

Charunagari चारुनागरी (चारुनागरी)

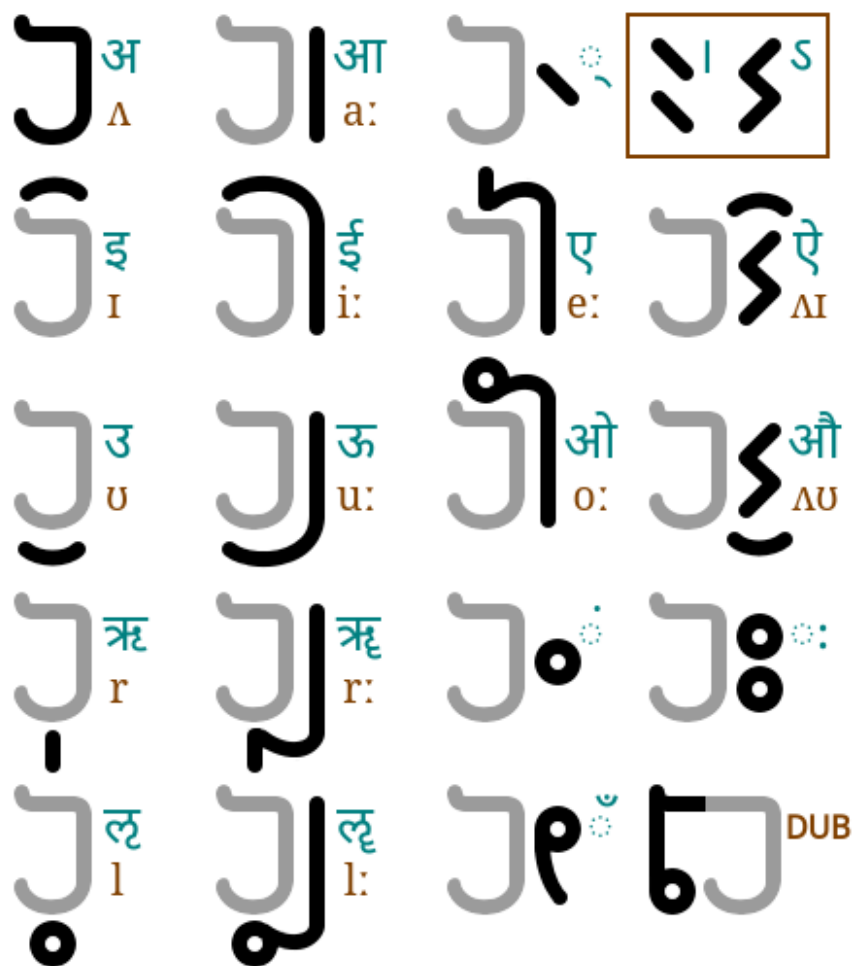
Among the classical languages of the world, one of the most ancient and sophisticated is Sanskrit. Charunagari is a script for Sanskrit, designed to be simple to write and read, especially compared to the other scripts used currently to transcribe Sanskrit. Also, Charunagari is a script designed exclusively for Sanskrit, although it may be used for other languages that share the phonetic inventory of Sanskrit.

Charunagari is a syllabic alphabet, much like most South/Southeast Asian scripts. It takes inspiration and design cues majorly from Brahmi, Nandinagari, Devanagari, Kannada, Tamil and Purbi Nagari scripts. The following are the syllabic letters (i.e. consonants with inherent 'a' sound) used in Charunagari, labelled with equivalents in Devanagari and IPA (shown without the inherent 'a' for convenience):

क k	ख k ^h	ग g	घ g ^h	ङ ŋ
च tʃ	छ tʃ ^h	ज dʒ	झ dʒ ^h	ञ ɟ
ट ʈ	ठ ʈ ^h	ड ɖ	ढ ɖ ^h	ण ɳ
त t̪	थ t̪ ^h	द ɖ̪	ध ɖ̪ ^h	न n
प p	फ p ^h	ब b	भ b ^h	म m
य j	र r	ल l	व v	ळ ɭ
श ʃ	ष ʃ̪	स s	ह h	क्ष kʃ̪

All the letters are designed to have a horizontal top-line (occasionally having a cusp in the middle) with an upturned end at the top-left corner. Every letter is written starting at this upturned corner and completed using a single continuous stroke.

Apart from the letters shown above, there is a ‘null’ letter which has no consonant sound. On its own, the null letter assumes the sound of its inherent ‘ʌ’, but different marks can be placed above, below and/or to its right to change the vowel sound. These vowel marks can also be placed on other letters to change their inherent ‘ʌ’ sound to the mark’s respective vowel sound. The following image shows the null letter (labelled as ‘ʌ’) and all vowel marks in Charunagari (with equivalents in Devanagari and IPA):



The vowel marks have been shown on a greyed-out null consonant, which implies that the latter can be replaced with any other letter. The mark labelled as ‘DUB’ is used to double the letter it is attached to albeit it is never actually used on the null letter. The mark labelled as [ँ] is the anusvara mark. When the anusvara occurs at the end of a word, it assumes the sound of ‘m’ [म्]. The mark labelled as [ऌ] is the chandrabindu, which nasalizes the vowel sound of the letter it is connected to. The mark labelled as [ः] is the visarga. The mark labelled as [्] is the halanta, which is used to remove the inherent ‘ʌ’ of the letter.

The brown box at the top-right of the image shows marks that aren't attached to letters. The one on the left is the sentence break mark and the one on the right is the 'avagraha' mark, used in Sanskrit to indicate disappearance of 'a' sound when 2 words are joined.

Forming consonant clusters is simple in Charunagari. Here, the letters that are to be joined together are just juxtaposed horizontally, then the upturned corner of each of these letters, other than the first one, is 'ironed-out'. 'Ironing out' involves flattening the upturned corner of the letter and connecting it to the previous letter in such a way as to be continuous with the previous letter's topline:

EXAMPLES OF LETTER CONJUNCTIONS

श्व = श् व

क्ष = क् ष

षट् = ष ट् र

क्ष (THE EXCEPTION)

ओ३म् = ॐ (can be used as 'pluta' ३ mark)

There is one exception to the ironing-out process, as highlighted in the image above. The last letter in the abugida, labelled as 'kṣ' is a commonly used conjunct consonant pair in Sanskrit which is often treated as its own letter in the language, so Charunagari has a special glyph for it. This sound can be created by pronouncing 'k' and 'ṣ' sounds successively, yet instead of just juxtaposing and 'ironing' these letters, the special glyph for 'kṣ' is used in Charunagari. In principle, this letter is similar to what 'X' is in English. This is the only exception to the ironing-out process in Charunagari.

At the bottom of the image is shown the Charunagari symbol for OM [ॐ] and how it can be written out with vowels and marks. As seen here, the vertical line mark, normally used for the 'a:' vowel, can also be used as the pluta vowel extension mark when used in addition to any long vowel mark.

Charunagari has its own set of numerals. The shapes of the numerals have taken inspiration from the numerals of most scripts of India. However, they all have been stylized to have a bottom-line, similarly to how the letters all have a top-line. When several digits come together to form a number, they juxtapose and their bottom-lines “iron out” like how the letters discussed above combine to form conjunct consonants. decimal expansions juxtapose separately from the integer part of the number. The method of representing decimal expansions is explained in the image below, with an example:



this mark is used like the decimal point. it is placed above the unit digit of the number when followed by 1 or more decimal digits.



this mark is used to show the beginning of a recurring decimal sequence, if present.



The following is the Sanskrit version of Article 1 of the UDHR, as handwritten in Charunagari:

सर्वे ज्ञानवाः समताः सत्त्वताः चतुर्थाः चतुर्था
एते च, गुरुत्वम् च समताम् च सत्त्वताः च
चतुर्थाः चतुर्था सर्वे चतुर्था-ता-चतुर्था
सत्त्वताः सत्त्वताः एते च, सर्वे च चतुर्था-ता-चतुर्था
एतत्सत्त्वता चतुर्थाः