

Appendix to “T^gT_EX: T_EX Spells for Typesetting in Tengwar — User’s Manual — Version 1.10, by Ivan A Derzhanski”

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1 Generalia

Other spells are available to select the fount to be used: `\tnw` (M Urban’s **tengwarweird**), and `\mbp` (M Björkman’s **parmaite**). Also, size control of the fonts is now more accurate with the new command `\tengmag{}` (argument is an integer number, being 1000 a typical value for normal size).

Digits 0–9 are available for any fount used, although corresponding *tengwar* are not encoded in positions 48–57. Also, standard punctuation marks are available by simple keystrokes for any mode and any fount used, and independently of original encoding of the fount:

Table 1: Standard punctuation marks

Key	Mark
,	,
;	:
.	::
:	::
!	‘
?	þ
-	~
+	~

Another major mode is available: Spanish. It is selected by the spell `\spanish`.

Individual symbols can be obtained without having to set a mode (and for any mode) by using commands with names based on those proposed in <http://std.dkuug.dk/JTC1/SC2/WG2/docs/n1641/n1641.htm> (linked from <http://www.unicode.org/roadmaps/smp>) by Michael Everson:

Table 2: The *tengwar*

Symbol	Command(s)	Symbol name(s)
p	<code>\tinco</code>	<i>tinco</i>
p	<code>\parma</code>	<i>parma</i>
q	<code>\calma</code>	<i>calma</i>
q	<code>\quesse</code>	<i>quesse</i>
p̃	<code>\ando</code>	<i>ando</i>
p̄	<code>\umbar</code>	<i>umbar</i>
q̄	<code>\anga</code>	<i>anga</i>
q̇	<code>\ungwe</code>	<i>ungwe</i>
h, b	<code>\thuule, \suule</code>	<i>thúle, súle</i>

b	<code>\formen</code>	<i>formen</i>
d, d	<code>\harma, \aha</code>	<i>harma, aha</i>
d	<code>\hwesta</code>	<i>hwesta</i>
h	<code>\anto</code>	<i>anto</i>
b	<code>\ampa</code>	<i>ampa</i>
d	<code>\anca</code>	<i>anca</i>
d	<code>\unque</code>	<i>unque</i>
n	<code>\nuumen</code>	<i>númen</i>
m	<code>\malta</code>	<i>malta</i>
u, u	<code>\ngoldo, \noldo</code>	<i>ngoldo, noldo</i>
u, u	<code>\ngwalme, \nwalme</code>	<i>ngwalme, nwalme</i>
n	<code>\oore</code>	<i>óre</i>
n	<code>\vala</code>	<i>vala</i>
a	<code>\anna</code>	<i>anna</i>
a, a	<code>\wilya, \vilya</code>	<i>wilya, vilya</i>
r	<code>\roomen</code>	<i>rómen</i>
r	<code>\arda</code>	<i>arda</i>
l	<code>\lambe</code>	<i>lambe</i>
l	<code>\alda</code>	<i>alda</i>
s	<code>\silme</code>	<i>silme</i>
s	<code>\silmenuquerna</code>	<i>silme nuquerna</i>
g, g, g	<code>\aaze, \aare, \esse</code>	<i>áze, áre, esse</i>
g, g, g	<code>\aazenuquerna, \aarenuquerna, \essenuquerna</code>	<i>áze nuquerna, áre n., esse n.</i>
h	<code>\hyarmen</code>	<i>hyarmen</i>
d	<code>\hwestasindarinwa</code>	<i>hwesta sindarinwa</i>
y	<code>\yanta</code>	<i>yanta</i>
u	<code>\uure</code>	<i>úre</i>

Table 3: Other symbols

Symbol	Command(s)	Symbol name(s)
l	<code>\halla</code>	<i>halla</i>
s	<code>\shortcarrier</code>	(2) <i>sinta kolindo</i>
l	<code>\longcarrier</code>	(2) <i>anda kolindo</i>
a	<code>\annasindarinwa</code>	(3) <i>anna sindarinwa</i>
p	<code>\extendedthuule</code>	
p	<code>\extendedformen</code>	
d	<code>\extendedharma</code>	
d	<code>\extendedhwesta</code>	
p	<code>\extendedanto</code>	
p	<code>\extendedampa</code>	
d	<code>\extendedanca</code>	
d	<code>\extendedunque</code>	
o, o	<code>\stemlessoore, \zero</code>	
u	<code>\stemlessvala</code>	
c	<code>\stemlessanna</code>	
u, u	<code>\stemlessvilya, \one</code>	(1) <i>mine</i>
...	<code>\threedotsabove</code>	
...	<code>\threedotsbelow</code>	
..	<code>\twodotsabove</code>	
..	<code>\twodotsbelow</code>	

˙	\amaticse, \dotabove	(3) <i>amaticse</i>
˘	\nunticse, \dotbelow	(3) <i>nunticse</i>
ˆ	\tengwaracute, \andaith, \longmark	<i>andaith</i>
˝	\doubleacute	
ʻ	\rightcurl	
˝˝	\doublerightcurl	
˘˘	\leftcurl	
˝˝˝	\doubleleftcurl	
˜	\nasalizer	
˝˝	\doubler	
˝˝˝	\tengwartilde	
˝˝˝˝	\tengwarbreve	
˝˝˝˝˝	\pusta, \putta, \tengwarstop	(3) <i>pusta</i> , (3) <i>putta</i>
˝˝˝˝˝˝	\doublepusta, \doubleputta	
!	\exclamationmark	
?	\questionmark	
ˆ	\tengwarsectionmark	
ˆˆ	\longsectionmark	
<hr/>		
˘˘˘	\longcarrierbelow	
˝˝˝˝	\doubleacutebelow	
˝˝˝˝˝	\rightcurlbelow	
˝˝˝˝˝˝	\leftcurlbelow	
˝˝˝˝˝˝˝	\leftfollowingsilme	
˝˝˝˝˝˝˝˝	\rightfollowingsilme	
<hr/>		
²	\two	(1) <i>atta</i>
³	\three	(1) <i>nelde</i>
⁴	\four	(1) <i>canta</i>
⁵	\five	(1) <i>lempe</i>
⁶	\six	(1) <i>enque</i>
⁷	\seven	(1) <i>otso</i>
⁸	\eight	(1) <i>tolto</i>
⁹	\nine	(1) <i>nerte</i>
¹⁰	\ten	(1) <i>cainen</i>
¹¹	\eleven	(1) <i>minque</i>
˙˙	\decimalbasemark	
˙˙˙	\duodecimalbasemark	
˙˙˙˙	\duodecimalleastsignificantdigitmark	

The main bibliographic source for symbol names has been the *Appendix E* to *The Lord of the Rings*. Other sources have been: (1) <http://lambenor.free.fr/tengwar/numbers.html> (by David Doughan and Julian Bradfield, possibly from some articles by Christopher Tolkien in issues 13 and 14 of *Quettar*), (2) Derzhanski's file `tengtex.sty`, and (3) Everson's Tengwar proposal to Unicode.

2 Spanish

This mode has been discussed and aproved by the Lambenor group, and has been originally described in <http://lambenor.free.fr/tengwar/espanol.html>.

2.1 Vowels

Vowels are written as *tehtar* over the preceding consonant or (when word-initial) over a short carrier (amigo ʼnm friend', nube ʼnf cloud', y i 'conj and'). When an accute accent

should be written according to the rules of accentuation of Spanish words, the vowel should be capitalised (never doubled), and then the single *tehta* is written over a long carrier (**mAs** **ṁṁṁ** ‘*adv, adj more*’, **tE** **ṁ** ‘*nm tea*’, **sI** **ṁ** ‘*adv yes*’, **sOlo** **ṁṁ** ‘*adv only*’, **tU** **ṁ** ‘*pron pers you*’). Note that ‘y’ never carries the accute accent in Spanish, so Y should never be used for inexistent ‘ý’.

The non-mute ‘u’ after ‘g’ and before ‘e’, ‘é’, ‘i’, or ‘í’ is always written in Spanish with ‘ü’, but TgTeX does not allow non-ASCII characters, so ‘ü’ is obtained with w (**cigweNa** **ḥṁṁ** ‘*nf stork*’). In Spanish, non-mute ‘u’ after ‘q’ and before ‘e’, ‘é’, ‘i’, or ‘í’ is very rare (even before other vowels) and it can also be obtained with w (**qwid pro quo** **ḥṁ** **ṁṁ** ‘*loc something in exchange for something*’) although not written with ‘ü’.

Diphthongs, triphthongs, and hiati are simply written as individual *tehtar*, by placing first one over preceding consonant or carrier, and the other(s) over additional carrier(s). In Spanish, combination of vowels can produce ascending diphthongs (**dial** **ṁṁ** ‘*nm dial*’), descending diphthongs (**aire** **ṁṁ** ‘*nm air*’), neutral diphthongs (**huir** **ṁṁ** ‘*v to escape*’), ascending hiati (**dIa** **ṁṁ** ‘*nm day*’), descending hiati (**maIz** **ḥṁ** ‘*nm maize*’), neutral hiati (**caer** **ḥṁ** ‘*v to fall*’), and triphthongs (**buey** **ṁṁ** ‘*nm ox*’).

2.2 Consonants

The following consonants are available:

t	p	p	p	C, ch	q	qu(a), c(b), q(c), k	q
d	ṁ	b, v	ṁ			gu(a), g(b), G	ḡ
c(a), z	ḥ	f	ḥ			g(a), j	ḡ
		V	ḥ	y(d), Y	ḡ		
n	ṁ	m	ṁ	N	ḡ		
		W	ṁ				
r(f), R	ṁ	r(e), rr(f), RR	ṁ	l	ḡ	L, ll	ḡ
x(g), s	ḡ					x(h), X	ḡ
h	ḡ						

taking into account next conditions: (a) before e, E, i, or I; (b) the opposite to (a); (c) not before ue, uE, ui, or uI, which means that q(c) is the opposite to qu(a); (d) before vowel (otherwise, y represents a vowel); (e) in initial position, or after a consonant belonging to another syllabe; (f) the opposite to (e); (g) in initial position; and (h) the opposite to (g).

Double consonants are written in three different ways: (a) ll (52% of ‘double’ cases in Spanish) represents the voiced palatal lateral approximant and is written as *alda*, **rr** (47% of ‘double’ cases) represents the voiced alveolar trill and is written as *arda* (**parrilla** **ṁṁ** ‘*nf grille*’), (b) nn (1.2% of ‘doubles’) and mm (0.08%) are respectively written as *númen* and *malta* with an overbar or overtilde *tehta* (**perenne** **ṁṁ** ‘*adj perennial*’), and (c) all the other double consonants (0.17%) are written with two identical *tengwar* (**pizza** **ṁṁ** ‘*nf pizza*’).

c yields *quesse* or *thúle* depending on context (**flaccidez** **ḥṁṁṁ** ‘*nf flaccidity*’).

C, G, L,

R, RR, Y yield *tengwar* independently of context with the minimum keystrokes. They were also the first consonants developed for Spanish mode and later improved for easier typewriting (**leCuGiLa** - **lechuguilla** **ḡṁṁ** - **ḡṁṁ** ‘*nf frill*’, **paRaRRaYos** - **pararrayos** **ṁṁṁ** - **ṁṁṁ** ‘*nm lightning conductor*’). In previous versions of the Spanish mode, j, k and z had to be used to obtain proper *tengwar* by misspelling Spanish words, but it was fixed later (**zinejEtika** - **cinegEtika** **ḥṁṁṁ** - **ḥṁṁṁ** ‘*nf hunting*’).

g yields *ungwe* or *hwesta* depending on context, and the mute ‘u’ is never written (**gas** **ḡ** ‘*nm gas*’, **gen** **ḡ** ‘*nm gene*’, **agua** **ḡṁ** ‘*nf water*’, **guiNo** **ḡṁ** ‘*nm wink*’, **pingwe** **ṁṁ** ‘*adj copious*’).

m is written as an overbar or overtilde *tehta* when preceding a bilabial plosive (**campo** **ṁṁ** ‘*nm field*’, **bomba** **ṁṁ** ‘*nf bomb*’) as established by the Lambenor group, or the bilabial nasal

(gamma ᐃᐃᐃ ‘*nf* gamma’). If *m* is not wanted to be written as a *tehta*, then a pair of braces should be used (gam{ }ba ᐃᐃᐃᐃ ‘*nf* prawn’).

n is written as an overbar or overtilde *tehta* when preceding a dental or velar plosive (ante ᐃᐃ ‘*nm* elk’, onda ᐃᐃ ‘*nf* wave’, anca ᐃᐃ ‘*nf* haunch’, manga ᐃᐃ ‘*nf* sleeve’) as established by the Lambenor group; and also, when preceding all other consonants except bilabials (ancho ᐃᐃ ‘*adj-m* wide’,... lanza ᐃᐃ ‘*nf* lance’). Also, if *n* is not wanted to be written as a *tehta*, then a pair of braces should be used (an{ }helo ᐃᐃᐃᐃ ‘*nm* eagerness’).

N yields *ngoldo* always. It is used for the Spanish ‘ñ’, which is not an ASCII character (NoNo ᐃᐃᐃ ‘*adj-m* characterless’).

q yields *quesse* by never writting the mute ‘u’ (que ᐃ ‘*rel pron, conj* that’, qatar ᐃᐃᐃ ‘*nm* Qatar’, quark ᐃᐃᐃ ‘*nm* quark’, in utroqwe iure ᐃᐃ ᐃᐃᐃᐃ ᐃᐃ ‘*loc* in both [civil and canon] laws’).

r yields *rómen* or *arda* depending on context. The first is obtained after a vowel, *b*, *c*, *d*, *f*, *g*, *k*, *p*, or *t* (entreabrir ᐃᐃᐃᐃᐃᐃ ‘*v* to half-open’, procrear ᐃᐃᐃᐃᐃᐃ ‘*v* to procreate’, hidrografia ᐃᐃᐃᐃᐃᐃᐃ ‘*nf* hydrography’, fritura ᐃᐃᐃᐃ ‘*nf* fry’). The later, in other cases, such as in initial position or after the other consonants (ronroneo ᐃᐃᐃᐃ ‘*nm* purr’), but also it should be obtained manually (by using a pair of braces) after the prefixes *ab*, *sub* or *post* (sub{ }rayado ᐃᐃᐃᐃᐃᐃ ‘*adj-m* underlined’).

rr yields *arda* when the first *r* should yield *rómen* (perro ᐃᐃ ‘*nm* dog’ vs. pero ᐃᐃ ‘*conj* but’). In Spanish, *rr* only occurs between vowels, but it is possible to write unexisting words such as ***rrecrrearr* ᐃᐃᐃᐃᐃᐃ ‘*v* to ***rrecrreate*’.

V yields *ampa* for those who want to represent ‘b’ and ‘v’ with different *tengwar* (bacIa ᐃᐃᐃᐃ ‘*nf* basin’ vs. vacIa - VacIa ᐃᐃᐃᐃ - ᐃᐃᐃᐃ ‘*adj-f* empty’), although it is not advisable since (1) *ampa* should be used for the voiced labio-dental fricative consonant (e.g., the English ‘v’), which does not exist in Spanish (Vicky ᐃᐃᐃᐃ ‘*nf* Vicky’); (2) ‘b’/‘v’ is not the only pair of letters that produce homophony without homography (e.g. encima ᐃᐃᐃ ‘*adv* above’ vs. enzima ᐃᐃᐃ ‘*nf* enzyme’), and additional *tengwar* have not been proposed for these cases, so why ‘b’/‘v’ should be different?

W yields *vala* for those who want to represent the voiced labial-velar approximant consonant (e.g., the English ‘w’), which does not exist in Spanish (niW WeiV ᐃᐃᐃ ᐃᐃᐃ ‘*loc* new wave’). In fact, the ‘w’ in Spanish words should be obtained with *b* for words of Visigothic or German origin (bamba ᐃᐃᐃ ‘*nm* Wamba’, bagneriano ᐃᐃᐃᐃᐃᐃᐃ ‘*adj-m* Wagnerian’), and with *u* or *w* for words of English origin (ueb - web ᐃᐃᐃ - ᐃᐃᐃ ‘*nf* web’).

x yields *silme* when word-initial (xenOn ᐃᐃᐃᐃ ‘*nm* xenon’), but *quesse-silme* otherwise (sexo ᐃᐃᐃ ‘*nm* sex’) just like *cs* (fucsia ᐃᐃᐃᐃ ‘*nf* fuchsia’).

X yields *quesse-silme* always. It may be used for some words with an initial ‘x’ that are wanted to be distinguished from similar existing words with an initial ‘s’ (solo ᐃᐃᐃ ‘*adj-m* alone’ vs. xolo - Xolo ᐃᐃᐃ - ᐃᐃᐃ ‘*nm* turkey, in Mexico’).

y yields *anca* or ‘’ depending on context (yErsey ᐃᐃᐃᐃᐃ ‘*nm* jersey’).

When *silme* bear a *tehta* for a following vowel, or a previous *n*, its *nuquerna* shape is automatically substituted (sensatos ᐃᐃᐃᐃ ‘*adj-mpl* sensible’).

2.3 An illustration

Inscription on the STE membership cards

ᐃᐃᐃᐃᐃᐃ ᐃᐃᐃᐃᐃ ᐃᐃᐃᐃᐃ