

**To: Unicode Technical Committee**  
**From: Iain Sinclair**  
**Subject: Comments on Kawi, L2/20-256**  
**Date: Tue, Nov 17, 2020**

The following comments respond to Perdana & Nurwansah's proposal to encode the Kawi script, L2/20-256. In short, the proposal is sound, and it offers solid documentation for the repertoire. Further consideration should, however, be given to -

(1) The standard form of the script: The basic, unadorned style tabled in fig. 2(b), p.17, and fig. 4-1 - the "Early" style - is the most appropriate choice for standardization. As the authors rightly state in their discussion of script styles, §2, p.2: "The 'standard' form of early Kawi is exemplified in the stone and copper plate inscriptions of the rulers Kayuwangi (856-882) and Balitung." However, the writing style used in the proposed repertoire (p.14) is what might be called a Script or Cursive style, and is typical of usage only in Java and Bali. It is recommended that the "Early" style be adopted as the standard instead. This style is also the one that Pandey's proposal (L2/12-125, fig. 1, p.4) determines to be standard.

(2) KAWI VOWEL SIGN AU: Is stated to be unattested in 5.1, p.3. However, there is plenty of attestation for LETTER AU. A couple of examples: the Grahi Buddha inscription dated Śaka 1106, l.1: ...maulibhūṣanavarmmadeva... (Woodward 2005 pl. 69); Padang Candi (Amoghapāśa) inscription dated Śaka 1269, l.8 (Kozok & van Reijn 2010:145-6) ...sauhṛdi+. The form of this vowel sign combines KAWI VOWEL SIGN AA and KAWI VOWEL SIGN AI. However, KAWI VOWEL SIGN AU ought to have a dedicated codepoint, as it does in other comparable script encodings, e.g. Devanagari.

(3) KAWI VOWEL SIGN O: Is not discussed at all in the proposal, but is widely attested. See the inscriptions mentioned above in connection with VOWEL SIGN AU. The form of this vowel sign combines KAWI VOWEL SIGN AA and KAWI VOWEL SIGN E, but KAWI VOWEL SIGN O ought to have a dedicated codepoint as it does in the Devanagari, etc., encodings.

(4) KAWI VOWEL SIGN EU: The proposed standard form of this glyph is visually almost indistinguishable from KAWI VOWEL SIGN II. Based on the testimony provided in Section D., it would be justified to place two strokes instead of one stroke in the interior of the curve.

(5) KAWI VOWEL SIGN ALTERNATE AA: Based on the attestation of section D, KAWI VOWEL SIGN ALTERNATE AA appears to be a mere stylistic alternate. This is normally handled by fonts rather than the encoding. It is unclear whether KAWI VOWEL SIGN ALTERNATE AA needs to be encoded at this stage.

(6) KAWI PUNCTUATION SECTION MARKER: Is functionally equivalent to SIGN SIDDHAM in other encoded scripts. See again Woodward *ibid.* & Kozok & van Reijn *ibid.*

(7) Punctuation nomenclature: It can be asked whether there is suitable emic terminology for these Sanskrit/English terms: CANDRA BINDU, ANUSVARA, VISARGA, VIRAMA, REPHA, DANDA, DOUBLE DANDA, SECTION MARKER, ALTERNATE SECTION MARKER, FLOWER, SPACE FILLER, DOT, DOUBLE DOT, TRIPLE DOT, CIRCLE, FILLED CIRCLE, SPIRAL, CLOSING SPIRAL. It would be warranted, giving due weight to the current user community, to substitute corresponding terms from Bahasa Indonesia, where such terms are available and sufficiently meaningful. Nonetheless, the proposed terms are clear and accurate

and can be accepted as they are.

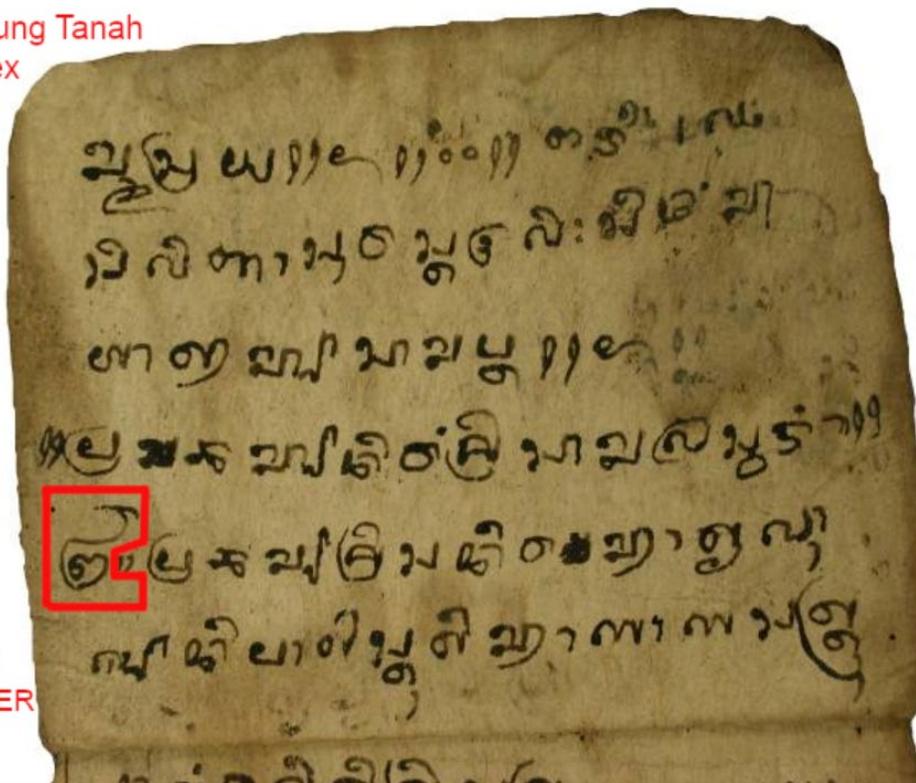
References:

Kozok, Uli & Eric van Reijn (tr.) 2010. 'Ādityawarman: Three Inscriptions of the Sumatran 'King Of All Supreme Kings'.' Indonesia and the Malay World 38:110, 135-158. doi: 10.1080/13639811003665488

Woodward, Hiram. 2005. The Art and Architecture of Thailand: From Prehistoric Times through the Thirteenth Century. Handbook of Oriental Studies. Section 3 Southeast Asia, 14. Leiden, Boston: Brill, 2005.

Example of KAWI LETTER AU

Tanjung Tanah  
codex



KAWI  
LETTER  
AU

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From: I Sinclair <[risinc@hotmail.com](mailto:risinc@hotmail.com)>  
Sent: Saturday, 21 November 2020 00:25  
To: Aditya Bayu; Ilham Nurwansah; Norbert Lindenberg  
Subject: Re: Comments on Kawi from Iain Sinclair

Dear Aditya Bayu,

Thank you for your response to my latest comments on your Kawi proposal. Let me address the pertinent points after quoting them:

>(1) regarding independent AU

>However, since you said as well that Kozok's reading of au[m̐] is still up to debate, is it possible that the letter in question is independent O as in o[m̐]?

There are multiple attestations of independent KAWI LETTER O in the Tanjung Tanah codex, especially f.7, where we read: orang (oraṃ, l.1, l.2), olih (oliḥ, l.2) etc. (The letterform of O is quite different from the letterform specified in the proposal, but I don't recommend modifying the proposal - the codex can be considered to represent a regional scribal tradition.) So, yes, O and AU are both attested and clearly distinguishable from each other in the same codex. It is understandable that the scribe wrote AU where we would expect OM, because there are many indications that he is transcribing spoken sounds in a semi-learned way. The context indicates that AU can be read with some confidence here, even though this is the only attestation I have identified at present.

>(2) regarding the style of the font

>Is the early style or the Mpu Mada style the best representative of Kawi in the standard?

>The representative glyphs in the standard are not normative and can be replaced later if necessary.

It is my concern that the glyph shapes in the encoding proposal may become normative. The sample of the early-style font in development that you provided in your email is much closer to what we might call the standard or basic shapes. I would welcome the reference letterforms being provided by that font, but I also understand that the current proposal does not insist on the Mpu-Mada font as normative.

>(4) regarding punctuation section marker the Kawi section marker may

>have developed from a decorative version of double danda in the Pallava script.

This is plausible, and could be reflected in a note accompanying the section marker codepoint. In any case, we also see the section marker being used in much the same way as a siddham sign can be used, that is, placed outside and in front of a complete text block. I don't know whether we see the proposed spiral glyph used in the same way. It may be that both glyphs are able to function as siddham signs.

>(5) regarding the nomenclature

>and the community has no complaint with using sanskrit names (if available) or descriptive english to avoid specific ethnic-based names.

I have no objection to that either. Even the Bahasa Indonesia Wikipedia page for Devanagari - pardon my using this as a reference - has English in the nomenclature ([https://id.wikipedia.org/wiki/Aksara\\_Dewanagari](https://id.wikipedia.org/wiki/Aksara_Dewanagari)). Having heard from you on this point, I don't think it needs further clarification.

Thank you again for your response. I hope that Kawi will enter the Unicode standard soon.

Yours sincerely,

Iain

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From: I Sinclair <risinc@hotmail.com>  
Sent: Wednesday, November 18, 2020 5:09 AM  
To: Aditya Bayu; Ilham Nurwansah; Norbert Lindenberg  
Subject: Re: Comments on Kawi from Iain Sinclair

Dear Norbert & All,

Likewise, I thank you for your attentive response to my comments. Let me add that I appreciate the authors' careful and effective work on the Kawi proposal.

Firstly, my comments on AU and O referred mainly to the encoding of dependent vowel signs. Kawi sits midway between the Indic and Indo-Austronesian (if we can use such a term) writing systems. My expectation is that Kawi would follow the norms set for Indic scripts such as Devanagari. Kawi is relatively early, has clear affinities with Pallava-era script and seems to be an ancestor of scripts on the Southeast Asian mainland. Kawi has also been used to write Sanskrit in standalone text blocks. In Devanagari, dependent AU and O have dedicated codepoints (U+094C, U+094B). So I welcome your confirmation that the plan is to represent the AU and O dependent vowels directly following the Javanese model, using atomised components. As far as I know, this is a viable alternative, and I have no objection to it. I leave it to you, the authors, to specify the compositing sequences according to this model.

As far as the independent vowel KAWI LETTER AU is concerned, it seems to be attested in Kawi in the Tanjung Tanah codex, f. 30 l.5, as transcribed in: Uli Kozok et al. 2015. A 14th century Malay code of laws: The Nīṭisārasamuccaya. Singapore: ISEAS, p.73. The form resembles that of KAWI LETTER O with the tail curling under and to the left in the manner of KAWI LETTER II and others. It is hard to say here whether Kozok's reading "au[ṃ] //" (corresponding to Devanagari औँ) is definitely acceptable, but in any case, there is at least one documented source for this glyph.

I hope this helps,  
Yours sincerely,  
Iain Sinclair