## **Avoiding Frequent Trivial Writing Mistakes**

Read this section carefully, keep it in mind all the time, or put it on your table while writing ... Actually we would not like to see these mistakes. They only generate a lot of tedious standard comments and steal time and energy that you could devote to the more substantial aspects of writing.

- Do not use the pronouns "I" and "you" in scientific texts. Usually one says "we" rather than "I", even if there is only a single author. This "we" can be understood as an "impersonal" pronoun that supports an objective tone and includes the readers. While the authors are behind their articles as real persons and are responsible for the content, authors are not "part of" the actual scientific content. Next, it is uncommon to address the readers directly: instead of "you", apply impersonal forms like "one", "somebody".
- Subject and verb must agree in singular or plural: "user have" and "users has" are false, "user has" and "users have" are correct.
- Also set apostrophes correctly for singular and plural: "user's files" (one user), "users' files" (several users).
- Do not confuse "its" (pronoun) with "it's". Anyway, in formal writing "it is" is more common that "it's". Similarly, write "does not" rather than "doesn't", and so on.
- Insert spaces, in particular, after punctuation marks, around parentheses, and before citations: "in paper [xx]", not "in paper[xx]".
- Sentences must be grammatically complete. For instance, this is bad: "The set of integers is countable. Whereas the set of reals is uncountable." Often the issue is resolved by appending the half sentence to the previous one: "The set of integers is countable, whereas the set of reals is uncountable." Half sentences often appear together with a formula: "We have  $E = mc^2$ . Where c is the velocity of light." should be: "We have  $E = mc^2$ , where c is the velocity of light."
- In conditional sentences (typically starting with "Since" or "If") it must be obvious where the assumptions finish and the conclusions start. It helps to clearly separate them, for instance, "If ..." should be followed by "... then ...".
- One may easily transfer constructions from one's own language to another language. This is called interference. Most notably, "that"

is used too often, perhaps due to the Swedish "som". False: "We test how many elements that are in the set." Correct: "We test how many elements are in the set."

- Decide on only *one* spelling variant of every name and use this variant consistently, not several variants mixed: begin with either capital or small letter, write it either as one word or as several separated words, either with or without hyphen, etc. Use either British or American spelling, not both variants together.
- Compound attributes are usually connected by hyphens, as in "first-order logic", "human-computer interaction", "property-based", "state-of-the-art method".
- The word "therefore" ("for this reason") is often confused with "therefor", and a spell checker would not notice that, because the latter is a valid word, too. Similarly, carefully distinguish "than" and "then", "too" and "to".
- Explain all abbreviations (except really well-known ones) when they appear for the first time. Do not let the reader guess what they mean.
- Abbreviations "i.e." and "e.g." should be enclosed in commas.
- Do not misuse mathematical symbols for replacing words or expressions within the text. Examples: "the # of edges" must be "the number of edges", "they reported > 100 cases" must be "they reported more than 100 cases", "if ∃ such elements" must be "if there exist such elements", "2× faster" must be "2 times faster". Do not use the & symbol to replace the word "and".
- Do not begin a sentence with a mathematical symbol.
- If you use LaTeX, write mathematical symbols properly, for instance: Use the "backslash log" command for logarithms, to obtain  $n \log n$ rather than the ugly *nlogn*. Enclose mathematical symbols in dollar signs: "The volume of a pizza with radius z and height a equals  $\pi zza = \pi z^2 a$ ." is obtained by

The volume of a pizza with radius \$z\$ and height \$a\$ equals \$\pi zza=\pi z^2a\$.

• Be formal. Do not use slang expressions like "math", "info", or "there is something called xxx".