

# Kannada Script LGR Proposal

Introduction, Current Analysis and Next Steps

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# Agenda

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Introduction to  
Kannada Script

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Classification of  
Characters

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Completion

# Introduction to Tamil Script

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- ⦿ **Population:** There are about 60 million speakers of Kannada language which uses Kannada script
- ⦿ **Geographical area:** Kannada is spoken predominantly by the people of Karnataka State of India. It is also spoken by significant linguistic minorities in the states of Andhra Pradesh, Telangana, Tamil Nadu, Maharashtra, Kerala, Goa and abroad
- ⦿ **Languages written in Kannada script:** Kannada, Tulu, Kodava (Coorgi), Konkani, Havyaka, Sanketi, Beary (byaari), Arebaase, Koraga
- ⦿ Work is in progress to include Tulu script in Unicode

# Classification of Characters: Consonants

## Vargeeya vyanjana (structured consonants)

	voiceless	voiceless aspirate	voiced	voiced aspirate	nasal
Velars	ಕ	ಖ	ಗ	ಘ	ಙ
Palatals	ಚ	ಛ	ಜ	ಝ	ಞ
Retroflex	ಟ	ಠ	ಡ	ಢ	ಣ
Dentals	ತ	ಥ	ದ	ಧ	ನ
Labials	ಪ	ಫ	ಬ	ಭ	ಮ

## Avargeeya vyanjana (unstructured consonants)

ಯ	ರ	ಱ (obsolete)	ಲ	ವ	ಶ	ಷ	ಸ	ಹ	ಳ	ಱ (obsolete)
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# Classification of Characters: Vowels

## Swaras (vowels)

Letter	ಅ	ಆ	ಇ	ಈ	ಉ	ಊ	ಋ	ಎ	ಏ	ಐ	ಒ	ಓ	ಔ
Vowel sign/ matra	N/A	ಾ	ಿ	ೀ	ು	ೂ	ೃ	ೆ	ೇ	ೈ	ೊ	ೋ	ೌ

## Yogavahas (part vowel, part consonant)

Anusvara	ಂ
Visarga	ಃ

In Kannada, all consonants (*vyanjanas*) when written as ಕ (ka), ಖ (kha), ಗ (ga), etc. actually have a built-in vowel sign (*matra*) of vowel ಅ (a) in them.

# Repertoire Included - 1

Sr. No	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
1	0C82	◌◌	KANNADA SIGN ANUSVARA	Mc	Anusvara		
2	0C83	◌ಃ	KANNADA SIGN VISARGA	Mc	Visarga		
3	0C85	ಅ	KANNADA LETTER A	Lo	Vowel		
4	0C86	ಆ	KANNADA LETTER AA	Lo	Vowel		
5	0C87	ಇ	KANNADA LETTER I	Lo	Vowel		
6	0C88	ಈ	KANNADA LETTER II	Lo	Vowel		
7	0C89	ಉ	KANNADA LETTER U	Lo	Vowel		
8	0C8A	ಊ	KANNADA LETTER UU	Lo	Vowel		
9	0C8B	ಋ	KANNADA LETTER VOCALIC R	Lo	Vowel		
10	0C8E	ಎ	KANNADA LETTER E	Lo	Vowel		

# Repertoire Included - 2

Sr. No.	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
11	0C8F	ಏ	KANNADA LETTER EE	Lo	Vowel		
12	0C90	ಐ	KANNADA LETTER AI	Lo	Vowel		
13	0C92	ಒ	KANNADA LETTER O	Lo	Vowel		
14	0C93	ಓ	KANNADA LETTER OO	Lo	Vowel		
15	0C94	ಔ	KANNADA LETTER AU	Lo	Vowel		
16	0C95	ಕ	KANNADA LETTER KA	Lo	Consonant		
17	0C96	ಖ	KANNADA LETTER KHA	Lo	Consonant		
18	0C97	ಗ	KANNADA LETTER GA	Lo	Consonant		
19	0C98	ಘ	KANNADA LETTER GHA	Lo	Consonant		
20	0C99	ಙ	KANNADA LETTER NGA	Lo	Consonant		

# Repertoire Included - 3

Sr. No	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
21	0C9A	ಚ	KANNADA LETTER CA	Lo	Consonant		
22	0C9B	ಛ	KANNADA LETTER CHA	Lo	Consonant		
23	0C9C	ಜ	KANNADA LETTER JA	Lo	Consonant		
24	0C9D	ಝ	KANNADA LETTER JHA	Lo	Consonant		
25	0C9E	ಞ	KANNADA LETTER NYA	Lo	Consonant		
26	0C9F	ಟ	KANNADA LETTER TTA	Lo	Consonant		
27	0CA0	ಠ	KANNADA LETTER TTHA	Lo	Consonant		
28	0CA1	ಡ	KANNADA LETTER DDA	Lo	Consonant		
29	0CA2	ಢ	KANNADA LETTER DDHA	Lo	Consonant		
30	0CA3	ಣ	KANNADA LETTER NNA	Lo	Consonant		



# Repertoire Included - 4

Sr. No.	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
31	0CA4	ತ	KANNADA LETTER TA	Lo	Consonant		
32	0CA5	ಥ	KANNADA LETTER THA	Lo	Consonant		
33	0CA6	ದ	KANNADA LETTER DA	Lo	Consonant		
34	0CA7	ಧ	KANNADA LETTER DHA	Lo	Consonant		
35	0CA8	ನ	KANNADA LETTER NA	Lo	Consonant		
36	0CAA	ಪ	KANNADA LETTER PA	Lo	Consonant		
37	0CAB	ಫ	KANNADA LETTER PHA	Lo	Consonant		
38	0CAC	ಬ	KANNADA LETTER BA	Lo	Consonant		
39	0CAD	ಭ	KANNADA LETTER BHA	Lo	Consonant		
40	0CAE	ಮ	KANNADA LETTER MA	Lo	Consonant		

# Repertoire Included - 5

Sr. No.	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
41	0CAF	ಯ	KANNADA LETTER YA	Lo	Consonant		
42	0CB0	ರ	KANNADA LETTER RA	Lo	Consonant		
43	0CB2	ಲ	KANNADA LETTER LA	Lo	Consonant		
44	0CB3	ಳ	KANNADA LETTER LLA	Lo	Consonant		
45	0CB5	ವ	KANNADA LETTER VA	Lo	Consonant		
46	0CB6	ಶ	KANNADA LETTER SHA	Lo	Consonant		
47	0CB7	ಷ	KANNADA LETTER SSA	Lo	Consonant		
48	0CB8	ಸ	KANNADA LETTER SA	Lo	Consonant		
49	0CB9	ಹ	KANNADA LETTER HA	Lo	Consonant		
50	0CBE	ಾ	KANNADA VOWEL SIGN AA	Mc	Matra		

# Repertoire Included - 6

Sr. No.	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
51	0CBF	◌ಿ	KANNADA VOWEL SIGN I	Mn	Matra		
52	0CC0	◌ೀ	KANNADA VOWEL SIGN II	Mc	Matra		
53	0CC1	◌ು	KANNADA VOWEL SIGN U	Mc	Matra		
54	0CC2	◌ೂ	KANNADA VOWEL SIGN UU	Mc	Matra		
55	0CC3	◌್ರ	KANNADA VOWEL SIGN VOCALIC R	Mc	Matra		
56	0CC4	◌್ರ್ಠ	KANNADA VOWEL SIGN VOCALIC RR	Mc	Matra		
57	0CC6	◌ೆ	KANNADA VOWEL SIGN E	Mn	Matra		
58	0CC7	◌ೀ	KANNADA VOWEL SIGN EE	Mc	Matra		
59	0CC8	◌ೈ	KANNADA VOWEL SIGN AI	Mc	Matra		
60	0CCA	◌ೊ	KANNADA VOWEL SIGN O	Mc	Matra		

# Repertoire Included - 7

Sr. No.	Unicode Code Point	Glyph	Character Name	Unicode General Category (gc)	Indic Syllabic Category	Reference	Y/N
61	0CCB	ಂ಼	KANNADA VOWEL SIGN OO	Mc	Matra		
62	0CCC	ಂಃ	KANNADA VOWEL SIGN AU	Mn	Matra		
63	0CCD	ಂಃ	KANNADA SIGN VIRAMA	Mn	Halant / Virama		
61	0CCB	ಂ಼	KANNADA VOWEL SIGN OO	Mc	Matra		

# Repertoire Excluded

- Code Points in MSR-2 but excluded because they are either not in common use or used for special purpose only (historic, religious, etc.):

Code Point	Glyph	Character Name	Notes
U+C8C	ಁ	KANNADA LETTER VOCALIC L	Not used in Kannada
U+CB1	ಃ	KANNADA LETTER RRA	Obsolete character, not used in modern Kannada
U+CBC	ಃ̣	KANNADA SIGN NUKTA	Does not belong to Kannada, not needed in LGR
U+0CD5	ಃ̣̣	KANNADA LENGTH MARK	Wrongly encoded by Unicode. Not to be used
U+0CD6	ಃ̣̣̣	KANNADA AI LENGTH MARK	Wrongly encoded by Unicode. Not to be used

# Within Script Variants for Kannada

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- ⦿ There are no variants within the script for Kannada

# Cross Script Variants for Kannada

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- ⦿ There are no cross-script variants for Kannada

# Whole Label Evaluation Rules (in plain English) - 1

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- ⊙ V → Vowel
- ⊙ M → Matra
- ⊙ C → Consonant
- ⊙ H → Halant / Virama
- ⊙ B → Anusvara
- ⊙ X → Visarga



# Whole Label Evaluation Rules (in plain English)

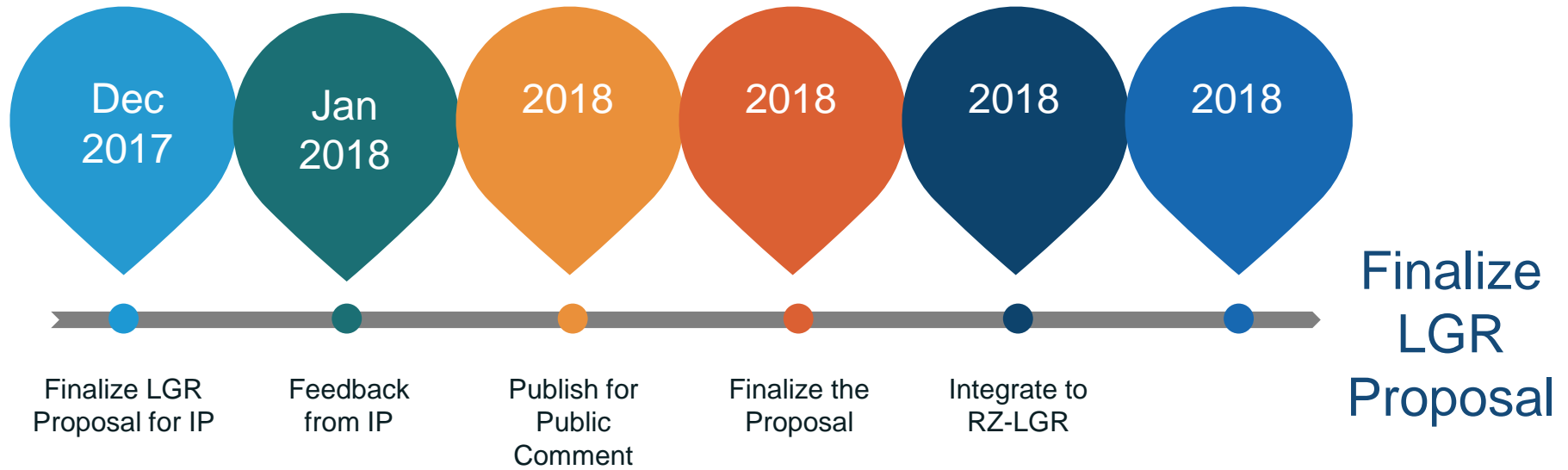
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- ⦿ Rule 1: H must be preceded by C and followed by Cs only
- ⦿ Rule 2: M must be preceded by C
- ⦿ Rule 3: B must be preceded by C, V or M
- ⦿ Rule 4: X must be preceded by C, V or M

# Current Status

Section in Google Doc	Status (To be initiated / In Progress / Completed / Reviewed)	Additional Notes
Description of Script and use		
Languages using Script		
Classification of characters		
Repertoire Analysis		
Within-script Variants		
Cross-script Variants		
WLE Rules		
References		

# Plan Till Completion



## To Summarize

# Thank You and Question

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