Characteristics of Tengwar Elfica

The Encoding

Additionally to the information given in section 1 the basic notions regarding the character encoding will be given now in order to understand the characteristics of Elfica.

When a text is introduced in the computer, a conversion operation should exist from characters to codes, so that the computer can understand what we have entered. This means that a text in the computer is a collection of codes which are integer numbers.

A Character Encoding Standard (CES) is a list of definitions of correspondence between characters and codes used to represent characters in the computer. Many standards exist according to the different languages. Differences also exist in the size of the code: one byte encodings, double byte encodings and multiple byte encodings. A one byte CES only uses 8 bits to represent a character, so that there are only 256 characters available. The MS Windows operating systems many places are reserved for control functions, so that in fact only 215 characters are available, like in the first versions of Elfica. A double byte CES uses 16 bits for each character therefore 65536 characters can be mapped. A well-known example of this type is Unicode. In the current version of Tengwar Elfica Unicode has been used keeping the keyboard layout of previous versions, which was originally defined by Daniel Smith. To access the additional characters the usual ALT 0nnn method can be used, where nnn is an integer that now can be greater than 256. This are good news, we have more space!, really much more than the one that we could use.

Tengwar Elfica Font

Tengwar Elfica 3.2 has the following characteristics:

Format: True Type. The use of other formats is not planned.

Encoding: Unicode.
　　MS Windows: MS Windows 1252 Latin 1 encoding
　　Non-Unicode applications on McIntosh: MC OS Roman encoding (Mc compatibility!!)
　　Unicode applications on McIntosh: MS Windows 1252 Latin 1 encoding

Keyboard layout for the US international keyboard: keyboard layout defined by Daniel Smith.

Basic characters: 215 characters that are the same used in the fonts Quenya, Sindarin and Noldor by Daniel Smith. These characters were the only ones available in the versions previous of Tengwar Elfica.

Additional characters: characters that have been added to the collection of basic characters, which has been possible by the use of Unicode. Among these characters are the characters belonging to Tengwar Elfica A font, which is no longer available.

List of characters:
The first 256 places of the font contain the following characters:

1. 65 Tengwar characters, including the 36 characters in the table of Appendix E along with the alternative characters, carriers and characters for Anglo-Saxon, Sindarín and Black Speech modes.
2. 14 modern punctuation and system characters.
3. 10 elfish punctuation characters.
4. 12 characters for the elfish numerals.
5. 117 Tehtar characters, having 4 variants each, besides tildes, bars, curls, base 12 identifiers, etc.
6. 38 non available places, reserved for control functions, as in all fonts under MS Windows. Originally they were 41 and in the last version 3 places have been recovered.

There also exist 62 additional characters in Elfica 3.2 version. For further details, see the character tables.

The Tehtar characters

Tehtar characters in Quenya and Sindarin (Tengwar/Tehtar mode) are used to represent the vowels, which don't have own Tengwar characters. According to the language the vowel is represented placing the corresponding Tehta together with the previous Tengwa (Quenya) or together with the following Tengwa (Sindarín).
In Tengwar Elfica font, as well as in all the other Tengwar fonts, the Tehta is an independent glyph that should be written immediately after the Tengwa that is supposed to be its carrier (that is to say, the Tengwa that will have the Tehta attached). This could seem a little strange, because in the case of Latin fonts the procedure is not like that; rather, the combined character appears after entering a key combination (because it is a single glyph, like á, for example). In the case of Tengwar fonts, the Tengwa is entered first and then the Tehta.
Since
o   the Tehtar can be placed above or below the Tengwa
o   there exist 5 basic vowels having several alternatives of style for some of them
o   there exist 4 variants of each Tehta to make possible the correct placing of the Tehta above or below Tengwar having different widths.
there are many different Tengwa-Tehta variants and the quantity of independent glyphs that would be necessary to account for all possible combinations would be very large.
For this reason the decision was to generate glyphs for the Tengwar on one hand and for the Tehtar on the other hand, combining them when entering the text. The quantity of necessary glyphs in this last case is minimal if it is compared with the number of Tengwa-Tehta combinations that should be generated if the conventional method of having a single glyph containing the character and the accent is adopted.

History

When Tengwar Elfica's first version was published, it had several problems of compatibility between glyphs, which were not possible to solve without creating new glyphs variants. Since the font used an encoding that allowed the inclusion of only 215 glyphs (many places are used for control characters), it was not possible to solve the problems using a single font. Therefore an auxiliary font was created in order to solve the known problems of the main font and also to give more decorative alternatives to the text. These additional glyphs, which are still necessary, and many more, have been included in the same font by the use of Unicode.