

DR. RAY'S LONG LIST OF EDITORIAL PET PEEVES

1. When talking about physical experiments, call them "tests" when talking about the results of finite element analyses, call them "simulations." Referring to FE simulations as "tests" makes it very confusing to the reader.
EX: The results of the finite element simulations were compared to the laboratory tests.
2. Never, ever use italicized fonts. The only places in technical writing where italicized fonts are used are (1) when a foreign word is used or (2) for reference numbers in text (i.e., see number 5).
EX: Ray *et al* describe a piecewise linear isotropic material model for guardrail steels.
3. Spell out the whole phrase or name before using an acronym for the first time. Put the acronym in parentheses after the full name or phrase. After the first citation, only use the acronym (e.g., don't switch back and forth between the full name or phrase and the acronym).
EX: The Federal Highway Administration (FHWA) performed tests of this system in 1993. The FHWA found the results to be unacceptable.
4. When referring to tables and figure in text always spell out the whole word (e.g., do not write tab. 2 or fig. 5), beginning with an initial capital.
EX: The results of the tests are shown in Table 4 and presented graphically in Figure 7.
5. References always appear at the end of the sentence after the punctuation.
EX: Jones describes the behavior of impulsively loaded cantilevered beams. (7)
6. The abbreviation "e.g." is from the Latin meaning *exempli gratia*, or "for example." This abbreviation should only be used in a parenthetical comment. There should be a period after both "e" and "g" since it is an abbreviation of two Latin words.
EX: Brittle materials (e.g., glass) fracture without experiencing strain hardening.
7. The abbreviation "i.e." is from the Latin meaning *id est*, or "that is." This abbreviation should only be used in a parenthetical comment and there should be a period after both "i" and "e" since it is an abbreviation of two Latin words.
EX: Brittle materials (i.e., non-strain hardening materials) fracture quickly.
8. The phrase *et al* is an abbreviation of a Latin phrase meaning "and others." It is used when referring to works where the list of authors is longer than two. If there are only two authors use both their names (e.g., Ray and Wright describe a ...) whereas if there are three or more use *et al*.
EX: Zukas *et al* provide an extensive background on high-velocity impact phenomena in their book.
9. Most of our work is published by either the Transportation Research Board (TRB) or the National Cooperative Highway Research Program (NCHRP). They require references to

be formatted like the examples below. It will save us all a lot of time if you format your references from the start such that they conform to the examples below.

EX: MICHIE, J. D., "Recommended Procedures for the Safety Performance Evaluation of Highway Appurtenances," NCHRP Report 230, Transportation Research Board, Washington, D.C. (March 1981).

EX: GRAHAM, M. D., W. C. Burnett, J. L. Gibson and R. H. Freer, "New Highway Barriers: The Practical Application of Theoretical Design," Highway Research Record 174, Highway Research Board, Washington, D.C. (1967).

10. Always spell out the word percent in text. Only use the percent sign (i.e., "%") in tables.

EX: The strength of the steel was reduced by 13 percent after the experiment.

11. Unless you are a Biblical Apostle, never start a sentence with the words however or therefore. The word therefore, for example, means "for that reason" suggesting a preceding contention. These words are used to splice two thoughts together.

EX: I calculate, therefore, I am.

12. Numbers less than ten should be written out in text and numerals should never appear at the beginning of a sentence.

EX: The device was four meters long.

13. Figures and tables must always have numbers and captions. Refer to the figure and table numbers in text. Make sure to tie your text to your figures and tables. The usual convention is for figure captions to be below the figure and for table captions to be above the figure.

EX: The stress-strain curve shown in Figure 6 indicates that the yield stress was 250 MPa.

14. Always include units when discussing quantitative measures.

EX: The accident rate at the intersection was 3.1 collisions per million vehicles entering the intersection.

EX: The 15 m/s impact resulted in an energy dissipation of 3 J and a peak force of 1.5 N.

15. Avoid the use of pronouns in technical writing.

EX: "The traffic volume was counted on three different days" rather than "We counted the traffic volume on three different days."