

Revised Proposal for Plain-text Grantha Chillu Representation

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Script Committee Recommendation:

“At the October 2014 UTC, an AI was created to add text for 8.0 saying that Consonant + Virama + ZWJ was an acceptable mechanism to show visual distinctions of the fused virama forms in Grantha. In §2.1 of L2/14-291, Sharma points out that Consonant + Virama + ZWJ is used for C1-conjoining forms in Indic. In Grantha, this sequence is only used for requesting the reph in isolation, since all other consonants have C2-conjoining forms. The other South Indian scripts (like Telugu and Kannada) follow this same pattern, so Grantha should also follow the same model, Sharma argues. As mentioned by Sharma, the fused virama forms are not conjoining forms, since they freely alternate with other vowelless forms. It was noted during the script subcommittee’s discussion that the use of Consonant + Virama + ZWJ for C1-conjoining forms was the old Malayalam model--Unicode 5.0 and prior, before encoding of the chillus--and that model is now deprecated.

Based on the argument in §2.1 of L2/14-291, we now suggest no change be made to the current text. (Note that Sharma’s option §3 is not possible, since Variation Selectors cannot be used with viramas [TUS §23.4 “The base character in a variation sequence is never a combining character...”].)

Recommendations: Given the new analysis provided in L2/14-291, we recommend the UTC discuss the topic briefly and drop the action from the last meeting (AI 141-A20 for Roozbeh Pournader: add text to the Specification reflecting the recommendation in L2/14-268 for the use of chillus and ZWJ for version 8).”

If < Consonant, Virama, ZWJ> sequence cannot be used for Grantha Chillu consonants, there are alternate ways to represent Chillu consonants using ZWJ. As the above recommendation mentions Variation Selector sequence cannot be used with viramas, alternate means of representing Chillus in plain text for Grantha can be explored. A plain-text representation of Chillu using Variation selector or some other means is requested by users.

Option 1:

I want to submit that in plain text representation of ligating chillu consonants in traditional orthography as <consonant, ZWJ, virama> sequence can be used. As this sequence does not clash with anything else in Grantha script as <cons, virama, ZWJ> is clashing with other needs.

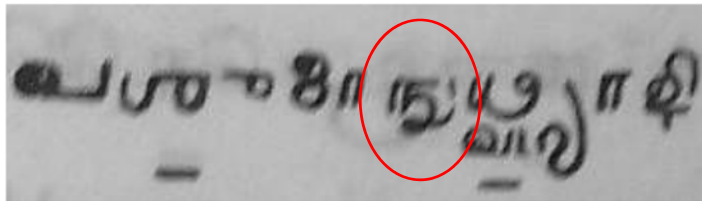
Option 2: For visually distinct Viramas, new Viramas – circular virama, bar virama – are recommended for Malayalam script. Also, for Gondi script, the recommendation is “ The present model of using ZWJs and ZWNJs for presenting various forms of virama and ra is confusing. We suggest an alternative model be considered, with two different virama characters, an always invisible character, and an always visible one, similar to Myanmar and Khmer. For repha and ra-kāra, encoding separate characters may be useful, similar to the Malayalam dot reph and and the medial ra in Myanmar and Tai Tham.”

Similarly, a Ligating Chillu Marker sign for Grantha script can be considered for visually distinct and contrastive uses chillu ligated consonants and explicit consonants.

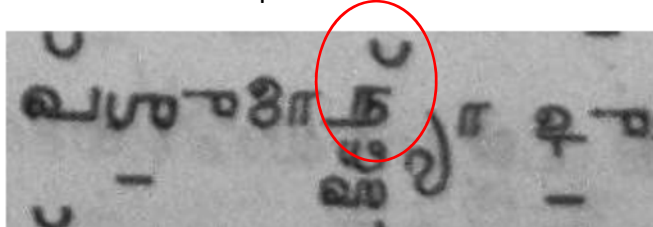
It is totally up to the User where he wants to employ chillu or explicit visual virama. Often in the same paragraph, we find chillus coming in some places and visual explicit virama appearing in other instances. So, a plaintext representation for ligating chillus is needed.

S. Sharma gave many examples on pages 22 & 23, L2/09-372 where either a ligated chillu or explicit virama are used in the same book. So choice of ligated chillu or explicit virama is User's choice and need a plain text representation. For example

Pashumaan with ligated consonant n: <consonant, ZWJ, Virama>



Pashumaan with Explicit Visual Virama: <consonant, Virama, ZWNJ>



Note the Chillu N or Visual Virama N indicated with a red circle in the same book.

In the next page, three forms of consonant groups in Grantha are shown. For these 3 forms common in Grantha script, the following plain text sequences are proposed.

The first row is the Consonant conjunct as Vertical cluster which is default and produced as

<C1, Virama, C2>

The second example of the same word, utkaTa, can be represented as,

<C1, ZWJ, Virama, C2> (Proposal for plaintext Ligated chillu consonant).

For explicit virama, use ZWNJ

<C1, ZWNJ, Virama, C2>. (also use ZWNJ sequence for explicit Virama in word final position.

This ZWNJ sequence makes sure Explicit Visual Virama is displayed for consonant (see Traditional orthography representation using this sequence in Cibu Johny's L2/14-113, pg. 7).

The above gives alternative means as <consonant, Virama, ZWJ> or Variation Selector sequence cannot be used for Grantha chillu ligated consonants in Plain Text.

3 Forms of Consonant groups in Grantha script

EXAMPLE 1:

Example Word	Grantha script	Description of Grantha script form
utkaTa	உத கூ 4	Vertical stack conjunct
utkaTa	உதகூ 4	Ligating Virama form
utkaTa	உத ^ஃ கூ 4	Visible Virama form

EXAMPLE 2:

Example Word	Grantha script	Description of Grantha script form
kaNvalaya	கூணுய 4	Vertical stack conjunct
kaNvalaya	கூணுய 4	Ligating Virama form
kaNvalaya	கூணு ^ஃ ய 4	Visible Virama form