

TO: Unicode Technical Committee
FROM: Debbie Anderson, SEI, UC Berkeley
RE: Representation of JIHVAMULIYA and UPADHMANIYA in Sharada
DATE: 23 January 2012

A question has arisen regarding the proper way to represent the JIHVAMULIYA and UPADHMANIYA for Sharada. As this affects the 6.1 block introduction for Sharada, a decision by the UTC is needed at the February 2012 meeting.

Background:

In October 2010, the South Asian Subcommittee reviewed Shriramana Sharma's document L2/10-330R regarding JIHVAMULIYA/UPADHMANIYA for Sharada and Brahmi, but deferred the decision on how to represent these characters to the UTC (S Asian report: L2/10-440).

While the topic was on the agenda for meeting #125 (D.2.2. in L2/10-415) and was discussed, there is no specific action noted in the minutes (L2/10-416). This topic was raised again by Shriramana Sharma over the UnicoRe in September 2011 in relation to Sharada and Brahmi.

The two options for representing these characters are:

1. With no virama

Represent the JIHVAMULIYA/UPADHMANIYA as:

JIHVAMULIYA/UPADHMANIYA + Consonant
(i.e., JIHVAMULIYA+ KA/KHA and UPADHMANIYA + PA/PHA).

The combination would be rendered as the required ligature or stack using a substitution in the font tables (ligature/stack of jihva/upadh + consonant).

This approach is advocated by S. Sharma in L2/10-330 and L2/12-020; Sharma notes that the usage of VIRAMA with JIHVAMULIYA/UPADHMANIYA is unnecessary as those two characters are always presented in these scripts stacked with the following consonant. S. Sharma adds (p. 3 L2/10-330R): "Thus the.... model without the virama is the *pan-Indic* appropriate model not only because it preserves the semantics of the Indic virama but also because it simplifies the transliteration of sequences involving these characters from Brahmi and Sharada to other Indic scripts"

2. With the virama

Represent the JIHVAMULIYA/UPADHMANIYA as:

JIHVAMULIYA/UPADHMANIYA + VIRAMA + Consonant
(i.e., JIHVAMULIYA+ VIRAMA + KA/KHA and UPADHMANIYA + VIRAMA + PA/PHA).

This approach is described in Sharada proposal L2/09-974.

Reference Documents:

L2/12-020 Special rendering of some jihvamuliya/upadhmaniya characters (S. Sharma)
L2/10-330R Written form of jihvamuliya/upadhmaniya in Brahmi and Sharada (S. Sharma)
L2/09-074 Sharada proposal (A. Pandey)
L2/07-342 Brahmi proposal (A. Glass and S. Baums)

Related item: An additional document has recently been submitted by S. Sharma (L2/12-020) regarding wording in chapter 10 on Brahmi for JIHVAMULIYA and UPADHMANIYA, with the suggestion the revised wording also be used for the Sharada block intro. It also notes that a square box is missing from the Brahmi block for U+11003 BRAHMI SIGN JIHVAMULIYA and U+11004 BRAHMI SIGN UPADHMANIYA.