Malayalam: Comparison of Dot-Reph Proposals in 5.1

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Even though a proposal for Malayalam dot-reph and an alternative proposal are given in http://www.unicode.org/versions/Unicode5.1.0, their relative merits and problems are not discussed in that document. We are trying to list them below:

1. Problems with both of the proposals

Deviates from the model common to rest of the Indic. That is, <RA, Virama, consonant> does not form the dot-reph when consonant is YA or VA.

2. Problems specific to proposed encoding

1. Does not have a representation for dot-reph forms of (Dot-Reph on YA - Table 4a Row 4) and (Dot-Reph on VA - Table 4b Row 4). Dot-Reph on VA is found in prints before 1970. Even though no evidence is presented for Dot-Reph on YA, it is definitely possible in the writing system.
2. When consonant is YA or VA, <RA, Virama, consonant> has to be rendered differently as a special case.

3. Problems specific to alternate encoding

It is violating the common understanding that ‘The virama sign nominally serves to suppress the inherent vowel of the consonant to which it is applied’. First of all, this is a phonetic property. In Malayalam, Virama is used with different phonetic properties as well. For example, Samvruthokaram sequence is <U-sign, Virama> in which there is no inherent vowel to be removed. Also, Chillus are new entities not found in rest of the Indic. The interaction of Virama with Chillus is yet to be defined.

4. Advantage of alternate encoding

It goes well with common user understanding that dot-reph is the short notation of Chillu-RR.

5. Following sequences cannot be used for Dot-Reph

1. <RA, Virama, ZWJ, Consonant> forming dot-eph, since <RA, Virama, ZWJ> should be forming Chillu RR to support existing data.

2. <RA, Virama, YA> forming dot-reph. Currently, <RA, Virama, YA> is used for which is a very common cluster found in Malayalam words for sun, wife, subject etc. We may not force the usage of ZWJ in such cases. That is, we must avoid proposing <RA, ZWJ, Virama, YA> as the only sequence forming .
6. Other potential uses of alternate proposal

There is evidence for subscripting Chillus. The sequence <Chillu, Virama, Consonant> could be used for rendering those visuals.

7. More proposals and their problems

7.1 <RA, VIRAMA, ZWJ, consonant>

- <RA, Virama, ZWJ> is already used up by Chillu-RR for supporting existing data.
- Fallback to Chillu-RR is not always valid. For example, ‘’ is ‘Sun’ in traditional orthography. If dot-reph is falling back to Chillu-RR, then we would get which is an incorrect spelling. The correct spelling in modern orthography is with full RA and C2-conjoining YA.

7.2. <RA, VIRAMA, ZWJ, Consonant> when Consonant is YA or VA and <RA, VIRAMA, Consonant> elsewhere

- <RA, Virama, ZWJ> is already used up by Chillu-RR for supporting existing data. However, the impact is only in the context of YA or VA.
- Like in 7.1, fallback to Chillu-RR is not always valid.
- Overhead of special case processing.

7.3 <RA, VIRAMA, ZWJ, ZWJ, consonant>

- Logic being <RA, Virama, ZWJ> would be Chillu-RR and it is joined with consonant by yet another ZWJ.
- One Problem would be, ignorable nature of zwj.

7.4 <Chillu-RR, ZWJ, Consonant>

- Dot Reph is always part of the grapheme cluster of Consonant. So all rendering engines and other implementations would need to change the existing C (V C)*(V|Vs)* pattern for finding an Indic grapheme cluster. This is a major change. (C = Consonants+Chillus, V = Virama, Vs = Vowel sign)
- Like in 7.1, fallback to Chillu-RR is not always valid.
pārvatam  S. Connected with နှင့်, as အားနှင့် the full-moon.

pārvatī N.pr. f. ပျစ်ပျစ် (Tābh. of ပျစ်) as if fr. ပျစ် in q.v.; but T. Te. V1. have pār-patyam, C. pār-patyam, apparently, as if fr. ပျစ်. 1. Local government, administration နေထိုင်နေသူရာတွင် တည်ထောင်ချိန်တွင် ပြည်သူ; ဝန်ကြီး ဝန်ထမ်းများ အားထောင်သူ နောင်, မှန်သူ သော့ချိန် TR. 2. Trav. a subordinate revenue situation.

pārpatē a subordinate Collector & Magistrate (Trav. = သော်ပေါက်). ဝန်ထမ်း ဝန်ထမ်း သော် သော် TR.(In Mal. a district about as large as 4 amīsams (စက်စိတ် ၄) together, was formerly under 1 amīsam: f.i. သော်သော် သော် သော် သော် No. said only by very old people).

P. Pādshāh, The Mogul emperor
v. n. To be distressed.
v. n. To extend.
s. m. A man servant, a courtier.
s. n. A translation.
s. n. A remedy, a means of averting.
s. n. Ridicule.
v. a. To try, to test.
adj. Coarse.
s. n. A mountain.

{s. n. A weight of gold or silver, the 100 part of a Toolam.

Dot-Reph over single VA from year 1851

A Malayalam and English Dictionary
By H. Gundert, 1872, Mangalore; by C. Stolz - Basel Mission
and Tract Depsitory, Trubner & Co. - London.

Subscripting LLA-chillu