Comment on L2/09-372 (Number of Viramas in closely related Malayalam and Grantha scripts)

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(a) I just went through the Grantha proposal by Mr. S. Sharma (L2/09-372). The main problem is that the close genetic relationship between Malayalam and Grantha scripts is NOT acknowledged in Sharma's proposal.

Isaac Taylor (**1829-1901**), The alphabet: an account of the origin and development of letters. Vol. 2, page 356,

"From this lapidary alphabet two scripts were developed, a cursive and literary script. The first is represented by the Tamil, while the other has developed into the **Grantha** or 'book' alphabet used by the Tamil Brahmans for the Sanskrit transcriptions of their sacred books. **From it [i.e., Grantha script] are derived** two vernacular alphabets which are used on the Malabar coast; one is the Tulu Grantha (line 23), and **the other the Malayalam**, from which several characters were borrowed by the Christians of St. Thomas in order to supplement the Syriac (Karshuni) alphabet which they obtained from the Nestorian missionaries (see vol. i., p. 293.)"

Student's Brittanica India, 5 volumes, Editors: Dale Hoiberg and Indu Ramchandani, (2000) pg. 349 has the entry on Malayalam language.

Of particular interest is the fact that Malayalam is also written using Tamil Grantha script that includes all the 5 Dravidian letters - e, o, Illa, nnna and rra.

pg. 349, Malayalam language:

"The earliest record of the language is an inscription dated to AD c. 830. An early extensive influx of Sanskrit words influenced the **Malayalam script** (derived from the **Grantha script**, itself derived from Brahmi): it has letters to represent all the Sanskrit sounds, besides the Dravidian sounds. The language also uses a script called Kolezhuttu (Rod script), which is derived from the Tamil writing system. The Tamil Grantha script is used as well to represent all Dravidian letters."

My Grantha proposal, L2/09-345, requests encoding the Tamil Grantha script in the SMP of Unicode, that includes all the Dravidian letters. As they form conjunct clusters and virama uses are very *different* from Tamil script, the 5 Dravidian letters have to be encoded in Grantha block in the SMP.

(b) Dravidian letters in Grantha script - History

Some social factors that Dravidian letters came to be written inside Grantha script are described by prof. S. N. Sadasivan that may be of interest.

Dr. S. N. Sadasivan, A social history of India, A. P. H. Publishing Co., N. Delhi, 2002, pg. 604

"Malayalam rose from the status of a dialect to an independent language in the 9th century. The first script of Malayalam, as a dialect, was Vattezuttu (circular or spherical writing) of Njanamonam which was the contribution of Buddhists. Between the 3rd century AD and the 9th century, Vattezuttu was the only alphabet and even in the early part of the 19th century, it was used for official records. By the 15th century, another script came into vogue, the Kolezuttu (long script) which however could not replace the Vattezuttu nor could it become popular. A third group of letters the Grantha-lipi (book script) was said to have been introduced at the instance of the Brahmins because they wanted to dissociate from the Buddhist Vattezuttu and the later Kolezuttu obviously of non-Brahmin origin.

However by the 16th century the non-Brahmins, the Sudras and the Ezhavas in particular, avidly learned the **Grantha lipi and used it for extensive writing**. Modern Malayalam script is the reformed Grantha letters popularized by Tunchat Ezhuttaccan."

In old times, Grantha script was used extensively to write Tamil and other Dravidian texts not just in South India, but also in South East Asian countries as well.

(c) There are only TWO viramas in Malayalam and Grantha scripts

S. Sharma proposes now 3 Viramas for Grantha script which are non-existent in the Grantha script. This fact is clear when we look at any book on Grantha script such as P. Visalakshy, R. Grunendahl, ... There is absolutely NO need to encode a third virama called "touching" virama. It is simply a glyph variation as the market was very, very small one or two presses did not take care to produce viramas uniformly in early 20th century. Based on this glyph variation, there is no need to assign a new virama in literature on the Grantha script as "touching" virama.

Since the closely related nature of Malayalam and Grantha scripts is NOT mentioned at all in L2/09-372, the importance of having Chillu marker sign with properties to create "prepausal" consonants is not provided in L2/09-372. Chillu, which means (word-)unit, is "prepausal" consonant indicating breaks in word-segments (within words, such as sam- and san-) and word-endings, are well-known features common to both Grantha and its relative, Malayalam scripts.

My Grantha proposal (L2/09-345) only proposes two types of viramas (1) a regular virama as in all of India's scripts and (2) Chillu marker sign to produce prepausal-chillu consonants in Grantha script. The Chillus in Grantha and Malayalam scripts are parallel and mark segment or word boundaries. Often, in manuscripts, Grantha texts run continuously without word breaks, and Chillus help in identifying full words or the prefixes such as sam- or san- in words.

(d) Regular Virama and Chillu Virama – Semantic differences

While checking with several temple priests working with Grantha scripts at temples such as Pazhani and Eechanari Hindu temples, they mentioned about the semantic difference when Chillu consonants are employed. In a regular cluster, such as those involving k.ssa as in other Indian scripts, no need for chillus. But wherever segment-breaks are necessary, we need chillus. Of course, some founts did not have enough chillus in their repertoire, so sometimes they substituted with explicit-virama forms. But scholars such as Sri. Kalyanasundara Gurukkal, Eachanari Vinayakar Temple, explained the necessity and importance of Grantha chillus an their connection with Malayalam chillus. They said that Malayalam chillus are directly formed from the uses and contexts of Grantha chillu usage.

Rachana team authors such as Chitraja Kumar have written many documents telling similar reasons such as Sharma's that Malayalam Chillus are not semantically different and no need to encode Chillus atomically. Like Malayalam chillus, Grantha chillus need representation in plain-text data, and a simple way to encode them is to use a Chillu Marker sign which will be easily understandable and easy to implement in fonts. Many Grantha font makers will look into Malayalam fonts and use different glyphs to make their Grantha font.

(e) For subjoined Vocalic L and Vocalic LL vowel signs

There are NO words in any Indian language to write Vocalic LL vowel sign, And Vocalic L is indeed very rare. For these two vowel signs (Vocalic L and Vocalic LL) regular code points should be used instead of dual encoding the same vowel signs twice. If there is a need, we can use ZWJ in sequences such as < Consonant, ZWJ, Vocalic L Vowel Sign> to indicate that the Vocalic L vowel sign is subjoined instead of its usual placement to the right side. Whether on the right side or subjoined, Vocalic L does not vary in meaning at all, and therefore no need to encode them twice in Grantha block.

(f) Vedic Svara signs

As per the instructions from UTC South Asia committee, I have removed all the Vedic Svara signs from my proposal. As they are secondary to main letters of the Script (e.g., Chillus, Sanskrit and Dravidian letters), we can come to their encoding after all the main characters are decided in Grantha block. Complete disunification of Grantha from other scripts such as Malayalam or Tamil has been requested which includes danda signs, and digits. Grantha Om sign is also requested in L2/09-345.

Naga Ganesan October 31, 2009