To: UTC and ISO/IEC JTC1/SC2 WG2
Title: Proposal to encode SYLOTI NAGRI SIGN ALTERNATE HASANTA in the UCS
From: Lorna Priest Evans (SIL International)
Date: 12 January 2019
Reference: L2/18-259, L2/19-023

Introduction

We wish to propose the addition of SYLOTI NAGRI SIGN ALTERNATE HASANTA in the “Syloti Nagri (Sylo)” script block. The character should be encoded at the next available codepoint which is U+A82C.

The need for this character was discussed in L2/18-259 and L2/19-023. It could be considered a variant of the SYLOTI NAGRI SIGN HASANTA. However, the properties are different. There have been some suggestions that the Bengali virama could be used. However, it is best to keep these kinds of characters in the same Indic script block as other characters in a particular script. Encoding this new character will simplify implementations.

The current SYLOTI NAGRI SIGN HASANTA is classified as “Pure_Killer.” However, that property should be changed to “Virama” because the current hasanta is used for conjunct formation. This ALTERNATE HASANTA should be classified as a “Pure_Killer” because no conjunct should be formed.

Examples of SYLOTI NAGRI SIGN ALTERNATE HASANTA have not been found. However, it has been requested by modern Nagri users. L2/19-023 gives examples of how it would be used.

In the example below (from L2/19-023), the first line uses the hasanta at the end of the word and the 2nd line uses the alternate hasanta at the end of the word.

 kartū ।
 kartṭ ।

The character should display similar to a BENGALI SIGN VIRAMA:

 ̀

Thus, we wish to request the encoding of SYLOTI NAGRI SIGN ALTERNATE HASANTA with properties as described below. Also, as mentioned above, the properties for SYLOTI NAGRI SIGN HASANTA must also be changed.
Character Name and annotations

The color blue indicates the new character property or a change in property or text. Black indicates no changes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A806</td>
<td>SYLOTI NAGRI SIGN HASANTA</td>
</tr>
<tr>
<td></td>
<td>• virama, forms conjuncts</td>
</tr>
<tr>
<td>A82C</td>
<td>SYLOTI NAGRI SIGN ALTERNATE HASANTA</td>
</tr>
<tr>
<td></td>
<td>• a killer, no conjunct formed</td>
</tr>
</tbody>
</table>

Unicode Character Properties

UnicodeData properties for the new character:

A806;SYLOTI NAGRI SIGN HASANTA;Mn;9;NSM;;;;;N;;;;;
A82C;SYLOTI NAGRI SIGN ALTERNATE HASANTA;Mn;9;NSM;;;;;N;;;;;

IndicSyllableCategory:

A806 ; Virama       # Mn SYLOTI NAGRI SIGN HASANTA
A82C ; Pure_Killer  # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA

IndicPositionalCategory:

A806 ; Top          # Mn SYLOTI NAGRI SIGN HASANTA
A82C ; Bottom       # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA

LineBreak:

A806;CM # Mn SYLOTI NAGRI SIGN HASANTA
A82C;CM # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA

This character (U+A82C) can sort immediately after:

A806 ; [.2ABB.0020.0002] # SYLOTI NAGRI SIGN HASANTA

Core spec changes in documentation

In L2/18-259 we made some suggested changes to the documentation. Those suggested changes were based on not encoding a new character. Thus, the changes to the Core spec should be revisited. The second paragraph that was added should be deleted.
<table>
<thead>
<tr>
<th><strong>A. Administrative</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>1. Title:</strong> Proposal to encode SYLOTI NAGRI SIGN ALTERNATE HASANTA in the UCS</td>
</tr>
<tr>
<td><strong>2. Requester's name:</strong> Lorna Priest Evans</td>
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<td><strong>3. Requester type (Member body/Liaison/Individual contribution):</strong> Individual contribution</td>
</tr>
<tr>
<td><strong>4. Submission date:</strong> 11-Jan-2019</td>
</tr>
<tr>
<td><strong>5. Requester's reference (if applicable):</strong> L2/19-024</td>
</tr>
</tbody>
</table>
| **6. Choose one of the following:**
| This is a complete proposal: Yes |
| (or) More information will be provided later: No |

<table>
<thead>
<tr>
<th><strong>B. Technical – General</strong></th>
</tr>
</thead>
</table>
| **1. Choose one of the following:**
| a. This proposal is for a new script (set of characters): No |
| b. The proposal is for addition of character(s) to an existing block: Yes |
| **2. Number of characters in proposal:** 1 |
| **3. Proposed category (select one from below - see section 2.2 of P&P document):**
| A-Contemporary | B.1-Specialized (small collection) | B.2-Specialized (large collection) |
| C-Major extinct | D-Attested extinct | E-Minor extinct |
| F-Archaic Hieroglyphic or Ideographic | G-Obscure or questionable usage symbols |
| **4. Is a repertoire including character names provided?** Yes |
| a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document? Yes |
| **5. Fonts related:**
| a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? STAR |
| b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): |
| **6. References:**
| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? No |
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? No |
| **7. Special encoding issues:**
| Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Sorting |

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## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?  
   If YES explain: This is the first official proposal. Other discussion documents are listed in the proposal.

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?  
   If YES, with whom?  
   If YES, available relevant documents: Proposal is based on desired usage.

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?  
   Reference: Proposal is based on desired usage.

4. The context of use for the proposed characters (type of use; common or rare)  
   Reference: See proposal

5. Are the proposed characters in current use by the user community?  
   If YES, where?  Reference: See proposal

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?  
   If YES, is a rationale provided?  
   If YES, reference: See proposal

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?  
   n/a

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?  
   If YES, is a rationale for its inclusion provided?  
   If YES, reference: See proposal

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?  
   If YES, is a rationale for its inclusion provided?  
   If YES, reference: See proposal

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?  
    If YES, is a rationale for its inclusion provided?  
    If YES, reference: See proposal

11. Does the proposal include use of combining characters and/or use of composite sequences?  
    If YES, is a rationale for such use provided?  
    If YES, reference:  
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?  
    If YES, reference: No

12. Does the proposal contain characters with any special properties such as control function or similar semantics?  
    If YES, describe in detail (include attachment if necessary)  
    No

13. Does the proposal contain any Ideographic compatibility characters?  
    If YES, are the equivalent corresponding unified ideographic characters identified?  
    No