On the Origin of Malayalam Candrakkala

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The two documents L2/14-014R and L2/14-015R proposed the encoding of MALAYALAM SIGN CIRCULAR VIRAMA and MALAYALAM SIGN VERTICAL BAR VIRAMA respectively. The proposal L2/14-015R mentions the following on Candrakkala

“Candrakkala was introduced in Malayalam script, by Rev. Dr. Hermann Gundert around 1847 to represent Saṃvr̥tōkāraṇ. Before that, Saṃvr̥tōkāraṇ was implicit at word endings with nominal consonant letters and often contextual as well. After around half a century, by around 1900, Candrakkala acquired its the second function to represent pure consonants without their inherent vowel A.

Long before the time Candrakkala was used to represent pure consonants, vertical bar virama was used to indicate the pure consonants. Its usage was limited to transliterating foreign words from Sanskrit, Tamil or European languages.

...While the attestations of Vertical Bar Virama range from 1700s to 1860s, while that of Candrakkala starts at around 1850. This symbol was almost out of use by the time Candrakkala was introduced. Once Candrakkala assumed its second functionality to represent pure consonants this sign became redundant as well.”

L2/14-014R says the following

“During this half century, before Candrakkala being used for its second function, Malayalam script tried a separate symbol that is a small circle at the top-right corner of the consonant letter, to represent the pure consonant.

This symbol co-existed with Candrakkala while Candrakkala doing its original function of neutral vowel sound. At the turn of the 20th century, circular virama got deprecated and Candrakkala was overloaded with the second function as well. Circular virama must be encoded to record the documents from its usage period.”

From above statements following points can be summarized on Candrakkala

1. The proposals states Candrakkala was introduced in Malayalam script, by Rev. Dr. Hermann Gundert around 1847 to represent Saṃvr̥tōkāraṇ.

2. It also states by around 1900, Candrakkala acquired the second function to represent pure consonants.
However after examining many manuscripts the aforementioned statements are incorrect and attestations were not provided supporting their views on invention of Candrakkala.

**Conclusion**

1. The Candrakkala was not invented by Hermann Gundert around 1847. It is attested in many 200-300 year old manuscripts. It is derived ultimately from Brahmi through Grantha, the parent writing system of Malayalam script. Candrakkala-like virama denoting vowel killing is also attested in Grantha and Tigalari scripts.

2. Malayalam script was originally employed for writing Sanskrit and later adapted for writing Malayalam language. The original function of Candrakkala was to represent pure consonants without their inherent vowel and later adapted to represent साṃवṛतोकारम. It is incorrect to assume that by around 1900, Candrakkala acquired the second function to represent pure consonants.

3. The Vertical Virama appears to be used in few non-native sources. It remains unattested in Malayalam and Sanskrit palm leaf manuscripts by as seen by authors. It appears to be borrowed from Virama of Vatteluttu (See last page of this document). Also Chillus are evolutionary related to ligated viramas of Grantha and Tigalari which do not have Vertical Virama. It seems are no major evidences that Vertical Bar Virama is the precursor in the evolution of Chillus as explained in the proposal. Chillus are also found in manuscripts before the introduction of Vertical Virama.

4. Both Circular and Vertical Virama were short-lived experiments during 18th and 19th century to indicate pure consonants. Whereas the chandrakkala is natively used to indicate both pure consonant and साṃवṛतोकारम.

**Action requested**

The Malayalam chapter 12.9 of Core specification mentions

“Two viramas are found in historical materials written before the introduction of the candrakkala ... Two viramas are found in historical materials written before the introduction of the candrakkala.”

Update the Core specification appropriately and remove the phrase of introduction of the candrakkala.
Candrakkala in various Sanskrit manuscripts in Malayalam script

The above folios depict the use of Candrakkala to indicate pure consonant in the words triṣṭup, ...nuṣṭup, šṭup.
Candrakkala-like virama in Grantha manuscripts and texts
Candrakkala-like virama in Tigalari manuscripts

Virama in Vatteluttu