typing shapes the meaning of words. *Psychon. Bull. Rev.* **19**, 499-504 (June 2012).

2. L. Barsalou, Perceptual symbol systems. *Behav. Brain Sci.***22,** 577-609 (August 1999).

5. A. W. Inhoff, A. M. Gordon, Eye movements and eye–hand coordination during typing. *Cur. Dir. in Psy. Sci.* **6**, 153–157 (December 1997).

6. D. E. Rumelhart, D. A. Norman Simulating a skilled typist: A study of skilled cognitive-motor performance. *Cog. Sci.* ***6*,** 1–36 (January 1982).

8. F. A. Logan, Errors in copy typewriting. *Jour. of Exp. Psy.: Human Perc. Perf.* **25**, 1760-1773 (December 1999).

G. D. Logan, Simon-Type effects: Chronometric evidence of keypress schemata in typewriting. *Jour. of Exp. Psy: Hum. Perc. Perf.* ***29****, 741-757* (August 2003).

10. J. R. Simon, A. M. Small Jr., Processing auditory information: Interference from an irrelevant cue. *Jour. of App. Psy.* **53,** 433–435 (October 1969).

12. J. R. Simon, in *Stimulus–response compatibility: An integrated perspective,* R. W. Proctor, T. G. Reeve, eds. (Elsevier, Amsterdam, 1990)pp. 31–86.

13. M. Rieger, Automatic keypress activation in skilled typing. *Jour. of Exp. Psy: Hum. Perc. Perf..* ***30***, 555–565 (June 2004).

14. G. D. Logan, N. J. Zbrodoff, Stroop-type interference: Congruity effects in color naming with typewritten responses. *Jour. of Exp. Psy: Hum. Perc. Perf.* **24**, 978-992 (June1998).

.

15. B. Hommel, J. Muesseler, G. Aschersleben, W. Prinz, The theory of event coding: A framework for perception and action planning. *Behav, and Brain Sci.,* ***24****,* 849–878 (October 2001).

17. T. A. Salthouse, Perceptual, cognitive, and motoric aspects of transcription typing. *Psy. Bul*. **99**, 303–319 (May 1986).

18. Newell & Simon, 1976

20. Zwaan, 1999

21. Hauk, Johnsrude, & Pulvermuller, 2004;

22. Tettamanti et al., 2005;

24. Gallese, Fadiga, Fogassi, & Rizzolatti, 1996;

25. Lyons et al., 2010

26. Zwaan & Taylor, 2006;

27. Holt & Beilock, 2006;

28. Cartmill, Goldin-Meadow, & Beilock, 2012;

30. S. L. Beilock, L. E. Holt, Embodied preference judgments: Can likeability be driven by the motor system? *Psy. Sci.***18,** 51-57 (January 2007).

31. R. M. Ping, S. Dhillon, S. L. Beilock, Reach for what you like: The body’s role in shaping preferences. *Emo. Rev*, **1**, 140-150 (April 2009).

32. S. Yang, D. A. Gallo, S. L. Beilock, Embodied memory judgments: A case of motor fluency. *Jour. of Exp. Psy.: Learn., Mem., Cog.* **35**, 1359-1365 (September 2009).

33. O. Van der Bergh, S. Vrana, P. Eelen, Letters from the heart: Affective categorization of letter combinations in typists and nontypists. *Jour. of Exp. Psy.: Learn., Mem., Cog.* **16**, 1153–1161 (November 1990).

34. Havas, Glenberg, & Rinck, 2007

37. Glenberg, Webster, Mouilso, Havas, & Lindeman, 2009

38. D. M. Oppenheimer, The secret life of fluency. *Trends in Cog. Sci.* ***12****, 237-241* (June 2009).

39. D. Casasanto, Embodiment of abstract concepts: Good and bad in right- and left-handers. *Jour. of Exp. Psy.: Gen*. **138**, 351-367 (August 2009).

40. Davidson, 1992;

42. D. Casasanto, Different bodies, different minds: The body specificity of language and thought. *Cur. Dir. in Psy. Sci.* **20**, 378-383 (December 2011).

46. M. Liberman, (2012)?????

47. Dobb (2012)

51. Paivio, 1971

52. Stanfield & Zwaan, 2001;

53. Zwaan, Stanfield, & Yaxley, 2002

54. Beilock & Lyons, 2008).

55.Noyes, 1988).

48. B. G. Tabachnick, L. S. Fidell, *Using Multivariate Statistics* (Pearson Education, Inc., ed. 5, 2012).

49. M. M. Bradley, P. J. Lang, “Affective norms for English words (ANEW): Instruction manual and affective ratings” (Tech. Rep. C-1, the Center for Research inPsychopathology, University of Florida, 1999).

50. Typing Master, Inc., 2013

1. Jasmin, K., & Casasanto, D. (2012). The QWERTY effect: How typing shapes the meanings of words. *Psychonomic Bulletin & Review*, *19*(3), 499-504. doi:10.3758/s13423-012-0229-7
2. Barsalou, L. W. (1999). Perceptual symbol systems. *Behavioral And Brain Sciences*, *22*(4), 577-660. doi:10.1017/S0140525X99002149
3. Inhoff, A. W., & Gordon, A. M. (1997). Eye movements and eye-hand coordination during typing. *Current Directions In Psychological Science*, *6*(6), 153-157. doi:10.1111/1467-8721.ep10772929
4. Rumelhart, D. E., & Norman, D. A. (1982). Simulating a skilled typist: A study of skilled

cognitive-motor performance. *Cognitive Science, 6,* 1–36.

1. Logan, F. A. (1999). Errors in copy typewriting. *Journal of Experimental Psychology: Human Perception and Performance, 25,* 1760–1773.
2. Logan, G. D. (2003). Simon-Type Effects: Chronometric Evidence for Keypress Schemata in Typewriting. *Journal Of Experimental Psychology: Human Perception And Performance*, *29*(4), 741-757. doi:10.1037/0096-1523.29.4.741
3. Simon, J. R., & Small, A. M., Jr. (1969). Processing auditory information: Interference from an irrelevant cue. *Journal of Applied Psychology, 53,* 433–435.
4. Simon, J. R. (1990). The effects of an irrelevant directional cue on human information processing. In R. W. Proctor & T. G. Reeve (Eds.),*Stimulus–response compatibility: An integrated perspective* (pp. 31–86). Amsterdam: North-Holland.
5. Rieger, M. (2004). Automatic Keypress Activation in Skilled Typing. *Journal Of Experimental Psychology: Human Perception And Performance*, *30*(3), 555-565. doi:10.1037/0096-1523.30.3.555
6. Logan, G. D., & Zbrodoff, N. J. (1998). Stroop-type interference: Congruity effects in color naming with typewritten responses. *Journal of Experimental Psychology: Human Perception and Performance, 24,* 978– 992.
7. Hommel, B., Muesseler, J., Aschersleben, G., & Prinz, W. (2001). The theory of event coding (TEC): A framework for perception and action. *Behavioral and Brain Sciences, 24,* 869–937.
8. Salthouse, T. A. (1986). Perceptual, cognitive, and motoric aspects of transcription typing. *Psychological Bulletin, 99,* 303–319.
9. [Newell, Allen](http://en.wikipedia.org/wiki/Allen_Newell); [Simon, H. A.](http://en.wikipedia.org/wiki/Herbert_A._Simon) (1976), [*Computer Science as Empirical Inquiry: Symbols and Search*](http://portal.acm.org/citation.cfm?id=360022), "Communications of the ACM", *Communications of the ACM* **19** (3): 113–126, [doi](http://en.wikipedia.org/wiki/Digital_object_identifier):[10.1145/360018.360022](http://dx.doi.org/10.1145%2F360018.360022)
10. Zwaan, R.A. (1999). Embodied cognition, perceptual symbols, and situation models. Discourse Processes, 28, 81–88.
11. Hauk, O., Johnsrude, I., & Pulvermuller, F. (2004). Somatotopic representation of action words in the human motor and premotor cortex. Neuron, 41, 301–307.
12. Tettamanti, M., Buccino, G., Saccuman, M.C., Gallese, V., Danna, M., Scifo, P., Fazio, F., Rizzolatti, G., Cappa, S.F., & Perani, D. (2005). Listening to action-related sentences activates frontoparietal motor circuits. Journal of Cognitive Neurosciences, 17, 273–281.
13. Lyons, I., Cieslak, M., Mattarella-Micke, A., Nusbaum, H., Small, S., & Beilock, S. L. (2010). Neural processing of action-related language. Brain & Language, 112, 214-222.
14. Zwaan, R.A., & Taylor, L.J. (2006). Seeing, acting, understanding: Motor resonance in language comprehension. Journal of Experimental Psychology: General, 135, 1–11.
15. Holt, L. E. & Beilock, S. L. (2006). Expertise and its embodiment: Examining the impact of sensorimotor skill expertise on the representation of action-related text. Psychonomic Bulletin & Review, 13,694-701.
16. Cartmill, E., Goldin-Meadow, S., & Beilock, S. L. (2012). A word in the hand: Human gesture links representations to actions. Philosophical Transactions of the Royal Society.
17. Beilock, S. L. & Holt, L. E. (2007). Embodied preference judgments: Can likeability be driven by the motor system? Psychological Science, 18, 51-57.
18. Ping, R., Dhillon, S., & Beilock, S. L. (2009). Reach for what you like: The body’s role in shaping preferences. Emotion Review, 1, 140-150.
19. Yang, S., Gallo, D., &  Beilock, S. L. (2009). Embodied memory judgments: A case of motor fluency.Journal of Experiment Psychology: Learning, Memory, & Cognition, 35,1359-1365.
20. Van den Bergh, O., Vrana, S., & Eelen, P. (1990). Letters from the heart: Affective categorization of letter combinations in typists and nontypists. Journal of Experimental Psychology: Learning, Memory, and Cognition, 16, 1153–1161.
21. Havas, D. A., Glenberg, A. M., & Rinck, M. (2007). Emotion simulation during language comprehension. *Psychonomic Bulletin & Review*, *14*(3), 436-441. doi:10.3758/BF03194085
22. Glenberg, A. M., Webster, B. J., Mouilso, E., Havas, D., & Lindeman, L. M. (2009). Gender, emotion, and the embodiment of language comprehension. *Emotion Review*, *1*(2), 151-161. doi:10.1177/1754073908100440
23. Oppenheimer, D. M. (2008). The secret life of fluency. *Trends In Cognitive Sciences*, *12*(6), 237-241. doi:10.1016/j.tics.2008.02.014
24. Casasanto, D. (2009). Embodiment of abstract concepts: Good and bad in right- and left-handers. *Journal Of Experimental Psychology: General*, *138*(3), 351-367. doi:10.1037/a0015854
25. Davidson, R. J. (1992). Anterior cerebral asymmetry and the nature of emotion. *Brain and Cognition, 20,* 125–151.
26. Casasanto, D. (2011). Different bodies, different minds: The body specificity of language and thought. *Current Directions In Psychological Science*, *20*(6), 378-383. doi:10.1177/0963721411422058
27. Liberman
28. Dobb
29. Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics (5th ed.)*. Boston, MA: Allyn & Bacon/Pearson Education.
30. Bradley, M. M., & Lang, P. J. (1999). *Affective norms for English words (ANEW): Instruction manual and affective ratings* (pp. 1-45). Technical Report C-1, The Center for Research in Psychophysiology, University of Florida.
31. Typing master
32. Paivio, A. (1971). *Imagery and verbal processes*. Oxford England: Holt, Rinehart & Winston.
33. Stanfield, R. A., & Zwaan, R. A. (2001). The effect of implied orientation derived from verbal context on picture recognition. Psychological Science, 12, 153-156.
34. Zwaan, R. A., Stanfield, R. A., & Yaxley, R. H. (2002). Language comprehenders mentally represent the shape of objects. Psychological Science, 13, 168-171.
35. Beilock, S. L. & Lyons, I. M. (2008). Expertise and the mental simulation of action. In K. Markman, B. Klein, and J. Suhr (Eds.), The Handbook of Imagination and Mental Simulation (pp. 21-34). Psychology Press.
36. Noyes, Jan (August 1988). ["The QWERTY keyboard: a review"](http://www.sciencedirect.com/science/article/pii/S0020737383800108). *International Journal of Man-Machine Studies* **18** (3): 265–281. [doi](http://en.wikipedia.org/wiki/Digital_object_identifier):[10.1016/S0020-7373(83)80010-8](http://dx.doi.org/10.1016%2FS0020-7373%2883%2980010-8).