Tengwar Telcontar

This document discusses the encoding of Tengwar Telcontar version 0.08. The latest version of the font and this document can be downloaded from the Free Tengwar Font Project: http://freetengwar.sourceforge.net/.

Changes from earlier proposals

By creating a fully functional Unicode font for Tengwar, my intention is to promote the proposal to encode Tengwar in Unicode, and to spur the discussion on the best way to design such an encoding. What then constitutes the best way to encode Tengwar? This I can hardly decide on my own; indeed, it is of the highest importance that an encoding proposal is approved by a majority of the Tengwar user community. You are therefore cordially invited to discuss and to propose changes to Tengwar Telcontar.

If you want to familiarize yourself with the Unicode standard in general, you can find much information at http://www.unicode.org/. In particular, I recommend that you read chapter 2 of *The Unicode Standard*, which defines many important concepts (e. g. terms like *character*, *glyph*, etc.): http://www.unicode.org/versions/Unicode5.2.0/ch02.pdf.

The current encoding of the characters in Tengwar Telcontar (shown in a table at the end of this document) is based on the encoding in Michael Everson's latest discussion paper at the Conscript Unicode Registry: http://www.evertype.com/standards/iso10646/pdf/tengwar.pdf. However, I have on more than one occasion diverged from Everson's table, adding some characters that I felt were missing and removed others that, to my opinion, either do not merit inclusion at all, or which possibly might be better represented in other ways. These changes may not be uncontroversial, and I hope to get feedback on them.

Johan Winge, December 2009.

Character 30, "reversed osse": 5

This character is attested in the recently published *Parma Eldalamberon 18*, in the document that has been included in the *Mellonath Daeron index of Tengwa Specimina* as DTS 78.

Character 35, "anna sindarinwa"

There exists no reason for regarding this character as anything else than a decorative glyph variant of the tengwa anna, α , and I have thus removed it.

Character 37: 9

This character was not included in previous versions of Tengwar Telcontar due to a mistaken presumption that it was nothing else than a glyph variant of quesse, \mathbf{q} . That, however, is not the case: in his title-page decorations for *The Shaping of Middle-earth* and *The Lost Road and Other Writings*, Christopher Tolkien uses \mathbf{q} to represent $/\mathrm{k}^\mathrm{w}/$, in *contrast* with \mathbf{q} , which there stands

for /k/. With the publication of *Parma Eldalamberon 16*, we now know that this was not merely an innovation by Christopher, but that the same character, with the same designation, existed in the pre-Fëanorian alphabets. Hence, it should surely be encoded, and for now I have used the code point assigned by Everson. In an official encoding, it should instead be moved together with the rest of the pre-Fëanorian characters.

Character 38, "reversed formen"

This character, because of its shape called "reversed formen" by Everson, is used by Christopher Tolkien in the title-page decoration for The Silmarillion to represent the /m/ in "when" and "which". But in the subsequent publications *Unfinished Tales* and *The History of Middle-earth* series, he instead uses the more customary hwesta sindarinwa in these words, and for this reason I am mostly inclined to regard this character as a glyph variant of d.

Character 3B, "Beleriandic mh": ¤

Used in the mode of Beleriand, this tengwa is to \mathbf{p} what \mathbf{p} is to \mathbf{p} . It is attested in DTS 31, and if \mathbf{p} is included, then surely \mathbf{p} should be encoded as well.

Character 3C, "Lowdham's wh": >

This character, representing /m/, is attested in DTS 50 and 51, but has not been included in earlier encoding proposals, evidently because it was believed to be a ligature. If this is the case, the first part would in all likelihood be a halla, l, considering both the shape and the use of halla to show devoicing in early Quenya.

But what about the second part? In his analysis of these texts, Christopher Tolkien twice reproduces this sign in a way that peculiarly differs somewhat from those written by his father; for Christopher's signs have a disconnection at the bottom, a distinction that was adopted by Daniel Smith in his fonts, e. g. in Tengwar Sindarin where it appears as p. Because of this, this sign has been associated with the tengwa p from DTS 18 (as proposed, for example, in TolkLang message 29.85.) However, p is used for p in DTS 50 and 51, not p and p in the striking graphical similarity between p and p in the closer represents how Tolkien actually wrote it, point unambiguously to an origin in p. If it is, indeed, a ligature, it is then constructed of p and p.

Lowdham's manuscripts contain several combined characters, viz. c, d, and c. These signs I have encoded as ligatures, created with the Zero Width Joiner, i. e. as c, d, and c. These and c. However, I am reluctant to do this when it comes to d, primarily because d is never found in isolation in these texts. We would expect to find it used to help represent f in "hréow", but instead this word is spelled with hyarmen: f For this reason I am rather inclined to regard f as a unique character, which would have been derived from rómen by the process of lengthening of the stem. (It is possible that we have a direct parallel to this in vaiya and hwesta sindarinwa: f is related to f in the same way, graphically as well as phonetically, that f is related to f.)

Character 3D, vaiya: o

We have, as of yet, only one example of this tengwa, in VT 46 (DTS 65). Arden R. Smith calls it "a previously unpublished variant of \mathbf{p} ".

Character 47: 9

This tehta, the below-the-tengwa counterpart to $\acute{\circ}$, is attested in DTS 51 (twice in line 5 and once in line 10).

Characters 48, 4E and 4F: % %

These doubled tehtar are indeed doubled, not only graphically but also semantically. As such, two on each other following single tehtar, i. e. $\acute{\circ}$, $\acute{\circ}$ and $\acute{\circ}$, respectively, convey exactly the same thing, namely a doubled (or longer) variant of the corresponding single tehta. In other words, if the doubled tehtar should be encoded, they should have canonical decompositions into $\acute{\circ}$ etc. (Note that this argument does not apply to $\ddot{\circ}$ and $\ddot{\circ}$, as they are typically not used as mere combinations of the corresponding single dots, but as tehtar on their own. On the comparably rare occasions when a double over dot is used to indicate a long variant of the single over dot, as in $\ddot{\circ}$ ("síla") in DTS 62, the sequence $\dot{\circ}$ should properly be used instead.)

Of course, these pre-compiled characters would be useful in those cases where smart rendering is not available. In such circumstances, rudimentary placement of tehtar can be achieved if the tehtar are designed as characters of zero width, with the actual glyphs displaced to the left. This is exactly the the technique employed in Dan Smith's fonts, with the exception that we would be limited to only one such glyph. In that case, two following single tehtar would completely overlap, and be indistinguishable from a single tehta.

However, since Tengwar Telcontar in its current version is not designed to be usable at all without smart rendering anyway, I have no use for them. So, even though I would by no means object if they were encoded in Unicode, I have left them out for the time being.

Judging from its location in the encoding chart, this character ought to represent the same thing as 9, and, by the reasoning above, would then not be necessary in Tengwar Telcontar. However, Tolkien's usage of 9 is, I dare say, completely unrelated to 9. (The later is simply the vowel 9, but placed below the tengwa; 9, on the other hand, is used as a consonant doubler in DTS 50 and 51, and a similar mark is used in DTS 71 for what I presume to be some kind of indication of capitalization.) To accentuate this, I have given the rendered result of 9, a slightly different appearance from 9, namely 9.

Characters 57: ,

This character originated in the encoding proposal as representing the tehta in DTS 51 which is used to indicate that the vowel above the tengwa is long. Christopher supports the obvious analysis, namely that this is essentially the tail of a long carrier that is superimposed on the tengwa. Now, in DTS 10 a similar tehta occurs, although more curved, particularly at the top; it is used in the combination $\mathfrak F$ to represent the "ch" in "Christmas" in the full mode. (In the tehta mode, this word is spelled with $\mathfrak F$.) Also, we find the sign called thinnas in DTS 65, the

purpose of which is said to indicate that a vowel is *short*, and which looks not dissimilar to the sign in DTS 10 (although its exact intended shape is difficult to discern.)

In other words, this character has been rather overloaded. But it should be remembered that DTS 51 abounds with ligatures, and I see no reason why the long carrier tehta should be treated differently from them. That is, I propose that it should be written with the Zero Width Joiner together with the long carrier: for example, is to be written as the character can be restricted to the signs in DTS 10 and 65, and its shape can be made more rounded, to better represent Tolkien's writing.

Character 58 and 59, s-hooks: \sim

The s-hook comes in many different shapes: it can be a simple hook, either pointing upwards or downwards, or it can loop and cross itself, etc. Most of these variations are not semantically significant, and they should not be encoded as separate characters. However, I believe there is one notable exception, namely the small hook descending counterclockwise which is seen on tinco in DTS 80 and in numerous places in combination with quesse, \mathfrak{F} , representing the Latin letter "x". The more common hook, \mathfrak{T} , is only used at the end of words, while \mathfrak{F} can be used in any position. That it is not merely the case that \mathfrak{F} is a variant of \mathfrak{T} that is used inside of words is demonstrated by the fact that \mathfrak{F} also occurs at the end of words, as in DTS 50: \mathfrak{F} ("wéox"). Nor is it the case that \mathfrak{F} is the shape which \mathfrak{T} automatically takes when applied to \mathfrak{F} , for we find, e. g., \mathfrak{F} if \mathfrak{F} ("peacock's") in both DTS 17 and DTS 18.

In the first official proposal both s-hooks were encoded, but in the discussion paper another solution was proposed, namely to treat a following s-hook as a ligature with \mathcal{L} . An objection to this approach is that, for one, it doesn't provide a means to differ between the two hooks, and secondly, the hook is used also for voiced /z/, which would otherwise be written with \mathcal{L} . For these reasons I prefer to follow the example of the original proposal, and encode both s-hooks as separate characters.

Character 5A, dot inside: ⊙

This character is to be used to write both the vilya with stroke inside, \mathbf{z} , as seen in DTS 71, and the dot inside osse, \mathbf{c} , which is attested in DTS 78. Seeing that both \mathbf{c} and \mathbf{z} are used in their respective documents to represent a closer vowel sound, $/\mathbf{z}$, compared to the unmarked tengwar, $/\mathbf{a}$, it seems very reasonable to unify this dot/stroke in one combining character.

It is not known whether the varying glyph shape simply is a question of writing style, or if it depends on the tengwa that the character is attached to. I have chosen the later approach for Tengwar Telcontar: in tengwar with a straight horizontal bar, it takes the shape of a short

stroke that is attached to the bar: \mathbf{w} , \mathbf{v} ; if there is no such bar, it will look like a simple dot: \mathbf{v} , \mathbf{e} , \mathbf{e} . (In the case of tengwar with two lúvar, the behaviour is undefined.) This choice was very much influenced by the forms of signs seen in the pre-Fëanorian alphabets, specifically PF7, in which a stroke inside a rounded letter is explicitly used as a variant of a dot, and PF13, where this stroke in one instance is used in exactly the same way as in DTS 71 and 78, i. e. to denote a closing from /a/to/æ/.

Characters 60–64, dot punctuations

Michael Everson has indicated that he doubts that these characters would be accepted by the Unicode consortium, since the following characters already exist in the standard, and hence should be used instead:

- U+2E31: WORD SEPARATOR MIDDLE DOT (\cdot)
- U+003A: COLON (:)
- U+205D: TRICOLON (:)
- U+2058: FOUR DOT PUNCTUATION (↔)
- U+2E2D: FIVE DOT MARK (↔)

However, for now I have retained the old characters, for the sake of backward compatibility.

Characters 6A and 6B: "

These are the signs used in DTS 51 to enclose Adunaic words, and which in the authorial transcription to the Latin alphabet are represented by round brackets – even though the words they surround are hardly parenthetical. Christopher Tolkien simply refers to them as "marks of citation"; however, their usage is atypical of quotation marks in any modern language, nor did such marks exist in medieval manuscripts. Instead, Benct Philip Jonsson has proposed that these signs are more related to the tengwar parenthesis, J, and that their primary role in this document is to indicate that the text they enclose is written in a different mode. All in all, it seems that the modern quotation marks "and " are unsuitable to represent these characters.

Character 6C: ^

This character is found in DTS 71, where it is evidently used as an exclamation mark.

Characters 70–7D, the numerals

The numerals are complicated for several reasons: they seem to have been far less stable than the regular tengwar, and the morphology of the few signs we do have is often non-trivial to analyse, which makes me reluctant to design glyphs. For the time being, I have borrowed them from J. "Mach" Wust's FreeMonoTengwar font.

Encoding of Tengwar Telcontar

	E00x	E01x	E02x	E03x	E04x	E05x	E06x	E07x
0	p	133	y	3	៉	ि	٠	C
1	p	m	Ą	2	়	ା	•	Ţ
2	q	ccı	7	c	៉េ	្វា	•	T
3	9	स्त	S		ः	ř	*	₩.
4	ညာ	າວ	b	L	·	<i>></i> ○	*	[
5	pp	р	9		•	ै	\$	t
6	ccj	а	દ	u	৲	៉	F	ſĽ
7	ष्व	น	3	9	्र	়	J	J
8	b	þ	λ			ה	~	Д
9	Ь	þ	d	2)	ृ	≈	ш
A	d	વ	λ	று	ි	•	11	5
В	ਰ	घ	0	В	্		11	B
С	က	ြာာ	1	þ	ૈ		٨	9
D	Ь	ြာ	1	Q	ु			ं
E	ccl	cc]	1					
F	ਜ਼ੀ	ष्ट्री						

Dark grey denotes code points that are not used. Light grey are code points which could potentially be used, or characters which could be removed; see the discussion for the respective code point.