# Scheherazade New / Harmattan / Lateef - Font Feature comparison

Scheherazade New, Harmattan and Lateef are OpenType-enabled font families that support the Arabic script. They include a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The sections below enumerate the details of these features. Some of the features have different default settings or the feature may only be implemented in one or two of the fonts. Whether these features are available to users will depend on both the application and the rendering technology being used. Some applications let the user control certain features such as Character Variants to turn on the rendering of variant characters. However, at this point, most applications do not make use of those features so another solution is needed to show the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. TypeTuner also provides the ability to turn on support for the Kurdish, Kyrgyz, Rohingya, Sindhi, Urdu, and Wolof language variants.

See Using Font Features. Although that page is not targeted at Arabic script support, it does provide a comprehensive list of applications that make full use of the OpenType font technology.

See also Arabic Fonts — Application Support. It provides a fairly comprehensive list of applications that make full use of the OpenType font technology.

This page uses web fonts (WOFF) to demonstrate font features and should display correctly in all modern browsers.

If this document is not displaying correctly a PDF version is also provided in the documentation/pdf folder of the release package.

# End of Ayah (U+06DD), Disputed End of Ayah (U+08E2), and subtending marks (U+0600..U+0605, U+0890..U+0891)

These Arabic characters are intended to enclose or hold one or more digits.

Specific technical details of how to use them are discussed in the Arabic fonts FAQ -- Subtending marks.

Additionally, all three fonts include two simplified alternates for U+06DD ARABIC END OF AYAH under the Stylistic Alternates (salt) feature, but at this time we know of no OpenType-based applications that can access these. The two alternates are also available through the Character Variants feature discussed below.

# **Customizing with TypeTuner**

For applications that do not make use of the OpenType Character Variants, you can now download fonts customized with the variant glyphs you choose. Read this document, visit TypeTuner Web, then choose the variants and download your font.

#### Language

Unfortunately, the UI needed to access the language-specific behavior is not yet present in many applications. LibreOffice and Microsoft Word 2016 support language-specific behavior for Kurdish, Sindhi and Urdu (but not Kyrgyz, Rohingya or Wolof). Some Harfbuzz-based apps, e.g., XeTeX, can access language-specific behavior.

#### **Kurdish (Northern)**

Affects: U+06BE

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	ههه	අදන න	ه ههه	
Kurdish (Northern)	ه ههم	නිදින න	ه ههھ	lang='ku'

#### Kyrgyz

Affects: U+0626

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	ئ ئئئ	ئ ئئئ	ئ ئئئ	
Kyrgyz	ئى ئىئى	ئ ئئئ	ئى ئئئى	lang='ky'

#### Rohingya

Affects: U+064C, U+064E, U+0650, U+06F4, U+06F6, U+06F7

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	بٌ ۴ ﴿ ٧	٧۶۴٠٠٠	بٌ بٌ ۲۶۴	
Rohingya	۲ ٤ ٿِ ٿِ	۲٦٤ ٽِ ٿِ	بٌّ بِّ ۲۶	lang='rhg'

#### Sindhi

Affects: U+0645, U+064E, U+0650, U+06F6, U+06F7

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	بٌ م ممم ۷۶	۷۶ ممم ۳	بٌ م ممم ۷۶	
Sindhi	بِّ م ممم ۲ >	بِّ م ممم ٦ ک	بِّ م ممم ۲ ک	lang='sd'

#### Urdu

Affects: U+064E, U+0650, U+06F4, U+06F6, U+06F7

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	بٌ ۲۶۴	۷۶۴ ٿِ	بٌ ۲۶۴	
Urdu	۲ ۳ ۳ ب	۷٦۴ پ	بّ ۲٦۳	lang='ur'

#### Wolof

Affects: U+062F, U+064E, U+0650, U+064F, U+0657

Language	Scheherazade New	Harmattan	Lateef	Feature Setting
Default	د بد بِّ بُ بُ	د بد بِ بِ	د بد بِّ بُ بُ	
Wolof	۵ بد بِّ بُ بُ	<b>ب</b> ب ب ہے	د بد بِّ بُ بُ	lang='wo'

#### **Character variants**

There are some character shape differences in different languages which use the Arabic script. These can be accessed by using OpenType Character Variants, or through the language support mentioned above.

#### Jeem/Hah

Affects: U+062C, U+062D, U+062E, U+0682, U+0683, U+0684, U+0685, U+0686, U+06BF, U+0757, U+0758, U+088A, U+08A2, U+08C1, U+08C5, U+08C6

Feature Scheherazade New Harmattan Lateef Feature setting
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Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	ے حیح ج ججج څ څڅڅ چ چچچ	ج ججج ح ححح خ خخخ ځ ځخځ چ چچچ	تحق ۾ چچ ج ججج ج	cv08=0
Handwritten	N/A	جبج 5 حبح 5   خنخ 5 حلخ 6 حيج   6 جبج 5 حثڅ 6   چپچ 6 چپڼ 5 حتڅ   6 جيچ 6 جبچ 5   جبټ 6 جبڅ 6 جبڅ   جبټ 6 جبچ   6 جبچ   6 جبچ	N/A	cv08=1

**Dal**Affects: U+062F, U+0630, U+0688, U+0689, U+068A, U+068B, U+068C, U+068D, U+068E, U+068F, U+0690, U+06EE, U+0759, U+075A, U+08AE

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	د د ځ ډ ډ ځ د <u>د</u> د د ځ ډ ډ چ	د ذ ڈ ډ ڊ ݙ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ݚ	3 > 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	cv12=0
Alternate	ۮۮڴڿڋڋڐڎ ۮ <b>ٞڐۮٛڋ</b> ۮ۪ڿ	ݚݚݙݙݙݫݚݙݨݙ ݚݙݚ <u>ݷ</u>	N/A	cv12=1

#### Sad/Dad

Affects: U+0635, U+0636, U+069D, U+069E, U+06FB, U+08AF

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	ص صصص ض ضضض ص صصص ش ضضض چپچ چ ض ضضض	ص صصص ض ضضض یص صِصِی ش ششش چپچی چی جی جنجج	ص صصص ض ضضض یں صصیں ش ششش پیچپ پی بن بنبنب	cv20=0
Half	N/A	م مصم خر ضضخ ير صِصِير څر څڅڅر چپچر پر خر ضِضِخر	N/A	cv20=1

#### Meem

Affects: U+0645, U+0765, U+0766, U+08A7

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	م ممم خ منه م ممم خ شفتم	م ممم ف ففف ۾ مِمِمِ څ څڅڅ	م ممم م مفنم م ممم م مُثَمَّم	cv44=0
Sindhi-style	م ممم فر منفر م ممم ششش	م ممم ف ففف م مِمِم څ څڅڅ	م ممم فر ففف جر جمجم ثر ثشش	cv44=1

#### Heh

Affects: U+0647

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	ه ههه	مهم ه	ه ههه	cv48=0

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Kurdish-style	ه ههه	వాక్తిన్ వ	ه ههھ	cv48=3
Sindhi-style	ه ههم	മമമ മ	ه ههم	cv48=1
Urdu-style	مهم ه	٠٠, ٥	مہرہ	cv48=2

#### **Heh Doachashmee**

Affects: U+06BE

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	a agg	අදන න	ه ههه	cv49=0
Knotted	ه همم	മമമ മ	ه ههو	cv49=1
Kurdish-style	ههه	නිදින න	ه ههھ	cv49=3

### Kyrgyz OE

Affects: U+06C5

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Loop	و	Э	g	cv51=0
Bar	<b>9</b>	9	و	cv51=1

#### Yeh Hamza

Affects: U+0626

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	ئ ئ	ئئ	ئئ	cv54=0

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Right hamza	ئى ئى	ئئ	ئى ئى	cv54=1

#### Maddah

Affects: U+0622, U+0627, U+0653, U+0653

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Small	<b>্</b> ব্য	ិរា	៍រ័រ៍	cv60=0
Large	៊ា	ិ៍រិរិ	N/A	cv60=1

# Shadda+kasra placement

Affects: U+064D, U+0650 with U+0651

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Default	<b></b> ۗ ۗ <u>ۗ</u> ۗ	្ខ័ ៊ី ៊ី	ڔٞٞڔؙٞ	cv62=0
Lowered	្ខ័ 🚆 ៉ី 🐥	្ខ័ ៊ី ៊ី	<i>ؠ</i> ؚٞڔؚۜ <i>۫</i> ؠؚۜ	cv62=1
Raised	<b></b> ૻ૿ૼૻ૿ૢૼ	<u> </u>	<i>ۣ</i> ؙؙؚٞٞٙٞٞٙ <i>ٞ</i> ٙ۠	cv62=2

#### Damma

Affects: U+064F

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Default	<i>ُ ب</i>	ံ ငု	بُ ث	cv70=0
Filled	ં	்	ં ઼ં	cv70=1
Short	<i>்  ்</i>	ံ	ِبُ ثُ	cv70=2

#### **Dammatan**

Affects: U+064C

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	<u></u> ే "	<b>ల</b>	ి స్త	cv72=0
Six-nine	<b>ీ</b>	ં •઼	ే స్త్రీ	cv72=1

#### **Inverted Damma**

Affects: U+0657

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Default	<b>ب</b> ث	ံ	ڹٛ	cv74=0
Hollow	<b>ب</b> ث	ံ	بْ '	cv74=1
Filled	<b>ب</b> ث	<b>ٺ</b> ٺ	ڹؙ	cv74=2

#### **Superscript Alef**

Affects: U+0670 on all yeh, sad and seen-like characters U+0620, U+0626, U+0633, U+0634, U+0635, U+0636, U+063B, U+063E, U+0649, U+064A, U+064A, U+0678, U+069B, U+069B, U+069D, U+069D, U+069D, U+06CD, U+06CD, U+06DD, U+06DD, U+06FA, U+06FB, U+075C, U+076D, U+077D, U+077D, U+077E, U+0775, U+0777, U+08A8, U+08A9, U+08AF, U+08BA

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Default	ی لیا ئ ئی سل	یٰ پٰی یٰ ٹٰئ س سس	ا ہا ئے اور	cv76=0
	سلسل شل شلشل صل	شٰ شلشٰ ص طص ض	شش ص صل ض ضطن عُ	
	صلصل صل طلطل ي	ظض يُ يُيْ يَ يَٰ يَٰيَ يُ	يُّا اِيَّا يَٰ اِيَّا اِيَّا اِيَّا اِيَّا يَٰیُ یَ يَی یَ يُی یَ یَی کَ نِی اِيَّا	
	يُٰی يَٰ يَٰی يُٰ ثِیٰ يَ	يَٰیٰ یٰ لیٰ يٰ لِيٰ ئیٰ ٹیٰ	<sup>ا</sup> عاماً بنا الساساء على الس	
	لىي كي ليي على علما	ښ ښلښ	شٰش مِلْ طِيطِ مُلْ صُطْ عَ	
	ىنىل ىنلىنىل مىلىپىل	ڜڵڜڶڝ طڝ ڞ	يى ئى بى ئى ئى ئې بې ئې پي	
	ش پٹیش کے کے کا میا	ظظ یٰ یٰیٰ یٰ یہٰ یٰ	ش شش ض ضض ش شش	

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
	صُل صَصْل کی لیلی کی بیا کی کی بیا کی	یٰی کٖ ہٖیٖ کِ پیٖ شٖ شلش خرا ظِخرا شر شلش ش شلش ش شلش کی یُکی کی یُکی کی اِنگی ک پہا کی بُئی کی اینی چرا چاچرا کی اُنگیا	ښ شنل ش شش س س س س س س س س س س س س س س س س س	
Large	ك پچائ ئي سل سلسل شل ششل صل صصل ضل ضاضل ئ پيئ ئي ئي ئي ئي ئي سنل ښښل پپل پپلپل ښل شاښل پپل پپلپل شل شاخل عل يي خابي بي شل شاخل علي خابي شل شاخل خل خاخل شل شاخل خل سندل شل شاخل خل سندل شل شاخل خل سندل شل شاخل خل سندل شل شاخل خل	وا پاوا ئ بلئ سل سلس شل شلش صل صل طط ض شلش صل طط ض الله في ال	عَلَيْ عَلَيْ سَ سَسَ شَكَّ عَلَيْ عَلَى سَا سَسَ شَكَّ عَلَيْ عَلَيْ عَلَى سَا سَسَ شَكَّ عَلَيْ عَلِيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلِيْ عَلَيْ عَلِيْ عَلَيْ عَلِيْ عَلَيْ عَلَيْكِ عَلَيْكِ عَلَيْكِ عَلَيْكَ عَلَيْكَ عَلَيْ عَلَيْكِ عَلَيْكَ عَلَيْكَ عَلَيْكَ عَلَيْكَ عَلَيْكَ عَلَيْكَ عَلَيْكِ عَلَيْكَ عَلَيْكَ عَلَيْكِ عَلَيْكُ عَلَيْكَ عَلَيْكُ عَلَيْكُ عَلَيْكُو عَلَيْكُوا عَلَيْكُو عَلَيْكُوا عَلَيْكُو عَلَيْكُوا عَلَي	cv76=1

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
	چلچل کي ليي			
Small	ك پلى ئ ئى سل سلسل شل ششل صل صلصل ضل ضلضل ئ يُنْ ئَ تَ يَيْ يَ يُنْ ئَ يَ يَيْ كَا بنل بنلبنل بيل بيليل بنل بنلبنل بيل بيليل مثل ششل صل صلصل على بيلى من ين يا بيل على بيلى بنل شبشل ضل على بيلى بنل شاشل من مناسل شل شاشل من مناسل شل شاشل من مناسل من شاشل من المناسل من مناسل من شاشل من المناسل م	وا ہوا ئ ئئ س سلس شا شاش ص طص ض ض شاش ص طص ض ض فی کی تا تی ٹی	ىٰ پہٰىٰ ئُ ئُئُ سُ سُسْ شُ شُشْ صَ صَصَ ضَ صَصَٰ ثَ يُئُ تُ يُٰ يُٰ يُٰ يُٰ يَٰ يٰ يٰ يٰ يٰ يٰ يٰ ئُی تُئُ بُن بَنْ بَنْبِنْ بِسْ سِٰسِٰ پُشْ شَشْ مَنْ عَلَىٰ عَلَىٰ يَٰ يٰ يٰ بِٰ بِيٰ يٰ پِيٰ شُ شُشُ مَٰ يُٰ يٰ يُٰ يَٰ يٰ يٰ بِيٰ يٰ پِيٰ مُن شُشُ مَٰ يُٰ يٰ يُٰ يُٰ يُٰ يُٰ يَٰ يٰ يٰ بِيٰ مُن شُشُ مَٰ يُٰ يٰ يُٰ يُٰ يُٰ يُٰ يُٰ يَٰ يَٰ يٰ يٰ يٰ يٰ يٰ يٰ مُن شُشُ مَٰ يُٰ يُٰ يُ يُٰ يُٰ يُٰ يُ يٰ	cv76=2
	سلسل شل شاشل سل سلسل سل سلسل کی لیل کی لیل کی لیل کی لیل کی لیل کی لیل کی لیک کی لیل کی لیل کیا لیک کی لیل کیا	شلشٰ ێؖ ێؖێ۠ێؖ ێؖ ێؖێۜڮ ڸۑۭؗ ؽؙ ڹؙۣؽ۬ ؽ۬ ڹؽ۬ ڝ		

#### Sukun

Affects: U+0652

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Closed	<u></u>	ံ င္	ڹ	cv78=0
Open down	<u></u> ်	ب ث	ب ٛ	cv78=1

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Open left	<i>ે ઼</i>	ဲ ပ္	ڔؙ	cv78=2

#### **End of ayah**

Affects: U+06DD

Firefox allows you to use U+06DD followed by the digits and proper rendering occurs. Some applications require the following:

- precede the entire sequence (subtending mark plus following digits) with 202D LEFT-TO-RIGHT OVERRIDE
- follow the entire sequence with U+202C POP DIRECTIONAL FORMATTING.

Surrounding the sequence with U+202D and U+202C seems to give the most reliable results in different browsers. However, we have not found a solution that works in Internet Explorer/Edge.

In the example below, the following codepoints are used: U+202D U+06DD U+0031 U+0032 U+0033 U+202C U+202D U+06DD U+0611 U+0622 U+0663 U+202C.

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard		(123) (1717)	(123) (177)	cv80=0
Simplified A	(123) (117)	(123) (1717)	(123) (177)	cv80=1
Simplified B	[123] [177]	123	123	cv80=2

The DISPUTED END OF AYAH (U+08E2) is also now available in the font. It works in the same way as End of ayah.

(Scheherazade New)



۵ (Lateef)

#### **Honorific ligatures**

Affects: U+FD40..U+FD4F, U+FDCF, U+FDFA..U+FDFB, U+FDFD..U+FDFF

Feature	Scheherazade New	Feature setting
Calligraphic	رالِينَهُ وَلِينَّهُ وَلِينَّهُ وَلِينِّهُ وَالنَّهُ عَلَيْكِهُ عِلَيْكِهُ عِلَيْكِهُ عِلَيْكُمْ عِلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلِينَّهُمْ وَلَيْكُمْ وَلِينَّهُمْ وَلَيْكُمْ وَلِينَا اللّهُ وَلَا وَلَا مِنْ وَلَا وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَيْكُمْ وَلَا مِنْ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلَا وَلَا مِنْ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلَا مُؤْمِنًا وَلِينَا اللّهُ وَلِينَا اللّهُ وَلَا مُؤْمِنُونِ وَلَوْلِمُ اللّهُ وَلِينَا اللّهُولِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَا اللّهُ وَلِينَالِينَالِينُونُ وَلِينَالِكُولُولُولُولُولِينَا اللّهُ وَلِينَالِكُولُولُولُولُولُولُولُولُولُولُولُولُولُ	cv81=0
Simplified	رَلِنَّهُ وَطَلِيْكُ مِنَ طَلِنَّهُ مِنَ اللَّهُ مُ مَا اللَّهُ مُنَ عَلَيْهِ السَّلَامُ السَّلَامُ السَّلَامُ رَحِمَّهُ وَطَيْعُنَهُ رَطَلِيْعُنَهَا رَطِيْجُهُم رَطِيْجُهُما رَطِيْجُهُما رَطِيْجُهُما وَلَيْكُمْ مِنْ عَل عَلَيْنَهُ وَسَلِيْنَ جَلَلْهُ بِشَــَةُ لِللَّهِ الْجَهْزِ الْجُمْدَ عَرَّوجَلَّ عَرَّوجَلَّ عَرَّوجَلَّ	cv81=1

#### **Eastern digits**

Affects: U+06F4, U+06F6, U+06F7

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Standard	497	451	454	cv82=0
Kurdish-style	457	451	454	cv82=3
Rohingya-style	٤٦<	٤٦٢	٤٦٧	cv82=4
Sindhi-style	47<	1517	477	cv82=1
Urdu-style	77<	۲۲۸	417	cv82=2

# **Proportional figures**

Tabular digits are the default for Latin digits. Lateef supports the OpenType **Proportional Figures (pnum)** for Latin digits.

Affects: U+0030..U+0039

Feature	Lateef	Feature setting
False	0123456789	pnum=0
True	0123456789	pnum=1

## **Tabular figures**

Proportional digits are the default for Arabic digits. Lateef supports the OpenType Tabular Figures (tnum) for Arabic digits.

Affects: U+0660..U+0669, U+06F0.. U+06F9

Feature	Lateef	Feature setting
False	·17٣٤٥٦٧٨٩ ·17٣۵۶٧٨٩	tnum=0
True	· ۱۲۳٤٥٦٧٨٩ · ۱۲۳۵۶٧٨٩	tnum=1

#### Comma

Affects: U+060C, U+061B

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Upward	٤ ،	٠, ١	٤،	cv84=0
Downward	ė e	; ;	;,	cv84=1

#### **Decimal separator**

Affects: U+066B

Feature	Scheherazade New	Harmattan	Lateef	Feature setting
Small reh	ر	J	J	cv85=0
Slash	1	1	/	cv85=1

#### Disable digit kerning (see FAQ) — Lateef and TypeTuner-only

The Arabic digits are proportional by default and Lateef includes kerning to improve the spacing of certain pairs of digits such as V/L. However there are some applications, including Microsoft Word for Windows, that process the digit kerning information incorrectly, actually making some digits too far apart and some too close together. We have added a special Typetuner feature that can be used to create a version of the Lateef fonts in which the digit kerning is *disabled*. When using those fonts in Microsoft Word the resulting digit spacing will be much nicer than Tabular, but not quite as good as it would be if the application's kerning worked correctly. This is discussed further in the FAQ.

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