

# A brief Language Guide for Statistical Writing



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## The general grammar guide

- Use the present tense throughout the article.
- Use active voice in the article.
- Avoid using passive voice. It is very old fashioned.
- Use “we” instead of “I” or “the author”.
- A statistical article is very technical and concise. Avoid long sentences with clauses!

## Capital letters

- Don't capitalize unnecessary words.
- Never start a sentence with numbers, Greek letters, or mathematical formulas.
- Special words in capital
  - Gaussian distribution, Poisson distribution should be in capital because they are named by real names. But gamma distribution is not named from a real name.

## Singular and plural form

- **data** is in plural **datum** is singular.
- **dataset** is singular.
- **pp.** plural; **p.** singular

## Footnotes and abbreviation

- Footnotes should be used rarely, and should not contain mathematical expressions.
- Avoid abbreviations as much as possible. If you have to use an abbreviation. Declare it at the first time when it appears e.g.  
*... we use maximum likelihood estimation (MLE)...*

- A mathematical expression should only be numbered when it is referred in the paper.
- Don't write in this way  
... *when  $\frac{y}{x} \geq 10$ , we have...*  
but write in this way  
... *when  $y/x \geq 10$ , we have...*
- Remember that a mathematical expression is also a sentence. So the grammar should be correct. Don't forget to put a full stop (.) in the end of an equation.
- An equation should be followed by an explanation of all the abbreviations and symbols not explained before.
- Bold letters should only be applied to matrix or vectors

# Numbers

- Don't start a sentence with a number.
- Numbers like 1, 2,... in the text should be displayed as one, two,...
- A large number should use the separator “,” e.g. 300,000

## Tables

- The caption should be at the top of the figure. A caption should comprise a brief title and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.
- Avoid using vertical lines.
- Place footnotes to tables below the table body and indicate them with superscript lowercase letters.
- The data presented in tables do not duplicate results described elsewhere in the article.



## Figures

- The caption should be at the bottom of the figure.
- A lot journals only accept EPS-format figures.
- Images supplied in color will sometimes only appear black and white in print due to the additional costs involved.
- Colors that display a clear difference may appear very similar to each other when converted to gray.
- Good practice
  - Use different types of lines (dashed, dotted, solid, bold,...) instead of colors when constructing a plot.
  - Crop the white margins before you embed a figure into the article to save space.

# Citations

- Author style
  - Only one author
  - Less than four authors
  - More than four authors
- Cite in text and cite in parentheses
- Singular or plural when meet “et al”
- Tense
- Use BibTeX with LaTeX with make life a lot easier.

## References

- A reference should only show up when it is cited in the paper.
- One should follow the standard style of References. The most common one is the author-year style, e.g.  
Beal, M. J., Falciani, F., Ghahramani, Z., Rangel, C., & Wild, D. L. (2005). A Bayesian approach to reconstructing genetic regulatory networks with hidden factors. *Bioinformatics*, 21(3), 349-356.