

## 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 *TUGboat* 10, no. 3, starting on page 336. Everything listed there is repeated here. Owing to the length of the list, it has been subdivided into two parts: English words, and names and non-English words that occur in English texts.

This list is specific to the hyphenation patterns that appear in the original `hyphen.tex`, that is, the patterns for U.S. English. If such information for other patterns becomes available, consideration will be given to listing that too. (See below, “Hyphenation for languages other than 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  $\TeX$ book*, page 454. For a digression on other views of hyphenation rules, see below under “English hyphenation”.) This particular rule is violated in some of the words listed; however, if a word is hyphenated correctly by  $\TeX$  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. If such a word appears in this list, hyphens are shown only

for the portions of the word that would be hyphenated the same regardless of usage. These words are marked with a ‘\*’; additional hyphenation points, if needed in your document, should be inserted with discretionary hyphens.

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 stored in the UK  $\TeX$  Archive at Aston and may be retrieved by anonymous FTP.

### Hyphenation for languages other than English

Patterns now exist for many languages other than English. The Stuttgart archive

`ftp.uni-stuttgart.de`

holds an extensive collection in the directory

`soft/tex/languages/hyphenation`

### The List — English words

<code>academy(ies)</code>	acad-e-my(ies)
<code>addable</code>	add-a-ble
<code>addible</code>	add-i-ble
<code>adrenaline</code>	adren-a-line
<code>afterthought</code>	af-ter-thought
<code>agronomist</code>	agron-o-mist
<code>amphetamine</code>	am-phet-a-mine
<code>analyse</code>	an-a-lyse
<code>analyses</code>	analy-ses *
<code>anomaly(ies)</code>	anom-aly(ies)
<code>antiderivative</code>	an-ti-deriv-a-tive
<code>antinomy(ies)</code>	an-tin-o-my(ies)
<code>antinuclear</code>	an-ti-nu-clear
<code>antinucleon</code>	an-ti-nu-cle-on

antirevolutionary	an-ti-rev-o-lu-tion-ary	comparand	com-par-and
apotheoses	apoth-e-o-ses	comparands	com-par-and
apotheosis	apoth-e-o-sis	comptroller	comp-trol-ler
appendix	ap-pen-dix	conformable	con-form-able
archipelago	arch-i-pel-ago	conformist	con-form-ist
archetypal	ar-che-typ-al	conformity	con-form-ity
archetypical	ar-che-typ-i-cal	congress	con-gress
arctangent	arc-tan-gent (better: arc tangent)	cosecant	co-se-cant
assignable	as-sign-a-ble	cotangent	co-tan-gent
assignor	as-sign-or	crankshaft	crank-shaft
assistantship	as-sist-ant-ship	crocodile	croc-o-dile
asymptomatic	asymp-to-matic	crosshatch(ed)	cross-hatch(ed)
asymptotic	as-ymp-tot-ic	dachshund	dachs-hund
asynchronous	asyn-chro-nous	database	data-base
atherosclerosis	ath-er-o-scle-ro-sis	datapath	data-path
atmosphere	at-mos-phere	declarable	de-clar-able
attributed	at-trib-uted	definitive	de-fin-i-tive
attributable	at-trib-ut-able	delectable	de-lec-ta-ble
avoids	av-oir-du-pois	democratism	de-moc-ra-tism
awoken	awok-en	demos	demos
bandleader	band-leader	derivative	de-riv-a-tive
bankrupt(cy)	bank-rupt(-cy)	diffract	dif-fract
baronies	bar-onies	direr	direr
baselineskip	\base-line-skip	direness	dire-ness
bathymetry	ba-thym-e-try	disparand	dis-par-and
bathyscaphe	bathy-scaphe	distraughtly	dis-traught-ly
beanies	bean-ies	distribute(d)	dis-trib-ute(d)
behaviour	be-hav-iour	doublespace(ing)	dou-ble-space(-ing)
beviess	beviess	dollish	doll-ish
bibliographische	bib-li-o-gra-phi-sche	driftage	drift-age
bidifferential	bi-dif-fer-en-tial	driver(s)	dri-ver(s)
billable	bill-able	dromedary(ies)	drom-e-dary(ies)
biomathematics	bio-math-e-mat-ics	duopolist	du-op-o-list
biomedicine	bio-med-i-cine	duopoly	du-op-oly
biorhythms	bio-rhythms	economics	eco-nom-ics
bitmap	bit-map	economist	econ-o-mist
blander	bland-er	electromechanical	electro-mechan-i-cal
blandest	bland-est	electromechanoacoustic	electro-mechano-acoustic
blinder	blind-er	elitist	elit-ist
blondes	blond-er	entrepreneur(ial)	en-tre-pre-neur(-ial)
blueprint	blue-print	epinephrine	ep-i-neph-rine
bornological	bor-no-log-i-cal	equivariant	equi-vari-ant
botulism	bot-u-lism	ethylene	eth-yl-ene
brusquer	brusquer	eversible	ever-si-ble
busier	busier	evert(s,ed,ing)	evert(s,-ed,-ing)
busiest	busiest	exquisite	ex-quis-ite
bussing	bussing	extraordinary	ex-tra-or-di-nary
butted	butted	fermions	fermi-ons
buzzword	buzz-word	flagellum(la)	fla-gel-lum(-la)
cacaphony(ies)	ca-caph-o-ny(ies)	flammables	flam-ma-bles
cameramen	cam-era-men	fledgling	fledg-ling
cartwheel	cart-wheel	flowchart	flow-chart
catarrhs	ca-tarrhs	formidable(y)	for-mi-da-ble(y)
catastrophic	cat-a-stroph-ic	forsythia	for-syth-ia
catastrophically	cat-a-stroph-i-cally	forthright	forth-right
cauliflower	cau-li-flow-er	freeloader	free-loader
chaparral	chap-ar-ral	friendlier	friend-lier
chartreuse	char-treuse	frivolity	fri-vol-ity
cholesteric	cho-les-teric	frivolous	friv-o-lous
cigarette	cig-a-rette	gasometer	gas-om-e-ter
cinquefoil	cinque-foil	geodesic	ge-o-des-ic
cognac	co-gnac	geodetic	ge-o-det-ic
cognacs	co-gnacs	geometric	geo-met-ric
		geotropism	ge-ot-ro-pism

gnomon	gno-mon	microfiche	mi-cro-fiche
grievance	griev-ance	millage	mill-age
grievous(ly)	griev-ous(-ly)	milliliter	mil-li-liter
hairstyle	hair-style	mimeographed	mimeo-graphed
hairstylist	hair-styl-ist	mimeographs	mimeo-graphs
harbinger	har-bin-ger	mimicries	mim-ic-ries
harlequin	har-le-quin	minis	min-is
hatcheries	hatch-eries	minuter(est)	mi-nut-er(-est)
hemoglobin	he-mo-glo-bin	mischievously	mis-chie-vous-ly
hemophilia	he-mo-phil-ia	misers	mi-sers
hepatic	he-pat-ic	misogamy	mi-sog-a-my
hermaphrodite(ic)	her-maph-ro-dite(-ic)	modelling	mod-el-ling
heroes	he-roes	molecule	mol-e-cule
hexadecimal	hexa-dec-i-mal	monarchs	mon-archs
holonomy	ho-lo-no-my	moneylender	money-len-der
homothetic	ho-mo-thetic	monochrome	mono-chrome
horseradish	horse-rad-ish	monoenergetic	mono-en-er-getic
hypothalamus	hy-po-thal-a-mus	monoid	mon-oid
ideals	ideals	monopole	mono-pole
ideographs	ideo-graphs	monopoly	mo-nop-oly
idiosyncrasy	idio-syn-crazy	monospline	mono-spline
igniter	ig-nit-er	monostrophic	mono-strofic
ignitor	ig-ni-tor	monotonies	mo-not-o-nies
ignorespaces	\ignore-spaces	monotonous	mo-not-o-nous
impedances	im-ped-ances	moronism	mo-ron-ism
infinitely	in-fin-ite-ly	mosquito	mos-qui-to
infinitesimal	in-fin-i-tes-i-mal	mudroom	mud-room
infrastructure	in-fra-struc-ture	multifaceted	mul-ti-fac-eted
interdisciplinary	in-ter-dis-ci-pli-nary	multiplicable	mul-ti-plic-able
inutile	in-utile	multiuser	multi-user (better with explicit hyphen)
inutility	in-util-i-ty	neofields	neo-fields
irrevocable	ir-rev-o-ca-ble	newsletter	news-let-ter
itinerary(ies)	itin-er-ary(ies)	noname	no-name
jeremiads	je-re-mi-ads	nonemergency	non-em-er-gency
keystroke	key-stroke	nonequivariance	non-equi-vari-ance
kilning	kiln-ing	noneuclidean	non-euclid-ean
laciest	lac-i-est	nonisomorphic	non-iso-mor-phic
lamentable	lam-en-ta-ble	nonpseudocompact	non-pseudo-com-pact
landscaper	land-scap-er	nonsmooth	non-smooth
larceny(ist)	lar-ce-ny(-ist)	nonuniform(ly)	non-uni-form(ly)
lifespan	life-span	norepinephrine	nor-ep-i-neph-rine
lightweight	light-weight	nutcracker	nut-crack-er
limousines	lim-ou-sines	oersteds	oer-steds
linebacker	line-backer	oligopolist	oli-gop-o-list
linespacing	\line-spacing	oligopoly(ies)	oli-gop-oly(ies)
lithographed	lith-o-graphed	operand(s)	op-er-and(s)
lithographs	lith-o-graphs	orangutan	orang-utan
lobotomy(ize)	lo-bot-omy(-ize)	orthodontist	or-tho-don-tist
loges	loges	orthokeratology	or-tho-ker-a-tol-ogy
macroeconomics	macro-eco-nomics	orthokeratology	or-tho-ker-a-tol-ogy
malapropism	mal-a-prop-ism	orthokeratology	or-tho-ker-a-tol-ogy
manuscript	man-u-script	orthokeratology	or-tho-ker-a-tol-ogy
marginal	mar-gin-al	orthokeratology	or-tho-ker-a-tol-ogy
mattes	mattes	orthokeratology	or-tho-ker-a-tol-ogy
medicaid	med-ic-aid	orthokeratology	or-tho-ker-a-tol-ogy
mediocre	medi-ocre	orthokeratology	or-tho-ker-a-tol-ogy
mediocrities	medi-oc-ri-ties	orthokeratology	or-tho-ker-a-tol-ogy
megalith	mega-lith	orthokeratology	or-tho-ker-a-tol-ogy
metabolic	meta-bol-ic	orthokeratology	or-tho-ker-a-tol-ogy
metabolism	me-tab-o-lism	orthokeratology	or-tho-ker-a-tol-ogy
metalanguage	meta-lan-guage	orthokeratology	or-tho-ker-a-tol-ogy
metropolis(es)	me-trop-o-lis(es)	orthokeratology	or-tho-ker-a-tol-ogy
metropolitan	met-ro-pol-i-tan	orthokeratology	or-tho-ker-a-tol-ogy
microeconomics	micro-eco-nomics	orthokeratology	or-tho-ker-a-tol-ogy
		overview	over-view
		oxidic	ox-id-ic
		painlessly	pain-less-ly
		palmate	palmate
		parabola	par-a-bola
		parabolic	par-a-bol-ic
		paraboloid	pa-rab-o-loid
		paradigm	par-a-digm
		parachute	para-chute
		paradimethylbenzene	para-di-methyl-benzene (para-di-meth-yl-ben-zene)
		parafluorotoluene	para-fluoro-toluene

	(para-flu-o-ro-tol-u-ene)		or quasi-
paragrapher	para-graph-er	quasihyponormal	qua-si-hy-po-nor-mal
paralegal	para-le-gal	quasiradical	qua-si-rad-i-cal
parallelism	par-al-lel-ism	quasiresidual	qua-si-resid-ual
paramagnetism	para-mag-net-ism	quasismooth	qua-si-smooth
paramedic	para-medic	quasistationary	qua-si-sta-tion-ary
paramethylanisole	para-methyl-anisole (para-meth-yl-an-is-ole)	quasitopos	qua-si-topos
parametrize	pa-ram-e-trize	quasitriangular	qua-si-tri-an-gu-lar
paramilitary	para-mil-i-tary	quintessence	quin-tes-sence
paramount	para-mount	quintessential	quin-tes-sen-tial
pathogenic	path-o-gen-ic	rabbitry	rab-bit-ry
peevish(ness)	peev-ish(-ness)	radiography	ra-di-og-ra-phy
pentagon	pen-ta-gon	raffish(ly)	raff-ish(-ly)
petroleum	pe-tro-le-um	ramshackle	ram-shackle
phenomenon	phe-nom-e-non	ravenous	rav-en-ous
philatelist	phi-lat-e-list	rearrangement	re-arrange-ment
phosphoric	phos-phor-ic	reciprocities	rec-i-proc-i-ties
picador	pic-a-dor	reciprocity	rec-i-proc-i-ty
piranhas	pi-ra-nhas	rectangle	rec-tan-gle
placable	placa-ble	reecho	re-echo
pleasance	pleas-ance	restorable	re-stor-able
poltergeist	pol-ter-geist	retribution(s)	ret-ri-bu-tion(s)
polyene	poly-ene	retrofit(ted)	ret-ro-fit(-ted)
polyethylene	poly-eth-yl-ene	rhinoceros	rhi-noc-er-os
polygamist(s)	po-lyg-a-mist(s)	righteous(ness)	right-eous(-ness)
polygonization	polyg-on-i-za-tion	ringleader	ring-leader
polyphonous	po-lyph-o-nous	robot	ro-bot
polystyrene	poly-styrene	robotics	ro-bot-ics
pomegranate	pome-gran-ate	roundtable	round-table
poroelastic	poro-el-as-tic	salesclerk	sales-clerk
postamble	post-am-ble	salesclerks	sales-clerks
postscript	post-script	saleswoman(en)	sales-woman(en)
postural	pos-tur-al	salmonella	sal-mo-nel-la
preamble	pre-am-ble	sarsaparilla	sar-sa-par-il-la
preloaded	pre-loaded	sauerkraut	sauer-kraut
preparing	pre-par-ing	scatological	scat-o-log-i-cal
preprocessor	pre-proces-sor	scheduling	sched-ul-ing
presplitting	\pre-split-ting	schizophrenic	schiz-o-phrenic
priestesses	priest-esses	schnauzer	schnau-zer
procedural	pro-ce-dur-al	schoolchild(ren)	school-child(-ren)
process	process	schoolteacher	school-teacher
procurance	pro-cur-ance	scything	scyth-ing
progenies	prog-e-nies	semaphore	sem-a-phore
progeny	prog-e-ny	semester	se-mes-ter
prohibitive(ly)	pro-hib-i-tive(-ly)	semidefinite	semi-def-i-nite
prosciutto	pro-sciut-to	semihomothetic	semi-ho-mo-thet-ic
protestor(s)	pro-test-er(s)	semiring	semi-ring
protestor(s)	pro-tes-tor(s)	semiskilled	semi-skilled
prototypal	pro-to-typ-al	seroepidemiological	sero-epi-de-mi-o-log-i-cal
pseudodifferential	pseu-do-dif-fer-en-tial	servomechanism	ser-vo-mech-anism
pseudofinite	pseu-do-fi-nite	setup	set-up
pseudofinitely	pseu-do-fi-nite-ly	severely	se-vere-ly
pseudoforces	pseu-do-forces	shapeable	shape-able
pseudonym	pseu-do-nym	shoestring	shoe-string
pseudoword	pseu-do-word	sidestep	side-step
psychedelic	psy-che-del-ic	sideswipe	side-swipe
psychs	psychs	skyscraper	sky-scraper
pubescence	pu-bes-cence	smokestack	smoke-stack
quadratics	qua-drat-ics	snorkeling	snor-kel-ing
quadrature	quad-ra-ture	solenoid	so-le-noid
quadriplegic	quad-ri-pleg-ic	solute(s)	solute(s)
quainter(est)	quaint-er(est)	sovereign	sov-er-eign
quasiequivalence	qua-si-equiv-a-lence	spaces	spa-ces
		specious	spe-cious

spelunker	spe-lunk-er
spendthrift	spend-thrift
spheroid(al)	spher-oid(al)
sphinges	sphin-ges
spicily	spic-i-ly
spinors	spin-ors
spokeswoman(en)	spokes-woman(en)
sportscast	sports-cast
sportively	spor-tive-ly
sportswear	sports-wear
sportswriter	sports-writer
sprightlier	spright-lier
squeamish	squea-mish
standalone	stand-alone
startling(ly)	star-tling(ly)
statistics	sta-tis-tics
stealthily	stealth-ily
steeplechase	steeple-chase
stochastic	sto-chas-tic
straightest	straight-est
strangeness	strange-ness
stratagem	strat-a-gem
stretchier	stretch-i-er
stronghold	strong-hold
stupider(est)	stu-pid-er(est)
summable	sum-ma-ble
superego	super-ego
superegos	super-egos
supremacist	su-prema-cist
surveillance	sur-veil-lance
swimmingly	swim-ming-ly
symptomatic	symp-to-matic
synchromesh	syn-chro-mesh
synchronous	syn-chro-nous
synchrotron	syn-chro-tron
talkative	talk-a-tive
tapestry(ies)	ta-pes-try(ies)
tarpaulin	tar-pau-lin
telegrapher	te-leg-ra-pher
telekinetic	tele-ki-net-ic
telerobotics	tele-ro-bot-ics
testbed	test-bed
thalamus	thal-a-mus
thermoelastic	ther-mo-el-as-tic
timestamp	time-stamp
toolkit	tool-kit
topographical	topo-graph-i-cal
toques	toques
traitorous	trai-tor-ous
transceiver	trans-ceiver
transgress	trans-gress
transversal(s)	trans-ver-sal(s)
transvestite	trans-ves-tite
traversable	tra-vers-a-ble
traversal(s)	tra-ver-sal(s)
treacheries	treach-eries
treachery	treach-ery
troubadour	trou-ba-dour
turnaround	turn-around
typal	typ-al
unattached	un-at-tached
unerringly	un-err-ing-ly
unfriendly(ier)	un-friend-ly(i-er)
vaguer	vaguer

vaudeville	vaude-ville
vicars	vic-ars
villainess	vil-lain-ess
viviparous	vi-vip-a-rous
voiceprint	voice-print
vspace	\vspace
wallflower	wall-flower
wastewater	waste-water
waveguide	wave-guide
weblike	web-like
weeknight	week-night
wheelchair	wheel-chair
whichever	which-ever
whitesided	white-sided
whitespace	white-space
widespread	wide-spread
wingspread	wing-spread
witchcraft	witch-craft
workhorse	work-horse
wraparound	wrap-around
wretched(ly)	wretch-ed(-ly)
yesteryear	yes-ter-year

### Names and non-English words used in English text

algebraische	al-ge-brai-sche
Allegheny	Al-le-ghe-ny
Arkansas	Ar-kan-sas
automatisierter	auto-mati-sier-ter
Bedienung	Be-die-nung
Brownian	Brown-ian
Columbia	Co-lum-bia
Czechoslovakia	Czecho-slo-va-kia
Dijkstra	Dijk-stra
dynamische	dy-na-mi-sche
English	Eng-lish
Eulerian	Euler-ian
February	Feb-ru-ary
Festschrift	Fest-schrift
Florida	Flor-i-da
Forschungsinstitut	For-schungs-in-sti-tut
funktional	funk-tsional
Gaussian	Gauss-ian
Greifswald	Greifs-wald
Grothendieck	Grothen-dieck
Grundlehren	Grund-leh-ren
Hamiltonian	Hamil-ton-ian
Hermitian	Her-mit-ian
Hibbs	Hibbs
January	Jan-u-ary
Japanese	Japan-ese
Kadomtsev	Kad-om-tsev
Kansas	Kan-sas
Karlsruhe	Karls-ruhe
Korteweg	Kor-te-weg
Legendre	Le-gendre
Leicester	Leices-ter
Lipschitz(ian)	Lip-schitz(-ian)
Louisiana	Lou-i-si-ana
Manchester	Man-ches-ter
Markovian	Mar-kov-ian
Massachusetts	Mass-a-chu-setts
Minnesota	Min-ne-sota

Nijmegen	Nij-me-gen
Noetherian	Noe-ther-ian
Noordwijkerhout	Noord-wijker-hout
November	No-vem-ber
Poincare	Poin-care
Potentialgleichung	Po-ten-tial-glei-chung
rathskeller	raths-ke-ler
Riemannian	Rie-mann-ian
Rydberg	Ryd-berg
schottische	schot-tische
Schrodinger	Schro-ding-er
Schwabacher	Schwa-ba-cher
Schwarzschild	Schwarz-schild
September	Sep-tem-ber
Stokessche	Stokes-sche
Susquehanna	Sus-que-han-na
technische	tech-ni-sche
Tennessee	Ten-nes-see
verallgemeinerte	ver-all-ge-mein-erte
Verteilungen	Ver-tei-lun-gen
Wahrscheinlichkeitstheorie	Wahr-schein-lich-keits-the-o-rie
Wertherian	Wer-ther-ian
Winchester	Win-ches-ter
Yingyong Shuxue Jisuan	Ying-yong Shu-xue Ji-suan
Zeitschrift	Zeit-schrift