### Software & Tools

### **Hyphenation Exception Log**

Barbara Beeton

This is the periodic update of the list of words that TEX fails to hyphenate properly. The list last appeared in full in  $TUGboat\ 16$ , no. 1, starting on page 12, with an update in  $TUGboat\ 21$ , no. 2, pages 132–133. The present list contains only new items reported since then.

A copy of this article with the complete list can be found on the TUG Web pages, via a link in the on-line Table of Contents.

Owing to the length of the complete list, it has been subdivided into two parts: English words, and names and non-English words that occur in English texts. This update follows that division.

This list is specific to the hyphenation patterns that appear in the original hyphen.tex, that is, the patterns for U.S. English.

In the list below, the first column gives results from TEX's \showhyphens{...}; entries in the second column are suitable for inclusion in a \hyphenation{...} list.

In most instances, inflected forms are not shown for nouns and verbs; note that all forms must be specified in a \hyphenation{...} list if they occur in your document.

Thanks to all who have submitted entries to the list. Since some suggestions demonstrated a lack of familiarity with the rules of the hyphenation algorithm, here is a short reminder of the relevant idiosyncrasies. Hyphens will not be inserted before the number of letters specified by \lefthyphenmin, nor after the number of letters specified by \righthyphenmin. For U.S. English, \lefthyphenmin=2 and \righthyphenmin=3; thus no word shorter than five letters will be hyphenated. (For the details, see The T<sub>E</sub>Xbook, page 454. For a digression on other views of hyphenation rules, see below under "English hyphenation".) particular rule is violated in some of the words listed; however, if a word is hyphenated correctly by TFX except for "missing" hyphens at the beginning or end, it has not been included here.

Some other permissible hyphens have been omitted for reasons of style or clarity. While this is at least partly a matter of personal taste, an author should think of the reader when deciding whether or not to permit just one more break-point in some obscure or confusing word. There really are times when a bit of rewriting is preferable.

One other warning: Some words can be more than one part of speech, depending on context, and have different hyphenations; for example, 'analyses' can be either a verb or a plural noun. No such ambiguous words appear in the present list.

The reference used to check these hyphenations is Webster's Third New International Dictionary, Unabridged.

#### English hyphenation

It has been pointed out to me that the hyphenation rules of British English are based on the etymology of the words being hyphenated as opposed to the "syllabic" principles used in the U.S. Furthermore, in the U.K., it is considered bad style to hyphenate a word after only two letters. In order to make TeX defer hyphenation until after three initial letters, set \lefthyphenmin=3.

Of course, British hyphenation patterns should be used as well. A set of patterns for UK English has been created by Dominik Wujastyk and Graham Toal, using Frank Liang's PATGEN and based on a file of 114925 British-hyphenated words generously made available to Dominik by Oxford University Press. (This list of words and the hyphenation break points in the words are copyright to the OUP and may not be redistributed.) The file of hyphenation patterns may be freely distributed; it is posted on CTAN in the file

tex-archive/language/hyphenation/ukhyph.tex and can be retrieved by anonymous FTP or using a Web browser.

## Hyphenation for languages other than English

Patterns now exist for many languages other than English, including languages using accented alphabets. CTAN holds an extensive collection of patterns in tex-archive/language/hyphenation and its subdirectories.

### The List—English words

All entries in the list below have been reported since a supplement to the list was last published in 2000.

acry-lamide acryl-amide acry-lalde-hyde acryl-alde-hyde al-ge-braically al-ge-bra-i-cal-ly anisotropy an-isot-ropy anisotropism an-isot-ro-pism anisotropic an-iso-trop-ic anisotrop-i-cally an-iso-trop-i-cal-ly ar-chi-me-dean archimedean bolome-ter bo-lom-e-ter catenoid cat-e-noid chemother-apy chemo-ther-apy

cok-er-nelco-ker-nelcollineationcol-lin-ea-tioncom-po-nen-t-wisecom-po-nent-wisedacty-lo-gram(aph)dactyl-o-gram(aph)

di-alec-tic dia-lec-tic dia-lec-tic di-alec-ti-cian dyslec-tic eigen-class(es) eigen-value(s) finitely dia-lec-tic dia-lec-ti-cian dys-lec-tic eigen-class(es) ei-gen-class(es) ei-gen-val-ue(s)

home-o-mor-phic(ism) ho-meo-mor-phic(ism)

in-du-bitablein-du-bi-ta-bleisotropyisot-ropyisotropiciso-trop-icleafhop-perleaf-hop-permi-croor-gan-ismmicro-organ-ism

newest new-est

nonar-ith-metic  ${\bf non\text{-}ar\text{-}ith\text{-}met\text{-}ic}$ nu-cleo-tide nu-cleotide phenyl-ala-nine phenyala-nine pipeline(s) pipe-line(s) plant-hop-per plan-thop-per plu-gin(s) plug-in(s) portable por-ta-ble posthu-mous post-hu-mous pseu-dog-ra-pher pseu-do-g-ra-pher pseu-dogroup pseu-do-group re-di-rect(-ion) redi-rect(ion) re-po-si-tion repo-si-tion rewire re-wire rewrite re-write rewrit-ten re-written scrutinv scru-ti-ny stereo-graph-ic stere-o-graphic warmest warm-est workaround work-around

# Names and non-English words used in English text

 Kr-ishna
 Krishna

 Kr-ish-naism
 Krish-na-ism

 Kr-ish-nan
 Krish-nan

 Mark-to-ber-dorf
 Markt-ober-dorf

 Petro-vskiĭ
 Pe-trov-skiĭ

 vi-i-ith
 viiith

vi-ith viith

wis-senschaftlich wis-sen-schaft-licht

xvi-i-ithxviiithxvi-ithxviithxxi-i-irdxxiiirdxxi-indxxiind

 $\diamond\,$  Barbara Beeton

American Mathematical Society

bnb@ams.org