In response to Kaihsu Tai

Massimo Guiggiani and Lapo F. Mori

The authors would like to thank Kaihsu Tai for his comments (Tai, 2009) on our paper about mathematical formulæ (Guiggiani and Mori, 2008). We also would like to thank Claudio Beccari for his comments and suggestions (Beccari, 2009).

In particular we agree that the correct form for writing unit symbols is always in upright roman. The example given in §5.2 should however be achieved with

walk $emph{at most $2^{mathrm{km}}} north$

since the word "north" was, and should remain, outside the emphasis.

We also agree that in the English language digits should be separated into groups of three by the use of a thin fixed space. This is clearly required by ISO 31-0 (1992) and NIST Special Publication 811 (2008). In our article we were, however, noticing that the babel package separates groups of three digits by a space or a comma according to the current language. In particular when the English language is selected, the variable \tangle thousandsep is defined as a comma. This probably comes from the widespread usage in the English language of a comma. This behavior, which should be avoided, is sometimes even required by manuals of style (American Psychological Association, 2001).

We do not agree with the suggestion of dividing physical quantities by their units, although this follows NIST Special Publication 811 (2008). This form is not widely used and is not required or even suggested by the ISO standards. We believe that a reader would find it far easier to understand that v (m/s) indicates a physical quantity named v expressed in meters per second, rather than v/(m/s). In the second case the reader could be confused by the notation and interpret it as a dimensionless physical quantity vs/m.

As noted by Tai, ISO 4217 (2008) requires the use of the SI prefixes with the international three-letter currency codes. We believe that this should be strictly followed by documents focused on currencies but not necessarily by less specialized documents. New currencies are not created that often and, when this happens, their symbol becomes quickly available

in most word processing applications. For instance we believe that in non-financial documents it is better to use the Euro sign € defined by the European Commission (1997), instead of the three-letter currency code EUR. The use of SI prefixes with monetary units is still very uncommon.

In the end, we would like to remind that the focus of our paper was on gross mistakes, too often found in scientific writings, which may severely impair readability.

Bibliography

American Psychological Association. Publication Manual of the American Psychological Association. 5th edition, 2001.

Beccari, C. "Private communication". 2009.

European Commission. Communication from the Commission — The use of the Euro symbol. 1997.

ISO 31-0. Quantities and units—Part 0: General principles. International Organization for Standardization, Geneva, 3rd edition, 1992.

ISO 4217. Codes for the representation of currencies and funds. International Organization for Standardization, Geneva, 7th edition, 2008.

NIST Special Publication 811. Guide for the Use of the International System of Units (SI). National Institute of Standards and Technology, Gaithersburg, MD, USA, 2008.

Guiggiani, M., and L. F. Mori. "Suggestions on how not to mishandle mathematical formulæ". TUG-boat 29(2), 255–263, 2008.

Tai, K. "In response to 'mathematical formulæ'". TUGboat 30(1), 2009.

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