

Consonant Clusters that need 3 sequences in Unicode Encoding in Grantha script

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In the Grantha script, there are many consonant clusters, the minimum cluster involves two consonants, but three consonant clusters are common. Even clusters with 4 or 5 consonants stacked together also exist. In these consonant clusters in the Grantha script, the native user community of the Grantha script which is the Tamil community needs an unambiguous representation among the three choices a User can select from. See, For example, a two consonant cluster, **utkaTa**

GRANTHA - 3way choices of Conjuncts

Example word : utkaTam

- ① $\begin{matrix} 2 & \text{ᱦ} & 4 \\ & \text{ᱦ} & \end{matrix}$ where $tka = \langle ta, \text{virama}, ka \rangle$
- ② $\begin{matrix} 2 & \text{ᱦ} & \text{ᱦ} & 4 \\ & \text{ᱦ} & \text{ᱦ} & \end{matrix}$ where $tka = \langle ta, \text{ZWJ}, \text{virama}, ka \rangle$
- ③ $\begin{matrix} 2 & \text{ᱦ} & \text{ᱦ} & 4 \\ & \text{ᱦ} & \text{ᱦ} & \end{matrix}$ where $tka = \langle ta, \text{prepausal virama}, ka \rangle$

3 Encoding Choices Needed to

unambiguously represent these 3 forms.

A user needs to have these 3 choices available to make his selection.

Three options to encode the ligated viramas of the Consonant clusters

(a) Ligated viramas in atomic form

or (b) with second virama code point

or (c) with joiners, exactly similar to half-consonants in Devanagari script.

Tamils in Tamil Nadu are the native User community of the Grantha script. There are laws in India and Tamil Nadu that make the profession of priests in the major Hindu temples open to all castes, much like anyone born out of any caste among Tamils become priestly professions in Christian Churches and Muslim Mosques. Grantha in Unicode will go a long way for the native user community and spread the knowledge and use among the Tamils. Other script communities of India do not need the Grantha script as their own scripts like Devanagari or Telugu can be used to write Sanskrit. But it is ONLY Tamils who will use the Grantha script. Unicode Consortium will be pleased in a few years' time, many Tamil script e-mails, e-lists, blogs, newspapers will have words written in Grantha script. So, Tamils will use Grantha script mixing it with Tamil even though Tamil will be more compared to Grantha words/sentences in a Web page.

There are some 23 ligated prepausal viramas for the users to choose from. How many a particular user from Tamils employ ligated virama consonant is his/her choice. Sridhar Sharma may use 7 second viramas , Kalyan Gurukkal may use 10, Rajarathna Bhattar may use 14, myself some 20 - no way a font can dictate/work in the choice of user preferences.

Take the case of the word, utkaTa -tk- can be vertically stacked, t can be prepausal virama, t can be overt virama. To distinguish between 3 forms, a second virama can tell a user & give him/her a choice.

Otherwise, it will be confusing for the user community & will be left without a user choice to select the form in which he wants to write Grantha words. That freedom to select the virama in the way he feels right should be left for the user to decide & second virama gives him the option to choose. Hence, the need of second virama in Grantha from the native user community.

Summary: So, we from the native community of Grantha users request UTC to award an unambiguous representation of ligated prepausal virama consonants, and this is well stated in the UTC committee's document, **L2/10-299** already after one year of looking at all the evidence:

"We note that if this recommendation is taken for the Grantha encoding, Grantha would have two viramas encoded -- a situation which is not unprecedented. There are other instances in the Unicode Standard in which because of presentation issues for a Brahmi based script, both a virama and a killer (or two types of viramas) have been encoded."

For Grantha script to work well within the Tamil community of users, it will be good to maintain this recommendation. Please note that many of the attendees of the Delhi meeting are not native users of Grantha script, nor do they know or use it in their lives.