To : Script Ad Hoc/Unicode Technical Committee

From : Febri Muhammad Nasrullah <<u>niomi13@proton.me</u>>
Subject : Updated Proposal to Encode the Lampung Script

Date : 2025-09-04

# **List of Contents**

1.	Proposal History	2
2.	Introduction	2
2.1.	Background	2
2.2.	Historical Development	2
2.3.	Standardization Efforts	3
2.4.	Challenges in Encoding	3
2.5.	Revitalization	4
2.6.	Goals	4
3.	Structure	4
3.1.	Independent Vowel Letter	4
3.2.	Consonant Letters	4
3.2.1	1. Ligatures	5
3.3.	Signs	5
3.3.1	1. Vowel Signs	5
3.3.2	2. Novel Vowel Signs	5
3.3.3	3. Consonant Signs	6
3.3.4	4. Other Sign	6
3.4.	Numerals	6
3.5.	Punctuation Marks	6
3.6.	Stylistic Variants	7
3.6.1	1. Twentieth Letter	8
3.7.	Orthographies	8
3.7.1	1. Cancellation Mark	9
3.7.2	2. Vowel Sign Relocation	9
3.7.3	- 9 9	
4.	Character Repertoire	9
5.	Properties	10
5.1.	General Category	
5.2.	Line Breaking	
5.3.	Typography	
5.4.	ISO 15924	
5.5.	<b>5</b>	
5.5.1	, , ,	
	Collation	
	References	
	Manuscripts	
	Acknowledgements	
	Glyph Attestations	
	Figures	
10.1	1 3 1 1	
10.2	,	
	Attachment	
12	ISO Proposal Summary Form	43

#### 1. Proposal History

L2/16-073 Preliminary proposal to encode the Lampung script in Unicode — Anshuman Pandev Recommendations to UTC #148 August 2016 on Script Proposals L2/16-216 — Deborah Anderson, Ken Whistler, Rick McGowan, Roozbeh Pournader, Andrew Glass, Laurentiu Iancu, and Lisa Moore L2/22-044 Revised proposal to encode the Lampung script — Anshuman Pandey Comments on Revised proposal to encode the Lampung script L2/22-057 — Aditya Bayu Perdana, et al Comments on Revised proposal to encode the Lampung script L2/22-058 — Febri Muhammad Nasrullah Recommendations to UTC #171 April 2022 on Script Proposals L2/22-068 — Deborah Anderson, Ken Whistler, Roozbeh Pournader, and Peter Constable Related documents: Indonesian and Philippine Scripts and extensions not yet encoded or proposed for L2/11-091

encoding in Unicode

– Christopher Miller

#### 2. Introduction

#### 2.1. **Background**

This document supersedes the "Revised Proposal to Encode the Lampung Script" by Anshuman Pandey (L2/22-044) and proposes the encoding of the Lampung script in the Unicode Standard based on its historically attested usage and current revitalization. The proposal integrates evidence from historical manuscripts with contemporary developments and re-evaluates past standardization efforts, including the 1985 Musyawarah model and its departures from manuscript traditions.

#### 2.2. **Historical Development**

The Lampung script, locally known as キューラー (Surat Lampung), is a Kawi-derived script historically used across the Lampung region, from the Komering River and Lake Ranau to the Sunda Strait. It was used to record Lampungic languages—including Lampung Api (1jp), Lampung Nyo (ab1), and Komering (kge)—as well as Javanese (jv), Nasal (nsy), and Central Malay dialects (pse) such as Pegagan, Ogan, and Semende. In modern times it has also been applied to Standard Indonesian (id).

The script appears in diverse textual genres: seals (Figure 21), mantras, talismans (Figure 13), amulets, folktales (Figure 8), poems (Figure 15), personal diaries (Figure 12), genealogies (Figure 46), and glossaries (Figure 14). Writing media included folded bark, bamboo strips, copper plates, horn, and paper. The earliest known example is a bark manuscript of Islamic mythology donated to the Bodleian Library in 1630.<sup>2</sup>

While genealogically related to Surat Ulu scripts (e.g., Rejang), Lampung is regarded as a distinct system with its own orthographic features and wide regional variation. Two principal styles can be identified: the style found in Sukadana, linked to Nyo speakers, and the style in Krui, associated with Api speakers.<sup>3</sup> These designations reflect the provenance of the manuscripts in which they were recorded, but stylistic features may have spread more broadly. Lampung manuscripts also reveal a rich spectrum of variation, with even individual scribes developing recognizable styles. Among these, the Krui style (Figure 19 and Figure 20) is notably difficult for other Lampung users to read, reflecting significant internal diversity. By contrast, the Telukbetung style—closely aligned with Sukadana—became the preferred form for correspondence and printing during the colonial period, likely due to Telukbetung's role as the administrative center.

<sup>&</sup>lt;sup>1</sup> According to the late Titik Pudjiastuti, the prior proposal (2022, p. 1) incorrectly used the term *Had Lampung*. The word *Had* is not attested in the Lampung language and appears to be a misrepresentation of the more accurate term Surat.

<sup>&</sup>lt;sup>2</sup> Gallop (Malay manuscripts from south Sumatra, 2015).

<sup>&</sup>lt;sup>3</sup> In his table, Holle (1882) includes the Krui variant as a modern form, while the Sukadana variant is an ancient form. See Figure 5.



Figure 1. Map showing settlement areas of ethnic groups in modern Lampung province prior to the  $20^{th}$  century. Colors indicate linguistic distribution: yellow = Api, blue = Central Malay, purple = Komering, pink = Nyo.

#### 2.3. Standardization Efforts

On 23 February 1985, the *Musyawarah Para Pemuka Adat Daerah Lampung* (Council of Traditional Leaders, hereafter *Musyawarah*) adopted the Sukadana–Telukbetung form, following Noeh's pedagogical textbook, as the de facto consensus model. This decision, however, left other regional variants underrepresented.<sup>4</sup> The *Musyawarah* also introduced several innovations not attested in manuscripts, such as Latin-style punctuation (§3.5), a novel letter (§3.6.1), and new vowel signs (§3.3.2). These changes were intended to modernize pedagogy but were not grounded in historical practice and have seen limited use outside classrooms.

In December 2022, the *Kongres Bahasa Lampung I* (First Lampung Language Congress, hereafter *Kongres*) reassessed this model. One of its motions was to remove the novel letter introduced in 1985, signaling a broader effort to realign the script with historical and linguistic evidence.<sup>5</sup>

This proposal therefore does not rely solely on the *Musyawarah* standard. While its influence is visible in pedagogical materials, it did not generate a large corpus of continuous text. Its use remains largely confined to decorative contexts, tables, and glossaries. For Unicode encoding, this proposal prioritizes characters with clear historical attestation and demonstrated use.

# 2.4. Challenges in Encoding

The modern orthography of Lampung remains unsettled. As highlighted at the *Kongres*, characters not grounded in manuscript tradition are still debated. For this reason, the present proposal restricts its scope to historically attested characters supported by primary documentation. Later innovations may be considered for future encoding if they achieve consistent community use, scholarly support and clear functional distinction. This approach is consistent with feedback from Unicode documents L2/22-057 and

<sup>&</sup>lt;sup>4</sup> Noeh (1971, pp. 86-87).

<sup>&</sup>lt;sup>5</sup> Pudjiastuti, et al. (2023).

L2/22-058, which caution against overreliance on secondary or recent sources when dealing with scripts whose transmission has been disrupted.

The Indonesian experience shows that standardization efforts of the late 20<sup>th</sup> century often lacked access to historical sources. Initiatives in Batak (1988), Lampung (1985), Kerinci (1992), Sundanese (1996), and Balinese/Sasak (1998) introduced additions that were not always supported by manuscript evidence.<sup>6</sup> Similar cases have led to complications in Unicode encoding, as seen in revisions or discussions for Javanese (L2/19-003), Sundanese (L2/21-221), Rejang (L2/25-162), and Balinese/Sasak (UTN#51). To avoid such setbacks, this proposal emphasizes characters with a strong historical foundation.

#### 2.5. Revitalization

Although Latin script remains dominant, Lampung has reappeared in education, signage, branding, and digital tools. Since 2014, it has been reintroduced through school curricula (Figure 28 to Figure 38),<sup>7</sup> public signage (Figure 39 to Figure 43), cultural decorations (Figure 46 to Figure 47, Figure 54 to Figure 58), city branding (Figure 59), and emblems (Figure 60). It also appears in personal expressions, such as tattoos (Figure 57).

Digital initiatives include keyboard layouts (Figure 48 and Figure 49), fonts (Figure 53), online dictionaries (Figure 50), OCR models, and encyclopedic projects (Figure 51 and Figure 52). These efforts demonstrate ongoing but uneven revitalization. Since 2022, the Indonesian government has prioritized the script's inclusion in the Indonesian National Standard (SNI),<sup>8</sup> but progress has been delayed due to the absence of Unicode support.

#### 2.6. Goals

The aim of this proposal is to encode Lampung as a distinct script in the Unicode Standard, presenting a repertoire that is historically attested, functionally supported, and relevant for current use. The proposal seeks to enable stable digital representation, support interoperability, and facilitate ongoing revitalization efforts by providing an encoding model that is accurate, practical, and sustainable.

#### 3. Structure

The Lampung script is a unicase abugida written left-to-right in horizontal lines, employing combining diacritics like other abugidas. The script does not exhibit bidirectional behavior. Some alternative descriptions exist in the literature but remain unattested in practice. Pudjiastuti (1996, p. 57) suggested that the script could also be written right to left or vertically, in analogy with Arabic or Hanzi, while Noeh (1971, p. 4) proposed that it distinguished uppercase and lowercase by enlarging characters. To date, however, neither historical manuscripts nor contemporary usage provide evidence for these features.

#### 3.1. Independent Vowel Letter

Lampung has one independent vowel, LAMPUNG LETTER A, which also acts as a vowel carrier (*fulcrum vocalis*) that can be attached with vowel signs.<sup>9</sup>

base	character names
7	LAMPUNG LETTER A

#### 3.2. Consonant Letters

Consonant letters represent a syllable with the inherent vowel /a/, /o/, or /e/.<sup>10</sup> There are 18 attested letters representing basic syllables.

glyph	character names	glyph	character names	glyph	character names
7	LAMPUNG LETTER KA	E	LAMPUNG LETTER TA	4	LAMPUNG LETTER YA
-	LAMPUNG LETTER GA	3	LAMPUNG LETTER DA	卫	LAMPUNG LETTER RA <sup>11</sup>
~	LAMPUNG LETTER NGA	~	LAMPUNG LETTER NA	~	LAMPUNG LETTER LA

<sup>&</sup>lt;sup>6</sup> Kozok (2009, p. 92).

<sup>&</sup>lt;sup>7</sup> Lampung Governor Decree No. 39 of 2014 on Lampung Script and Language (2020).

<sup>&</sup>lt;sup>8</sup> Novrizaldi (2022).

<sup>&</sup>lt;sup>9</sup> Beele & Tuuk (1868, p. 139).

<sup>&</sup>lt;sup>10</sup> /a/ in Api and Komering, /ɔ/ in Nyɔ, and /ə/ in Central Malay. See Matanggui (1985, p. 3); in his book, however, he incorrectly refers to /ɔ/ as /o/.

<sup>&</sup>lt;sup>11</sup> The LETTER RA and CONSONANT SIGN R represent a proto-Lampung \*r sound. However, there are various phonetic realizations of /r/ within Lampung dialects up to the present time, usually velar or uvular fricative (/x/, /x/, or /s/). See Anderbeck (2007, pp. 14-15).

4	LAMPUNG LETTER CA	-	LAMPUNG LETTER PA	1	LAMPUNG LETTER WA
m	LAMPUNG LETTER JA	4	LAMPUNG LETTER BA	+	LAMPUNG LETTER SA
~	I AMPUNG I FTTFR NYA	ய	LAMPUNG LETTER MA	Ы	LAMPUNG LETTER HA

#### 3.2.1. Ligatures

To date, no widely attested ligature forms have been documented in the Lampung script. However, the author has identified three possible ligature forms in a manuscript held at the National Library of Indonesia (Figure 22).

#### 3.3. Signs

Here, the author uses generic names due to inconsistencies in the names found across secondary sources. 12

#### 3.3.1. Vowel Signs

The following dependent vowel signs are attested in historic materials:

glyph	character names	Lampungic	Central Malay	others
់	LAMPUNG VOWEL SIGN I	/i/, /e/	/i/, /e/	/i/, /e/
ੂ	LAMPUNG VOWEL SIGN U	/u/	/u/, /o/	/u/, /o/
៉	LAMPUNG VOWEL SIGN E	/ə/, /o/	/a/	/ə/
દ	LAMPUNG VOWEL SIGN E TALING	-	-	/e/

VOWEL SIGN I and VOWEL SIGN U correspond to forms also found in the Rejang script. Lampung, however, does not have distinct signs for /o/ and /e/, since these sounds are predictable allophones of /ə/ and /i/.<sup>13</sup> VOWEL SIGN E is primarily used for the mid-central vowel /ə/ and its allophones. In Central Malay texts, this same sign sometimes functions to shift the inherent /ə/ to /a/ (Figure 18).

In texts written in other languages (e.g., Malay and Javanese), VOWEL SIGN I is used for /e/, and VOWEL SIGN U for /o/ (Figure 26).<sup>14</sup> Van der Tuuk also recorded a left-positioned VOWEL SIGN E TALING in a Malay manuscript written in Lampung script.<sup>15</sup> This feature resembles the /e/ sign in related Kawi-derived scripts but appears only rarely and outside native Lampung usage. It may be considered for encoding in the future if sufficient evidence is identified.

#### 3.3.2. Novel Vowel Signs

As part of pedagogical modernization, the 1985 *Musyawarah* introduced two novel vowel signs (Figure 32) intended to create a one-to-one correspondence between vowel sounds and symbols: <sup>16</sup>

glyph	character names	sound value
្	LAMPUNG NOVEL VOWEL SIGN E	/e/
ុ	LAMPUNG NOVEL VOWEL SIGN O	/o/

Although their shapes resemble variant forms of VOWEL SIGN I and VOWEL SIGN II found in some manuscripts, their use as distinct graphemes for /e/ and /o/ began only after the 1985 standardization. They were designed mainly for teaching purposes and to align with Indonesian orthographic conventions, <sup>17</sup> rather than as a continuation of historical Lampung practice, where /e/ and /o/ functioned as predictable allophones of /i/ and /ə/.

Since the 1980s, these signs have been used in textbooks and classroom contexts, but they are not attested in premodern manuscripts and their adoption across grade levels remains uneven. <sup>18</sup> In some cases, pedagogical usage has introduced misinterpretations, such as treating the mid-open vowel /ɔ/ (an allophone of /a/ in the Nyɔ dialect) as /o/, <sup>19</sup> or replacing the historically consistent the Lampungic suffix -kən, realized as [kən] in Nyɔ and [kon] in Api, Nasal, and Komering. Across dialects this suffix has

<sup>&</sup>lt;sup>12</sup> For example, CONSONANT SIGN W is referred to as *tekelungan* in the 1969 *Almanak Sumatera* (Figure 28), *teklengu* in Pudjiastuti (1996) (Figure 32), and *tekelungau* in 21<sup>st</sup> century material such as <u>this abstract</u>.

<sup>&</sup>lt;sup>13</sup> Anderbeck (2007, pp. 16-17).

<sup>&</sup>lt;sup>14</sup> For Javanese example, see Beele & Tuuk (1868, p. 142).

<sup>&</sup>lt;sup>15</sup> Beele & Tuuk (1868, pp. 1-3).

<sup>&</sup>lt;sup>16</sup> These signs are included in L2/22-044 (2022, p. 4) but the fact that they are novel additions is not mentioned.

<sup>&</sup>lt;sup>17</sup> Noeh (1971, pp. 86-87).

<sup>&</sup>lt;sup>18</sup> The author's observation of school textbooks, along with <u>field research</u> conducted in 2025 by SEI awardee Ariq Syauqi, confirms that these novel signs is being taught in educational institutions.

<sup>&</sup>lt;sup>19</sup> For instance, words like *jamɔ* ("with") and *agɔ* ("will") are written as mi, even though in historical sources and phonemic analysis they correspond to mi and as shown in this wordlist.

traditionally been written with VOWEL SIGN E (-¬), reflecting schwa and its predictable allophones. The introduction of the NOVEL VOWEL SIGN O has led some users to substitute -¬, creating inconsistency and undermining the cross-dialectal stability of the suffix's written form. These practices show that the novel signs function mainly as pedagogical aids rather than integral elements of the traditional orthography and should be assessed as such for encoding purposes. Accordingly, this proposal submits the two characters on a provisional basis, leaving to the UTC Script Encoding Working Group the decision on whether their attested use warrants independent encoding. If not encoded, they could alternatively be represented through font-level mechanisms such as OpenType stylistic alternates, as the author recommends.

#### 3.3.3. Consonant Signs

There are six dependent consonant signs that represent syllable-final (coda) consonants.

glyph	character names	Sound value
<b>্</b>	LAMPUNG CONSONANT SIGN NG	/ŋ/
៊ី	LAMPUNG CONSONANT SIGN N	/n/
ঃ	LAMPUNG CONSONANT SIGN Y	/j/
្	LAMPUNG CONSONANT SIGN R	\r \x \\\\\\\\\\
្ច	LAMPUNG CONSONANT SIGN W	/w/
<b></b>	LAMPUNG CONSONANT SIGN H	/h/

The prior proposal (2022, pp. 4-6) identified of and as vowel signs (VOWEL SIGN AI and VOWEL SIGN AU) on the assumption that Lampung diphthongs follow the Brahmic model of vowel sequences. However, Lampungic evidence indicates otherwise. Sequences such as [ay], [aw], and [uy] function as a vowel followed by a glide, behaving structurally as consonantal codas rather than as a single vowel nucleus. 21

This distinction is evident in phonotactics: forms like *kayn* or *kawr* are not permissible and are consistently normalized as *kayin* and *kawur* with an inserted vowel. Such behavior shows that  $\checkmark$  and  $\checkmark$  operate as consonant signs rather than as vowel extensions. Manuscript evidence supports this interpretation. Classical Lampung texts wrote glides Y and W as full consonants ( $\checkmark$  or  $\checkmark$ ) combined with the vowel silencer ( $\checkmark$ 9). Dedicated subscript forms for Y and W emerged only in the late 19<sup>th</sup> century, and their modern usage aligns more closely with consonantal function.<sup>22</sup>

Accordingly, this proposal classifies of and as consonant sign y and consonant sign w. This classification better reflects manuscript practice, Lampung phonology, and current usage, while avoiding the misapplication of Brahmic vowel logic to a script with distinct structural principles.

#### 3.3.4. Other Sign

The inherent vowel of a letter is 'killed' by a visible VOWEL SILENCER sign. This sign does not produce conjuncts and is always rendered visibly. There is no conjunct formation between adjacent base letters. This sign triggers sign relocating (see §3.7.2).

#### 3.4. Numerals

Western Arabic numerals (U+0030–U+0039) were used alongside the Lampung script in both historical and contemporary contexts. Although a set of "Lampung numerals" is displayed in the Lampung Museum (Figure 30), no evidence has been found of their use in historical manuscripts or other primary sources, nor of their adoption in present-day practice. These forms were not addressed in the 1985 *Musyawarah* and do not appear in educational or community usage. In line with L2/22-068, this proposal does not recommend encoding them currently or reserving code points.

#### 3.5. Punctuation Marks

The following punctuation marks are attested in historic materials:

<sup>&</sup>lt;sup>20</sup> Anderbeck (2007, p. 16).

<sup>&</sup>lt;sup>21</sup> Past scholars, such as Tuuk (1868), were aware of the issue so he used /ay/ and /aw/ in his tables rather than /ai/ and /au/.

<sup>&</sup>lt;sup>22</sup> Beele & Tuuk (1868, pp. 139-141).

glyph	character names
\$55	LAMPUNG PUNCTUATION SUN
0	LAMPUNG PUNCTUATION MOON
_	LAMPUNG FULL STOP

PUNCTUATION SUN was generally used at the beginning of a text, while PUNCTUATION MOON marked its conclusion or the end of a section. In some manuscripts, PUNCTUATION SUN also served to close a section, and both PUNCTUATION SUN and PUNCTUATION MOON occasionally functioned as space fillers or markers similar to bullet points (see Figure 16 and Figure 17). Decorative illumination is also attested between sentences (Figure 7). By the early 20<sup>th</sup> century, however, these signs declined in use, and the FULL STOP became the common sentence-ending mark (see Figure 23). Since the FULL STOP glyph closely resembles U+2013 EN DASH, it may be substituted with the latter.

The 1985 *Musyawarah* introduced additional punctuation marks (Figure 33), including comma-like and exclamation-like symbols. These appear in textbooks and are sometimes taught in schools,<sup>23</sup> but their adoption is inconsistent: they are more visible in early education materials, while later curricula and actual usage often default to Latin punctuation.<sup>24</sup> Glyph shapes in these newer forms also vary across sources, which may contribute to limited uptake. In line with L2/22-068, this proposal does not recommend encoding these pedagogical punctuation marks at this stage, given their restricted and uneven use.

#### 3.6. Stylistic Variants

Historical sources show that the Lampung script exhibits a variety of stylistic forms (see §9). Following Miller (2011, p. 23), these variations are not substantial enough to justify separate encoding and are better handled at the font level. The table below illustrates the variants.

Name	Glyph		Know	n vari	ants	
LAMPUNG LETTER NGA	74	4	1 <sub>r</sub>			
LAMPUNG LETTER TA	E	7	1			
LAMPUNG LETTER DA	3	9	4	c	4	
LAMPUNG LETTER BA	4	щ	9			
LAMPUNG LETTER MA	4	4				
LAMPUNG LETTER CA	4	S	Ш			
LAMPUNG LETTER JA	Th	W	w	<b>^</b>	E	
LAMPUNG LETTER NYA	~	TI	w			
LAMPUNG LETTER SA	+	$\circ$	n	Α		
LAMPUNG LETTER RA	口	2	//	N	<b>'</b>	=
LAMPUNG LETTER YA	4	w	W			
LAMPUNG LETTER WA	2	(2)	7	+	4	
LAMPUNG LETTER HA	5	2	И	$\sim$		
LAMPUNG VOWEL SIGN I	្	ំ	ិ	ें	٥	
LAMPUNG VOWEL SIGN U	ੂ	়	ុ			
LAMPUNG VOWEL SIGN E	៉	ऺ	<b>'</b>	៉	់	
LAMPUNG CONSONANT SIGN NG	៊	்				
LAMPUNG CONSONANT SIGN N	៊ី	់	៉ឺ			
LAMPUNG CONSONANT SIGN Y	ঃ	୍ର 3	O-	ା		
LAMPUNG CONSONANT SIGN H	<b></b>	ः	<b>=</b>	O		
LAMPUNG VOWEL SILENCER	్ర	୍/	္	J	O"	

<sup>&</sup>lt;sup>23</sup> Field observations by Ariq Syauqi.

<sup>&</sup>lt;sup>24</sup> As exemplified in <u>this textbook</u> for 10<sup>th</sup> grade school.

Because access to primary manuscripts remains limited, certain contemporary reproductions may differ from historical evidence and should be treated with caution when used as references.

#### 3.6.1. Twentieth Letter

The twentieth letter in the 1985 Lampung script () has been variably referred to as RRRA, GRA, GHA, or KHA, reflecting longstanding inconsistency. Its earliest attested mention is in Westenenk's documentation (Figure 3), where it appears as RRRA without phonetic explanation. Later sources, including *Almanak Sumatera* (Figure 28) and Noeh (Figure 29), adopted the name GRA, also without defining its sound value. This terminology was subsequently cited in the 1985 *Musyawarah* and reinforced in works such as *Ensiklopedia Indonesia* and the study of Titik Pudjiastuti, <sup>25</sup> establishing GRA in modern reference literature. The *Kamus Lampung–Indonesia* (1985) introduced the term GHA, equating it with Arabic & ARABIC LETTER GHAIN, and more recent sources occasionally use KHA, though this has no historical precedent.

Despite these shifting labels, there is no phonological evidence for treating the letter as a separate grapheme. A prior Unicode proposal (2022, p. 3) assigned it the value /gr/, but no such phoneme exists in Lampungic languages. The 1985 dictionary's comparison with Arabic  $\dot{\xi}$  (/ɣ/) illustrates the confusion: velar and uvular fricatives such as [ɣ], [x], [χ], and [ʁ] do occur in Lampung dialects, but they are understood as allophonic realizations of proto-Lampung \*r, not independent phonemes. <sup>26, 27</sup> In writing, these sounds are consistently represented with the LETTER RA. Noeh himself observed that "the LETTER GRA did not exist, because the LETTER RA was used to write the GRA sound" (Figure 29). It is possible that Noeh retained the label GRA primarily for pedagogical purposes. While he acknowledged that the sound was written with RA, introducing a separate label may have been intended to simplify teaching or to align with external models such as Arabic or Indonesian orthography, not the native one.

Orthographic evidence supports this conclusion. Historical manuscripts show wide variation in the shapes of RA and other letters, sometimes even within the same text (see §9). The form later described as GHA appears rarely and without consistent distinction from RA. For example, Manuscript F records the Arabic word Baghdad (بغداد) using the standard CONSONANT SIGN R, without introducing a special letter for ¿. Abdoerrahman (1904) similarly noted that although Paminggir and Pubian speakers pronounced a guttural [y]-like sound, it was "always written with (RA)."<sup>28</sup> A contemporaneous comparative table produced while Lampung was in active everyday use (Figure 27) explicitly classifies the so-called GHA under RA, underscoring its status as a glyphic variant rather than a separate character.

Contemporary practice continues this pattern. Lampung Wikipedia articles employ RA for both native and borrowed words, with no separate GHA.<sup>29</sup> During the 2022 Congress, a proposal was submitted to remove the character altogether, citing the lack of phonemic contrast and community recognition.<sup>30</sup> Government publications now describe GHA or KHA as nonstandard historical spellings of RA (Figure 34), and the Lampung provincial emblem consistently uses RA (Figure 60).

Taken together, the inconsistent terminology, absence of phonological contrast, and interchangeable manuscript usage indicate that this character functions as a stylistic variant of RA rather than an independent grapheme. In line with Unicode principles, such variants are best handled at the font level. While it may be studied further, current evidence does not justify separate encoding.

#### 3.7. Orthographies

Historical manuscripts reveal consistent orthographic conventions in the Lampung script. These patterns, while not addressed during the 1985 *Musyawarah*, are important for understanding the script's structure and for informing Unicode encoding and font development. Limited access to references in the post-

<sup>&</sup>lt;sup>25</sup> Pudjiastuti, et al. (2023, pp. 321-322).

<sup>&</sup>lt;sup>26</sup> Anderbeck (2007, pp. 14-15).

<sup>&</sup>lt;sup>27</sup> "[kh] and [r] are variant of [gh]." See Udin, Sudrajat, Akhyar, Rejono, & Sanusi (1992, pp. 8-9).

<sup>&</sup>lt;sup>28</sup> "'ġo', de gebrouwde 'g' of 'r' die enigszins met de Arabische ¿ vergeleken kan worden, door de Paminggirsche en Poebiansche uitgesproken maar niet geschreven; altijd gebruiken zij de 🔁 = RA."

<sup>&</sup>lt;sup>29</sup> As of August 28<sup>th</sup>, 2025, the <u>Komering Wikipedia</u> (kge) is the most active, with 2,646 articles. In comparison, the <u>Api Wikipedia</u> (ljp) has only 127 articles, and the <u>Nyɔ Wikipedia</u> (abl) has just 3, both still in development on the <u>Wikimedia Incubator</u>.

<sup>&</sup>lt;sup>30</sup> Pudjiastuti, et al. (2023, pp. 311-331).

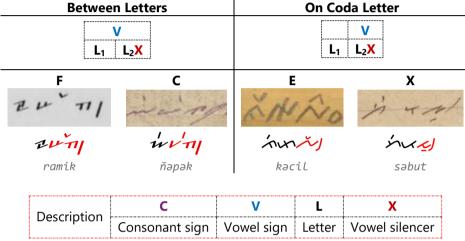
independence period meant that many contemporary users were unfamiliar with these norms, underscoring the value of documenting them.

#### 3.7.1. Cancellation Mark

A sequence of VOWEL SIGN I and CONSONANT SIGN W is sometimes used to cancel a cluster, indicating that it should not be read (see Figure 19 for the examples). Comparable strategies are also found in Kawi, Javanese, Sundanese, and Balinese manuscripts.

# 3.7.2. Vowel Sign Relocation

In a closed syllable marked with a VOWEL SILENCER, the vowel sign of the initial consonant is relocated to the coda consonant. This displacement typically occurs between the consonants and, more rarely, on the coda consonant.<sup>31</sup>



### 3.7.3. Sign Stacking Placement

While prior proposal (2022, p. 6) identified LVC syllables, these are rarely attested in manuscripts (attested only in Figure 24). Historically, Lampung consistently employed LCV syllables. In cases with an upper vowel sign and a non-spacing consonant sign, the consonant sign is placed closer to the base letter, with the vowel shifted upward or to the side. Non-spacing signs are sometimes enclosed by VOWEL SIGN E or CONSONANT SIGN N.<sup>32</sup>

Upward			Rightward			Inward		
C V		V C L			V C V			
Α			В	С	F	Н	ı	Н
花	20	= 4	Z.	ف	芝	17	中	1-1
ズ	<b>~</b>		Ž T	$\stackrel{\underline{l}}{\nu}$	ビロ	7	7	7

#### 4. Character Repertoire

The table below presents the character repertoire in five columns: Sukadana variants, Krui variants (see Figure 27), proposed Unicode code points, character names, and corresponding figure numbers.

7	TL	1E700	LAMPUNG LETTER A	Figure 19
7	N	1E701	LAMPUNG LETTER KA	Figure 19
~	7	1E702	LAMPUNG LETTER GA	Figure 18
~	4	1E703	LAMPUNG LETTER NGA	Figure 19
41	S	1E704	LAMPUNG LETTER CA	Figure 19

<sup>&</sup>lt;sup>31</sup> Beele & Tuuk (1868, pp. 139-141).

<sup>&</sup>lt;sup>32</sup> Beele & Tuuk (1868, p. 139).

74	W	1E705	LAMPUNG LETTER JA	Figure 19
m	$\mathcal{T}\mathcal{D}$	1E706	LAMPUNG LETTER NYA	Figure 19
E	7	1E707	LAMPUNG LETTER TA	Figure 19
3	9	1E708	LAMPUNG LETTER DA	Figure 19
~	m	1E709	LAMPUNG LETTER NA	Figure 19
_	_	1E70A	LAMPUNG LETTER PA	Figure 19
4	y	1E70B	LAMPUNG LETTER BA	Figure 19
ட	4	1E70C	LAMPUNG LETTER MA	Figure 19
4	W	1E70D	LAMPUNG LETTER YA	Figure 19
ㅁ	2	1E70E	LAMPUNG LETTER RA	Figure 19
~	7_	1E70F	LAMPUNG LETTER LA	Figure 19
2	(2)	1E710	LAMPUNG LETTER WA	Figure 19
+	$\cap$	1E711	LAMPUNG LETTER SA	Figure 19
ы	$\sim$	1E712	LAMPUNG LETTER HA	Figure 19
់	័	1E713	LAMPUNG VOWEL SIGN I	Figure 19
ੂ	ੁ	1E714	LAMPUNG VOWEL SIGN U	Figure 19
៉ី	៎	1E715	LAMPUNG VOWEL SIGN E	Figure 19
্	Ō	1E716	LAMPUNG CONSONANT SIGN NG	Figure 19
៊ី	៊ី	1E717	LAMPUNG CONSONANT SIGN N	Figure 19
্	ુ 3	1E718	LAMPUNG CONSONANT SIGN Y	Figure 19
さ	័	1E719	LAMPUNG CONSONANT SIGN R	Figure 19
្	ृ	1E71A	LAMPUNG CONSONANT SIGN W	Figure 19
୍"	ः	1E71B	LAMPUNG CONSONANT SIGN H	Figure 19
్రం	୍/	1E71C	LAMPUNG VOWEL SILENCER	Figure 19
榝	\$	1E71D	LAMPUNG PUNCTUATION SUN	Figure 15
0	:::	1E71E	LAMPUNG PUNCTUATION MOON	Figure 19
ឹ		1E71F	LAMPUNG NOVEL VOWEL SIGN E	Figure 32
ុ		1E720	LAMPUNG NOVEL VOWEL SIGN O	Figure 32

#### 5. Properties

#### 5.1. General Category

This proposal uses a 4-column block starting at 1E700.

```
UnicodeData.txt

1E700;LAMPUNG LETTER A;Lo;0;L;;;;N;;;;

1E701;LAMPUNG LETTER KA;Lo;0;L;;;;N;;;;

1E702;LAMPUNG LETTER GA;Lo;0;L;;;N;;;;

1E703;LAMPUNG LETTER NGA;Lo;0;L;;;N;;;;

1E704;LAMPUNG LETTER CA;Lo;0;L;;;N;;;;

1E705;LAMPUNG LETTER JA;Lo;0;L;;;N;;;;

1E706;LAMPUNG LETTER NYA;Lo;0;L;;;N;;;;

1E707;LAMPUNG LETTER TA;Lo;0;L;;;N;;;;

1E708;LAMPUNG LETTER DA;Lo;0;L;;;N;;;;

1E709;LAMPUNG LETTER NA;Lo;0;L;;;N;;;;

1E708;LAMPUNG LETTER NA;Lo;0;L;;;N;;;;

1E708;LAMPUNG LETTER BA;Lo;0;L;;;N;;;;

1E700;LAMPUNG LETTER YA;Lo;0;L;;;N;;;;

1E700;LAMPUNG LETTER YA;Lo;0;L;;;N;;;;

1E706;LAMPUNG LETTER YA;Lo;0;L;;;N;;;;

1E706;LAMPUNG LETTER RA;Lo;0;L;;;N;;;;

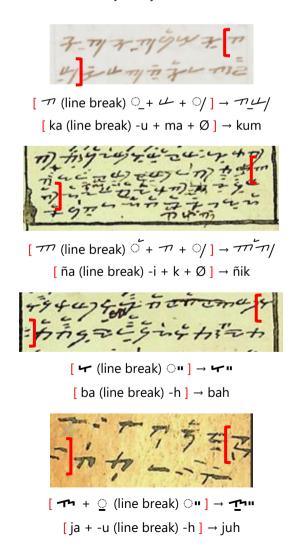
1E706;LAMPUNG LETTER RA;Lo;0;L;;;N;;;;

1E710;LAMPUNG LETTER LA;Lo;0;L;;;N;;;;
```

```
1E712;LAMPUNG LETTER HA;Lo;0;L;;;;;N;;;;;
1E713; LAMPUNG VOWEL SIGN I; Mn; 0; NSM;;;;; N;;;;;
1E714; LAMPUNG VOWEL SIGN U; Mn;0; NSM;;;;;N;;;;
1E715; LAMPUNG VOWEL SIGN E; Mn; 0; NSM;;;;; N;;;;
1E716; LAMPUNG CONSONANT SIGN NG; Mn; 0; NSM;;;;; N;;;;;
1E717; LAMPUNG CONSONANT SIGN N;Mn;0;NSM;;;;;N;;;;
1E718;LAMPUNG CONSONANT SIGN Y;Mc;0;L;;;;;N;;;;
1E719; LAMPUNG CONSONANT SIGN R; Mn; 0; NSM;;;;; N;;;;
1E71A; LAMPUNG CONSONANT SIGN W; Mn; 0; NSM;;;;; N;;;;;
1E71B; LAMPUNG CONSONANT SIGN H; Mc;0;L;;;;;N;;;;;
1E71C; LAMPUNG VOWEL SILENCER; Mc; 9; L;;;; N;;;;
1E71D; LAMPUNG PUNCTUATION SUN; Po;0;L;;;;;N;;;;;
1E71E; LAMPUNG PUNCTUATION MOON; Po;0;L;;;;;N;;;;
1E71F; LAMPUNG NOVEL VOWEL SIGN E; Mn; 0; NSM;;;;; N;;;;;
1E720; LAMPUNG NOVEL VOWEL SIGN O; Mn; 0; NSM;;;;; N;;;;
LineBreak.txt
1E700..1E712;AS
                     # Lo
                              [19] LAMPUNG LETTER A..LAMPUNG LETTER HA
1E713..1E717;CM
                     # Mn
                              [5] LAMPUNG VOWEL SIGN I..LAMPUNG CONSONANT SIGN N
             ;CM
                     # Mc
                              LAMPUNG CONSONANT SIGN Y
1E718
1E719..1E71A;CM
                     # Mn
                              [2] LAMPUNG CONSONANT SIGN R..LAMPUNG CONSONANT SIGN W
            ;CM
                     # Mc
                              LAMPUNG CONSONANT SIGN H
1E71B
                     # Mc
                              LAMPUNG VOWEL SILENCER
1E71C
1E71D..1E71E;AL
                     # Po
                              [2] LAMPUNG PUNCTUATION SUN..LAMPUNG PUNCTUATION MOON
1E71F..1E720;CM
                              [2] LAMPUNG NOVEL VOWEL SIGN E..LAMPUNG NOVEL VOWEL SIGN O
                     # Mn
```

#### 5.2. Line Breaking

Traditionally, the Lampung script is written without spaces between words. In contemporary usage, however, writers often insert SPACE (U+0020) to enhance readability and clarity. Hyphens or other marks indicating continuance are not used. Line breaks may occur within a closed syllable, in which case the vowel sign is always carried over and attaches to the coda consonant on the next line (LETTER1 (LINE BREAK) VOWEL SIGN + LETTER2 + VOWEL SILENCER). In rare cases, line breaks also occur before spacing signs such as CONSONANT SIGN +—and theoretically CONSONANT SIGN Y—or, very rarely, before the VOWEL SILENCER.



# 5.3. Typography

The primary font used in this proposal was designed by Aditya Bayu Perdana, based on inked *daluwang* manuscripts (Manuscripts C and H) with some stylistic adjustments. These glyphs serve as illustrative examples and are not intended to define the full range of stylistic variation found in Lampung script traditions. Additional fonts referenced here were developed by the author and by Rizal Budi Laksana.

In the prior feedback (L2/22-057), concerns were expressed about relying on *Identifikasi Anatomi Aksara Lampung* (Indrayati & Migotuwio, 2020) for typographic description, as the study was based only on *Musyawarah* materials and did not fully reflect the diversity of authentic manuscripts. Its reduced vowel-sign proportions make it unsuitable as a basis for typographic structure. For these reasons, it should not be treated as a comprehensive or definitive reference for the typographic structure of the script.

#### 5.4. ISO 15924

The Lampung script is not yet assigned an ISO 15924 script code. This proposal recommends the code Lmpg to represent it.

#### 5.5. Encoding Model

The previous proposal (2022, p. 8) recommended adopting an Indic-based model for encoding the Lampung script. However, unlike other Indic-derived Indonesian scripts, Lampung does not exhibit complex shaping behaviors such as mandatory ligatures, split vowels, or conjunct formation. Considering this, a quasi-visual model is proposed as a more appropriate encoding strategy.

The quasi-visual model is a hybrid approach: characters are entered into their logical sequence, while the font handles positioning according to historical orthography. This balances historical accuracy with contemporary usability, avoiding both the rigidity of Indic shaping logic and the instability of purely visual models. One advantage of this model is that it clearly defines a canonical input order for Lampung. Experience with other Brahmic scripts have shown that ambiguous or underspecified orders can cause serious problems, leading to search mismatches, inconsistent rendering across platforms, and even security risks such as web domain and source code spoofing.<sup>33</sup> By contrast, Lampung can establish a well-defined order from the outset, thereby preventing such issues.

The reliability of this model can be demonstrated by predictable input and rendering sequences. Table below illustrates the five valid input patterns. Regardless of context, the order is straightforward: the user types characters in a natural "phonetic" order, and the font applies the orthographic rules (sign relocation, stacking, cancellation) to yield the expected visual result. Sign relocation and stacking are implemented at the font level using OpenType GSUB/GPOS rules,<sup>34</sup> not by shaping engine logic. Unicode encoding provides only the logical input order. Lampung does not require Indic shaper (USE). A simple visual shaper (HarfBuzz default, Graphite, CoreText) is sufficient, with no reordering beyond font-level. This guarantees that different platforms and applications render Lampung consistently and without ambiguity.

No.	Input Sequence	Input	Examples	Expected Rendering		
1	LETTER + VOWEL SIGN	KA + -U	ক + ু	Į.	KU	
2	LETTER + CONSONANT SIGN	SA + -M	+ + Ō	Ŧ	SAM	
3	LETTER + VOWEL SIGN + CONSONANT SIGN	KA + -I + -M	<b>・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・</b>	14	KIŅ	
4	LETTER <sub>1</sub> + LETTER <sub>2</sub> + VOWEL SILENCER	KA + PA + ·	<b>ポ+ロ+</b> 9	7-9	KAP·	
5	LETTER <sub>1</sub> + VOWEL SIGN + LETTER <sub>2</sub> + VOWEL SILENCER	KA + -I + KA + ·	ァ+ * + + + + ッ	ولوسي	KIK·	

This bounded set of input sequences means that Lampung text can be normalized easily and consistently across environments, avoiding the multiple encodings for the same visual form that plague other Brahmic scripts.<sup>35</sup> It also ensures proper line-breaking without fallback glyphs such as the DOTTED CIRCLE, since glyph placement is handled contextually at the font level rather than through Indic-style attachment logic.

 $<sup>{\</sup>color{red}^{33}} \ \underline{\text{https://lontar.eu/en/notes/order-and-disorder-in-unicode/index.html}}$ 

<sup>&</sup>lt;sup>34</sup> For a sample GSUB rule, see §11.

<sup>&</sup>lt;sup>35</sup> For example, in Khmer, visually identical strings such as ម្ត្រី, ង្គ្រី, and ង្គ្រី ("woman") correspond to different input sequences.

To ensure that this model remains both secure and unambiguous in practice, only the five canonical input orders defined above are valid. Any alternative sequence—even if visually identical—must be treated as invalid and rendered with fallback markers such as the ODOTTED CIRCLE (U+25CC) to clearly indicate an error. The script introduces no changes to Unicode Normalization Forms NFC, NFD, NFKC, or NFKD. This guarantees that each grapheme corresponds to a single, unambiguous sequence, enhancing interoperability, security, and preservation of the script's integrity in digital environments. The table below illustrates this principle.

Input order	Ren	dering	Valid?
LETTER + VOWEL SIGN + CONSONANT SIGN	د/=	ジ	<u>~</u>
LETTER + CONSONANT SIGN + VOWEL SIGN	=/_	ジ	×
LETTER <sub>1</sub> + VOWEL SIGN + LETTER <sub>2</sub> + VOWEL SILENCER	349	wy	~
LETTER <sub>1</sub> + LETTER <sub>2</sub> + VOWEL SIGN + VOWEL SILENCER	359	المريد	X

In the end, the quasi-visual model offers a balanced, low-complexity, and historically faithful encoding strategy. It maintains logical input order, guarantees consistent rendering, and prevents the interoperability and security risks seen in other Brahmic scripts. With the model already demonstrated in public fonts such as <u>Suarnadipa Lampung</u>, and with open-source templates available, implementation is straightforward.

# 5.5.1. Distinctiveness from Rejang Script

Some Unicode documents (e.g., L2/21-116, L2/11-091) have suggested that Lampung might be treated as a stylistic variant of Rejang. This proposal argues, however, that Lampung requires its own dedicated block. Although both scripts descend from the Kawi script, they've diverged substantially in both form and function. Lampung is not part of the *Surat Ulu* family. It possesses distinct base letter shapes (e.g., CA, DA, NGA, JA, TA, BA, MA, RA, SA) and unique features such as a dedicated vowel sign for /a/36 and specific consonant signs (e.g., CONSONANT SIGN Y, CONSONANT SIGN N, and CONSONANT SIGN W).<sup>37</sup> These differences are not superficial but reflect fully separate orthographic systems. Historical and typographic sources (Marsden, Westenenk, Van der Tuuk, Faulmann, Holle) consistently describe Lampung as a distinct script. The existence of dedicated Lampung typefaces (Figure 6) and their documented use in official correspondence (Figure 21 to Figure 25) reinforce its autonomy. Contemporary Lampung readers also report difficulty in reading Rejang texts,<sup>38</sup> confirming that the two are not interchangeable in practice.

Modern consensus forms (e.g., *Musyawarah* 1985) do not represent the full range of historical variation. The Krui style, for instance, is not mutually intelligible with either Rejang or other Lampung varieties, underscoring that Lampung cannot be treated as a subset of Rejang.

The Rejang block itself was developed primarily from a single secondary source and contains glyph assignments with little historical basis.<sup>39</sup> Subsequent corrections proposed by Ariq Syauqi (L2/25-162)—such as revisions to the form of REJANG LETTER RA—highlight the ongoing debates and the unsettled nature of that encoding. Unicode's stability policy prevents retroactive correction, meaning that reusing the Rejang block for Lampung would perpetuate these problems indefinitely.

The last but not least, from a structural perspective, Lampung is proposed to follows a quasi-visual model for orthography and line breaking (§3.7 and §5.2). Reusing Rejang codepoints for Lampung is not viable because the two scripts differ in orthographic behavior and encoding logic. Lampung requires sign reordering in closed syllables and vertical stacking of non-spacing signs—features not accommodate by the Indic model applied to Rejang. Even with specialized font support, attempts to adapt Rejang characters result in inconsistent rendering, particularly on platforms lacking advanced OpenType features. In most everyday environments—such as social media platforms, operating systems, and mobile apps—users cannot choose custom fonts, and developers generally rely on Google Noto, which assigns only a single representative form per Unicode block. In such cases, users depend entirely on Unicode's character-level encoding.

<sup>&</sup>lt;sup>36</sup> Miller (2011, p. 24).

<sup>&</sup>lt;sup>37</sup> Beele & Tuuk (1868, pp. 139-141).

<sup>&</sup>lt;sup>38</sup> Field observations by Ariq Syauqi.

<sup>&</sup>lt;sup>39</sup> See Everson (2006, pp. 3-4) and Syarifuddin (2021, pp. 4-8)

Additional incompatibilities arise if Rejang codepoints are reused for Lampung. First, character combinations: For example, REJANG VOWEL SIGN AI cannot combine with other vowels, whereas Lampung orthography regularly requires sequences such as of [uy] or " [ay]. These are valid and frequent in Lampung but cannot be represented within the Indic model used for Rejang. Because shaping models cannot be altered once a script is encoded, such structural mismatches cannot be resolved through codepoint reuse. Second, line breaking: under Indic logic, vowel signs must remain attached to their base consonant, causing DOTTED CIRCLE or placeholder characters to appear at line breaks. This behavior disrupts the traditional Lampung layout, as illustrated in the comparative table below.

Current Rejang model	Current Rejang model (with Lampung-glyph font)	Proposed Lampung model
~^ <mark>^^</mark> ^°	~~~ <u>~~</u> ~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
<mark>∵</mark> ₩¾^√ <mark>°</mark> *°,	<mark>ૻ</mark> ઋુ॒ৣৢয়ৢ৸ৢ	<mark>サ</mark> クニラュ± <sup>ニ</sup> "ᢇᡃ᠑⊑

These incompatibilities are further demonstrated in shaping engine behavior (see table below). While some implementations (e.g., HarfBuzz in Brave Browser, LibreOffice, or Android) can suppress dotted circles or allow REJANG VOWEL SIGN AI to combine with other vowels, others (e.g., Firefox, Office 365 Word, CoreText on iOS) fail or produce broken results. Such inconsistency confirms that adapting Rejang codepoints for Lampung cannot guarantee reliable rendering across platforms.

	<u>-</u>	
Shaping Engine / Platform	Suppresses the DOTTED CIRCLE?	Allows REJANG VOWEL SIGN AI to combine?
HarfBuzz (Brave Browser)	Yes	Yes
HarfBuzz (Mozilla Firefox)	No	No
HarfBuzz (LibreOffice Writer)	Yes	No
HarfBuzz (Android 15)	Yes	Yes
USE (Office 365 Word)	No	No
USE (Notepad)	Partial (broken)	Partial (broken)
CoreText (iOS)	No	No

These cumulative incompatibilities—orthographic, structural, and technical—demonstrate that Lampung cannot be encoded as a subset of Rejang. A dedicated Lampung block is therefore essential to ensure accurate representation, stable rendering across platforms, and conformance with Unicode's principles of script identity.

#### 6. Collation

Early scholarship once assumed that the Lampung script lacked a native collation system, since no traditional abecedaria were known. References by Marsden, Westenenk, Faulmann, and Holle (Figure 2 to Figure 5) presented a Brahmic-like sequence—beginning with velars, followed by labials, dentals, palatals, semivowels, the vowel carrier, sibilant, and aspirate—similar to the order now used in Unicode for Rejang. These accounts, however, did not provide explicit rationale and exhibit inconsistencies, especially in the labial and palatal groups. Contemporary educational materials (Figure 31) largely follow this precedent. More recent findings show that Lampung traditions did employ systematic collation, with two distinct patterns:

a. Kaganga-style order (Brahmic-like).<sup>40</sup>

b. Hanacaraka-style order (Javanese-like).<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> See Figure 18.

<sup>&</sup>lt;sup>41</sup> Pudjiastuti, et al. (2023, p. 316).

These variants reflect regional and pedagogical practices, demonstrating that functional sorting systems have long existed in Lampung usage. For consistency with other Brahmic scripts, this proposal recommends adopting a Brahmic-style default collation, as follows:

#### 7. References

Anderbeck, K. R. (2007). An initial reconstruction of Proto-Lampungic: phonology and basic vocabulary. *Studies in Philippine Languages and Cultures. SIL International, 16,* 41–165. Retrieved from https://www.sil.org/resources/archives/25900

Balogh, D., & Griffiths, A. (2020). DHARMA Transliteration Guide. Retrieved from https://hal.science/halshs-02272407v3

Beele, L. A., & Tuuk, H. N. (1868). Les manuscrits Lampongs: en possession de M. le baron Sloet van de Beele. T. Hooiberg & fils.

Retrieved from https://play.google.com/books/reader?id=5zhNAAAAcAAJ&pg=GBS.PP1&hl=id

Everson, M. (2006, April 24). *Proposal for encoding the Rejang script in the BMP of the UCS*. Retrieved from UTC Document Register for 2006: https://www.unicode.org/L2/L2006/06139-n3096-rejang.pdf

Faulmann, K. (1880). Illustrirte [sic] Geschichte der Schrift. Vienna/Pest/Leipzig: Hartleben's Verlag.

Gallop, A. T. (2015, April). *Malay manuscripts from south Sumatra*. Retrieved from Asian and African studies blog: https://blogs.bl.uk/asian-and-african/2015/04/malay-manuscripts-from-south-sumatra.html

Gallop, A. T. (2019). Malay Seals from the Islamic World of Southeast Asia. Singapore: NUS Press.

Holle, K. (1882). *Tabel van Oud- en Nieuw-Indische Alphabetten. Bijdrage tot de palaeographie van Nederlandsch-Indië.* The Hague: M. Nijhoff. Retrieved from https://quod.lib.umich.edu/p/philamer/APU0956.0001.001

Kozok, U. (2009). Surat Batak. Jakarta: Kepustakan Populer Gramedia.

Marsden, W. (1784). The History of Sumatra: Containing an Account of the Government, Laws, Customs and Manners of the Native Inhabitants, with a Description of the Natural Productions, and a Relation of the Ancient Political State of that Island. London: William Marsden. Retrieved from https://archive.org/details/thehistoryofsumatra/page/n15/mode/1up

Matanggui, J. H. (1985). *Kamus Lampung - Indonesia*. Jakarta: Pusat Pembinaan dan Pengembangan Bahasa. Retrieved from https://repositori.kemdikbud.go.id/2930/1/Kamus%20Lampung-Indonesia%20-%20323h.pdf

Miller, C. (2011, March 14). *Indonesian and Philippine Scripts and Extensions*. Retrieved from Unicode Technical Note #35: http://www.unicode.org/notes/tn35/

Noeh, M. (1971). Pelajaran Membaca dan Menulis Huruf Lampung. Bandar Lampung.

Novrizaldi. (2022, September 28). *Pemerintah Segera Daftarkan SNI Aksara Pegon, Kawi dan Lampung*. Retrieved from The Indonesian Coordinating Ministry for Human Development and Culture: https://www.kemenkopmk.go.id/pemerintah-segera-daftarkan-sni-aksara-pegon-kawi-dan-lampung

Pandey, A. (2022). Revised proposal to encode the Lampung script in Unicode. Proposal. Retrieved from https://www.unicode.org/L2/L2022/22044-lampung.pdf

Panitia Almanak Nasional Sumatera. (1969). *Almanak Sumatera*. Medan: Komando Antar Daerah Sumatera. Retrieved from https://books.google.co.id/books/about/Almanak\_Sumatera.html?id=dE8CAAAAMAAJ&redir\_esc=y

PERATURAN GUBERNUR No. 39 Tahun 2014 Tentang Mata Pelajaran Bahasa Dan Aksara Sebagai Muatan Lokal Wajib Pada Jenjang Satuan Pendidikan Dasar Dan Menengah. (2020, February 25 ). Retrieved from Jaringan Dokumentasi dan Informasi Hukum | Kantor Biro Hukum Provinsi Lampung: https://jdih.lampungprov.go.id/product-hukum/provinsi/4277/mata-pelajaran-bahasa-dan-aksara--sebagai-muatan-lokal-wajib-pada-jenjang-satuan-pendidikan-dasar-dan-menengah

Pudjiastuti, T. (1996). Aksara dan Naskah Kuno Lampung Dalam Pandangan Masyarakat Lampung Kini. Jakarta: Departemen Pendidikan dan Kebudayaan.

Pudjiastuti, T., H.M, J., AM, S., Dwijonagoro, S., Ariyani, F., Idris, A. R., . . . Agusti. (2023). *Meneroka Bahasa, Aksara, dan Sastra Lampung*. (A. R. Idris, & F. Ariyani, Eds.) Yogyakarta: Deepublish.

Syarifuddin, M. M. (2021). *Towards an Encoding for Surat Ulu*. Retrieved from https://www.unicode.org/L2/L2021/21116-surat-ulu.pdf

Udin, N., Sudrajat, R., Akhyar, W., Rejono, I., & Sanusi, E. (1992). *Tata Bahasa Bahasa Lampung Dialek Pesisir*. Jakarta: Pusat Pembinaan dan Pengembangan Bahasa Departemen Pendidikan dan Kebudayaan.

Yani, Z. (2021). Katalog Naskah Lampung. (M. Holil, & A. R. Idris, Eds.) Jakarta: Litbangdiklat Press.

# 7.1. Manuscripts

Code	Object	Documentation/Current Location	Ref. number/Alias	Date
Α	Bark	British Library	MSS Lampung 1	19 <sup>th</sup> century
В	Paper	British Library	MSS Malay A 4	1812
С	Paper	National Library of Indonesia	98 E 49.2	-
D	Paper	National Library of Indonesia	<u>98 E 35</u>	-
E	Bamboo	British Library	<u>Or 12986</u>	19 <sup>th</sup> century
F	Paper	Delpher	Letterproef van Oosterse schriften	1907
G	Paper	Suherman's Library	Announcement Letter	1913

Н	Paper	Wereld Museum	RV-769-33	1890
	Bark	National Library of Indonesia	<u>93 E 105</u>	-
J	Bronze	-	Bandardewa manuscript	1818
K	Paper	Weltmuseum Wien	Inv.Nr. 30760	1884
L	Paper	Weltmuseum Wien	Inv.Nr. 20050	1888
М	Bark	National Library of Indonesia	93 E 104	-
N	Bark	National Library of Indonesia	93 E 108	-
0	Paper	National Library of Indonesia	93 E 31	-
Р	Bark	National Library of Indonesia	93 E 95	-
Q	Bark	National Library of Indonesia	93 E 97	-
R	Bark	National Library of Indonesia	93 E 98	-
S	Bark	National Library of Indonesia	93 E 99	-
Т	Bark	National Library of Indonesia	98 E 32	-
U	Paper	National Library of Indonesia	<u>98 E 43</u>	-
٧	Bark	British Library	EAP1454/2/8	1887
W	Various	Katalog Naskah Lampung	Yani (2021)	-
Х	Paper	DREAMSEA Repository	DS 0122 00002	1908

# 8. Acknowledgements

The author gratefully acknowledges the many individuals who contributed to the preparation of this proposal. Special thanks are extended to Aditya Bayu Perdana ( ) for support with proofreading, corrections, and font development; and to Ariq Syauqi, intern at SEI, for proofreading assistance and for engaging with philologists in Lampung and Jakarta. The author also records gratitude to two distinguished philologists: Arman Arifin Zainal, for providing handwritten documentation and thoughtful correspondence, and the late Titik Pudjiastuti (1956–2024), for her correspondence.

Warm thanks are due to Muhammad Rasyid Taufiqul Hafidz (மும்மும் து. கூற்கு ஆம்க ஆம்க்கு) for his careful transcriptions, suggestions, and translations of figures, and to Rizal Budi Laksana (色ピールグリーカ/へか) for font design.

Finally, the author thanks Deborah Anderson (Director Emeritus) and Anushah Hossain (Research Director) of the Script Encoding Initiative (SEI), University of California, Berkeley, for their guidance and support, and Anshuman Pandey (Technical Director) for his preliminary work on Lampung script encoding. This work was supported in part by a grant from SEI.

Each of these contributions has improved the clarity, depth, and overall quality of the proposal. The author welcomes feedback from the UTC Script Encoding Working Group and other stakeholders to further refine this model and ensure that the Lampung script is encoded in a way that is both technically robust and faithful to its orthographic traditions.

	1E70	1E71	1E72	1E73
0	4	1	़	
U	1E700	1E710	1E720	
1	7	+		
'	1E701	1E711		
2	7	Ы		
_	1E702	1E712		
3	~	័		
•	1E703	1E713		
4	4	ੂ		
·	1E704	1E714		
5	74	៉ឺ		
	1E705	1E715		
6	~	<b>্</b>		
	1E706	1E716		
7	E	៊ី		
,	1E707	1E717		
8	3	্		
	1E708	1E718		
9	~	さ		
	1E709	1E719		
Α	_	្ជ		
	1E70A	1E71A		
В	4	O"		
	1E70B	1E71B		
С	ш	್ರಿ		
С	1E70C	1E71C		
D	4	歘		
	1E70D	1E71D		
Ε	1	0		
	1E70E	1E71E		
F	15705			
	1E70F	1E71F		

#### This script is known indigenously as Surat Lampung. Independent vowel 1E700 4 LAMPUNG LETTER A Consonants 1E701 LAMPUNG LETTER KA 1E702 LAMPUNG LETTER GA 1E703 LAMPUNG LETTER NGA 1E704 4 LAMPUNG LETTER CA 1E705 LAMPUNG LETTER JA 74 ~ 1E706 LAMPUNG LETTER NYA 1E707 = LAMPUNG LETTER TA LAMPUNG LETTER DA 1E708 3 LAMPUNG LETTER NA 1E709 1E70A LAMPUNG LETTER PA 1E70B 4 LAMPUNG LETTER BA 1E70C LAMPUNG LETTER MA 1E70D 4\_ LAMPUNG LETTER YA 1E70E ㅁ LAMPUNG LETTER RA LAMPUNG LETTER LA 1E70F 1E710 LAMPUNG LETTER WA 1E711 + LAMPUNG LETTER SA 1E712 LAMPUNG LETTER HA **Dependent vowel signs** 1E713 ់ LAMPUNG VOWEL SIGN I 1E714 LAMPUNG VOWEL SIGN U 1F715 LAMPUNG VOWEL SIGN E **Dependent consonant signs** 1E716 ៑ LAMPUNG CONSONANT SIGN NG 1E717 LAMPUNG CONSONANT SIGN N 1E718 ್ಯ LAMPUNG CONSONANT SIGN Y す LAMPUNG CONSONANT SIGN R 1E719 1E71A LAMPUNG CONSONANT SIGN W 1E71B ு LAMPUNG CONSONANT SIGN H Silencer sign LAMPUNG VOWEL SILENCER 1E71C ్ర • doesn't produce conjunct • always rendered visibly **Punctuations** 1E71D 歘 LAMPUNG PUNCTUATION SUN 1E71E 0 LAMPUNG PUNCTUATION MOON **Dependent vowel signs** LAMPUNG NOVEL VOWEL SIGN E 1E71F • a glyph variant of 1E713 • used in a 21st century document

• for actual é, use 1E713

LAMPUNG NOVEL VOWEL SIGN O • a glyph variant of 1E714

• used in a 21<sup>st</sup> century document • for actual o, use 1E714 or 1E715

1E720

°

# 9. Glyph Attestations

Rejang

# COMPARISON of LAMPUNG with KERINCI & REJANG Letters

			1							1		
	Lam	pung	Kerinci	Rejang				Lam	pung	Kerinc	i Rejan	ng
Α	N	TL	~	<b>M</b>			PA	~	<u>_</u>	<b>L</b>	✓	
KA	$\sim$	N	п	<b>^</b>			ВА	V	щ	Т	/	
GA		7	1	^			MA	V	4	上	<b>X</b>	
ŃΑ	X	4	7=	W			YA	W	w	4_	W	
CA	x	S	Ą	<b>\$</b>			RA	N	2	7L	<b>^</b>	
JA	$\sim$	W	4	<b>M</b>			LA	$\nearrow$	7	1	$\mathcal{N}$	
ÑA	m	m	4_	M			WA	11	(2)	+	Ŋ	
TA	W	7	_	A			SA	n	$\bigcirc$	=	<b>/</b>	
DA	s	9	4	٨			НА	$\checkmark$	$\sim$	ч	<b>^</b>	
NA	m	m	-4	M						·		
			ļ			Signs						
		-1	-U -E	-O	- <del>ə</del>	-NG	-N	-Y	-R	-W	-H	KILLER
Lampung		់	ੂ		៉	៊	៊ី	ঃ	<u>্</u>	្ជ	O#	్రి
Kerinci	C	0	- 후			্					ा।	ા

# COMPARISON of LAMPUNG GLYPH in SEVERAL WRITING MANUSCRIPTS

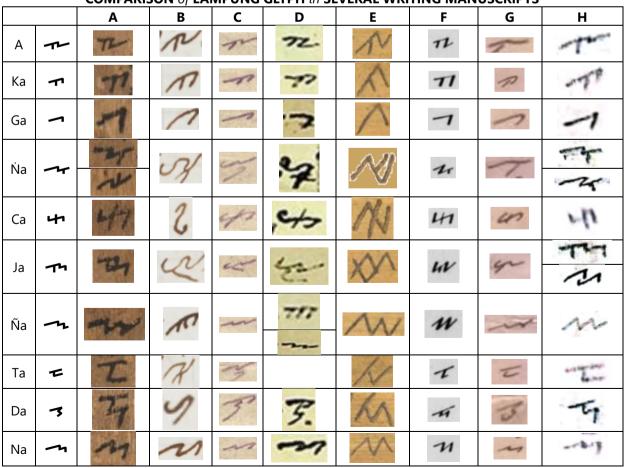
**় '** 

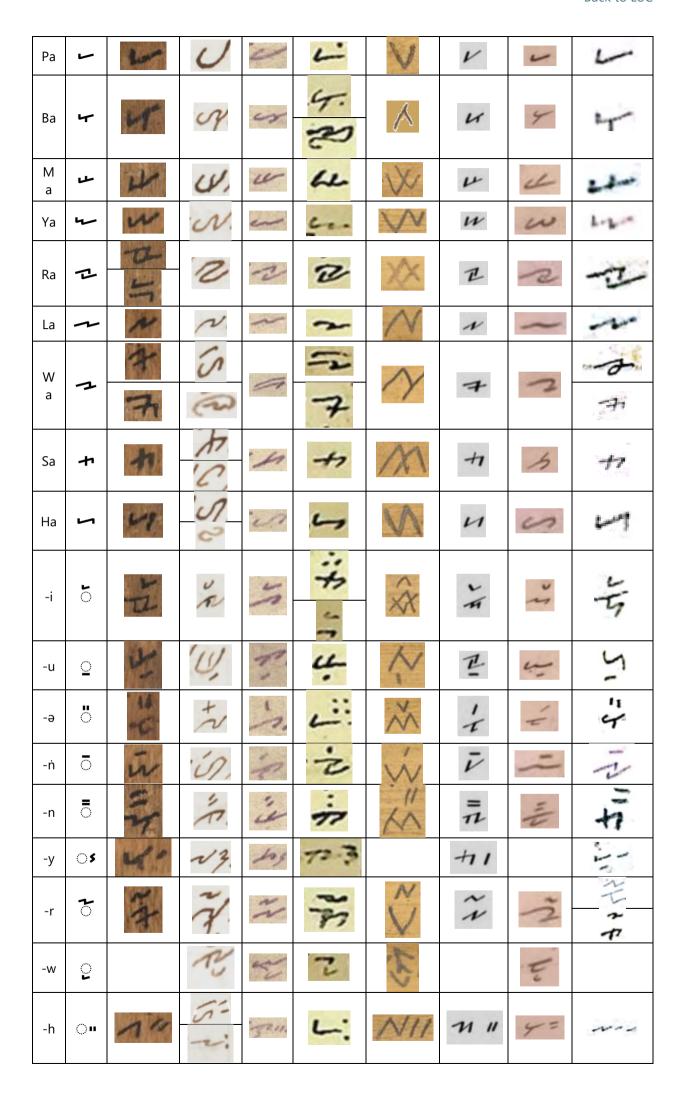
េ

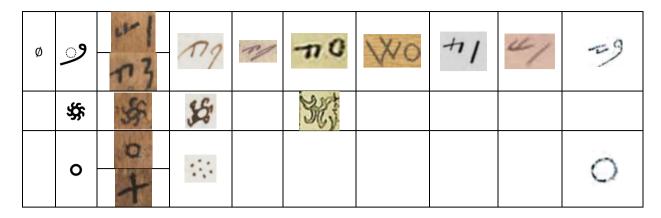
إ

**'** 

″്







#### **Additional Attestations from Various Sources**

			Additional At	testations fro	om various So	ources		
Ka	7	TI	11	>				
		M	K	J				
Йа	~	N	×	X				
		J	J	J				
Ca	4	T	8					
		P	<b>W</b> (p. 55)					
Ja	т	21	€	~				
		S	<b>W</b> (p. 55)	J				
Та	E	-	TO	R	7	n		
		U	I	М	R	X		
Da	3	P	*	U	15	3	1-	5
		ı	J	<b>W</b> (p. 55)	К	V	<u>Text</u>	Х
Ва	4	D	*					
		0	J					
Ма	ட	4	W.	V				
		<b>W</b> (p. 55)	V	J				
Ra	고	-	1	11	M			
		N	M	L				
			IVI	L	J			
Wa	1	-	1	+	8	1	X	1
Wa	ュ	U	<b>W</b> (p. 51)	1	×	K	×	*
Wa Sa	<b>1</b>	Ne -	<b>W</b> (p. 51)	+ q	<b>W</b> (p. 55)	<b>*</b>	×	
		Ne -	1	+	8	K	×	
		<b>W</b> (p. 55)	<b>W</b> (p. 51)	+ q	<b>W</b> (p. 55)	×	V	
Sa	+	Ne -	W (p. 51)  M	+ q	<b>W</b> (p. 55)	×	V	
Sa	+	<b>W</b> (p. 55)	<b>W</b> (p. 51)	+ q	<b>W</b> (p. 55)	×	V	

-у	ঃ	V 5						
		K						
-r	<u>ئ</u>	1.						
		L						
-h	୍"	u!	~"					
		K	J					
ø	్రా	705	7/	レノ	T)	70	7	<b>^11</b>
		N	<u>Text</u>	L	Q	0	<b>W</b> (p. 82)	J
	<b>\$</b> \$	华	2	(1)		557	0	
		N	M	M	<b>W</b> (p. 55)	P	J	
	0	*	6	SK	50			
		N	P	P	J			
		57 -	1	~-	主-			
	-	Х	G		DS 0122 00001			

# 10. Figures

# **10.1.** Historical Lampung script (pre-1985)

# SUMATRAN ALPHABETS.

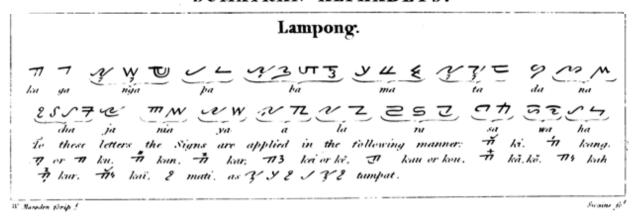


Figure 2. Description of Lampung characters in a chart of Sumatran alphabets (Marsden, 1784).

							L. C. 1	WESTEN	ENK:						
		Pasémah	Ond Navagards percentionals percentages	Oud Libongsch	Out Likeyed of propins it deceases	Löbonysch	that Majorapan religion Maradon (MI)	Rédynnysch.	Lémbok Sindang	Lémbak Béngkorles	Sermented		Outlinger, reject	Eurocoger's in Kreen	Language
	hu	-0	1100	ant.	D	-0	A	-		~	-17	2%	A	~	-
	gu	-1	~ 7	-	-	-	-	-	-1	-	-	-	-	-	1
	ta ta	WAL	200	400	2	-0.00	ar 40 m	No at	111	11 11	260	2	4 5	us w	1
	da	-0		T	-1.0	10	-0	01	1 Dine	06	100	1	IV	7239	16
	na	79 T	5 5	41	50	75	44 6	4 7	五	94	听十	-14	+5	200	3
	pa	~	ww	20	~	~	n	M	27	711	-41	-44	-20	-41	1
	ba	-/	+ +	*		-+		-	7			-	27.0	4	4
	MMI	×+××	H VE	ido	06	w	Wx R	+ 10	of 400mg	+ww	wer	*	3711	L.L	w
	for .	100	708 X	-01		-07	10	~	1	1	00	107	00 4	100	1,44
	dja	-cn 501	my wa	424		-ch	100	104	100	21 24	124	100	vO:	16 10	47 1
	rya.	m	www.	w		w	w	AN	266-	111	1500	w	111 44	way	144
	PE	-55	/ -	-011-04	100	-	1011 A. 10	a 8 6	-	42	1	400	C> +1	4 1	-4
	hi	211	工力	N	0	2	12	211	110	10 10	12	4	00	00	-0
goes.	fire/www.	218	+ ×	3	121	1	N N	2	3	25 15	2	~	WZ	20	1
and the	ju	w	waln	in		w	w	w	in	in	in	I	MM	44	2
Boe	holish)	ы	~~~			-	n	10		Les.	4-9	1-4	or un	con	4
	ha/m?	72	41	4		-12	-	inc	w	es.	n	N	2/12	+2	No
	mba	T	607	-		-=	E	T	K	-6	E	T			
	nggs	A	14	41		-051	-41	VO.	A	4	-41	49			
	indo lugia	no no	at hiner	at		w	46	N	100,000 100	N M	N	45 14		P. 2	
	tse	a	100			a	or	0	th	-01	a	1451			
	geleum	er .							100						56
	ligina	w	公山							Bet	世	15			
	ingaless insta	10 4	22							M	int ata	K			
8	hga	100	1190							N	a	0			
-googeniste	Appent.	Les 100	-							1	=	100			
10	100	us	- 32							-	N D	10			
die	3										4	10000			
Blor	- sign										in	w			
	Ross	67		-		-	0	- 63		0		-51	d.	77	71
	kor koa	-17	553	-5		4	1	-	TT , 170000	777	7	413	77	-01	7
	hov	7				it down	~		24.	AL.	200	7	49.9	-mi	2001
	Anne	15/10				4 4	4		M.	भी			34	-6	4
	loang	41	6	A.		4	A		A 2000)	-it	-69	-4	A	in	-49
	kan	-11		d		7	20	47	in Atomit	4	47	4	+4	+	-0
Sun.	As.	3-11	4 15 15	31		297 247	201	-int	Set Syst (mil)		-in	30	-25	南与	-th
Känborenhms	Ad kell					1	-ñ	अंत	And which involve						
Subs	žò.	A1				1111=:	20						Seek to	Aur.	orine:
3	Reals	and the same	173.0	etin			A1.		-17,000				4.	milia	-et-
	hi	an							100				1000	100	
	200	-47													

Figure 3. Chart showing scripts from Lampung ("Lampoengsch"), Bengkulu and Kerinci by L.C. Westenenk.

# SCHRIFTEN AUF CELÉBES UND SUMATRA.

Maṅkāsar	Bu	ıgi	В	attak		Redžań	Lampuñ	Wert
mankasai	Alt	Neu	Alt		Neu		Dampan	Weit
		~						a
æ	"	"	2011	77	30	~	~	ka
×	3	ゃ	7	$\overline{}$	7	^		ga
\$	7	~	<	~	<	NIN	W N &	'nа
8	5	ฮ	~	77	2-	۶	7 S 2	tša,ťa
$\boldsymbol{\mathscr{E}}$	2	٦	€	~	<b>4</b>	A	<u>s</u>	dža,d
B	₹	~	~	~	~	<b>/~</b>	мπ	ńа
0	`	~	ע א	×	ደ ஶ	$\Diamond$		ta
~ C	<b>&gt;</b>	٠	<	$\overline{}$	~	MA	9	da
^	7	•	20	ਰ	~	^	MM	na
ム	∿	~	-	$\widehat{}$	_		40	pa
$\sim$	x	<b>ب</b> د	0	$\equiv$	æ		N 3 UT 3	ba
*	~	_	$\propto$	$\mathbf{x}$	•	$x \times x$	<b>€</b> 11 y	ma
<b>E</b>	**	**	~~	<del>-</del> ~	~	W	w N	ya
F	٦	=	9	3	-	<i></i>	e 5 Z	ra
2	v	~	-	S	-	<i>~</i> .	νz	la
٠ ك	~	~	00	7	~	N. M. W. //	≥ 5	wa
æ	8	0	2-12	₹	2-	/ N //	n o	sa
Æ	<b>∞</b>	8	20	77	22	V / 1	54	ha

Die Vokale der Bugi sind: titi
oder ana irate i, titi oder ana iraca
u, l'ana ri-boko ē, l'ana ri-yolo o z. B.:

ki, ku, lke, ke, lo bie Battak-Vokale sind: die Initiale a, i,
u, in der Mitte und am Ende i,

> u,  $\times$  o, -e,  $\overline{\phantom{a}}$ , a ist den Konsonanten inhärent, -e steht am Anfang der Konsonanten ( $\Longrightarrow$  bere), am Ende oder über Vokalen ( $\longrightarrow$   $p\overline{a}$ ,  $\longrightarrow$   $p\overline{b}$ ),  $\rightarrow$  wird auch verbunden, z.B.  $\Longrightarrow$  bupusutu.

Figure 4. Comparison of Rejang ("Redžan"), Lampung ("Lampun") and related scripts (Faulmann, 1880).

6.5			E	.	NED	ERI	AN	DSC	H	- 1	NDII			E	. [	SI	M	AT	RA	J			
Volgorde der	114	115	116	-			120	121	122	123	124	Volgorde der	114	115	116	-	_	-	-	-	122	/23	124
Letters	Lampongs  Alphabettes, uit les 12º Lampongs v Sloet van den Beele, door  modern Neuhrenner van der Tenk						Letters	-	Lampongs  Alphabetten uit les M. Lampongs v. Sloet van. den Bede, door Neubranner van der Tuuk.														
Leuers	modern		A.	Neul A#	AT	Vun der	Tunk	C	D	E	16	Trecters	.modern	A	A de	AW	de do	AT.	Ar	C	n der D	Tunk	(
K	77	-	-	7			-	2	_	n	0	Dн											
Кн												N											
G		_		_		-						P	-n=-	_	- 14			n	_n	~·-	"	"	-
GH	7					-						PH	v.v.	-	V	·	4	~	V	~	· · · ·	V	-
		-							-	-				-									-
NG	4	w.	a	ne	ve	1	2	~	w.	ux	x	В	1329	3	1	1	1	1	1	1	Ψ.	3	-
_NG	-					. =						Вн		-									
$T_J$	1/2	8	N		ne	N	n	n	2	2	x	M	us	=	w	v	·	w	v	u.	u.	w	
$T_{J^H}$		-0										IJ	w	w	w	~	w	w	~	×	u.	w	
D <sub>J</sub>	wa	E	a	~	a	c	N	-	n	w	e	-J	3,					,			- 1	- 3	
Din		,									+	R	2.5	1	.,	~		~	N		24	2	
N <sub>J</sub>													1	-	*	-		N	4	2			
Ť	w,m	-	n	-					-	-	-	_R		Ī			~		~				
Ťн			-		-	1				-		_R_		-		-							-
						9		380				L	-2	~	n.	~	~	1	~	~	~	n	-
D					-						-	V	-w	-	4	18	00	9	M.		<u>-</u>	s.	-
Ďн			,	éen.								Ç											
N												$S_{J}$	-H	-	A1	A	~	an.	m	m	0	Ch	
T	61,7	=	0	N	~	0	v	×.	2	7	1	SH							- 1				
Тн	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					-						H	un	0	S	n	s.	u	S		0	S	
D	5.3	-	-5°	-4	9	Ti'	5	4	47	9	h	_н	=	2		=	_		_ =	:			

Figure 5. Chart showing Lampung scripts from Sumatra (Holle, 1882).

Figure 6. Illustration from Haarlem type foundry Joh. Enschedé & Zonen (1907). This Lampung typeface will later be used in official documents, such as letters of appointment of village heads (Figure 25).

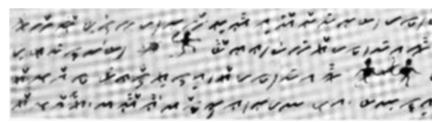


Figure 7. Lampung writing on paper, with court scenes.

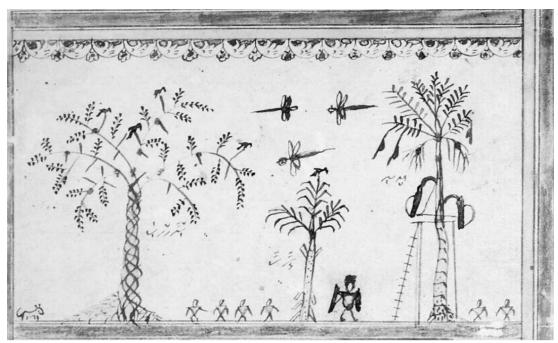


Figure 8. <u>An illustration</u> with object descriptions in Lampung script from the Tale of Si Dayang Rindu.



Figure 9. Bandardewa manuscript, found in West Tulang Bawang Regency, made of bronze sheet with a size of  $15 \times 21$  cm. The contents consisting of 17 lines.



Figure 10. <u>Bamboo manuscript</u>, found in Way Handak, 1884.

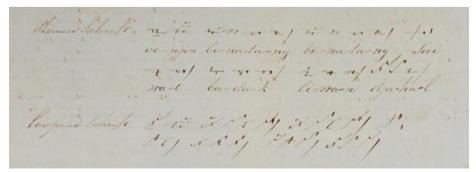


Figure 11. <u>Lampung text</u> in angular and round style.

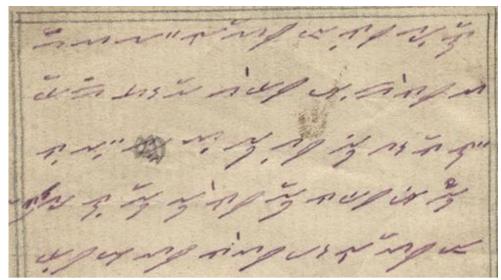


Figure 12. Cursive Lampung sheet from 98 E 49.2.



Figure 13. Lampung manuscript on talisman (Weltmuseum Wien Inv.Nr. 20050).



Figure 14. <u>Glossary</u> of titles and ranks of local nobility in Lampung and Latin script.

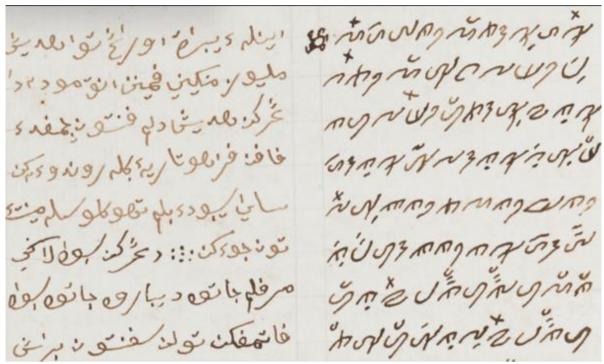


Figure 15. Detail of a paper manuscript documented by British Library (MSS Malay A 4). The PUNCTUATION SUN can be seen at the beginning of the text.

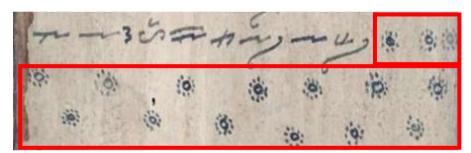


Figure 16. Sequence of PUNCTUATION SUN as space and decor filler (Yani, 2021, p. 82).

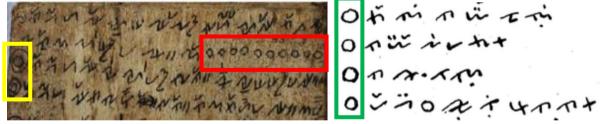


Figure 17. Sequence of PUNCTUATION MOON as space filler (Yani, 2021, p. 52) (red box) and point bullet (Beele & Tuuk, 1868, p. 48) (green box). Sequence of PUNCTUATION SUN as point bullet (yellow box) also occurred.

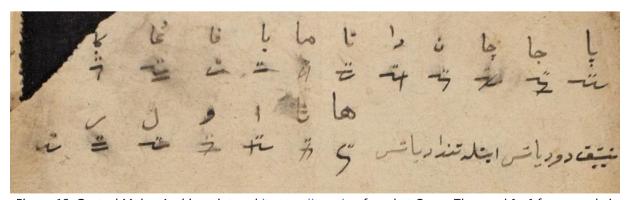


Figure 18. Central Malay Arabic script and <u>its transliteration</u> found at Ogan. The word [ga] for example is written as "and S respectively.

Lampung Transcription<sup>42</sup> **Image** エコムリカウムンキャナ marrum kidan malinət ::0@3+=35+n @ duway təray tika-チャノチャノダルチャ tuktuk di batu kumban makkun tipakay **山ダルカーカキレカ3**喜 nə anənku diku @ dəñik-dəñik Labun say 「カノウカガカノ工<u>を</u>へ3か <u>๚หังหันพล:ก</u> mbi dibi majawəh kadar kulik mak カセンカルカノロルか ガンデ::をかか/をか ki hati @ cənək-cən-ナカノウセルカヹがか ək di juyuku liyanni 2414キカゼルカ/ rambutan kuliyak 声がかっきませんして kində niku cəncəm pulaw のマーキャットエル daratan @ kapələm きりかれか:カ子 きのカルガ:カチガ rədak munih katani クミルカカノーのルノー duramu ñak pədəm min

Figure 19. Transcription of text from MSS Malay A 4 by Muhammad Rasyid Taufiqul Hafidz.

ポップリック ana suratni ku-でがマックリー - burni bab bara-った かっしまれる - wun anakni kam-った クークナッと - mandur masta bara-った クーク です - wun iskawayar ti-っと では - yan ruwa incik pa-キ: たっして - tih ulun lampun

Figure 20. Transcription of tombstone inscription at Krui, Lampung West Coast. It means: "A tombstone inscription of Bob Brown, son of Commander Master Brown, Esquire. Both were Resident Assistants (Incik Patih) of Lampung People."

<sup>42</sup> The author uses the loose transliteration ("transcription") method as described in a document from the DHARMA transliteration guide (Balogh & Griffiths, 2020).

	1064	1818	1777	
~~~~~~~~~	マールにつ (inner) マールにつ ベースをデー マーネー・(outer)	تا ت	ئىب <b>ىد</b> ېئ	~~*****
nagara ratu suṅkay	batin tiyah marga (inner) kapala marga nəgara tulang bawang suhkay (outer)	nəṅgəri ujuṅ karaṅ	nəgara bumi	gunuṁ sugih

Figure 21. Several seals with Lampung script that were documented by Gallop (2019).

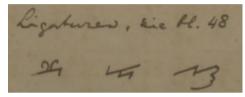


Figure 22. Ligatures attested in <u>101 NBR 125A</u>. These forms appear to represent the sequences (gi), (da), and (da).

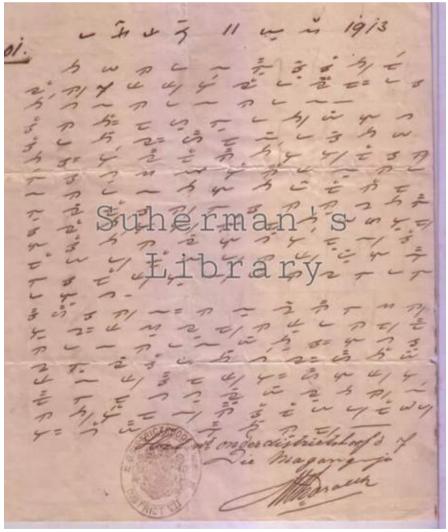


Figure 23. <u>An announcement</u> made by the head of the Pasar Madang under-district in Malay and the Lampung script (11 June 1913).

<sup>&</sup>lt;sup>43</sup> Personal communication with <u>Muhammad Haidar Izzuddin</u>, a philologist student at Universitas Indonesia



Figure 24. Letter of appointment of the village head (penghoeloe) in Lampung and Latin script using Malay (1932).



Figure 25. <u>Decree of the appointment</u> of the village head, March 4th, 1939.



Figure 26. Soerat Lampoeng, a guide to writing Lampung script, was written in Malay by a Sukadana assistant teacher in the 1920s. This is now housed in the Leiden University library and has been <u>documented</u> by Arman A. Z.

Notice the foreign words "controleur" 点 レベング [kontro'Lijur] and "Palembang" ンパンノス [pə'Lɛmbaŋ] use VOWEL SIGN I and VOWEL SIGN II for /e/ and /o/, respectively.

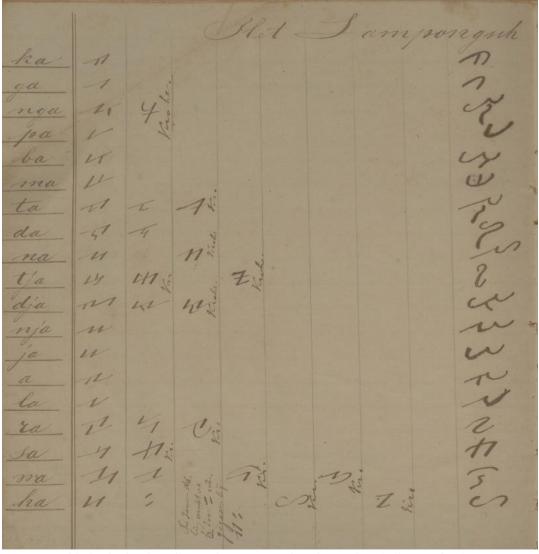


Figure 27. A table in the book Rědjangsch enz., stored at the <u>National Library of Indonesia</u>, contains Lampung script variants and styles. Notice that character = is aligned with = ('ra'), indicating that = is a variant of =.

#### 10.2. Consensus Lampung script (post-1985)

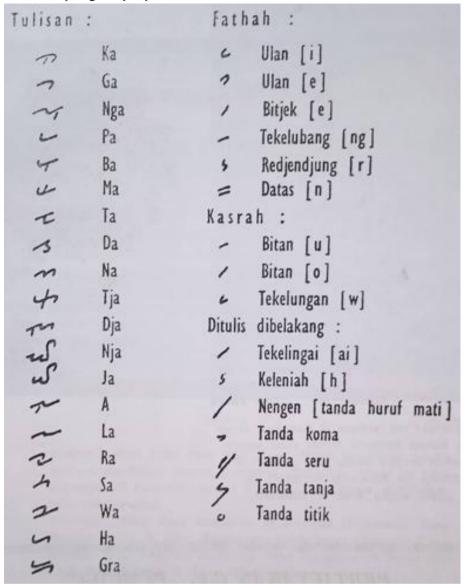


Figure 28. Lampung script post-independence pre-Musyawarah (Panitia Almanak Nasional Sumatera, 1969, p. 1073).

# Tulisan kuno ini hutuf induknya ada 19 buah. Huruf gha tidak ada teapi untuk menulis huruf gha itu dipakai juga huruf ra. Huruf kuno itu bebeapa diantaranya yang bentuknya lebih dari satu. Yang dipakai dalam pelajaran ni hanya yang lazim terdapat dalam buku-buku peninggalan lama Dalam Kaganga dibawah ini huruf kuno yang letaknya disebelah atas tulisan Latiyn itulah nang dipakai, sedangkan bentuk-bentuk yang lain yang berada disebelah kanannya sekedar untuk diketahui. Besar huruf kecil sedikit dari sepertiga petak kertas tempat menulis, sedangkan huruf besarnya adalah huruf kecil dibesarkan dua kali. Dalam Kaganga ini hanya ditulis huruf kecil saja. Tanda-tanda baca hanya ada titik saja yaitu sebuah bulatan kecil saja. Suatu bunyi yang ditulis memakai datasan atau memakai keliniah biasanya juga ditulis memakai huruf induk na dan ha dengan memakai nengen.

Figure 29. A closeup of Moehamad Noeh's workbook (1971).



Figure 30. The stone inscription contains 'consensus' Lampung script numerals in the Lampung Museum.

∕∩ ka	ga	nga	<b>∠</b> pa	4 ba	W ma
ん ta	∕S da	na	لا) ca	<b>У</b> Ч ja	nya
w ya	<b>∕</b> ra	<b>∼</b> a	N la	لم sa	1 wa
✓ ha	<b>√</b> gra				*

Figure 31. Inventory of the Musyawarah's Lampung consonants (Pudjiastuti, 1996, p. 49).

Figure 32. Inventory of the Musyawarah's Lampung diacritics (Pudjiastuti, 1996, p. 50)

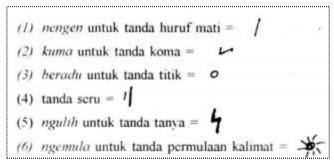


Figure 33. Inventory of the Musyawarah's Lampung punctuations (Pudjiastuti, 1996, p. 51).

Contoh Kata	Lama	Baru
Ragom [Ra-gom]	(kha-gom)	(ra-gom)
Jurai [Ju-rai]	(ju-khai)	MN (ju-rai)

Figure 34. The table of comparison between old spelling [left] and new (standard) spelling [right].

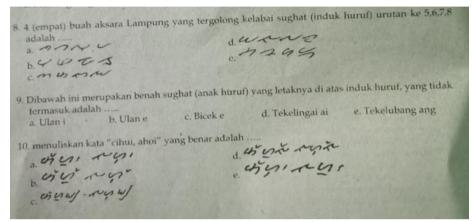


Figure 35. Lampung script test sheet.

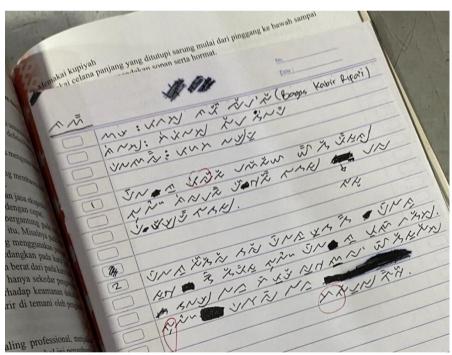


Figure 36. Lampung script homework. 44



Figure 37. Special column for Lampung script in local newspapers.

<sup>&</sup>lt;sup>44</sup> Ariq Syauqi's documentation



Figure 38. Android game application preview for learning Lampung script.



Figure 39. Lampung script decoration on the Səsat Agung (traditional meeting building).



Figure 40. <u>Welcome gate</u> decorated with Lampung script reads シヘソグ メソルン Hanggum Hikam Ram Tungga.



Figure 41. A welcome gate to the Lampung City inscribed in Latin and Lampung script.<sup>45</sup>



Figure 42. <u>Signboard</u> of 1<sup>st</sup> Podomoro Elementary School, Pringsewu.

<sup>&</sup>lt;sup>45</sup> Ariq Syauqi's documentation



Figure 43. Street signs inscribed in Lampung script. 46



Figure 44. An overhead road sign at West Tulang Bawang is inscribed in Lampung script.<sup>47</sup>

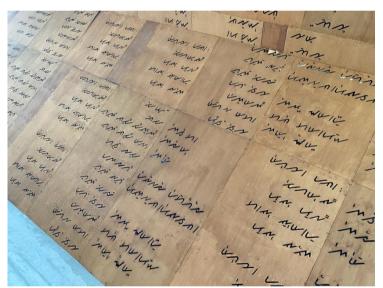


Figure 45. Closeup of the roof of Nuwa Səsat, a traditional meeting center at West Tulang Bawang. 48



Figure 46. The <u>stone inscription</u> contains the genealogy of one of the local heroes in Lampung and Latin script. Notice the word "khaja" [ $\chi ad\overline{3}a$ ] is written as  $rac{1}{2}$  [raja].

<sup>&</sup>lt;sup>46</sup> Ariq Syauqi's documentation

<sup>&</sup>lt;sup>47</sup> Ariq Syauqi's documentation

<sup>&</sup>lt;sup>48</sup> Ariq Syauqi's documentation

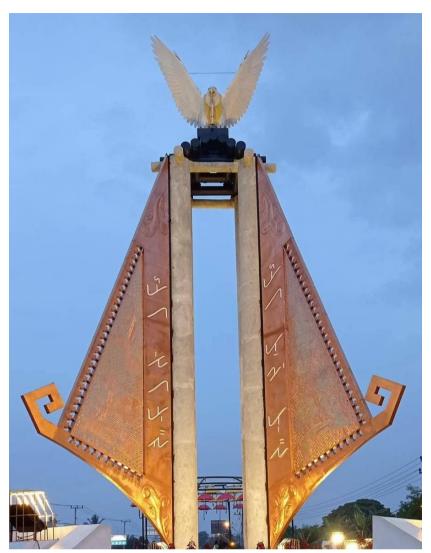


Figure 47. <u>Tugu Garuda</u> at Menggala, Tulang Bawang Regency with two sentences in Lampung script: ジハンズ (Marga Təgamɔan) and ジハメグ (Marga Buway Bulan).



Figure 48. Lampung Script Keyboard prototype and layout.



Figure 49. Lampung Script Keyboard Mockup for Android (ANSI Layout) 49

Kamus Indonesia-Lampung						
●Indonesia ○Lampung						
sungai						
sungai (indonesia) :						
<u>λ</u> ]/ν <sub>1</sub>						
sungai (indonesia)						
sungai = Љ₩ / (way)						
sungai = イスパが (batangarei)						
sungai = ບ່່າ ບໍ່ທັທ (heliyah)						

Figure 50. Indonesian-Lampung online dictionary (<a href="https://meizano.github.io/lampung/">https://meizano.github.io/lampung/</a>). The Lampung script on this website uses a Latin font with Lampung-mocking glyphs.

<sup>&</sup>lt;sup>49</sup> <u>https://www.youtube.com/shorts/z0A0eVaQIT0</u>

Figure 51. The main page of the Komering edition of Wikipedia..



TABIK NABIK TABIK! ljå yå halaman guway ngujey Wikipidiya lem Bahaså Lappung Nyå, bahasånå Ulun Abung, Tulang Bawang, jamå Melinting. Tulisanmew di jå agå di appir nihan. Kiluyan guway netisken Wikipidiya Lappung Nyå anjak Wikimedia Incubator agå di akurey lamun radew cukup halaman isseynå. Lamun di akurey, unyen issey di jå agå di pindah adek Wikipidiya say setemennå. Ulah ijå yå lagey di ujey, unyen judul tulisan di jå mestey di tapek jamå purmat {{Wp/abl/Gelar Tulisan}}. Uppamå, Ruppek Nikew agå nulis halaman ngenåey Lappung, halaman genuwaymew mestey bejudul [[Wp/abl/Lappung]] (Tuley di Wikipidiya nak en, halaman agå bejudul [[Lappung]] jugå). Guway Metey Ruppek say dapek bebahaså Lappung Nyå di taway ngeguway tulisan say waway senayah-nayahnå di Wikipidiya jå. Guway Tulisan Barew かしまかo NUIN (UNIX MAVÄW MAJ AV NO BAN JAMAN) [NUIN] MA) O \$ רַחי שׁעוֹ יחוז יחוז לי מימע מעל או אין אייני איי nxvxw mo

Figure 52. Lampung Nyo edition of Wikipedia in Wikimedia Incubator.

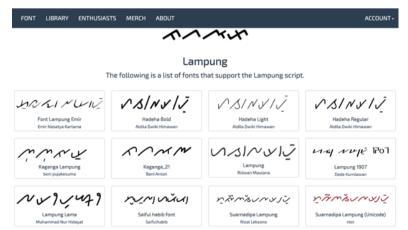


Figure 53. List of Lampung digital fonts in <a href="https://aksaradinusantara.com/">https://aksaradinusantara.com/</a>.



Figure 54. <u>Screenshot</u> of Lo Z - Budaya (feat. Tuan Tigabelas) music video, one of the music videos that uses the Lampung language and script.



Figure 55. Watch belts decorated with Lampung script in <u>the coverage of one of the national TV</u> stations in Indonesia.



Figure 56. Examples of clothing decorated with Lampung script.



Figure 57. Lampung script <u>tattoo</u>.



Figure 58. Lampung script as decoration on the restaurant menu.

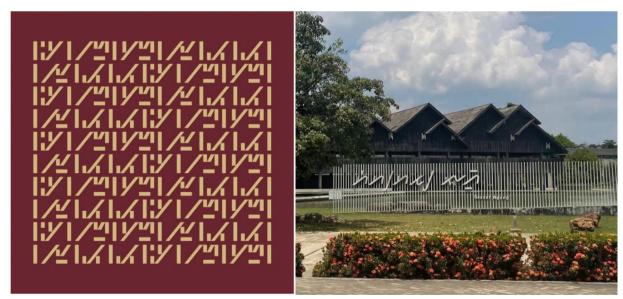


Figure 59. <u>City branding</u> work by Nusae of West Tulang Bawang Regency, incorporating Lampung script.

















Figure 60. The (distorted) Lampung script in the provincial and regency emblems.

#### 11. Attachment

Example GSUB Rule (Lampung)

```
@CG_1 = [dottedcircle ka-lmpg ga-lmpg ...]; # base letters
@CG_2 = [vowelsignicomb-lmpg vowelsignucomb-lmpg vowelsignecomb-lmpg]; # vowel
signs
@CG_Silencer = [vowelsilencer-lmpg];

lookup SingleSubstitution1 { # GSUB Lookup type SingleSubstitution
    sub vowelsignicomb-lmpg by vowelsignicomb-lmpg.alt;
    sub vowelsignucomb-lmpg by vowelsignucomb-lmpg.alt;
    sub vowelsignecomb-lmpg by vowelsignecomb-lmpg.alt;
} SingleSubstitution1;

feature rclt { # Glyph Composition / Decomposition
    sub @CG_2' lookup SingleSubstitution1 @CG_1 @CG_Silencer;
} rclt ;
```

#### 12. ISO Proposal Summary Form

#### ISO/IEC JTC 1/SC 2/WG 2

#### PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>50</sup>

Please fill all the sections A, B, and C below.

Please read Principles and Procedures Document (P & P) from <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html</a> for guidelines and details before filling this form.

Please ensure you are using the latest form from <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest Roadmaps.

#### A. Administrative

1. Title: Updated Proposal to En	code the Lampung Script						
	hammad Nasrullah						
3. Requester type (Member body/Liaison/Individual contribution):	Individual contribution						
4. Submission date:	2025-09-04						
5. Requester's reference (if applicable):							
6. Choose one of the following:							
This is a complete proposal:	<u> </u>	es					
(or) More information will be provided later:							
B. Technical – General							
Choose one of the following:							
a. This proposal is for a new script (set of characters):		Yes					
Proposed name of script:	Lampung						
b. The proposal is for addition of character(s) to an existing b	olock:						
Name of the existing block:							
Number of characters in proposal:	3	1/33					
3. Proposed category (select one from below - see section 2.2 of F							
A-Contemporary B.1-Specialized (small collection)	X B.2-Specialized (large collection)						
C-Major extinct D-Attested extinct	E-Minor extinct						
F-Archaic Hieroglyphic or Ideographic	G-Obscure or questionable usage symbo	ls					
4. Is a repertoire including character names provided?		Yes					
a. If YES, are the names in accordance with the "character r	naming guidelines"						
in Annex L of P&P document?		Yes					
b. Are the character shapes attached in a legible form suitab	ole for review?	Yes					
5. Fonts related:							
a. Who will provide the appropriate computerized font to the	Project Editor of 10646 for publishing the	Э					
standard?							
Aditya Bayu Pel							
b. Identify the party granting a license for use of the font by t		ite, etc.):					
Aditya Bayu Perdana (jimeildo	tkomm@gmail.com)						
6. References:							
a. Are references (to other character sets, dictionaries, desc							
b. Are published examples of use (such as samples from ne							
of proposed characters attached?	Yes						
7. Special encoding issues:							
Does the proposal address other aspects of character data processing (if applicable) such as input,							
presentation, sorting, searching, indexing, transliteration etc.	. (If yes please enclose information)?	Yes					
8. Additional Information:							

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <a href="http://www.unicode.org">http://www.unicode.org</a> for such information on other scripts. Also see Unicode Character Database (http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>&</sup>lt;sup>50</sup> Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

#### C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?  If YES explain  L2/22-044	Yes.					
2. Has contact been made to members of the user community (for example: National Body,						
user groups of the script or characters, other experts, etc.)?	Yes					
If YES, with whom?  Aditya Bayu Perdana, Arman A. Z., Muhammad Rasyid Tau Pudjiastuti, etc.	ıfiqul Hafidz, Titik					
If YES, available relevant documents: This document						
3. Information on the user community for the proposed characters (for example:						
size, demographics, information technology use, or publishing use) is included?	Yes					
Reference: This document						
4. The context of use for the proposed characters (type of use; common or rare)	Common					
Reference: This document						
5. Are the proposed characters in current use by the user community?	Yes					
If YES, where? Reference: Lampung, Indonesia						
6. After giving due considerations to the principles in the P&P document must the proposed chara-	cters be entirely					
in the BMP?	No					
If YES, is a rationale provided?						
If YES, reference:						
7. Should the proposed characters be kept together in a contiguous range (rather than being scatt	ered)? Yes					
8. Can any of the proposed characters be considered a presentation form of an existing						
character or character sequence?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:						
9. Can any of the proposed characters be encoded using a composed character sequence of either	er					
existing characters or other proposed characters?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:						
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)						
to, or could be confused with, an existing character?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:						
11. Does the proposal include use of combining characters and/or use of composite sequences?	Yes					
If YES, is a rationale for such use provided?	Yes					
If YES, reference: This document						
Is a list of composite sequences and their corresponding glyph images (graphic symbols) pro	ovided? Yes					
If YES, reference: This document						
12. Does the proposal contain characters with any special properties such as						
control function or similar semantics?	No					
If YES, describe in detail (include attachment if necessary)						
13. Does the proposal contain any Ideographic compatibility characters?	No					
If YES, are the equivalent corresponding unified ideographic characters identified?						
If YES, reference:						