Suspicious identity of U+A9B5 JAVANESE VOWEL SIGN TOLONG

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1 Acknowledgements

2 Background

In the original Unicode Javanese proposal [L2/08-015R *Proposal for encoding the Javanese script in the UCS*](#), the character *tolong* (U+A9B5 JAVANESE VOWEL SIGN TOLONG) was described as a vowel sign that is used exclusively in the Sundanese writing system with three major use cases:

1. Used alone as the vowel sign *o*
2. As a part of the vowel sign *eu*: <vowel sign *ě*, *tolong*>
3. As a part of the letters and conjoined forms of *reu*/*leu*: <letter / conjoined form *rě*/*lě*, *tolong*>

Table 1. Sundanese *tolong* usage according to the original proposal

Written form	◌	◌ꦴ	◌ꦵ	◌ꦵ	◌ꦼ	◌ꦼꦴ
Encoding	(A9B5 TOLONG)		A9BC PEPET (A9B5 TOLONG)		A9C0 PANGKON A989 PA CEREK (A9B5 TOLONG)	
Transcription	*a*	*o*	*ě*	*eu*	*rě*	*reu*
Pronunciation	[a]	[o]	[ə]	[ɤ]	[rə]	[rɤ]

See also the note under Table 2.

However, *tolong* appears to be merely a stylistic variant of *tarung* (U+A9B4 JAVANESE VOWEL SIGN TARUNG), therefore the disunification of *tolong* from *tarung* is likely a mistake.

3 Proposal

The Unicode Standard needs to recommend how the inappropriately disunified character U+A9B5 JAVANESE VOWEL SIGN TOLONG should be handled.

In particular, clarification in the names list and the *Core Specification* is necessary for explaining the background of the mis-disunification and recommending how both the *tarung* and *tolong* forms for both the Javanese and Sundanese languages should be implemented. For example, aliases and annotations in the names list may be adjusted in this way:

A9B4 ◌ꦴ JAVANESE VOWEL SIGN TARUNG

= aa
• o in Sundanese

A9B5 ◌ꦵ JAVANESE VOWEL SIGN TOLONG

= o
• use of this character is discouraged

4 Usage of *tarung*

Originally, in the writing systems for the Sanskrit and Old Javanese languages, *tarung* mainly has the following use cases:

1. Used alone as the vowel sign *ā*
2. As a part of various vowel letters and signs, such as vowel sign *o* and the conjoined form *r̄*:
   <vowel sign *e* / conjoined form *r̥*, *tarung*>

Table 2. Sanskrit and Old Javanese *tarung* usage (selective)

Written form	◌	◌ꦴ	ꦏ◌	ꦏ◌ꦴ	◌꧀ꦭ	◌꧀ꦭꦴ
Encoding	(A9B4 TARUNG)		A9BA TALING (A9B4 TARUNG)		A9C0 PANGKON A989 PA CEREK (A9B4 TARUNG)	
Transcription	*a*	*ā*	*e*	*o*	*r̥*	*r̄*

Note: Because the original proposal only mentioned the usage of *tolong* on the letter and conjoined form of *pa cerek* but not the sign *keret*, even though orthographically the conjoined form of *pa cerek* is not parallel to those vowel signs in the tables, this document does not address this distinction between conjoined forms and signs. For a complete discussion of the usage of written forms for these vocalic liquids, see L2/19-004 *Properties of U+A9BD JAVANESE CONSONANT SIGN KERET*.

Because the modern languages Javanese and Sundanese don't have a vowel *ā* contrasted with the inherent vowel *a*, the sign *tarung* is no longer used alone as the vowel sign *ā*. Instead, for the Javanese language, *tarung* has the following adapted use cases and is never used alone (note the modified letters and signs are originally for Sanskrit *r̥/l̥* but have been reanalyzed for Javanese as *rĕ/lĕ*):

1. As a part of the vowel sign *o*: <vowel sign *e, tarung*>
2. As a part of the non-Sanskrit vowel sign *eu*: <vowel sign *ě, tarung*>
3. Also, as a part of the letters and signs for *reu/leu*: <letter/sign *rě/lě* + *tarung*>

Table 3. Javanese *tarung* usage

Written form	◌	◌2	꧋◌	꧋◌2	◌	◌2	◌꧀	◌꧀2
Encoding	(A9B4 TARUNG)		A9BA TALING (A9B4 TARUNG)		A9BC PEPET (A9B4 TARUNG)		A9C0 PANGKON A989 PA CEREK (A9B4 TARUNG)	
Transcription	*a*		*e*	*o*	*ě*	*eu*	*rě*	*reu*
Pronunciation	[a]		[e]	[o]	[ə]	[ɤ]	[rə]	[rɤ]

While for the Sundanese language, *tarung*'s usage only differs on the first case, where the out-of-use Sanskrit vowel sign *ā* is adapted to be a simplified vowel sign *o*:

1. Used alone as the vowel sign *o*.
2. As a part of the non-Sanskrit vowel sign *eu*: <vowel sign *ě, tarung*>
3. Also, as a part of the letters and signs for *reu/leu*: <letter/sign *rě/lě* + *tarung*>

Now compare Table 4 (Sundanese) with Table 3 (Javanese), and see how *tarung* is phonetically repurposed in the Javanese writing system for *o* (cells highlighted). Also, the content of Table 1 is stacked below and aligned with Table 4 for easier comparison.

Table 4. Sundanese *tarung* usage according to the authors

Written form	◌	◌2	꧋◌	꧋◌2	◌	◌2	◌꧀	◌꧀2
Encoding	(A9B4 TARUNG)		A9BA TALING (A9B4 TARUNG)		A9BC PEPET (A9B4 TARUNG)		A9C0 PANGKON A989 PA CEREK (A9B4 TARUNG)	
Transcription	*a*	*o*	*e*		*ě*	*eu*	*rě*	*reu*
Pronunciation	[a]	[o]	[e]		[ə]	[ɤ]	[rə]	[rɤ]

Written form	◌	◌ꧏ			◌	◌ꧏ	◌꧀	◌꧀ꧏ
Encoding	(A9B5 TOLONG)				A9BC PEPET (A9B5 TOLONG)		A9C0 PANGKON A989 PA CEREK (A9B5 TOLONG)	
Transcription	*a*	*o*			*ě*	*eu*	*rě*	*reu*
Pronunciation	[a]	[o]			[ə]	[ɤ]	[rə]	[rɤ]

3

5 *tolong* is a stylistic variant of *tarung*

The authors of the original proposal were probably confused by the atypical stylistic variant of *tarung* in the Sundanese samples (especially because of the phonetic value *o* that was seemingly unrelated to vowel sign *ā*), therefore could not identify it. As a result, in the original proposal the stylistic variant is considered a separate vowel sign and is named according to the name "tolong" given in a sample. However:

1. The so-called *tolong* form is a common stylistic variant of *tarung*.
2. The attestation of *tolong* doesn't show a contrast between *tolong* and *tarung*.
3. The *tarung* form is actually commoner in Sundanese text.

The form that is analyzed in the original proposal as *tolong* is a common stylistic variant of *tarung* in not only Sundanese but also Javanese text, and it is especially prominent in handwritten documents.

In the examples shown in Figure 1, *tarung* is used as a part of the vowel sign *o* (<vowel sign *e*, *tarung*>), but most of the *tarung* occurrences take the *tolong* variant form. All of the letters were written in the Javanese language, and while some of the them were written in the West Java (the area in which the Sundanese language is used), the *tolong* form is also found in letters from as far away as Lasem in the central Java. This indicates that the *tolong* form is a stylistic variant of *tarung*, and is neither specific to the Sundanese region and language nor orthographically different from *tarung*.

Figure 1. Samples from letters written in the Javanese language, circa 1816.

(Samples from the Raffles Papers (1816) Add MS 45273, British Library)

Tarung which is graphically similar to "standard" Tarung
a)   f25r Surakarta

Tarung which is graphically similar to Tolong
1)   f26v Yogyakarta
2)   f30r Cirebon
3)   f37r Bandung
4)   f71r Semarang
5)   f78r Lasem
6)   f82r Sedayu

It should be noted that all Sundanese samples from the original proposal were taken exclusively from *Cacarakan Aksara Sunda*, a Sundanese orthography book published in 1984—a time in which using the Javanese script in Sundanese publications was already becoming an uncommon practice.

And in that single attestation, although the structure is introduced as "tolong", it is not indicated whether or not it is only a stylistic variant of the structure known as *tarung* in the Javanese language.

Also, many Sundanese manuscripts and publications made prior to *Cacarakan Aksara Sunda* used typical *tarung* instead, without a contrasted *tolong*. See Figure 2, 3, 4, and 5.

Figure 2. *Dongeng-dongeng Pingĕntĕngĕn* (Muhammad Musa, 1867), a Sundanese language story book. (The first syllable [doŋ] in both lines shows usage of a typical *tarung* alone.)

Figure 3. *Soendasch spelen lees boek, met Soendasche* (K.F. Holle, 1862), a Sundanese grammar book.

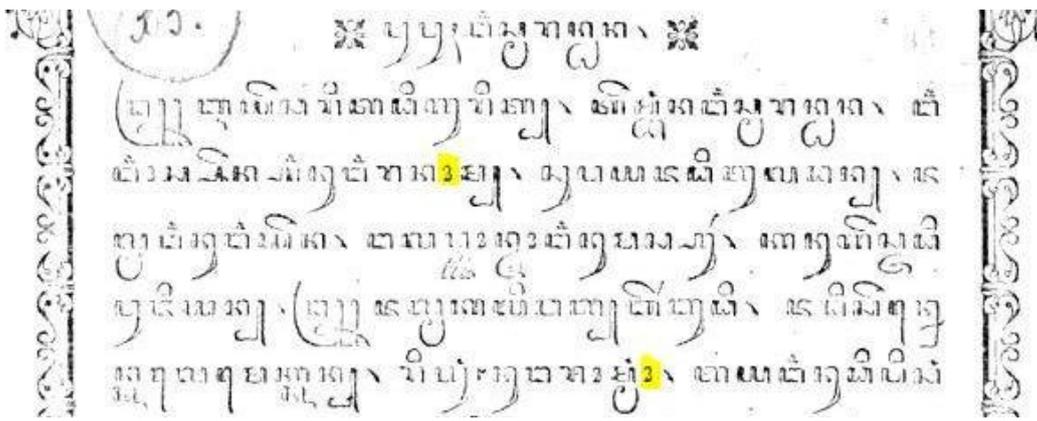**Figure 4.** *Wawacan Carita Ibrahim* (1858, Hijri/Islamic year 1275)

Figure 5. *Carita Tuwan Kapitan Wilĕm Esbranson Bontĕku*
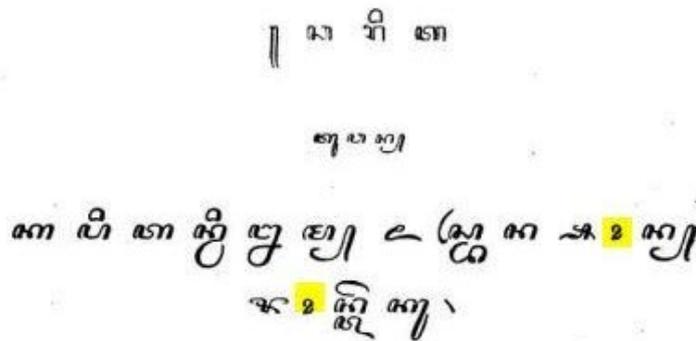(Raden Kartawinata,1874)

Figure 6. *Fonta Unicode Aksara Jawa (Javanese Unicode Font*
https://jv.wikipedia.org/wiki/Pitulung:Tuladha_Jejeg, R.S. Wihananto)

- Selama ini aksara Jawa tidak bisa membedakan antara vokal miring dan vokal *jejeg*. Menurut Hadiwaratama di tulisannya **"Vokal-Vokal Jejeg Aksara Jawa"** (http://www.ganeshana.org/file/artikel/budaya/04032009/Vokal2%20Jejeg%20Aksara%20Jawa%203-3-09%20disempurnakan%204-3-09.pdf), tanda vokal ꦵ TOLONG (U+A9B5) yang selama ini hanya dipakai di penulisan Sunda bisa dimanfaatkan untuk membedakan antara vokal miring dan vokal *jejeg*. Contohnya:

  - ꦱꦼꦒꦤ꧀ꦺ *segané* — ꦱꦼꦒꦴ *segá*,
  - ꦥꦶꦠꦶꦏꦺ *pitiké* — ꦥꦶꦠꦶꦏ꧀ *pitík*,
  - ꦏꦸꦛꦸꦏꦺ *kuṭuké* — ꦏꦸꦛꦸꦏ꧀ *kuṭúk*,
  - ꦧꦒꦺ *bagé* — ꦧꦒꦺꦏꦏꦺ *bagèkaké*,
  - ꦏꦼꦧꦺꦴ *kebo* — ꦏꦺꦴꦝꦺꦴꦏ꧀ *kódók*.

6 Experimental usage of *tolong*

Since Unicode started to support Javanese, at least one scholar has tried to utilize Unicode's *tarung/tolong* differentiation to create experimental orthographies. Such experimental usage is not yet well understood.

According to R.S. Wihananto (see Figure 6 on the last page), a scholar Hadiwaratama proposed that *tolong* may be used for differentiating the so-called *jejeg* (upright) and *miring* (slanted) variants of vowels that are normally not indicated in writing. However, note that one of the justifications for this repurposing usage is the incorrect assessment that the character *tolong* "is only used for Sundanese writing thus far" (highlighted in Figure 6), which is apparently based on the inappropriate information available in the Unicode Standard.