Review of Kawi code chart of Unicode 15 Alpha (PRI 442)

Waṣkiṭa Kinaṇṭi   Rikza F. Sh.
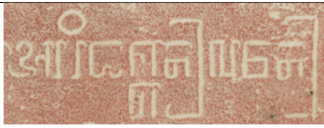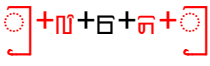
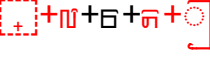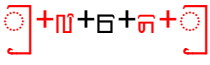gugahennyawaku@gmail.com   rikzafsh@gmail.com
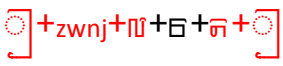
21 March 2022

This document reviews several things that we think need to be improved in Kawi code chart of Unicode 15 Alpha.

KAWI CONJOINER (U+11F42)

This character—that intended to produce conjunct forms—we think it doesn't need to be encoded. Like other Indic scripts, conjunct forms are produced by virama or vowel killer. To avoid the formation of conjunct form, ZWNJ can be inserted after virama. Applying the same scenario in Kawi like other Indic scripts in this case, can ease to convert Kawi to other Indic scripts or vice versa.

| Text	Sequences	Explanation
äsiḍaktan⁄ lawan⁄	According to the proposal: अ+ऴ+ँ+ऴ+ऴ+[+]+ऴ+ऴ+ ऴ+ऴ+ऴ+ऴ+ऴ Suggested sequences: अ+ऴ+ँ+ऴ+ऴ+ऴ+ऴ+ऴ+ ऴ+zwnj+ऴ+ऴ+ऴ+ऴ	An example uses of forming-conjunct virama and not-forming-conjunct virama in KERN E59-vz inscription. Rendered as a digital font "Arma Kawya" by Rikza F. Sh.
äsiḍaktan lawan⁄	According to the proposal: अ+ऴ+ँ+ऴ+ऴ+[+]+ऴ+ऴ+ [+]+ऴ+ऴ+ऴ+ऴ Suggested sequences: अ+ऴ+ँ+ऴ+ऴ+ऴ+ऴ+ऴ+ ऴ+ऴ+ऴ+ऴ+ऴ	

If the reason of encoding forming-conjunct virama and non-forming-conjunct virama is to avoid the use of ZWNJ as in internet domain name, we don't think that necessary. Remember that non-forming-conjunct virama in Kawi script is usually only appear in the end of sentence, and the internet domain name is usually consisting of several words and not more than one sentence, we think that non-forming-conjunct virama is not needed in the middle of internet domain name.
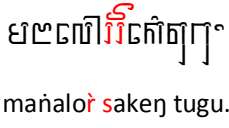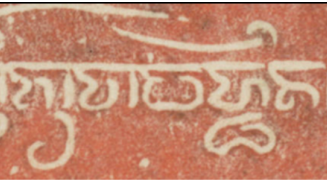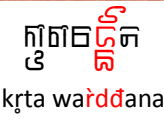
We also suggest for virama that typed after letter ra to automatically change into repha. We will discuss about it in the next section.

KAWI SIGN REPHA (U+11F02)

As in other Indic scripts, Kawi also has repha or r dead consonant. Normally, repha in Kawi is pre-syllable, unlike in modern Javanese or Balinese which has post-syllable repha. Although post-syllable repha forms are also attested in some Kawi manuscript.

As mentioned in Kawi Proposal (L2/20-284R), pre-syllable and post-syllable repha are seem to be unified as U+11F02 with a "different" typing sequences with other combining marks which are typed before the letter that has repha above it.

We suggest that U+11F02 character is specially used only for post-syllable repha. And for pre-syllable repha, the letter ra+ virama sequences could be used instead, like other Indic scripts. We also suggest for final-r typing sequence is after the letter that has final-r on top of it, not before it. We also suggest to change the glyph representation of U+11F02 from 🆂 to 𑼂. Both pre-syllable repha or final-r could have the same glyph, or differentiate it depending on the will of font creator.

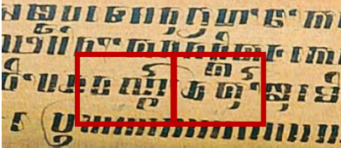| Text	Sequences	Explanation
maṅaloṙ sakeŋ tugu.	According to the proposal: ย+ꦔ+ꦭ+ꦺ◌+ꦺ◌+🆂+ꦱ +ꦏ+ꦼ◌+◌ꦁ+ꦠ+ꦸ◌+ꦒ+ꦸ◌+° Suggested sequences: ย+ꦔ+ꦭ+ꦺ◌+ꦺ◌+ꦫ+◌ꦴ+ꦱ +ꦏ+ꦼ◌+◌ꦁ+ꦠ+ꦸ◌+ꦒ+ꦸ◌+°	An example uses of pre-syllable repha from KERN E59-vz inscription. Rendered as a digital font "Arma Kawya" by Rikza F. Sh.
kṛta waṙddana	According to the proposal: ꦏ+◌ꦸ+ꦠ+ꦧ+🆂+ꦢ+◌ꦶ +ꦢ+ꦤ Suggested sequences: ꦏ+◌ꦸ+ꦠ+ꦧ+ꦫ+◌ꦴ+ꦢ+ ◌ꦶ+ꦢ+ꦤ	An example uses of pre-syllable repha from Trenggalek inscription KERN E35-a
nahuṙ ḍayaŕ	According to the proposal: ꦤ+🆂+ꦲ+◌ꦸ+ꦏ+🆂+ꦪ Suggested sequences: ꦤ+ꦲ+◌ꦸ+𑼂+ꦏ+ꦪ+𑼂	An example uses of post-syllable repha (or final-r) in Mariñci inscription.

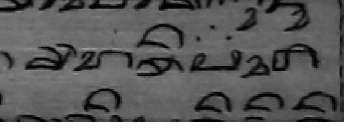| Text	Sequences	Explanation
ᯅᯰᬶᮛᬶ waṛṇa catuṛ	According to the proposal: ᯅ + ᯮ + ᮀ + ᰁ + ᮔ + ᯅ + ᯮ + ᮔ + ᬶ Suggested sequences: ᯅ + ᮛ + ᬶ + ᮀ + ᬶ + ᮔ + ᯅ + ᮔ + ᬶ + ᯮ	An example of simultaneous uses of pre-syllable repha and post-syllable repha in Serat Catur Bumi gebang MS manuscript.

To avoid the formation of repha, so the letter ra doesn't changed into repha, and the next letter changed to conjunct form below the letter ra, the sequences ra+zwnj+virama+next letter could be used. These cases are rarely found in a Kawi manuscript. Usually it's only found in the word "rwa". So, we think that these cases should be considered as an exception.

Text	Sequences	Explanation
  rwa	According to the proposal: ᮛ + ᰁ + ᯅ Suggested sequences: ᮛ + zwnj + ᬶ + ᯅ	An example of letter ra with conjunct form of letter wa in Pura Gunung Kawi, Bali. The letter ra doesn't changed in to pre-syllable repha (ᯅᬶ) but remain as letter ra (ᮛ)

POSSIBILITY OF OTHER UNPROPOSED CHARACTERS

We found some possibility of other Kawi character that not yet proposed to Unicode standard. One of those are combining nukta which has similar shape and function with JAVANESE SIGN CECAK TELU (U+A9B3) and BALINESE REREKAN (U+1B34). The use of this combining mark is to marking the foreign phoneme that doesn't exist in the original Kawi phonology. For example, if this nukta combining mark is placed above the letter pa (U+11F26), that letter should be pronounced as /fa/.

Text	Sequences	Explanation
ᯕᯂᬶᯓᬶ maharifate	According to the proposal: - Suggested sequences: ᯕ + ᯂ + ᮛ + ᬶ + ᯓ + ᬶ + ᮔ + ᮊ	An example of the letter pa with combining nukta above it in "Seh Ba Yajid" (206 II.3 L 32) Manuscript written in Buda script (one of the Kawi styles used in Merapi-Merbabu).

However, the use of combining nukta is still under study. We hope this character will be encoded on the future version of Unicode standard.

CONCLUSION

Based on the description above, we suggest Unicode to to:

1. Delete and unencode KAWI CONJOINER (U+11F42)
2. Change the name of U+11F41 from KAWI SIGN KILLER to KAWI VIRAMA
3. Change the description of U+11F42 to "●vowel killer, does form below-base and post-base conjunct forms"
4. Change the name of U+11F02 form KAWI SIGN REPHA to KAWI FINAL R
5. Change the representative glyph of U+11F02 from ⬚ to ⬚
6. Change the description of U+11F02 to "●only used for final r ●for pre-syllable repha use sequence 11F2C ⬚ 11F41 ⬚"

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