Proposal to encode Malayalam Letter Chillu Y

Cibu Johny, cibu@google.com
2014-Dec-26

Discussion

In the Malayalam script, a Chillu or Chillaksharam is a special vowel-less form of a consonant. In Unicode, these special vowel-less forms of Malayalam are given their own codepoints: 0D7A to 0D7F as Chillu NN, N, RR, L, LL and K (in that order):

ൺ ൻ ർ ൽ ൾ ൿ

Malayalam Letter Chillu LLL is already proposed and in the pipeline with codepoint 0D4F and is at stage 5 as of writing this document.

ൿ

Now an additional Chillu character is proposed: Malayalam Letter Chillu Y:

ൢ

While this Chillu Y is not in use today, it has been attested in Malayalam documents from 1851 to 1918, by multiple authors, in manuscript and print as well. So it must be encoded for recording those documents.

In August, 2007 Michael Everson had already proposed this Chillu to ISO as N3295[1]. This document expands on that by adding newly discovered attestations.

Attestations

Attestations from various sources are listed below as sources organized as subsections.

Malayāḷabhāṣā Vyākaraṇaṁ (1851) Lithograph by Rev. Dr. Hermann Gundert

Only a few initial pages of the above document are available to the author. Since it contains, multiple attestations of Chillu Y, it is anticipated that there could be more attestations in remaining pages of the original book.

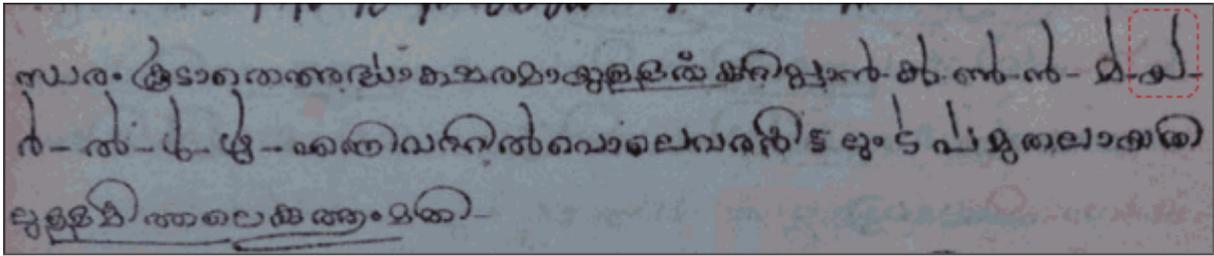[1] http://std.dkuug.dk/jtc1/sc2/wg2/docs/n3295.pdf

Image 1: From page 3 of the lithograph; the text lists various Chillus of Malayalam.
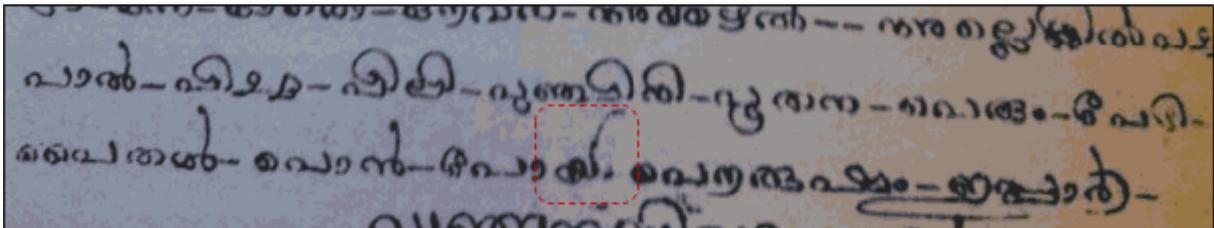

Image 2: From page 8 of the lithograph, list of few words including one with Chillu Y.
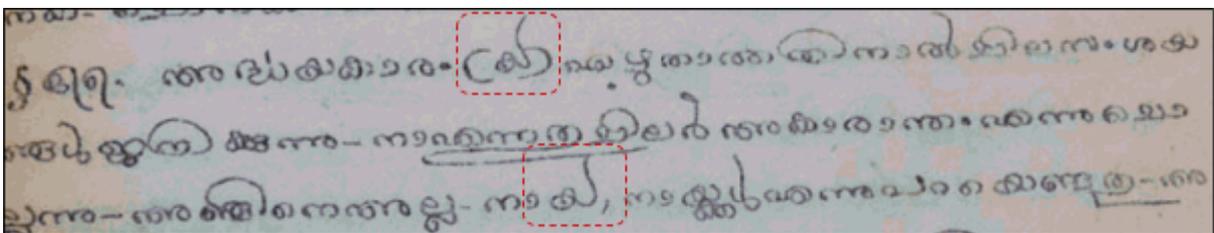

Image 3: From page 13 of the lithograph, chillu Y is separately indicated; also, a word using Chillu Y.
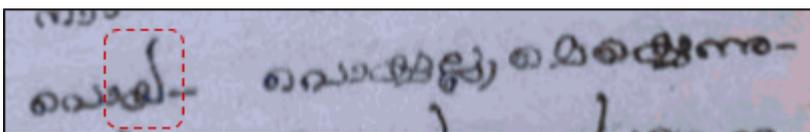

Image 4: From page 13 of the lithograph, a word using Chillu Y.

A Malayalam and English dictionary[2](1872), by Rev. Dr. Hermann Gundert

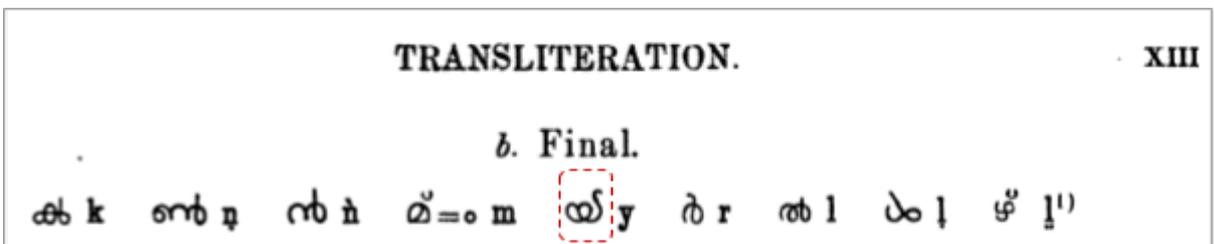This document contains numerous attestations of Chillu Y. Following are few samples from it.

Image 5: Page XIII of the book lists all the chillus of Malayalam with their Latin transliteration.

Image 6: Page 238 of the book shows a word that uses Chillu Y.

Image 7: Page 647 of the book shows a word that uses Chillu Y.

Malayalam 5th Grade Reader in Travancore Kingdom[3] (1918)

This document contains many attestations of Chillu Y. Following are few samples from it. These are particularly interesting since they are used in the running text.

Image 8: Page 38 of the book shows a word using Chillu Y in running text in a poem.

Image 9: Page 64 of the book shows Chillu Y in running text in prose.

Image 10: Page 178 of the book shows Chillu Y in running text, in poem.

---

[3] https://archive.org/details/MalayalamFifthReader1918Images

Based on the above attestations one can confidently state that this character was in use in the later half of the 19th century and the initial part of the 20th century. Since then it has been replaced by the YA with explicit virama: �യ്.

However, given that the chillu representation of vowelless consonants has a distinct encoded form than their virama representation[4], for faithfully recording as digital text the original content of such old prints/manuscripts as cited above, it is justified and necessary to encode a MALAYALAM LETTER CHILLU Y.

Choice of codepoint

It is suggested that this character may be placed together with the Chillu LLL which is in stage 5. For that, Chillu LLL may be moved to 0D56 and Chillu Y be placed above that in the same column. The proposed codepoint is **0D55**.

---

[4] Proposal to encode Malayalam Chillaksharams, L2/06-207.

Malayalam Code Chart

	0D0	0D1	0D2	0D3	0D4	0D5	0D6	0D7
0	◌ഁ	ഐ	ഠ	ര	◌ീ		ൡ	ധ
1	◌ഁ		ഡ	റ	◌ു		ഞ	ന
2	◌ം	ഒ	ഢ	ല	◌ൂ		ൺ	ഩ
3	◌ഃ	ഓ	ണ	ള	◌ൃ		ൻ	ൌ
4		ഔ	ത	ഴ	◌ൄ	ൔ		ൖ
5	അ	ക	ഥ	വ		ൕ	ഈ	ൺ
6	ആ	ഖ	ദ	ശ	െ◌	ൖ	൦	൙
7	ഇ	ഗ	ധ	ഷ	േ◌	◌ൗ	പ	൚
8	ഈ	ഘ	ന	സ	ൈ◌	൘	വ	൞
9	ഉ	ങ	ണ	ഹ		൙	ന	ൕ
A	ഊ	ച	പ	ഺ	ൊ◌	൚	ർ	ണ്
B	ഋ	ഛ	ഫ	◌഻	ോ◌	൛	ഇ	ൻ
C	ഌ	ജ	ബ	◌഼	ൌ◌	൜	ന്ന	ർ
D		ഝ	ഭ	ഽ	◌്	൝	൭	ൽ
E	എ	ഞ	മ	◌ാ		൞	വൃ	ൾ
F	ഏ	ട	യ	◌ി	ൖ	ൟ	ൻ	ൿ

Legend

White: Published as of Unicode 6.3.

Green: Accepted and at advanced stage not permitting changes.

<mark>*Yellow*</mark>: Fractions, accepted.

Orange: Chillu LLL accepted but preferably to be moved to group with Chillu Y.

Blue: New location proposed for Chillu LLL.

Purple: Locations of ongoing proposals like Anusvara Above, Chillus M, Circular and Vertical Bar Viramas, and Symbol Para.

Red: Location proposed for Chillu Y.

Proposed character with properties

ഝ

0D55;MALAYALAM LETTER CHILLU Y;Lo;0;L;;;;;N;;;;;

It is also requested that Malayalam Letter Chillu LLL currently accepted for 0D4F be moved to 0D56.

Thanks

- Shiju Alex for providing the scans of 5th Grade reader in Travancore (1918) and the lithography print of Malayāḷabhāṣā Vyākaraṇaṁ (1851) which are key attestations for this proposal.
- Michael Everson for the original proposal.
- Shriramana Sharma for providing much appreciated technical advice.

Official Proposal Summary Form

(Based on N3902-F)

A. Administrative

1. Title
Proposal to encode MALAYALAM LETTER CHILLU Y
2. Requester's name
Cibu Johny
3. Requester type (Member body/Liaison/Individual contribution)
Individual contribution
4. Submission date
2014-Dec-26
5. Requester's reference (if applicable)
6. Choose one of the following: This is a complete proposal (or) More information will be provided later
This is a complete proposal.

B. Technical – General

1. Choose one of the following:
1a. This proposal is for a new script (set of characters), Proposed name of script
No
1b. The proposal is for addition of character(s) to an existing block, Name of the existing block
Yes, Malayalam
2. Number of characters in proposal
1 (one)
3. Proposed category
Category B1, specialized small (for this character)
4. Is a repertoire including character names provided?
Yes
4a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?
Yes
4b. Are the character shapes attached in a legible form suitable for review?
Yes
5. Fonts related:
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

Michael Everson

b. Identify the party granting a license for use of the font by the editors (include address, e-mail etc.)

Michael Everson, everson@evertype.com

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

Yes

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script.

See detailed proposal.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

Yes

2b. If YES, with whom?

Shiju Alex. The author is himself one of the user community.

2c. If YES, available relevant documents

None specifically. The matter was discussed via email.

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

Those (scholars and enthusiasts) who desire to store old Malayalam documents using this character.

4a. The context of use for the proposed characters (type of use; common or rare)

Rare

4b. Reference

See detailed proposal.

5a. Are the proposed characters in current use by the user community?

No. This character was in historical use.

5b. If YES, where?

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

Yes

6b. If YES, is a rationale provided?

It belongs in the Malayalam block which is in the BMP.

6c. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

Only one character is proposed.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences?

No

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

No

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?

13c. If YES, reference: