Follow-up to Extended Tamil proposal L2/10-256R

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This is a follow-up to my Extended Tamil proposal L2/10-256R. It reflects some further thought I have been giving to the matter of how Extended Tamil and related script-forms should be represented at the encoding level. It also describes use of Extended Tamil for contexts I had not considered earlier. No part of this document alters any of the Extended Tamil characters or their names or properties as proposed by L2/10-256R, however. The only intention is to clarify the details of the implementation and usage of Extended Tamil.

§1. Encoding model of Extended Tamil and related script-forms

§1.1. Tamil script for Tamil language

Just to cover the entire spectrum, I first note that characters from the Tamil block are used to denote the Tamil language (obviously). The point is that Extended Tamil characters which are intended for the proposed Tamil Extended block are *not* used for this:

ஐந்து கரத்தண யாண முகத்தணே இந்தின் இளம்பிறை போலும் எயிற்றண நந்தி மகன்தண ஞானக் கொழுந்திணப் புந்தியில் வைத்தடி போற்றுகின் றேனே.

(The above verse is the first verse from the Tirumantiram, a text on the Shaiva Vedanta religion attributed to one sage Tirumūlar.)

§1.2. Grantha script for Sanskrit language

At the other end of the spectrum, the Grantha script – to be precise, characters from the Grantha block – are used to denote Sanskrit as in this verse from the Bhagavad Gītā (18-66):

യെലുക്കിക്കിച്ച ട്രൂ സ്ഥാം || പ്രത്യേക്കം സ്ഥയ്യം ലുജ | പ്രത്യേക്ക് സ്ഥയ്യം ലുജ | വ്യാപ്രത്യാക്കുന്നു

\$1.3. Extended Tamil script (Liberal variant) for Sanskrit language

The same verse in Extended Tamil, using characters from the Tamil and Tamil Extended blocks and a font that displays those characters in the orthographic style we have called in our proposal L2/10-256R as ET-L or Extended Tamil Liberal:

ஸா்வயா்மாந் பரித்யஜ்ய மாம் ஏக் மரண் வ்ரஜ l அஹ் த்வா ஸா்வபாபேஊ்யோ மோக்ஷயிஷ்யாமி மா முுசு ll

The language is Sanskrit. Both Tamil-style and Grantha-style glyphs are seen. Only characters from the Tamil and Tamil Extended block are used. No characters from the Grantha block are used.

§1.4. Extended Tamil script (Conservative variant) for Sanskrit language
The same verse in ET-C or Extended Tamil Conservative:

ஸா்வத⁴ா்மாந் பாித்யஜ்ய மாம் ஏகம்² ஶாரணம்² வ்ரஜ | அஹம்² த்வா ஸா்வபாபேப்⁴யோ மோக்ஆயிஷ்யாமி மா ஶுுசு ||

The language is Sanskrit. Only Tamil-style glyphs along with superscript digits (or other diacritics in other variants) are seen. Only characters from the Tamil and Tamil Extended block are used. No characters from the Grantha block are used.

§1.5. Mixed Grantha and Tamil scripts for mixed Sanskrit and Tamil languages

A translation of the same verse above into Tamil interlaced with Sanskrit words, in which the Sanskrit portions – often parts of words and not even whole words – are represented in the Grantha script (marked in blue):

வையு வக்களையும் வரி தர மம் செய்து என்னெருவணேயே அடைக்கலம் புகுவாய். நான் உன்னே வையு வாடங்களிலிருந்தும் விடுவிப்பேன், கவலேப்படாதே.

This writing style, called Manipravalam, is marked by a pronounced increase in the usage of Sanskrit word-roots, especially Sanskrit-style compounds and Sanskrit verb-roots, which however mostly take Tamil-style word endings (as seen above) while sometimes Sanskrit-style word endings may also be seen. When the writer seeks to accurately represent the Sanskrit-style portions, s/he uses Grantha.

In such a writing style, the language is variously Sanskrit and Tamil. Sanskrit portions are composed entirely using characters from the Grantha block and Tamil portions entirely from the Tamil block. No characters from the Tamil Extended block are used. The Sanskrit/Grantha portions will exhibit Grantha orthographic rules while the Tamil/Tamil portions will exhibit Tamil ones. Thus this is a true mixture of two scripts.

§1.6. Extended Tamil script (Conservative variant) for Sanskrit fragments in Tamil When significant portions of a Tamil passage are judged to be in Sanskrit and are desired to be accurately represented, the mixed Tamil-Grantha writing as described above is used. When there is no desire for such accuracy, especially when Sanskrit words are considered full imports into the Tamil language, such Sanskrit-derived words are written in the Tamil script without any extensions. Most of the time, Sanskrit-aware readers can infer the original Sanskrit word with its proper phonetic content from the context.

Occasionally, however, a writer will desire to mark a Sanskrit-derived Tamil word so that it is not confused with a similar native Tamil or another Sanskrit-derived Tamil word. For example, the word bhāvam (from Skt bhāva = state of mind) in Tamil would be written the same as pāvam (from Skt pāpa = sin, used to express sympathy). In a context where the writer seeks to convey to the reader it is the former word that is intended and not the latter, the writer will leave no room for doubt and use ET-C for the consonant, as follows:

Whether an Extended Tamil character has here been used for a Sanskrit word or a Tamil one is moot, and in fact, it is irrelevant. Extended Tamil is intended to enable the Tamil script to distinguish more sounds that it is natively able to. Such a distinction was required here, and was hence accomplished using Extended Tamil. The next section will demonstrate that Extended Tamil is not limited to the writing of Sanskrit. Thus even if it were argued that it is a Tamil word here that Extended Tamil was used to denote, no fault can be found with that on principle.

§1.7. Concluding words on encoded representation

The condensed summary of the above analysis can be stated as follows. Characters from the Grantha block are only used in two very clearly defined contexts: when the writing is entirely Grantha/Sanskrit, and for the Grantha/Sanskrit parts of Manipravalam texts. For all other cases, only Tamil and Extended Tamil characters are to be used, even if Grantha-style glyphs are seen in some renderings thereof and irrespective of the language represented. When one clearly understands this demarcation, all confusions will disappear. There is no "mixing" of scripts at the encoding level even if any seems to exist at the superficial glyphc level.

Even Manipravalam, which comes close to "mixing" scripts, is encoding-wise stable. Even when characters with script=grantha and script=tamil are "mixed" in the sense of being present in the same "word", they are *never* mixed in rendering – i.e. combinations of base characters and combining marks with different script properties will *never* occur and do *not* need to be supported. (In fact, such combinations should *not* be supported in the interest of ensuring sane data input.) As to where exactly the script boundary occurs in a given Manipravalam text, i.e. where the sequence of script=grantha characters ends and that of script=tamil characters starts, it is up to the inputter to carefully compose the text such that there will be no problem when the text is later used. "Caveat scriptor"!

§2. The use of Extended Tamil for other than Sanskrit

In my Extended Tamil proposal, I had predominantly considered the use of Extended Tamil for the writing of Sanskrit. In passing, I had also cast a glance at its use for writing Saurashtra assuring that Extended Tamil as proposed by me would also support this. I was content to consider only Sanskrit and Saurashtra because these are the only two languages *explicitly* mentioned in TUS chapter on Tamil as requiring the use of numeral diacritics.

However, I realized that Extended Tamil can be and is also used to write very many other languages. I provide samples for Hindi, Marathi, Telugu and Kannada. These are Hindu religious compositions in these respective languages by Goswami Tulasi Das, Sant Jnaneshvar, Tyagaraja Swami and Purandara Dasa, who are all recognized to have chiefly employed these particular languages in their extensive literary output. The source for these samples is a book Śrī Bhāgavata Sammelana Sampradāya Bhajana Mālā published in 2008 by Śrī Jñānānanda Sēvā Samājam, Mandaveli, Chennai which is a respected institution in these Hindu religious circles. The page numbers are given along with the samples.

Hindi, p 236

ப⁴ஜமன ராம் சரண தி³ன ராதி

ரஸனா கஸபஜோ தும் ஹரிபத ஸுரத பிரதக்யோம் அவஸாதி

ஜாகே கஹத் த³ஹத் து³க்க த³ாருண் ஸுனோ த்ரய தாப பு³ஜாதி

ராமசந்த்³ரகே நாம அமியரஸ . ஸோரஸ கோபி³ன க³ாதி

துளஸீத³ாஸ ப்ரபு⁴ வினய கரத் ஹை ப்ரத²ம ஆரஜகீ பாதி

Marathi, p 245

லாரலார நாம விடே²ாப³ா நாம துஜே² ஸார ம்ஹணோனீ ஶுுலபாணீ ஜபதாஹேம் வாரம்வார ஆதி³ மத்⁴ய அந்தீம் நிஜ பீ³ஜ ஓங்கார பத்த அக்ஞானி ஜட தரலே அபார புக்தி ஆணி முக்தி ஸுக² த³ாயக ஸாசார ந்⁴ருவ ப்ரஹ்லாத³ அம்ப³ரீஷேம்கேலா ஹா நிர்த⁴ார பீ³யலோ தி³வலீ வ்யர்த² ஜாதோ ஹா ஸம்ஸார பீ³ய ரகு²மா தே³வீ வரு விட்²ட²லேம் ஆத⁴ார

Telugu, p 230

ராகம் : சுத்தபங்காள

ப : ராம ப⁴க்தி ஸாம்ராஜ்யம் ஏமானவுல கப்பே³னோ மனஸா

அ : ஆமானவுல ஸந்த³ர்மனம் அத்யந்த ப்³ரஹ்மானந்த³மே

ச: ஈலாக³னி விவரிம்பலேனு சாலா ஸ்வானுப⁴வ வேத்³யமே லீலா ஸ்ருஷ்ட ஜக³த்ரயமனே கோலாஹல த்யாக³ராஜ³னுதுட³கு

Kannada, p 203

ஜக³து³த்³த⁴ாரன ஆடி³ஶித³ளெ யஶோதே³

1 ஐக³து³த்³த⁴ாரன மக³னெந்து³ திளியுத ஸுகுணாந்த ரங்க³ன ஆடி³மித³ளெ யமோதே³

 நிக³மகெ ஶிலுகத³ அக³ணித மஹிமன மகு³க³ள மாணிக்யன ஆடி³ஶித³ெள யஶோதே³

 அணோரணீயன மஹதோ மஹீயன அப்ரமேயன ஆடி³ மித³ளெ யமோதே³

 பரமபுருஷன பரவாஸுதே³வன புரந்த³ர விட்ட²லன ஆடி³மித²ளெ யமோதே³

These samples indicate that Extended Tamil is used for languages other than Sanskrit and Saurashtra as well, It is also to be noted that such usage for South Indian languages like Telugu and Kannada will mean that the contrast between short E/O and long EE/OO exists. (Such contrast is seen in the Kannada sample above, for example.) That does not alter the fact that Sanskrit and Saurashtra are the *major* usage cases for Extended Tamil, however.