## Dravidian Letters in Tamil Grantha Script Some Notes in Their History of Use

Dr. Naga Ganesan (<u>naa.ganesan@gmail.com</u>)

#### **1.0 Introduction**

Earlier, in L2/11-011 with the title, *Diacritic Marks for Short e & o Vowels (Dravidian and Vedic) in Devanagari (North India) and Grantha (South India)*, Vedic vowels, short e & o in Devanagari are recommended to be transcribed into Grantha in Unicode using the corresponding letters as in Govt. of India (GoI) proposal. The archaic Dravidian short /e/ & /o/ typically use a "dot" (puLLi) diacritic on long /e/ & /o/ vowels in south India, and this was originally proposed in the Grantha proposal after consultations with epigraphists and Tamil Grantha scholars. Reference: the Table of Dravidian letters in Grantha proposal by Dr. Swaran Lata, Govt. of India letter, pg. 8, L2/11-011 is given:

	PROPOSED GRANTHA CHARACTERS			EXISTING TAMIL CHARACTERS			SIMILAR DEVANAGARI CHARACTERS *		
Code	Glyph	NAME OF THE CHARACTER	Code G	lyph	NAME OF THE CHARACTER	Code	Gyph	NAME OF THE CHARACTER	
1130E	ൺ	GRANTHA LETTER E *for transcribing Dravidian short /e/	0B8E 6	ភ	TAMIL LETTER E	90E	ऎ	DEVENAGARI LETTER SHORT E	
11312	હ	GRANTHA LETTER O *for transcribing Dravidian short /o/	0B92	9	TAMIL LETTER O	912	সৌ	DEVENAGARI LETTER SHORT O	
11329	ன	GRANTHA LETTER NNNA *for transcribing Dravidian alveolar nasal	OBA9 6	ன	TAMIL LETTER NNNA	929	ऩ	DEVENAGARI LETTER NNNA	
11331	B	GRANTHA LETTER RRA *for transcribing Dravidian alveolar /r/	OBB1	מ	TAMIL LETTER RRA	931	ऱ	DEVENAGARI LETTER RRA	
11334	ĥ	GRANTHA LETTER LLLA *for transcribing Dravidian retroflex continuant	OBB4	Ð	TAMIL LETTER LLLA	934	ऴ	DEVENAGARI LETTER LLLA	
11346	ം	GRANTHA VOWEL SIGN E *for transcribing Dravidian short /e/	OBC6	െ	TAMIL VOWEL SIGN E	946	2	DEVENAGARI VOWEL SIGN SHORT E	
1134A	ொ	GRANTHA VOWEL SIGN O *for transcribing Dravidian short /o/	OBCA (	ொ	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

This document is to add some further inputs about the history of Tamil written in Grantha script. Grantha Tamil or Tamil Grantha, by definition, can handle writing both Indo-Aryan (Sanskrit and its derived languages) and Dravidian such as Tamil language. Both Tamil script with explicit *virama*, and Tamil Grantha script with implicit *virama* grew up together in their history, that is the reason about 30 letters are very similar between the two scripts. For example, page 37, A. C. Burnell, *Elements of South Indian Paleography*, 1874. "The origin of this Tamil alphabet is apparent at first sight; it is a brahmanical adaptation of the Grantha letters corresponding to the old VaTTezuttu, from which, however, the last four signs (LLL, LL, RR and NNN) have been retained."

For the co-development of Tamil and Grantha scripts exchanging letter forms is dealt in B. Chhabra, Expansion of Indo-Aryan culture during Pallava rule, 1965, pp. 72-76.

Dr. A. Veluppillai explained that Tamil and Tamil Grantha scripts are considered as the same by giving an illustration. In Pandya country, the normal script known as *VaTTezuttu* was reserved for Tamil language portion of epigraphs, while Tamil names or letters from Tamil script were mixed in the Grantha script portion to write Sanskrit sections of the same inscription. This, according to Prof. Veluppillai, is the solid proof that Tamil and Grantha are considered one and the same script in centuries past, and the reason why 30 or so letters are the same or very near the same between the two scripts even today. As further proof, Asko Parpola (Helsinki) sent a sample where LLLA is used inside *Saamaveda* (Sanskrit) printed in Tamil Grantha script in 1924 (Section 3.0). Similar examples exist for LLA and NNNA also. For comparative purposes, look into Tamil block in Unicode having added letters, *sha* (U+0BB6) and similarly Malayalam has new letters, NNNA and TTTA in Unicode 6.0.

## 2.0 PuLLi diacritic in Unicode Brahmi and in Grantha orthography:

Govt. of India proposal on Grantha has a *Nukta* combining sign at U+1133C which is to help make Grantha letters write English letters, Z, W and F in proper transliteration. Nukta is brand new for Grantha, and not found at all in old books and manuscripts. The puLLi "dot" diacritic has been applied on Grantha letters in print long ago. For example, see the 1900 AD book, Bhoja Charitram available at:

http://books.google.com/books?id=XbE\_AAAAIAAJ&dq=bhoja+charitram&source=gbs navlinks\_s

*puLLi* dot diacritic on some Grantha letters from the book, Bhoja charitram:

ர<sub>ி</sub>ணுய்வம் மாதேர மே s ஓய (p. xiii) வ்பாவர் வக் வ்பறாகர்மகர்க்। அஸ<u>ல்</u>யைஃப்ராவிமூர் நிஸி I (p. xiv)

Let us take a look at Brahmi encoding in Unicode (L2/07-342, S. Baums and A. Glass). "A special device was introduced for the marking of vowelless consonants, used both for Sanskrit and Tamil. In Sanskrit, this sign is called *virāma* and is first attested in manuscripts of the first century CE. In Tamil, it is called *puLLi* and is attested in inscriptions from the second century CE (Mahadevan 2003, p. 198)." (pg. 4).

"In the second century BCE, as Brāhmī spread southwards, speakers of Old Tamil became acquainted with it and adapted it to the writing of their own language." (pg. 7). "*PuLLi* takes the form of a dot above or in the upper part of the *akSara*. In addition to this normal *virāma* 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 (pg. 8, L2/07-342).

This Brahmi script principle is also used to produce short /e/ and /o/ in Grantha code chart (GoI, L2/10-426). PuLLi for short /e/ and /o/ in Grantha is needed for writing without mutilation thousands of words in the Dravidian languages of south India. And also short /e/ & /o/ required while transcribing names like Kennedy, Obama, ... in Grantha. Shriramana Sharma in his documents submitted to UTC in 2010 has explained and accepted the need for the short /e/ and /o/ and Govt. of India meeting of Grantha experts has come to the same decision.

## 3.0 Tamil transliterated in Tamil Grantha script

For long, Tamil letters have been added in Brahmi scripts to write Dravidian properly. This is acknowledged in Unicode encoding, for example, Brahmi encoding in Unicode allots separate code points for Tamil/Dravidian letters. In addition to the "vowel reducer" diacritic, Tamil puLLi to generate short /e/ and /o/ vowels in Brahmi in Unicode encoding, S. Baums and A. Glass added the Tamil letters in Brahmi code chart in Unicode (pg. 8-9, L2/07-342):

"For the representation of sounds particular to Dravidian, the makers of Old Tamil Brāhmī added four new consonant signs to the repertoire of Brāhmī: LLL, LL, RR and NNN. The second of these, LL, is phonetically identical (a retroflex lateral) to the LL that somewhat later appears in north-Indian Brāhmī for the writing of Sanskrit, and that also occurs in the Bhattiprolu inscriptions. Moreover, both the Tamil Brāhmī and the Bhattiprolu LL are graphically derived from the regular letter l, the former by adding a hook to the lower right of l, the latter by mirroring l horizontally (while the north-Indian LL is derived from the letter DD). Old Tamil, Bhattiprolu and north-Indian LL should therefore all be encoded as 11031. Additional code points are provided for LLL, RR and NNN in the positions 11072 to 11074." As we can see, similar principles have been employed for the 5 Dravidian/Tamil letters in Grantha chart proposal.

Let us now look at some history of writing Tamil in Grantha script documents across the last seven centuries. Tamil has been declared as one Classical language of India few years ago in the Indian parliament. Prof. George L. Hart, University of California, sent in a Letter of recommendation for this, and when two other Dravidian languages, viz., Telugu and Kannada were added to the Classics list by the Govt. of India, Hart wrote some comments as a reaction, published in my weblog: http://nganesan.blogspot.com/2010/09/bhk.html

Being a classical language of India, Tamil, like Sanskrit, is also written in several scripts. Apart from Tamil script, Tamil is written in (1) Arabic script, its name being *aRabi Tamizh* or Tamil Arabic (2) Latin script as Tamil Latin (ISO 15919 standard). BTW, like Some French and German letters used more commonly in English web to denote the exact sounds, as font availability due to Unicode increases, Tamil Latin can be employed at least in the special Dravidian/Tamil letters to denote the retroflex sounds of south India to the more general English readers of the world and, (3) of course, Tamil Grantha script to exactly represent sacred Dravidian/Tamil classics, bhakti texts (Bhakti is a major part of religion of the masses in India, said to have started by Dravida saints 13 centuries ago).

Caldwell, Robert (1858/9). "On the substitution of the Roman characters for the Indian characters", Madras Journal of Literature and Science, new series 4:43-71. This early reference started the Tamil transliteration effort into Latin, its evolution can be studied via the British library catalogues of Tamil books published intermittently during the 20<sup>th</sup> century. Tamil Arabic script has a much longer history than the Tamil Latin transcriptions. Coming to Tamil being written in Grantha script, it is at least 720 years old. Grantha is truly a multi-language script and it can legitimately be called as "Latin" script of south India and south east Asia because it has been applied to write different language families such as Dravidian in history, like Latin script handles many languages now.

Here is an early instance of Grantha employed as a multi-language script to transliterate Tamil language. "Curiously enough we find a copper-plate grant containing an inscription having Sanskrit and Tamil sections both written in the Grantha script [11]. The date of the record falls in 1289 AD. The Tamil portion is entirely transliterated in Grantha script following only the written form and **not** the form of pronunciation. [11] Ep. Ind., XXXVII, pp. 175 ff. " (pg. 243. "Convertibility of surds and sonants" historical evidence, K. G. Krishnan - Indo-Iranian Journal, 1972). After the copper-plate inscription of 1289 AD, the next stage in south India of transliteration of Tamil into Grantha is recorded by the researches of Prof. S. Raju (L2/11-024). Prof. Raju documents his results about Tamil being written in Grantha script in social documents of Palaghat region, Kerala and Justice R. Sengottuvelan's statements regarding Tamil names like Kangeya Manradiars signing their names in Grantha exactly. Dr. R. Nagaswamy, the founder Director of Dept. of Archaeology, Tamil Nadu state (1965-1988) in L2/11-025 mentions about Tamil names transcribed in Grantha inscriptions. Both Drs. Nagaswamy and Raju, eminent epigraphy experts of Tamil Nadu, have recommended the addition of 5 Dravidian letters to Grantha in Unicode block as recorded in the GoI proposal.

Prof. Asko Parpola, (http://www.helsinki.fi/~aparpola/), the Finnish indologist has sent me a Sanskrit Saamaveda book page where the Dravidian/Tamil LLLA is used inside Veda (the oldest Indo-Aryan/Indo-European book we possess). A. Parpola wrote: "Thank you for your message. In my opinion it is useful to include the extra Tamil letters in the Grantha unicode. I am appending a scan of page 145 of the Jaiminiiya-prayoga-vivaraNa by A. Rangasvaami Ayyangaar, printed in Grantha and Tamil scripts at Kumbhakonam in 1923. Here you see a Jaiminiiya Saamaveda saaman printed in Grantha. The entire text on this page is in Sanskrit and Grantha, but because in the Jaiminiiya branch of Saamaveda surviving only in South India, the Sanskrit word *iDaa* is rendered *iZaa*, it is necessary to use the corresponding Tamil-Malayalam letter LLLA to express this. You see it in the middle of the third line from the bottom on this page. With best regards, Asko Parpola".

Page 145, Dravidian letter LLLA Example in Grantha script, Jaiminiiya Prayoga VivaraNa, 1924, KumbhakoNam.

58 B கவிபுரவணவாசா நி п 19] கவால ரெகால வல்ஜா உரைகா உடலாஜா உவொவா 1 ஆல 1 wayan and may the co 5 vo 5 ஆாஜா உவொ ஒவா 1 வாவிமுஸரா ஜமதொ ஜொ கீ 81811 கா the second secon പ് செவஷவாக் தீ ணி உ**வ**ை அா8செவொ தாலல் தூகீயல் ஒள ஆ**ப் காடிலா ။ சுயன** இருவாகொடாராவ <del>க</del>ுகே வட்டு கவ ணிணா வஹீ ஆஷி ட மீவ- ூகொ சூடீ வஹ ஆா உஷீ ட வொஹா உ கி டி 5) காஸிட சியையா ஆகையா 1 லம் ஹா 1 த 11 சு 11 லாம காஜ ழக கூறவ 2 50 50 ஹாவாவகா நலுலயா பலாராலா தீடவாஜ விவ ஆா ஜீ நா உ **ക എ** മറ്റ് ല പ്രാഖ അറ്റി അറ്റി മ வா தீ 1 யஜதால வா ஷூ ூ ஒள ஹொவா 1 யியாவால - ூ 1 8 1 फ़ि, म् हा की की म् हा 1) 4 நி i வுுமுுஷை தல வை i உணுவாணா வுு ஹுவாஹா வு ஹுவாஹா வு ப வஹை மீஷ பா வ இர இஷா? 1 e u வைவைதாக்கலைவைதாவாக் பலாறைல் வை ஆகொவாகவா ப 4-1-5 4 5 சதிதுக்கிலாலாடு ப சியைகானா வாக்கு காகுய J ₫ solation and a solation af வுகையா வா ப உட் சி பி க க ய உ ஹு வெள B A 4 வை வாடதி : க் வாசறை கணி உதெக்வு மற்று வா ! வா 4 5 4-001 சொலை ஹாலவகவ ூநால I தாயாவிஷ் வியகராலாக I 4J-5 4 5

Next, let us look at NNNA ( $\omega$ ) in Grantha script. (1) John Marr, Some Manuscripts in Grantha Script in Bangkok, *Bulletin of the School of Oriental and African Studies, University of London*, Vol. 32, No. 2. (1969), pp. 281-322.

But the grapheme here is **60** and as such it bears comparison with Ta. **57** <u>na</u>. (pg. 291). This NNNA is quite different from dental NA and forms a conjunct with letter CA (pg. 295)

A joined form for the cluster  $\underline{nc}$  is used in a few places; it is  $\underline{mc}$ .

**Chillu Form for NNNA:** 

(a) (pg. 309) **TT 5 15 07 rattunan**(b) (pg. 320) **and final** -m **2** together with -n 67.

Grantha script has many Chillus, and if Chillus are formed using joiners, the halfconsonant model of Indic rendering should be employed. For Chillu NNNA, the Unicode sequence will be <NNNA, VIRAMA, ZWJ> in parallel with Malayalam Chillu sequences (provided atomic chillu code points are not encoded for Grantha). The chillu sequence with ZWJ is discussed in L2/10-447. In Grantha script, the Chillu NNNA forms conjuncts with many consonants following it.

In 1972, Dr. Marr went on to publish a second study of some more Tamil Grantha manuscripts. "Some Manuscripts in Grantha Script in Bangkok-II," Journal of the Siam Society (JSS) 60, no. 2 (1972): 71-76. In this paper, he has transcribed instances of alveolar n (NNNA) from manuscripts.



In fact, there are scores of occurrences of NNNA letter in Grantha script in Marr's 1972 JSS paper.

From Grantha manuscripts, Prof. T. P. Meenakshisundaram published 104 sacred Tamil verses written in Grantha script. What is interesting is the fact that these decades of sacred Bhakti hymns have an order rearranged differently from the contemporary print editions. Thevaram verses can be read in south Indian scripts in <u>http://thevaaram.org/</u>When Grantha comes to Unicode, we plan to create Thevaram properly in Grantha plaintext web pages. This will be a teaching tool for those interested to learn Grantha script because for Tamils (or Telugus or Kannadigas), their native script can be compared with Grantha script. Important semantics will be lost to the students of Grantha, if Tamil or Malayalam etc. nouns are wrongly written. Grantha being an academic script, it will draw students from all over the World, and it is all the more important to introduce both Dravidian and Indo-Aryan (Sankrit) etc., words, and sacred texts in appropriate phoneme characters in Grantha Unicode plaintext in the web.

Tamil sacred verses (written in Grantha script in Thailand) from Prof. T. P. Meenakshisundaranar (TPM)'s book. 1961. (II ed., 1978), Taylantil Tiruvempavai Tiruppavai (Contributions to the External History of the Tamils).

Prof. TPM (first Vice Chancellor, Madurai University) lists a total of 104 Tamil verses as Appendixes I - VII that he studied and which were written in Grantha script. Prof. TPM's book, pp. 71-94. If the reader wants, I can email the scans as a PDF file.

Appendix I Tiruppavai II Tiruvempavai Uyyakkondar Arulicceyta Taniyan (also) III Tiruvaymoli (Nammalvar) IV Tevaram (Sambandar) Pumpavai Pathikam (Mylapore) V Tevaram (Sambandar) Todudaiya Seviyan (Shiyali) VI Tevaram (Sundarar) Pitta piRaicUDii VII Tevaram (Appar) Kurrayinavaru For example. Appendix I in TPM book

## பிற் சேர்க்கை I

## திருவெம்பாவை

ஆதியுல் அந்தமும் இல்லா அரும்பெருஞ் சோதியை யாம்பாடக் கேட்டேயும் வாள் தடங்கண் மாதே! வளருதியோ? வன் செவியோ நின் செவிதான்? மாதேவன் வார்கழல்கள் வாழ்த்திய வாழ்த்தொலிபோய் வீதிவாய்க் கேட்டலுமே விம்மிவிம்மி மெய்ம்மறந்து போதார் அமளியின் மேல் நின்றும் புரண்டுஇங்ஙன் ஏதேனும் ஆகாள் கிடந்தாள்; என்னே! என்னே! ஈதே எந்தோழி பரிசு ஏலோர் எம்பாவாய்!

## Appendix II

# பிற் சேர்க்கை II திருப்பாவை

and the second s

மார்கழித் திங்கள் மதிதிறைந்த நன்னொல் நீராடப் போதுவீர் போதுயினே நேர் இழையீர்! சீர்மல்கும் ஆய்ப்பாடிச் செல்வச் சிறுமீர்கான்! கூர்வேல் கொடுந்தொழிலன் நந்தனேபன் குமரன் ஏர் ஆர்ந்த கண்ணி யசோதை இளஞ்சிங்கம் கார்மேனிச் செங்கண் கதிர்மதியம் போல் முகத்தான் நாரா யணனே நமக்கே பறைதருவான் பாரோர் புகழப் படித்து ஏல்ஓர் எம்பாவாய்.

[...]

The following book by Filliozat/N. Sarma also should be consulted for Dravidian sacred texts written in Grantha script. In this, Neelakanta Sharma wrote some Tamil texts in Grantha orthography in his way.

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*Textes sanskrits et tamouls de Thaïlande*, Author: Neelakanta Sarma; Jean Filliozat, Publisher: Pondichéry : Institut français d'indologie ; Paris : diffusion A. Maisonneuve, 1972, 156 pp.

**Summary:** Grantha script has long been a multi-language script in its history and has been used to write sacred Tamil texts. For proper representation of names (personal, river and place) and sacred classics from the classical Dravidian languages of south India, the Grantha homeland, the 5 Dravidian letters need to be encoded within Grantha block in Unicode for proper orthography and phonemes.

### **References:**

[1] Stefan Baums and Andrew Glass, Proposal for the Encoding of Brāhmī in Plane 1 of ISO/IEC 10646, L2/07-342, 2007.

[2] Naga Ganesan, Proposal to encode the Grantha Script, L2/09-345, 2009.

[3] Govt. of India, Proposal to encode the Grantha script in Unicode, L2/10-426, 2010.

[4] Naga Ganesan, Consonant Clusters that need 3 sequences in Unicode Encoding in Grantha script, L2/10-447, 2010.

[5] M. Karunanidhi (Chief Minister), Letter from Gov't of Tamil Nadu re Grantha, L2/10-464, 2010.

[6] E. Annamalai (Director Emeritus, Central Inst. of Indian Languages), My views on Encoding Grantha in Unicode, L2/11-006, 2011.

[7] Naga Ganesan, Diacritic Marks for Short e & o Vowels (Dravidian and Vedic) in Devanagari (North India) and Grantha (South India), L2/11-011.

[8] Letter from Prof. S. Raju (Epigraphist) regarding the addition of 5 Dravidian characters to Grantha block in Unicode, L2/11-024.

[9] Letter from Dr.R.Nagaswamy (Founder Director, Dept. of Archaeology, Tamil Nadu, (1965-1988)) re Grantha, L2/11-025