Abyssinica SIL Features

The Ethiopic script does not require much rendering except for some combining marks for gemination and vowel length. Abyssinica SIL provides both OpenType and Graphite rendering solutions for rendering the combining marks and for kerning as well as for the special glyph variations that can occur for the Ethiopic script.

Features

When Abyssinica SIL is used in applications that support Graphite or OpenType, and that provide an appropriate user interface, various user-controllable font features are available allowing access to alternatively-designed glyphs.

The table below gives a visual representation of the featured character glyphs in the font. The shaded lines show the default character(s). The other lines show the first alternate and, if available, the second alternate.

## List of Graphite features and OpenType Character Variants

Feature Name	Feature setting	Feature IDs	Character shapes
Punctuation	Ethiopic-style		! $ % * + / 0 1 2 3 4 5 6 7 8 9 = ? ¡ © « ² ³ ¹ » × ' ' " " ‹ › 0 4 5 6 7 8 9 €
	Latin-style	cv01=1	! $ % * + / 0 1 2 3 4 5 6 7 8 9 = ? ¡ © « ² ³ ¹ » × ' ' " " ‹ › 0 4 5 6 7 8 9 €
mwa alternates (U+121F)	Standard		ሟ
	Alternate-1	cv04=1	ሟ [1]
	Alternate-2	cv04=2	ሟ [2]
rwa alternate (U+122F)	Standard		ሯ
	Alternate	cv05=1	ሯ [2]
xoa alternate (U+1287)	Standard		ሧ
	Alternate	cv17=1	ሧ
xwa alternates (U+1288..U+128D)	Standard		ኈ ኊ ኋ ኌ ኍ
	Handwriting	cv18=1	ኈ ኊ ኋ ኌ ኍ
nwa alternate (U+1297)	Standard		ኗ
	Alternate	cv19=1	ኗ [1]
nya alternates (U+1298..U+129E)	Standard		ኘ ኙ ኚ ኛ ኜ ኝ ኞ
	Disconnected	cv20=1	ኘ ኙ ኚ ኛ ኜ ኝ ኞ [3]
nywa alternates (U+129F)	Standard		ኟ
	Disconnected	cv21=1	ኟ [3]
	Cohen	cv21=2	ኟ [2]
kxwaa alternate (U+12C3)	Standard		ኃ
	Alternate	cv26=1	ኃ [2]
zha alternates (U+12E0..U+12E6)	Standard		ዠ ዡ ዢ ዣ ዤ ዥ ዦ
	Cohen	cv31=1	ዠ ዡ ዢ ዣ ዤ ዥ ዦ [4]
	Chaine	cv31=2	ዠ ዡ ዢ ዣ ዤ ዥ ዦ [5]
dda alternates (U+12F8..U+12FE)	Standard		ዸ ዹ ዺ ዻ ዼ ዽ ዾ
	Alternate	cv32=1	ዸ ዹ ዺ ዻ ዼ ዽ ዾ [6]

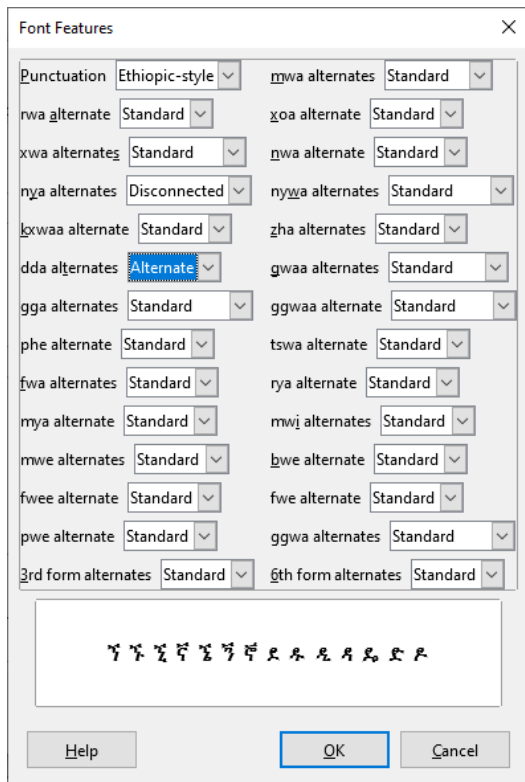| Feature Name	Feature setting	Feature IDs	Character shapes
gwaa alternates (U+1313)	Standard		ጓ
	Sebat Bet	cv40=1	ጓ[7]
	Alone Stokes	cv40=2	ጒ[8]
gga alternates (U+1318..U+131E)	Standard		ጘ ጙ ጚ ጛ ጜ ጝ ጞ
	Disconnected	cv41=1	ጘ ጙ ጚ ጛ ጜ ጝ ጞ[9]
ggwaa alternate (U+131F)	Standard		ጟ
	Disconnected	cv42=1	ጟ[9]
phe alternate (U+1335)	Standard		ጵ
	Alternate	cv45=1	ጵ[10]
tswa alternate (U+133F)	Standard		ጿ
	Alternate	cv46=1	ጿ
fwa alternates (U+134F)	Standard		ፏ
	Cohen-1	cv48=1	ፏ[1]
	Cohen-2	cv48=2	ፏ[1]
rya alternate (U+1358)	Standard		ፘ
	Alternate	cv49=1	ፘ[2]
mya alternate (U+1359)	Standard		ፙ
	Alternate	cv50=1	ፙ[2]
mwi alternates (U+1381)	Standard		᎙
	Sebat Bet	cv60=1	᎙[7]
	Leslau	cv60=2	᎙[11]
mwe alternates (U+1383)	Standard		᎛
	Sebat Bet	cv61=1	᎛[7]
	Leslau	cv61=2	᎛[11]
bwe alternate (U+1387)	Standard		᎟
	Alternate	cv62=1	᎟[11]
fwee alternate (U+138A)	Standard		Ꭲ
	Alternate	cv63=1	Ꭲ[11]
fwe alternate (U+138B)	Standard		Ꭳ
	Alternate	cv64=1	Ꭳ[11]
pwe alternate (U+138F)	Standard		Ꭷ
	Alternate	cv65=1	Ꭷ[11]
ggwa alternates (U+2D93..U+2D96)	Standard		ⶓ ⶔ ⶕ ⶖ
	Disconnected	cv70=1	ⶓ ⶔ ⶕ ⶖ[9]
3rd form alternates	Standard		ቊ ኲ ኊ ጒ ቊ ጚ
(U+124A U+12B2 U+12C2 U+1312 U+1385 U+138D)	Alternate	cv80=1	ቊ ኲ ኊ ጒ ቊ ጚ[7]
6th form alternates	Standard		ቍ ኵ ኍ ጕ
(U+124D U+12B5 U+12C5 U+1315)	Alternate	cv85=1	ቍ ኵ ኍ ጕ[7]

Use of Features/Character Variants

LibreOffice

In LibreOffice 3.4+[1] the font features can be turned on by choosing the font (ie Abyssinica SIL), followed by a colon, followed by the feature ID, and then followed by the feature setting. So, for example, if the "dda alternates" are desired, the font selection would be "**Abyssinica SIL:cv32=1**". If you wish to apply two (or more) features, you can separate them with an "&". Thus, "**Abyssinica SIL:cv32=1&cv20=1**" would apply "dda alternates" plus the "nya alternates" feature.
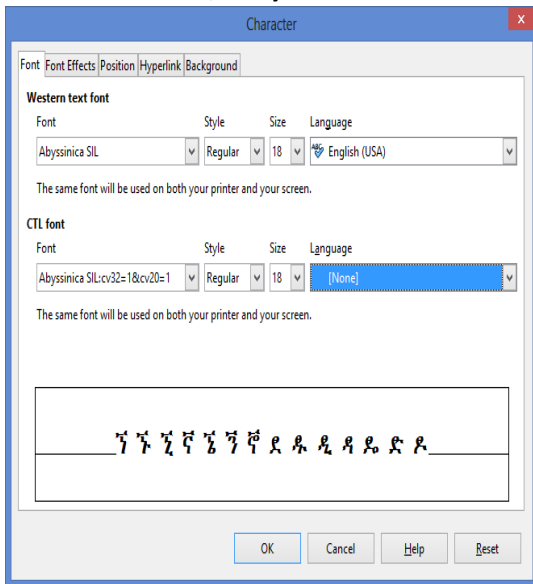
Newer versions of LibreOffice have a user interface which allows selection of the Font Features. Select your text (or style) and go to **Format / Character**. Choose the Abyssinica SIL font and click on **Features**. Then select the features you wish to select.

1Download here: http://www.libreoffice.org/download.

XeTeX

For XeTeX[2], Feature IDs are not used. Use the **Feature Name** and **Feature setting**, e.g., if Character Variant 32 was desired, the font selection would be: "Abyssinica SIL/GR:dda alternates=Alternate" at 12pt

OpenType Character Variants

Currently there are very few applications which support OpenType Character Variants.

For applications which do support OpenType Character Variants, such as in CSS, the Character Variant ID and setting is chosen. For example, in CSS, if cv32, is desired, you might have this code in your .css:

```
...
@font-face {
  font-family: AbyssinicaSIL;
  src: url(AbyssinicaSIL-Regular.woff);
}
.cv320 {
  font-family: AbyssinicaSIL;
  -font-feature-settings: "cv32" 0; font-size: 200%;
}
.cv321 {
  font-family: AbyssinicaSIL;
  -font-feature-settings: "cv32" 1; font-size: 200%;
}
...
```

and this in your .html:

```
<p class=cv320> ዲ ዱ ዲ ዳ ዴ ድ ዶ</cv320> [cv32=0]</p>

<p class=cv321> ዲ ዱ ዲ ዳ ዴ ድ ዶ</cv321> [cv32=1]</p>
```

Which would produce this:

ዲ ዱ ዲ ዳ ዴ ድ ዶ [cv32=0]

ዲ ዱ ዲ ዳ ዴ ድ ዶ [cv32=1]

Language features

If an application allows you to select either the Gumuz or Sebat Bet language, the default glyphs will change based on Sebat Bet or Gumuz preferences.

It is also possible to choose the language through the font menu in LibreOffice:

Gumuz: ኝ ኙ ኚ ኛ ኜ ኝ ኞ ኟ (Abyssinica SIL:lang=guk)
Sebat Bet: ጓ ሟ ቿ ኲ ኵ ጒ ቢ ቿ ቄ ኰ ኹ ጕ (Abyssinica SIL:lang=sgw)

2http://tug.org/xetex/

TypeTuner

At this point, most applications do not make use of these features (neither Graphite or OpenType Character Variants nor language features) so another solution is needed to use the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. The TypeTuner Web site is http://scripts.sil.org/ttw/fonts2go.cgi.

References

Alone, John Philip Herbert Mackenzie. 1946 (Fourth edition). *The Alone-Stokes Short Manual of the Amharic Language (with vocabularies).* Macmillan and Co. Limited: London.

Chaîne, Marius. 1907. *Grammaire éthiopienne. Imprimerie catholique*. Beyrouth.

Cohen, Marcel. 1970 Seconde edition. *Traité de langue amharique (Abyssinie)*. Institut d'ethnologie: Paris.

Leslau, Wolf. 1966. *Ethiopians Speak: Studies in Cultural Background. Part 2: Chaha.* University of California Publication. Near Eastern Studies, Volume 9. University of California Press: Berkeley

Praetorius, Franz. 1955. *Aethiopische Grammatik mit Paradigmen, Litteratur, Chrestomathie und Glossar*. Frederick Ungar Publishing Co. New York.

1Chaîne (p 3), Cohen (table 2)
2Cohen (table 2)
3Gumuz language preference
4Alone-Stokes, Chaîne (p 3), Cohen (table 1)
5Chaîne (p 3)
6Archaic Oromo language preference
7Sebat Bet language preference
8Alone-Stokes (inside back cover)
9Bilen language preference
10Praetorius (p 6)
11Leslau