From: February 18, 2011

Dr. Naga Ganesan on behalf of Tamil Grantha script experts and Sivachariar priests in Hindu temples of USA and Palani, Tamil Nadu.

Subject: Dravidian letters in Grantha block in Unicode - regarding

Dear Dr. Swaran Lata and Dr. Manoj Jain,

Namaste. This is regarding the letter Smt. Swaran Lata as Govt. of India, MIT official wrote to Dr. P. R. Nakkeeran, Tamil Virtual Academy on 27-Dec-2010. All parties involved in the Grantha proposals agreed that we will follow ISCII model for Grantha just like other major script of India in Unicode. And, we agreed that Tamil and Grantha be **disunified** completely from each other. Please refer to the Minutes of GoI meeting with Grantha experts of Tamil Nadu and elsewhere in India based on which the GoI proposal, L2/10-426 to encode Grantha was given to UTC.

Disunfication is a general principle all parties agreed upon, and it will be discriminatory and leading to linguistic and technical implementation problems if Dravidian letters need to come from Tamil block. Dravidian = Telugu, Kannada, Malayalam, Tamil (and, not just Tamil as language "purists" seem to presume). It is obvious from Dr. Swaran Lata's table of comparison (sent to Nakkeeran, 27-Dec-2010) that short /e/ & /o/ vowels and the corresponding vowel signs are glyptically very different and can never be taken from Tamil block into Grantha block.

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	ഞ്	GRANTHA LETTER E *for transcribing Dravidian short /e/	0B8E	எ	TAMIL LETTER E	90E	ऎ	DEVENAGARI LETTER SHORT E
11312	နဲ	For transcribing Dravidian short	0B92	ஒ	TAMIL LETTER O	912	ऒ	DEVENAGARI LETTER SHORT O
11329	ன	GRANTHA LETTER NNNA *for transcribing Dravidian alveolar nasal	0BA9	ன	TAMIL LETTER NNNA	929	ऩ	DEVENAGARI LETTER NNNA
11331	ந	GRANTHA LETTER RRA *for transcribing Dravidian alveolar /r/	OBB1	ற	TAMIL LETTER RRA	931	Ţ.	DEVENAGARI LETTER RRA
11334	æ	Frantha Letter LLLA  *for transcribing Dravidian retroflex continuant	OBB4	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

## (I) Linguistic Problems if Dravidian letters for Grantha are coming from Tamil block:

Here is the important Linguistics problem if Dravidian letters are *not* disunified between Tamil and Grantha blocks in Unicode. The Vedic gods like *AgnimiZhe* in Rgveda and iZhaa in Saamaveda are not Tamil and nothing to do with Tamil Nadu either. Vedas are a product of the Aryans in

Punjab region in today's India and Pakistan right after the bronze age. Vedas predate any known Tamil text or inscriptions by some 1500+ years, and so it will NOT be proper to call them Tamil, but it is correct to designate them as Dravidian in North West India. This is best done if Dravidian letters are disunified from Tamil and put inside Grantha block. As an example, let me point to the 5 Grantha letters disunified and placed inside Tamil block with Tamil character properties, Tamil vowel signs, Tamil virama. The same thing is proposed for Dravidian letters in Grantha blocks (Dravidian is much larger in scope than just Tamil).

Similarly, people, place, mountain, river names of Dravidian speaking regions of Karnataka, Andhra Pradesh and Kerala need to be dealt with using Dravidian letters. Let us take the case of BharatapuZhaa river name, written in Grantha script. It will be linguistically correct to sort & search and use them from Grantha block only, as this is Kerala river and not a Tamil Nadu river at all!

So, we submit that Grantha block need to have the Dravidian letters so as to represent the ancient Vedic and non-Tamil but Dravidian names properly, Linguistically, it will be incorrect to designate them as Tamil.

## (II) Technical implementation problems of 5 Dravidian letters, if not disunified & borrowed into Grantha Unicode block

Tamil and Grantha blocks were disunified on the basis of what is done for Letters for (a) Kaithi and Gujarathi (b) Maithili and Bengali and (c) Kannada and Telugu scripts in Unicode.

When the scribal tradition and typological behaviour of scripts differ from each other, it is Unicode tradition to disunify all the letters between scripts. Taking out 5 Dravidian letters would cripple Unicode tech implementations quite severely.

The major Technical problems if **Dravidian** letters have to come from Tamil block are:

- (a) In URL addresses of Internet Domain Names registry the letters have to be from the same block. Mixing Tamil and Grantha blocks will not work.
- (b) Tamil block letters will have Character names as Tamil, while Grantha block letters will have Character names as Grantha. If they are mixed they lead to all sorts of problems technically.
- (c) The searching of Grantha words if Tamil letters are mixed in between cannot be done.
- (d) Collation and sorting of texts in Grantha script texts need a complete set of Dravidian letters within them, otherwise the collation becomes impossible.
- (e) Grantha typology involves "reph", "ra-vattu", "ya-phala" quite regularly on all letters including Dravidian letters. Tamil script lacks these features of Grantha totally.
- (f) Grantha distinguishing mark is the Conjunct vertical stacking including Dravidian letters (see Books by Marr, Filliozat, ....) This cannot be performed for Tamil block letters.
- (g) Virama is different from each other in Grantha vs. Tamil. So also, the vowel signs (called Matras in Unicode) are very different between Tamil vs. Grantha scripts.
- (h) The shapes glyptically are very different between short /e/ & /o/ vowels and the vowel signs.

Hence, we representing the scholarly and user community of Grantha request that Dravidian letters be NOT taken from Tamil block, and let them be placed in Grantha block as that will only be proper for the 4 Southern states of India to equally enjoy the benefits of using Grantha script

whenever and whoever wants to use them in computers and the web. A list of UTC documents from eminent experts on Tamil Grantha script from Tamil Nadu are provided for this.

If Dravidian letters are not there in Grantha, it will make it impossible to write South Indian names etc., correctly in Grantha and will go against the design principles of ISCII model upon which Grantha block design is based. We request MIT, GoI officials to favorably consider the disunification of Dravidian letters between Tamil and Grantha blocks and send their recommendation letter to UTC for approval. We thank you for this help which will make Grantha a multi-language script usable for transliterating between India's major scripts. If Dravidian letters are not there in Grantha, it will make it impossible to write South Indian names etc., correctly in Grantha.

Respectfully yours, N. Ganesan, PhD

## References:

- (1) L2/10-409 Unicode Standard for Grantha Script, Summary of the Meeting Sept 6th, New Delhi, Gol.
- (2) L2/10-426 Proposal to encode the Grantha script in Unicode, Govt. of India (Gol).

Eminent Grantha Tamil experts agreeing to Dravidian letters in Grantha block:(3) L2/11-024:

- (3) Letter from Prof. S. Raju regarding the addition of 5 Dravidian characters to Grantha block in Unicode.
- (4) L2/11-025 Letter from Dr.R.Nagaswamy re Grantha (Nagaswamy is founder-Director, Dept. of Archaeology, Govt. of Tamil Nadu. He was there 1965-1988 as its director, then moved on to Govt. of India projects at the center.)
- (5) L2/11-011, Diacritic Marks for Short e & o Vowels (Dravidian and Vedic) in Devanagari (North India) and Grantha (South India).
- (6) L2/11-034, Dravidian Letters in Tamil Grantha Script: Some Notes in Their History of Use.