L2/03-257

Introduction to the Syloti Nagri Script

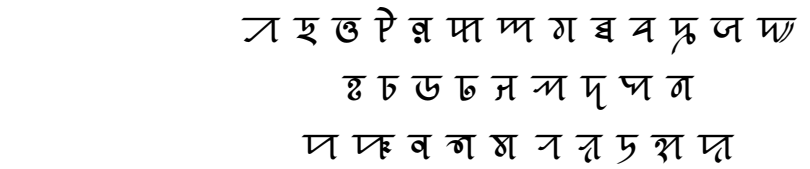
This short introduction to the Syloti Nagri script is intended for people with no prior experience but can be used by anyone looking for more information on this unique script. It is based on the current Unicode proposal to encode Syloti and the successful implementation of the Syloti Nagri script by 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 Syloti-enabled operating systems and support applications. We will not however delve into the specifics of programming support for Syloti Nagri — 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.

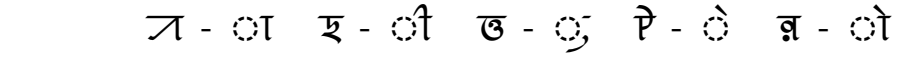
Consonants

As currently proposed, the Syloti Nagri script consists of 44 basic letter shapes, or nominal glyphs, which can be further divided into consonants, vowels, punctuation marks and diacritics. The 32 base glyphs are shown here:



Vowels

Syloti Nagri 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 5 basic vowels are illustrated below:



No graphic transposition is required to display these vowel signs properly so reordering of the text stream is not necessary.

There is an additional dependent vowel sign required to display Syloti text — ◌ꠣ. This vowel has no independent form of its own because it is always used as the second part of a diphthong, or compound vowel, ending in /-i/. It should be noted that this means it can also occur alone with a base glyph representing the inherent vowel followed by /-i/.

Diacritics

There are only two proper diacritics encoded to support Syloti — *anusvara* and *hasanta*.

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Aside from its traditional Indic designation, *anusvara* can also be considered a final form for the sequence /-ng/ which does not have a base glyph in Syloti Nagri since it doesn't occur in other positions.

[We find the placement of *anusvara* in the current proposal unusual but this really plays no role in developing support for Syloti Nagri — its inclusion is all that's required for proper display.]

Anusvara can also occur with the vowels ি and ে creating a potential problem with the display of both items. We concur with the recommendation of the Sylheti Translation And Research organization that *anusvara* always be typed after any vowel signs, as a final character. Some font developers might consider requiring the user to key these items in reverse order, which could theoretically create a valid display (in the case of ি), but this method should be discouraged. The best way to deal with these items is as ligatures and this is how XenoType Technologies supports the proper display of this sequence.

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The use of *hasanta* is currently proposed as the best means of creating conjuncts, along the Indic and Burmese virama models. When *hasanta* occurs alone between two consonants, a conjunct is formed and *hasanta* is removed (the first example). However, if *hasanta* is followed by `ZWNJ`, then no conjunct occurs and *hasanta* remains visible (the second example).

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Digits

There appear to be no unique Syloti digits — at least none that have come to light as of yet. When digits do appear in Syloti texts, they are generally Bengali forms. Any font designed to support Syloti should include the Bengali digits since there is no guarantee that they would otherwise exist in a user's computing environment. Naturally, they should use the corresponding **Bengali** block codepoints.

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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.

There are also several poetry marks included in this section — four native marks are currently proposed for the Syloti block and one additional flourish that has been proposed for inclusion in the **General Punctuation** block.

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Finally, in the documentation for the **New Surma** font created by STAR (and used throughout this document), reference is made to a Syloti question mark which is not included in the current proposal. Until clarification can be obtained about its exclusion from the current proposal, XTT will provide support for it in the **Private Use Area**.

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Sample Text

Below is a sample text that illustrates Syloti Nagri and most of the features required for proper display. This text is taken from a booklet entitled ***Ten Sylheti Poems*** translated by James Lloyd-Williams and Matiar Rahman Chowdhury.

কান বন্ধু জা নাই নুমান মনে -
ডাকীনে কী প্রান জুড়াবে না দেপ্পনে নইলনে⁂
নুখী ন রূনুনজামী লমাই কানদ্ধ দিনা
হুপ্পে কীবা দুপ্পে নাপ্পদ্ধ জাইনা কী জাননা⁂
লখী হন্ধ, নুখী গীন্ধ, কানীল দ্রীনজন
লমান মাজে কী দন লদ্ধে নপ্পব নুমান মন⁂
কৌন দিকীল লদ্ধদ লনী গাঁগেল কুনে বহল
দান কৌনু দান কৌনু কানী দীনজ জাই মন গৈল⁂

শাদ্দ লদ্ধদ লনী দীন ১৮৪৩-১৯২২ খ্রীষ্টাব্দ, বৃন্দাবন, সুনামগঞ্জ