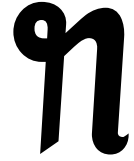# Introduction to the Saurashtra Script

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This short introduction to the Saurashtra script is intended for people with no prior experience but can be used by anyone looking for more information on this unique script. It is based on the current Unicode proposal to encode Saurashtra and the successful implementation of the Saurashtra script by XenoType Technologies on a Macintosh running OS X 10.2.x.

The main purpose of this document is to provide information for software developers in an effort to promote the support of Saurashtra-enabled operating systems and support applications. We will not however delve into the specifics of programming support for Saurashtra — the information herein should provide an adequate starting point regardless of the operating system or technology involved.

To this end, we will frequently diverge from traditional linguistic terminology in an effort to point out or emphasize certain features of this script. Linguists and purists will have to forgive us.

Consonants

As currently proposed, the Saurashtra script consists of 79 basic shapes, or nominal glyphs, which can be further divided into consonants, vowels, digits, punctuation marks and diacritics. The 34 base glyphs representing consonants are shown here:

ꢒꢖꢕꢗꢘ ꢚꢛꢜꢝꢞ ꢔꢓꢗꢖꢘ

ꢗꢘꢙꢠ ꢣꢤꢥꢦꢧ ꢨꢩꢪꢫ ꢬꢭꢮꢯꢰ

The Saurashtra language also possesses 4 consonant sounds not found in other Indic scripts. In the written language these are represented by ꢒꢳ, ꢘꢳ, ꢓꢳ and ꢝꢳ. These glyphs can currently be created by combining the base glyph with the element encoded at `U+AB50`, however, we feel that these glyphs should be considered individual sounds and represented as such. Moreover, the combining element at `U+AB50` serves no independent purpose and is never treated as a 'letter' — it only occurs as an element in the characters above.

It should be noted that Uchida's *Saurashtra-English Dictionary* lists items beginning with these characters in independent sections. Sethuraman's *Trilingual Saurashtra Dictionary*, also treats these special consonants as mentioned in The Hindu ["Though this Prakrit language has been influenced by other languages, mention has been made of special consonants peculiar to this language."], but we have not yet procured a copy of this latest dictionary. On a side note, the current proposal indicates that Uchida's dictionary is in the Saurashtra script — in fact, it uses a Roman transliteration.

When Saurashtra is written in the Tamil script, these special sounds are indicated by suffixing the Tamil letter ஃ and this is presumably why the element has been separated from its base glyphs in the current proposal for the Saurashtra script. However the Tamil script's transliteration for the language should not serve as the basis for this script's encoding. Some writers use a combination with the

Saurashtra glyph ꢦ to express these sounds. Consequently, we caution that it may be necessary to establish four additional codepoints and that the item at U+AB50 may have to be deprecated. It is not known how, if at all, these sounds are represented in older forms of the script.

Vowels

Like most other Indic scripts, Saurashtra uses independent and dependent vowel signs. As expected, the independent vowel signs are used to express word- or syllable-initial vowels while dependent vowels are used in conjuction with base glyphs. Both forms of the 16 basic vowels are illustrated below:

ꢂ–◌ ꢃ–◌ꢵ ꢄ–◌ꢶ ꢅ–◌ꢷ ꢆ–◌ꢸ ꢇ–◌ꢹ ꢈ–◌ꢺ ꢉ–◌ꢻ

ꢊ–◌ꢼ ꢋ–◌ꢽ ꢌ–◌ꢾ ꢍ–◌ꢿ ꢎ–◌ꣀ ꢏ–◌ꣁ ꢐ–◌ꣂ ꢑ–◌ꣃ
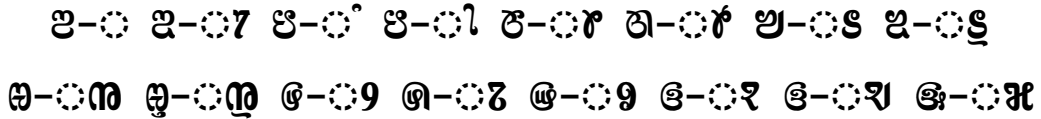
As expected, the inherent vowel has no visual representation. Graphic transposition is not required to display any of these vowel signs properly so reordering of the text stream is not necessary. And although all of the dependent vowel signs are spacing glyphs, two of them, ◌ꢶ and ◌ꢷ, form ligatures with their base consonant. There is some variety in how a few of the uncommon vowels signs are written but these can be addressed as font design/feature issues.

There are two additional glyphs, *anusvara* and *visarga*, that we list here as vowels since they can only occur with a base glyph.

◌ꢀ ◌ꢁ
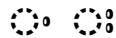
Diacritics

The only diacritic encoded in the Saurashtra block is the *virama*.

◌꣄

In the modern script, the virama occurs frequently as there is only one common conjunct (ꢳ) which can be displayed in the traditional manner (ꢥ+◌꣄+ꢮ) using a ligature. It has been suggested that the virama not be visible unless followed by ZWNJ — this setup makes the most sense since older versions of the script use more conjuncts which can be supported properly with this type of implementation. Currently, our keyboard driver outputs the sequence VIRAMA+ZWNJ from the default key position for virama on standard ISCII keyboards to minimize typing.

Digits

The Saurashtra script possesses its own set of native digits with no special requirements.

꣐ ꣑ ꣒ ꣓ ꣔ ꣕ ꣖ ꣗ ꣘ ꣙
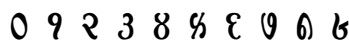
Punctuation

With the advent of digital type and the modernization of the Syloti Nagri script, one can expect to find all of the traditional punctuation marks: period, comma, colon, semi-colon, question mark, etc. In addition to these marks, the Devanagari single and double danda are also used with great frequency. A well designed font should include these items from the **Devanagari** block in an appropriate style.

Sample Text

Below is a sample text that illustrates modern Saurashtra and the required features for proper display. This text is taken from a short primer of the Saurashtra language.