# Annapurna SIL - Font Features

Annapurna SIL is a Graphite and OpenType-enabled font family that supports the Devanagari script. It includes a number of optional user-selected features that may be useful or required for particular uses or languages. These Graphite and OpenType features are primarily specified using four-letter tags (e.g. 'cv04' or 'ss04') to display variant characters or specific behavior. Certain apps, such as web browsers, can also use language tags to display all the language-specific variants and behaviors.

This document lists all the language and user-selected features in Annapurna SIL. For more information on how to access these features in specific environments and applications, see Using Font Features.

This page uses web fonts (WOFF2) to demonstrate font features and should display correctly in all modern browsers. For a more concise example of how to use Annapurna SIL as a web font see Annapurna SIL Webfont Example. For detailed information see Using SIL Fonts on Web Pages.

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

## Language-specific features

Affects: U+091D U+096B U+096E U+096F

| Language | Test sequences | OpenType/Graphite tag |
|----------|----------------|----------------------|
| Default | झ झ़ झ़ झ़ झ़ झ़  ५ ८ ९ | none |
| Nepali | झ झ़ झ़ झ़ झ़ झ़  ५ ८ ६ | NEP / ne |
| Newari | झ झ़ झ़ झ़ झ़ झ़  ५ ८ ८ | NEW / new |

## User-selected feature list

### Character Variants and Stylistic Sets

#### Jha alternates

Affects: U+091D

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | झ झ़ झ़ झ़ झ़ झ़ | cv01=0 |
| Nepali style | झ झ़ झ़ झ़ झ़ झ़ | cv01=1 or ss01=1 |
| Newari style | झ झ़ झ़ झ़ झ़ झ़ | cv01=2 or ss02=1 |

#### Kra alternate

Affects: U+0915 U+0930

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | क्र क्र | cv03=0 |
| Open style | क्र क्र | cv03=1 or ss03=1 |

## Tra alternate

Affects: U+0924 U+0930

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | त्र त्र | cv04=0 |
| Closed style | त्र त्र | cv04=1 or ss04=1 |

## Shra alternate

Affects: U+0936 U+0930

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | श्र श्र | cv05=0 |
| Sha style | श्र श्र | cv05=1 or ss05=1 |

## Ukar nukta position

Affects: U+0941 U+0942 U+093C

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | कु कू कु कू | cv06=0 |
| Outside | कु कू कु कू | cv06=1 or ss06=1 |

## Ekar nukta position

Affects: U+0947 U+093C

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | के | cv07=0 |
| Above bar | के | cv07=1 or ss07=1 |

## Digit five alternate

Affects: U+096B

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | ५ | cv08=0 |
| Nepali style | ५ | cv08=1 or ss08=1 |

## Digit eight alternate

Affects: U+096E

| Feature | Sample | Feature setting |
| --- | --- | --- |
| Standard | ८ | cv09=0 |
| Nepali style | ८ | cv09=1 or ss09=1 |

## Digit nine alternates

Affects: U+096F

| Feature | Sample | Feature setting |
|---|---|---|
| Standard | ९ | cv10=0 |
| Nepali style | ६ | cv10=1 or ss10=1 |
| Newari style | ८ | cv10=2 or ss11=1 |

## Visarga with connecting bar

Affects: U+0903

| Feature | Sample | Feature setting |
|---|---|---|
| Standard | ः | cv12=0 |
| With bar | ः | cv12=1 or ss12=1 |

## Glottal stop - no connecting bar

Affects: U+097D

| Feature | Sample | Feature setting |
|---|---|---|
| Standard | ॽ | cv13=0 |
| No bar | ॽ | cv13=1 or ss13=1 |

## Dya and Hya alternates

Affects: U+0926 U+0939 U+094D U+092F

| Feature | Sample | Feature setting |
|---|---|---|
| Standard | द्य दॢ्य दझ्य दॄ्य द्ऱ्य दझ्र    ह्य हॢ्य हझ्य हॄ्य ह्ऱ्य ह्झ्र | cv14=0 |
| Open Ya | दय दॢय दझय दॄय दॱय दझ्र    हय हॢय हझय हॄय हॱय हझ्र | cv14=1 or ss14=1 |

## Archaic forms

Affects: U+0905 U+0906 U+0913 U+0914 U+0923 (U+0915 U+0937)

| Feature | Sample | Feature setting |
|---|---|---|
| Standard | अ आ ओ औ ण ण क्ष क्ष | cv15=0 |
| Archaic form | ग्र ग्रा ग्रो ग्रौ एा ए द्ध द्ध | cv15=1 or ss15=1 |

### Ra Ukar with Nukta ligatures

Affects: U+0930 U+0931 U+0941 U+093C

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | रु रु | cv16=0 |
| Ligature form | रू रू | cv16=1 or ss16=1 |

### Cha alternate

Affects: U+091B U+094D

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | छ छ् | cv17=0 |
| With tail or no stem | छ् छ | cv17=1 or ss17=1 |

### Headstroke alternates

Affects: U+A8FB

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | — | cv21=0 |
| Discrete | – | cv21=1 |
| Extended (has width) | - | cv21=2 |
| Filler (zero width) | - | cv21=3 |

### JainOm alternate

Affects: U+A8FD

| Feature | Sample | Feature setting |
|---------|--------|-----------------|
| Standard | ꣽ | cv22=0 |
| Extended bar | ꣽ | cv22=1 |

# Default behavior

Many font features in Annapurna SIL common to both OpenType and Graphite rendering engines working behind the scenes to display the proper shaping of Devanagari characters, such as half forms and conjuncts, and to correctly position diacritics or marks. Others features (listed below) are used to create a more pleasing look. These features are always "on".

## Stacking conjunct compression

If there is a matra below a stacking conjunct, this feature compresses the conjunct which raises the matra above the descender height line. Otherwise, they could clash with matras or signs above the bar on the following line. *In the test sequence below, note the first conjunct (without a matra) is normal height.*

Affects: U+0915 U+0916 U+0917 U+0918 U+0919 U+091A U+091F U+0920 U+0921 U+092E U+0932 U+0939

| Feature | Sample | Feature setting |
|---|---|---|
| Conjunct compression | क्रु कु कू कु कू | Contextual Alternate 'calt' |

## Fractions

Note: The Ligature feature is included in the font since some OpenType applications use it instead of the Fractions feature setting.

Affects: U+0967 U+0968 U+0969 U+096A U+2044

| Feature | Sample | Feature setting |
|---|---|---|
| No ligature (using ZWNJ) | १/२ १/४ ३/४ | None |
| Fractions | ½ ¼ ¾ | Fractions 'frac' or Ligature 'liga' |

## Latin punctuation

The Latin characters in Annapurna SIL are derived from the Charis SIL font. However, the exclamation and question marks were redrawn to fit the style of the Annapurna Devanagari glyphs and are used by default. But they will switch to the Charis style punctuation when preceded by a Latin character. This is accomplished by use of the Contextual Alternates OpenType feature.

Affects: U+0021 U+003F

| Feature | Sample | Feature setting |
|---|---|---|
| Devanagari style | test क्र! test क्र? | Default |
| Latin style | test kra! test kra? | Contextual Alternate 'calt' |
| Mixed styles | नमस्ते! Namaste! | Contextual Alternate 'calt' |

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