## **Guide to notations on theses and reports**

I have developed a shorthand notation for comments and corrections that often apply to theses, reports, and other manuscripts. Many of these are adapted from the excellent "Further notes on lucid writing, pattern perception, and scientific thinking" by Prof. Michael McIntyre, Department of Applied Mathematics and Theoretical Physics, University of Cambridge.

- AA Ambiguous antecedent, often a pronoun such as "this", "it", etc. Example: "Fargo was flooded due to an ice jam. It then broke up and floated downstream..." which leaves us concerned for the residents of this fragmented, floating city.
- actor The reader is an unnecessary actor in the discussion. Examples: "the climate depends on what time of year you are there" or "we find a warm climate in Syria." (Also see *move*.)
- awk Awkward construction. May be formally correct, but reads oddly.
- cap Capitalization error.
- cause Cause/effect relationship is reversed or unclear.
- clar Clarify. Sometimes clarity requires adding more details, but often clarity is improved by removing excess words that obscure the point you are trying to make. (Also see *SW17*.)
- CW Use consistent words when referring to the same thing. Example: Discussing "the parameter value..." and then mentioning "the coefficient..." leaves the reader wondering whether a parameter is the same thing as a coefficient.
- DM Successive use of the same word but with different meanings or implications. Example: "Temperatures are seldom above 30°C above the lake." (Compare to *IJ*.)
- EQ Excessive quotation. This may be **one** quote! Use quotes very sparingly in scientific writing, except for special cases such as when writing a biography of a scientist.
- fig cit Figure citation: Figures and tables are to be numbered consecutively and cited by number. Do not use "the figure below" or the like.
- Figure description. Mechanics of figure construction should appear *only* in the figure caption and must never be repeated in the main text. Examples: "In Figure 2, the dotted line gives...", "shown by the green shaded regions in Figure 4..."
- flow Flowery language inappropriate for academic writing. Example: "the sweeping vistas of the region's imposing mountains."
- frag Sentence fragment.
- GA Misuse of an apostrophe when writing a plural. Example: "The Andes Mountain's lie along the western side of South America."
- gram Grammatical error not otherwise specified.
- IJ Incongruous juxtaposition. Example: "Here we concentrate on dilute solutions..."

- inf Informal language not appropriate for a paper of this type: Examples: "It is pretty dry in the Sahel," "Temps and precip vary from year to year."
- LR Lucidity would be improved by explicit repetition. Example: "this climate"  $\rightarrow$  "desert climate." (Also see AA.)
- move Is it necessary for the reader to move? Examples: "As you go toward the south..."  $\rightarrow$  "To the south...", "As you move into the mountains..."  $\rightarrow$  "Toward the mountains..." (Also see *actor* and *SW17*.)
- MW Missing word or words.
- NC Indicates a reference in your list of references that is not cited in the text.
- NR Indicates a reference citation in your text that does not have a corresponding entry in your list of references.
- nonseq Non-sequitur: a statement that is not a natural consequence of what immediately precedes it.
- num Agreement of number. Example: "One of the sites were found to have..."
- OP Material is out of place. It interrupts the flow between what comes before and after, or discusses details before the general topic is introduced.
- OT Off-topic. This material appears to be unrelated to the subject of your paper or to the material surrounding it. If it is related, explain the relationship more clearly. Example: You include a section on automobile manufacturing in a report about climate.
- punc Punctuation. In particular, my experience is that the colon and semicolon are seldom used correctly in undergraduate papers.
- ram Rambling sentence. This is not a run-on sentence but has too many ideas or nuances for the reader to follow easily. Split the sentence or remove unnecessary material.
- ref? Unreferenced statement that is not common knowledge.
- ref fmt Reference citation in the text is not in the proper format. Example: "J. Marshall Hendrix, in the Journal of Psychedelic Music, volume 17, page 12 stated..." should be "Hendrix (1969) stated..." Be sure you know what reference format is expected as practice varies between fields.
- runon Run-on sentence. Note that a run-on sentence is not necessarily long and vice versa. Be careful to avoid comma splices, they are a common form of run-on sentence.
- RPC Revolting Parenthesis Construction. Avoid (embrace) the use of parentheses (explicit wording) to indicate alternatives. The few words saved (added) are not (are) worth the extra burden (greater ease) imposed on (granted to) the reader.
- RR Repetitious redundancy. Examples: "solar insolation", or "annual rainfall is 37 inches per year." Also includes repetition of information that already has been stated.
- shift Sudden shift of topic or focus. Smooth out the transition between one idea and the next, or alert the reader that you are beginning a new topic by including a sub-section heading.

- sim Use simpler words or simpler construction; e.g., "winds of insubstantial magnitude" →
  "weak winds". Don't fall into the trap of thinking that fancy words and complex
  sentences make your writing sophisticated. Research shows that *simpler* writing
  increases the reader's perception of the writer's intelligence! (Hint: program your word
  processor to replace every occurrence of "utilize" or "utilization" with "use.")
- sp Spelling error. (Confusion between "affect" and "effect" is especially common.)
- Omit needless words. (Strunk and White's item 17.) This is my most common notation on reports. It is also one of the most difficult problems for students to overcome, since your academic experience likely has trained you to add needless words in order to pad out your work to a required minimum length. Some common examples are given at the end of this guide. See also *actor*, *clar*, *figd*, *flow*, *move*, *OT*, *ram*, *RR*, *sim*, and *tru*.
- tru Truism; a point that is obvious or self-evident and conveys little or no useful information. Examples: "Rainfall, temperature, and sunlight are important to crops." "This region's terrain affects its climate."
- vague Use more specific language. Example: "Winters are mild" → "Average winter temperatures do not fall below freezing." "Agriculture is important in this region" → "Agriculture employs 34% of the region's population."
- WC Word choice. Is this really what you mean? Can you use a more precise word (or words)?
- Use parallelism in words or construction. Examples: "both legal and illicit" → "both legal and illegal"; "For a given canopy density, the wind is insensitive to the width of the canopy." → "For a given canopy density, the wind is insensitive to canopy width." This is a powerful writing technique that is too seldom used.
- ¶ Start a new paragraph.
- no ¶ No new paragraph (i.e., join paragraphs).

## Omit needless words: some common examples

"in the summer months" → "in summer" (or "during the month of June" → "during June")

"in the winter season" → "in winter"

"a majority of" → "most"

"in proximity to"  $\rightarrow$  "near"

"large in size" (or "green in color", etc.) → "large" (or "green", etc.)

"as you go toward the south"  $\rightarrow$  "toward the south" (See *move*.)

"In an article published in the Journal of Climatology, John Q. Smith and James T. Jones state that..."  $\rightarrow$  "Smith and Jones (2006) state that..." (See *ref fmt*.)

"due to the fact that"  $\rightarrow$  "because"

"the average temperature is sixty two degrees Fahrenheit"  $\rightarrow$  "the average temperature is 62°F"