

T \acute{g} T \acute{E} X: T \acute{E} X Spells for Typesetting in Tengwar

User's Manual

Version 1.10*

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1 Introduction

This document describes the use of T \acute{g} T \acute{E} X (`tengt \acute{e} x.tex` and `tengt \acute{e} x.sty`) for the T \acute{E} X/L \acute{A} T \acute{E} X/L \acute{A} T \acute{E} X ϵ typesetting of text in the languages of Middle-earth in F \acute{e} anorian tengwar, using my Computer Modern Tengwar family, its variant Computer Roman Tengwar, the fount `teng10` by Julian C Bradfield or the revised fount `tengwar` by Michael P Urban (or any combination of these).¹

Perhaps it is worth reminding that the name *T \acute{E} X* is derived from the Greek word *tekhnē* ‘art’, which (along with the Latin *texō* ‘weave’, *textum* ‘web, fabric, texture’, *textus* ‘text’) goes back to the Proto-Indo-European root **tek \acute{s} -* ‘create, frame, carve’, no doubt from a Lemberin cognate of the Proto-Eldarin base *TEK-* ‘write’ (*The Lost Road*:391), whence also Quenya *p \acute{e} q* ‘writes’, Sindarin *p \acute{a} b \acute{i}* ‘write!’.

The input of T \acute{g} T \acute{E} X is essentially an ASCIIisation of the R \acute{o} men \acute{o} rean spelling adopted by J R R Tolkien and described in Section I of Appendix E to *The Lord of the Rings*. (One difference is that capital letters are used for increasing the total number of letters available for the input, instead of singling out sentence-initial words and proper names, a device which is not a regular feature of the F \acute{e} anorian script²; another is that no accent marks are used, because of the limitations of ASCII.) Its output strives to follow the orthographic conventions of the Third Age, discussed in Section II of the same Appendix and illustrated

*Inspiration has been drawn from the package ArabT \acute{E} X by Klaus Lagally. I give thanks to Emanuele Vicentini, Gernot Katzer, Dirk Thierbach and Michael Urban for their comments and cooperation.

¹This document uses Computer Modern Tengwar by default. To substitute Computer Roman Tengwar, J Bradfield's or M Urban's tengwar, uncomment line 18, 19 or 20 of the source, then recompile it.

²Large ornate initials do occur in some documents, but are used very inconsistently.

in the few surviving samples of text in tengwar³; on those occasions on which the sources disagree, the evidence from the corpus takes precedence over the description in the Appendix. In its current version T^gTeX is intended for processing text in Quenya, Sindarin and their close relatives, and it also provides some support for Westron and the Black Speech, but not for any other languages, although it may work by accident for some post-Third-Age Mannish tongues (such as Irish in Sindarin mode).

T^gTeX is not copyrighted, but its use is protected by an oath, the text of which (in English and Quenya) is to be found in the file `vanda.tex` in this distribution.

2 Generalia

To activate T^gTeX, load it by `\input tengtex` into a TeX source file, include the option `tengt` into the document header of a L^ATeX document or instruct L^ATeX 2_ε to `\usepackage{tengt}`.

The fount used is selected by one of the spells `\cmteng` (Computer Modern Tengwar, the default option), `\crteng` (Computer Roman Tengwar), `\jcb` (J Bradfield’s `teng10`) and `\mpu` (M Urban’s `tengwar`). Tengwar can be magnified by the spell `\tengwarmag` (with one argument; the default is 0). The chosen magnification is activated when you next select a fount.

Three major modes are available: Quenya, Classical Sindarin and Belerianic Sindarin. The appropriate mode is selected by the spells `\quenya`, `\sindarin` and `\belerianic` (there is no default mode). There are also certain options within each of the modes, described in the dedicated sections.

The typesetting of text in tengwar, particularly of longer passages, is done by the environment `elvish`. For the inclusion of short quotations in tengwar into text written in other scripts the macro `\quetta` is also available.⁴ An Elvish environment, but not an Elvish quotation, may consist of two or more paragraphs separated by blank lines.

In an Elvish environment or quotation continuous strings of letters (in the TeX sense) are recognised as words and written in tengwar in the output, following the orthographic conventions of the mode (and ignoring letters to which a value is not assigned); continuous strings of decimal digits are recognised as numbers, and are inverted in the output.⁵ Numbers may form part of words.

Sauron ataltane 3019sse. hoŷn ipzpnw jɛɛwɛŷ:

[Quenya] ‘Sauron fell in 3019.’

³One of these sources, Aragorn’s letter to Master Samwise, is in fact an early Fourth Age document, but it can be taken as representative of Third Age Sindarin writing, since it was during the Third Age that the author received his Elvish education.—Some archaic (pre-Third-Age) conventions, in particular regarding Quenya, are also supported.

⁴All the macro does is send its parameter to the environment for processing; it thus uses more of TeX’s memory, but it is shorter to type.

⁵Numbers are not explicitly marked as such with a dot or line above them, since the numerals in the founts are already sufficiently distinct from tengwar, in any case more so than a dot would be from an overdot tehta.

Any other characters (such as punctuation marks), blank space and $\text{T}_{\text{E}}\text{X}$, $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ or $\text{T}_{\text{E}}\text{X}$ parameterless commands are let through unchanged, and it is the user's responsibility to ensure that their visible effect, if any, makes sense in the chosen fount (for example, because of the way the character code tables are organised, a hyphen yields a tengwa number 11 in J Bradfield's fount and a wavy dash in M Urban's and in Computer Modern Tengwar). Empty pairs of curly brackets can be used to break ligatures, as they make $\text{T}_{\text{E}}\text{X}$ think that the word ends there and a new one begins.

3 Computer Modern Tengwar

The Computer Modern Tengwar family (included in this distribution) is to Computer Modern Roman as the tengwar themselves are to the mediæval Anglo-Saxon and Celtic calligraphic Roman hands that were their Primary World prototype. Just as Computer Modern Roman is $\text{T}_{\text{E}}\text{X}$'s default fount family, the Computer Modern Tengwar are now $\text{T}_{\text{E}}\text{X}$'s native accent.

I made this family with several purposes. First, I expect it to help us see the tengwar with the eyes of a European of old (such as Ottor Wáfre the mariner, named Eriol in Tol Eressëa), to whom they would not have appeared archaic, only different in the use, but not the style, of eminently familiar graphic elements.

Second, chances are that those who wish to use the tengwar for large-scale writing will need a wider variety of sizes and styles. Within this family counterparts of all Computer Modern and Concrete Roman typefaces can be generated and used. (Support for their selection has not been included in the package at this stage, but it can be added easily enough if the idea proves popular. In the meantime users are encouraged to experiment.)

Third, it blends better with surrounding text in Roman (so well, in fact, that I have found it necessary to underline all inclusions in tengwar in this document), which may be an advantage in some situations.

And fourth, there now is a fount that I can make $\text{T}_{\text{E}}\text{X}$'s default, without having to give priority to either J Bradfield's or M Urban's.

4 Computer Roman Tengwar

The Computer Roman Tengwar family endeavours an even more radical move in the same direction as Computer Modern Tengwar: on top of the modernisation of the entire character set it performs a further degree of romanisation of the primary tengwar (the secondary ones are not altered). Needless to say, it blends even better with Roman text.

Although it claims to be a separate family, in reality it uses the same typefaces as Computer Modern Tengwar, only different parts of them.

5 Quenya

5.1 Vowels

In Quenya mode you have the option of choosing between heavy (default) and light vocalisation, using the words `\heavyvocalise` and `\lightvocalise` for switching back and forth.

Short vowels are written as tehta over the preceding consonant or (when syllable-initial) over a short carrier. When light vocalisation (a glimpse of which is to be seen in *J R R Tolkien, Life and Legend (Catalogue of the Bodleian Library Exhibition, Oxford, 1992)*, Plate 218) is selected, the tehta for **a** is not written, but all tengwar standing for syllable-final consonants receive a subscript dot tehta (**f**almar ‘waves’, for example, is set as **ƒ̣ẓḷẓp̣** if vocalised lightly and **ƒ̣ẓḷẓp̣** if vocalised heavily).

Long vowels can be either doubled in the input, and then the tehta is also doubled (**y**een **ƒ̣m̄** ‘year’, **m**ool **l̄z̄** ‘slave, thrall’, **u**ur **ɪ̄** ‘fire’; note that this only works with **e**, **o** and **u**), or capitalised, and then the single tehta is written over a long carrier (**y**Ar **ƒ̣j̄** ‘blood’).

Diphthongs with **i** as second element are written as yanta bearing the tehta for the first element (**o**ire **l̄z̄** ‘everlasting age’). Diphthongs with **u** as second element are written as úre bearing the tehta for the first element (**l**euke **z̄óq̄** ‘snake’).

5.2 Consonants

The following consonants and consonant clusters are available:

c, k	q	f	ƒ	G	ɑ	h	λ	hl	l̄z̄
hr	h̄	ht	dp	hw	ɸ	H	d	l	z̄
lb	z̄p̄z̄	ld	z̄	m	l̄z̄	mb	p̄z̄	mp	l̄z̄
n	ɹ̄	nc, nk	ɸl	nd	p̄	ng	ɸq̄	ngw	z̄q̄
nq, nqu	z̄l̄	nt	h̄			N	ɸ	Nw	z̄
p	p̄	q, qu	q̄			r	ɹ̄	rd	z̄
s	ʃ	ss	ʃ			S	b	t	p
v	z̄	w	z̄	x	q̄	y	ɸ	z	ʃ

Double consonants are written with an underbar tehta (**q**uetta **q̄p̄**⁶ ‘word’, **ty**elle **p̄z̄** ‘grade’). The only exception is **ss**, which is written as esse (**G**assa **ɸ** ‘hole, opening, mouth’).

G, H, S,

N, Nw yield tengwar which had lost their original phonetic values by the Third Age. They are meant for writers concerned with etymology (**G**alda **ɑ**z̄ ‘tree’, **H**On **d̄j̄m̄** ‘heart’, **N**oola **ɑ̄z̄** ‘wise, learned’, **S**inde **h̄p̄** ‘grey’).⁷

⁶The examples in this section are vocalised lightly.

⁷The first notation is suggested by the fact that Proto-Eldarin *g*, preserved in Sindarin, became zero in Quenya, presumably going through a stage where it was an approximant, such

Diphthongs with **e** as second element are written as yanta bearing the tehta for the first element (**oer** ǻǻ ‘sea’). Diphthongs with **i** as second element are written as anna bearing the tehta for the first element (**uir** ǻǻ ‘eternity’). Diphthongs with **u** as second element are written as úre bearing the tehta for the first element (**naug** ǻǻ ‘dwarf’).

6.2 Consonants

In either of the two Sindarin modes you have the option of choosing whether the calmatéma or the quessetéma is to be used for velar consonants (and, in the latter case, whether the calmatéma is to be used for palatal consonants) and whether the óretyelle or the númetryelle is to be used for single nasal consonants. The selection of the Classical Sindarin mode automatically allocates the velars in the quessetéma, though `\vaswestron` makes **c** available for calma (English **cek** qǻ ‘cheque’) and `\vincalma` transfers the rest of the velars into the calmatéma. (The shortcut `\blackspeech` is equivalent to `\sindarin \oleft \vaswestron`.) Also, the the nasal consonants are allocated in the númetryelle, though this setting can be altered by specifying `\ninn0re`, and restored by `\ninnUmen`. The following consonants and consonant clusters are available in the default setting:

b	<u>ǻ</u> ǻ	bh	<u>ǻ</u> ǻ	B	<u>ǻ</u> ǻ	c, k	<u>ǻ</u> ǻ	ch, kh	<u>ǻ</u> ǻ
d	<u>ǻ</u> ǻ	dh	<u>ǻ</u> ǻ	D	<u>ǻ</u> ǻ	f	<u>ǻ</u> ǻ	gh	<u>ǻ</u> ǻ
h	<u>ǻ</u> ǻ	hw	<u>ǻ</u> ǻ			j	<u>ǻ</u> ǻ	lh	<u>ǻ</u> ǻ
m	<u>ǻ</u> ǻ	mh	<u>ǻ</u> ǻ	mm	<u>ǻ</u> ǻ	n	<u>ǻ</u> ǻ	N	<u>ǻ</u> ǻ
p	<u>ǻ</u> ǻ	ph	<u>ǻ</u> ǻ			nn	<u>ǻ</u> ǻ	rh	<u>ǻ</u> ǻ
s	<u>ǻ</u> ǻ	ss	<u>ǻ</u> ǻ	sh	<u>ǻ</u> ǻ	r	<u>ǻ</u> ǻ	th	<u>ǻ</u> ǻ
v	<u>ǻ</u> ǻ			w	<u>ǻ</u> ǻ	t	<u>ǻ</u> ǻ	zh	<u>ǻ</u> ǻ
						z	<u>ǻ</u> ǻ		

Double consonants are written with an underbar tehta (**tellen** ǻǻ ‘footprint’). The only exceptions are **ss**, which is written as esse, and **mm** and **nn**, which are written as malta and númen with or without an overbar or overtilde tehta.

bh is provided for the sake of completeness, as an alternative to **v**.

f is written as formen in initial and medial position (**farn** ǻǻ ‘enough’, **tofn** ǻǻ ‘deep’) and as ampa in final position (**tif** ǻǻ ‘flute’).

gh, j,

sh, z, zh are provided in order to make possible the typesetting of text in Westron (**zIr** ǻǻ ‘wise’) or the Black Speech (**ghAsh** ǻǻ ‘fire’).

H is always written as hyarmen, without forming a digraph with a preceding consonant letter.

i is written as yanta when it appears as a glide in initial position (**iAr** ǻǻ ‘blood’, **ioIf** ǻǻ ‘brand’, **iuith** ǻǻ ‘use’, **iU1** ǻǻ or **iuul** ǻǻ ‘embers’).

m is written as an overbar or overtilde tehta when preceding a labial consonant (**hamp** ǻǻ ‘garment’, **ammarth** ǻǻ ‘doom, fate’).

