Comment on L2/13-065: Grantha characters from other Indic blocks such as Devanagari, Tamil, Bengali are NOT the solution

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Here is a brief comment on L2/13-065 which suggests Devanagari block for Grantha characters to write both Aryan and Dravidian languages.

From L2/13-065, which suggests Devanagari block for writing Sanskrit and Dravidian languages, we read:

"Similar dedicated characters were provided to cater different fonts as URUDU MARATHI SINDHI MARWARI KASHMERE etc for special conditions and needs within the shared DEVANAGARI range.

There are provisions made to suit Dravidian specials also as short E short O LLLA RRA NNNA with new created glyptic forms in rhythm with DEVANAGARI glyphs (with suitable combining ortho-graphic features inside DEVANAGARI) for same special functions. These will help some aspirant proposers as a fall out who want to write every Indian language contents in Grantham when it is unified with DEVANAGARI because those features were already taken care of by the presence in that DEVANAGARI. Even few objections seen in some docs claim them as Tamil characters to induce a bug inside Grantham like letters from GoTN and others become tangential because it is going to use the existing Sanskrit properties inside shared DEVANAGARI and also with entirely new different glyph forms nothing connected with Tamil.

In my doc I have shown rhythmic non-confusable glyphs for Grantham LLLA RRA NNNA for which I believe there cannot be any varied opinions even by GoTN etc which is very much as Grantham and not like Tamil form at all to confuse (as provided in proposals)."

Grantha in Devanagari block to write Sanskrit and Dravidian languages will not work. And, Grantha block should be separate from either Tamil or Malayalam or Devanagari blocks. This has already been accomplished for **Sanskrit language**, see

my original proposal for Grantha script to encode the script in ISCII model of Tamil, Devanagari and Malayalam scripts and subsequent documents.

Grantha script which is an important script, considered sacred, by different religious communities of South India such as Jains, Vaishnavas, Saivas were and are used to write their religious texts for almost two millennia. Every Tamil agrees as can be seen in the proposal documents that both Dravidian and Sanskrit can be written in Grantha script. And, this document L2/13-065 prefers using Devanagari block for Dravidian letters in Grantha script, while some in Tamil Nadu committee prefers Tamil block (vide Letter from Tamil Nadu committee to UTC). However, the there are **hacked fonts** for Grantha script to write Sanskrit & Tamil in Bengali and Malayalam blocks working. Major publishers from Madras, and Tamil Nadu academics, and religious community representatives want Grantha script to be encoded in Unicode and ISO standard 10646 as soon as possible so that they can write and publish on the web and on paper using latest Publishing technology and elegant Unicode fonts. The solution to print Dravidian languages texts such as those from Malayalam is not Devanagari block but Grantha block itself. Note that there are more than 25 letters common between Tamil and Grantha blocks (e.g. RRA, LLLA, NNNA), but their behavior in stacked conjuncts, virama, chillu forms of consonants are different. And, Grantha has basically two different styles and once encoded both styles will be able to function.

Everyone in the World, including this L2/13-065 shows, agrees that both Aryan and Dravidian can be written Grantha script in computers and the web. The difference is how best to achieve this objective. Simple and technically straight forward solution to write Sanskrit and Dravidian languages in Grantha script is to follow what is done in the Unicode standard for all Indic scripts – i.e, to encode the needed characters in the particular block itself. So, Dravidian letters should be gotten from Grantha script itself & not from Devanagari or Tamil or Malayalam blocks. Please note that Dravidian characters are special to 4 southern Indian languages, not just Tamil language. An ISO standard such as Unicode cannot favor one language e.g., Sanskrit for writing in Grantha script, where as Dravidian writing in Grantha is either neglected or disabled. For example, Shriramana Sharma (L2/09-372) has explained well the need to encode short E and O vowels

and vowel signs in Grantha block of Unicode. Note that these characters' shapes are NOT in Tamil block at all. So, simple straight forward technical solution is to encode these Dravidian characters in Grantha block, and this will ensure proper plain text writing in all computer platforms without loss of semantics in the sacred religious texts and also personal and place names.

Diacritic for writing short E and O in Grantha script

Malayalam and Tamil scripts differ from Grantha script in representing short E and O vowels. Hence, we cannot use E and O vowels or the corresponding vowel signs from either Malayalam or Tamil script. Note that Grantha **long E and O** are Tamil or Malayalam **short E and O**, whereas Grantha short E and O vowel representation employs a diacritic symbol [1].

This has been explained by many specialists on Grantha. For example, Sriramana Sharma's proposal on Grantha script (L2/09-372)

Examples of transliterating Kannada and Telugu names of towns and villages using these new characters are given below:

ꢍꢞꢿꢦꢸ   ꢔꢡꢸꢦꢺꢶ   ꢜꢀꢔꣂꢬꢸ   ꢒꢀꢒꢺꢶ

ꢈꢔꢸꢎꢝ   ꢕꢪꢸꢀꢒꢼ   ꢲꢸꢰꢢꢔꢬ   ꢒꢺꢶꢲꢶꢱꢥꢣꢠ

Of course, words from Indian English with short E would also be transcribed in this way.

8.3. Short Vowels E and O

In common with the previous proposal for encoding Grantha submitted by Naga Ganesan (L2/09-141), we support the encoding of four new characters, two independent vowels and two vowel signs for the short vowels E and O common in South Indian languages and also in some North Indian languages such as Bhojpuri. The short vowel E is also common in Indian English.

Here, we give brief remarks about what these vowels are intended for and also what they are *not* intended for.

45

8.3.1. Transliteration of Tamil, not a valid case

The transliteration of Tamil is not a valid cause to encode short E and O in Grantha, since the Tamil and Grantha scripts are so similar and the mixed usage of those scripts has been attested previously in the case of Manipravalam. Anybody who can read Grantha can reasonably be expected to read Tamil (though the converse is not true). Therefore Tamil words which need to be inserted in Sanskrit text written in Grantha can be written in their own native script.

Further, Grantha is a phonetic script whereas Tamil is a phonemic script. Tamil class consonant letters denote both voiced and voiceless stops whereas the Grantha ones denote only one sound each. Tamil vowel sign U denotes both normal [u] and 'shortened U' whereas Grantha denotes only normal [u]. Thus Grantha is a bad representative of Tamil phonemes and so Tamil written in Grantha would be highly awkward to read. There can be no valid case for writing Tamil in Grantha, especially seeing as most, if not all, Grantha users can read Tamil also.

8.3.2. Transliteration of Malayalam, a partially valid case

Malayalam is a mixed phonetic-phonemic script, because the Malayalam language has two kinds of words – Sanskrit-based and Tamil-based. Thus going by the previous arguments, and since Malayalam is not as similar to Grantha as Tamil, Malayalam should properly be transliterated using a mixture of Tamil and Grantha, much like in Manipravalam. We give an example:

ശ്രീരാമചരിതത്തെ   അടിസ്ഥാനമാക്കി   ആത്മതത്വത്തെക്കുറിച്ചു   വിവരിക്കുന്നതിനാൽ അദ്ധ്യാത്മരാമായണം എന്നു പറയുന്നു.

ஶ்ரீராசரிதத்தெ   அடிஸ்லாநமாக்கி   ஆதுததத்தெக்குறிச்ச   விவரிக்குந்ததிஏல் ஸுலூாதுஎாஎயணஎ எந்று பறயுந்து.

Note that this still does not require the encoding of any new characters in Grantha.

8.3.3. Transliteration of Kannada and Telugu, a fully valid case

Kannada and Telugu, while totally phonetic scripts, do have the short vowels E and O, and to transliterate these, one requires Grantha characters for those vowels, both independent and dependent. The shapes proposed for these characters are the same as those of the long vowels with a "pulli" added on top. The Tamil script formerly marked its short vowels thus (as shown below from ref 12 pp 1 and 2) and the same would be appropriate for Grantha today.

Tamizh	அ	ஆ	இ	ஒஈ	உ	உஈ				எ	ஏ	ஐ	ஒ	ஓ	ஔ
Tamizh	க	கா	கி	கீ	கு	கூ				கே	கெ	கை	கோ	கொ	கௌ

The "pulli" can be in the form of a dot or a ring. While the ring form is shown above, the dot form is also seen as in the following passage from page 52 of ref 13:

எனவே எகார ஒகாரங்கட்குப் புள்ளி
எ்-ஒ்-என வரும்.
இஃது உயிர்மெய்க்கும் ஒக்கும்.

The choice between the dot and ring forms is a matter of personal taste. We prefer the ring form.

Reference [1]: "PuLLi takes the form of a dot above or in the upper part of the akSara. In addition to this normal virama function, puLLi is also used with the vowels e and o in order to mark them as short: in contrast to Sanskrit and most Middle-Indo-Aryan dialects, the Dravidian languages have short as well as long e and o phonemes." In the Brahmi encoding, puLLi function and its shape "dot" to reduce long /e/ and /o/ to short vowels is allowed in Unicode (S. Baums and A. Glass, L2/07-342, pg. 8, L2/07-342).

It should be noted that Tamil E and O differ from the older Grantha E and O because of the reform introduced by a Jesuit priest from Italy. "The famous Jesuit Beschi (1704-1774) is the author of a great improvement in Tamil orthography – the distinction between long and short e & o." (pg. 37A. C. Burnell, Elements of South Indian Paleography, 1874).

Table comparing **Grantha SHORT E and O** vs. **Tamil and Devanagari SHORT E and O**. Note that the vowels and vowel signs are quite different.

PROPOSED GRANTHA CHARACTERS			EXISTING TAMIL CHARACTERS			SIMILAR DEVANAGARI CHARACTERS *		
Code	Glyph	NAME OF THE CHARACTER	Code	Glyph	NAME OF THE CHARACTER	Code	Gyph	NAME OF THE CHARACTER
1130E	௸	GRANTHA LETTER E *for transcribing Dravidian short /e/	0B8E	எ	TAMIL LETTER E	90E	ऎ	DEVENAGARI LETTER SHORT E
11312	௹	GRANTHA LETTER O *for transcribing Dravidian short /o/	0B92	ஒ	TAMIL LETTER O	912	ऒ	DEVENAGARI LETTER SHORT O
11329	ண	GRANTHA LETTER NNNA *for transcribing Dravidian alveolar nasal	0BA9	ன	TAMIL LETTER NNNA	929	ऩ	DEVENAGARI LETTER NNNA
11331	ற	GRANTHA LETTER RRA *for transcribing Dravidian alveolar /r/	0BB1	ற	TAMIL LETTER RRA	931	ऱ	DEVENAGARI LETTER RRA
11334	ழ	GRANTHA LETTER LLLA *for transcribing Dravidian retroflex continuant	0BB4	ழ	TAMIL LETTER LLLA	934	ऴ	DEVENAGARI LETTER LLLA
11346	�ெ	GRANTHA VOWEL SIGN E *for transcribing Dravidian short /e/	0BC6	ெ	TAMIL VOWEL SIGN E	946	ॆ	DEVENAGARI VOWEL SIGN SHORT E
1134A	�ொ	GRANTHA VOWEL SIGN O *for transcribing Dravidian short /o/	0BCA	ொ	TAMIL VOWEL SIGN O	94A	ॊ	DEVENAGARI VOWEL SIGN SHORT O

* These characters were not available in the original DEVANAGARI SCRIPT but introduced in DEVENAGARI to Transcribe Dravidian Sounds