Preliminary proposal to encode the Lampung script in Unicode

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1 Introduction

This is a preliminary proposal to encode the 'Lampung' script in the Unicode standard. This document presents a tentative character repertoire, representative glyphs, and encoding model. Information on the following issues is sought:

1. *Encodability*   Lampung has some affinity with Rejang (U+A930..A95F). A comparison of the two scripts is given in tables 1–3). Additional research is required for determining issues of separately encoding Lampung or unifying it with the Rejang block.

2. *Character repertoire*   Are there characters that should be included in the proposed repertoire beyond those shown here?

3. *Character names*   Are character names acceptable? The name for the letter ⩗ requires attention. It is given the value *gha* in some sources, but its pronunciation is more proximate to /gra/. Should the lettter be named GHA or GRA?

4. *Stylistic variants vs. alternate forms*   Historical and modern sources show several variant forms of consonant letters. Some of these may be considered stylistic variants, while others may be true alternate forms. It may be practical to encode some variants as separate characters.

5. *Representative glyphs*   Are the representative glyphs acceptable?

6. *Digits*   Several Indonesian websites show a full set of Lampung digits. They do not occur in the manuscript sources that were consulted for this proposal. Are they historically attested or are they new inventions?

7. *Punctuation*   Various sources show what appear to be distinctive marks that correspond to Latin punctuation marks. Do these marks occur in manuscript sources? Are they modern innovations?

Feedback on this information is requested from experts and users of the script. Additional source materials are also requested. A formal proposal is forthcoming.

Figure 1: The location of Lampung province in Sumatra, Indonesia. Source: Wikimedia Commons (`https://commons.wikimedia.org/wiki/File:Lampung_in_Indonesia.svg`)

2 Background

The Lampung (ﺳ/ﺳ/ﺗ) script is used in Sumatra, Indonesia. It is also known as *aksara lampung* and *had lampung*. Lampung is based upon the Brahmi model and is related to other scripts of South Sumatra. The script is currently used. It is promoted by a mandate for preserving the Lampung language and script, and is taught in primary schools (see Suri 2015). It is used in official insignia and signage in Lampung province. There has been an effort to develop optical-character recognition software for Lampung (see Junaidi, et al, 2011, 2013). The script was described by Christopher Miller in Unicode Technical Note #35 "Indonesian and Philippine Scripts and Extensions".

3 Script Details

3.1 Structure

Lampung is an alphasyllabary that is written from left to right. The only independent vowel letter is LAMPUNG LETTER A, which has the default value /a/ and functions as a vowel carrier. Vowels are represented using dependent combining signs. These signs are written with the vowel carrier for independent forms of vowels. Each consonant possesses the inherent vowel /a/. The inherent vowel is changed by applying a vowel sign to a consonant. Vowel signs may occur above, below, and to the right of a consonant. The script has a VIRAMA mark for silencing the inherent vowel. However, the VIRAMA is not used for producing conjuncts and has no control properties. Instead, consonant clusters are represented as atomic ligatures. The final consonants *nga* and *h* are represented using combining signs.

The structures of Lampung orthographic syllables are:

$$\mathbf{V_{carrier}} \; [V_{sign}] \; [C_{sign}]$$

$$\mathbf{C} \; [\; [V_{sign}] \; [C_{sign}] \; | \; [M_{virama}] \;]$$

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3.2 Approach

Lampung may be considered a 'proper script' as well as a 'class of scripts'. In terms of the latter, there are several varieties of the script attested in numerous manuscripts, which differ primarily in the shapes of certain letters and vowel signs. These varieties are not separate scripts and may be considered styles of Lampung. The case is similar to the Landa and Sindhi scripts of South Asia (see discussion in L2/10-011R). For these there are regional variations of letterforms, but they belong typologically to the same family. The proposed block for Lampung encodes the modern form of the script. The historical styles are unified with the block and may be represented using fonts.

3.3 Character repertoire

The proposed 'Lampung' block contains 20 consonant letters, 7 combining vowel signs, 4 consonant signs, and 1 *virama*. Character names are aligned with those of Rejang characters in Unicode. Representative glyphs for characters are based upon forms used in manuscripts and have been designed by the proposal author.

4 Proposed Encoding

4.1 Consonants

There are 20 consonant letters:

	Character name	Value
	LAMPUNG LETTER KA	/k/
	LAMPUNG LETTER GA	/g/
	LAMPUNG LETTER NGA	/ŋ/
	LAMPUNG LETTER PA	/p/, /f/
	LAMPUNG LETTER BA	/b/
	LAMPUNG LETTER MA	/m/
	LAMPUNG LETTER TA	/t/
	LAMPUNG LETTER DA	/d/
	LAMPUNG LETTER NA	/n/
	LAMPUNG LETTER CA	/t͡ʃ/
	LAMPUNG LETTER JA	/d͡ʒ/
	LAMPUNG LETTER NYA	/ɲ/
	LAMPUNG LETTER YA	/j/
	LAMPUNG LETTER A	/a/, Ø

⟋⟍	LAMPUNG LETTER LA	/l/
⟋⟍	LAMPUNG LETTER RA	/r/
⟍	LAMPUNG LETTER SA	/s/, /z/
⟍⟍	LAMPUNG LETTER WA	/w/
⟍⟍	LAMPUNG LETTER HA	/h/, /kh/
⟍	LAMPUNG LETTER GHA	/gr/

Each consonant letter has the inherent vowel /a/. The inherent vowel is changed by the addition of a dependent vowel sign (see section 4.2) or silenced using the *virama* (see section 4.4).

The ⟋⟍ LAMPUNG LETTER A is a vowel carrier. When a combining vowel sign is attached to it, the letter adopts the phonetic value of the sign and represents an independent vowel.

The letter ⟍ is given the value 'GHA' in modern charts. However, it represents the sound /gr/, not the aspirated /gʱ/. A more appropriate name may be 'GRA'.

There are variant forms of several letters (see figures 6–9):

	Regular	Variant
LAMPUNG LETTER BA	⟍	⟍
LAMPUNG LETTER MA	⟍	⟍, ⟍
LAMPUNG LETTER DA	⟍	⟍
LAMPUNG LETTER CA	⟍	8
LAMPUNG LETTER JA	⟍	⟍
LAMPUNG LETTER NYA	⟍	⟍
LAMPUNG LETTER RA	⟍	⟍
LAMPUNG LETTER SA	⟍	⟍
LAMPUNG LETTER WA	⟍	⟍

Additional research is required to determine if these should be considered glyphic variants or if they should be encoded as distinctive alternate forms.

4.2　Vowel signs

There are seven dependent vowel signs:

	Character name	Value	Indigenous name
◌̆	LAMPUNG VOWEL SIGN I	/i/	*ulan*
◌̠	LAMPUNG VOWEL SIGN U	/u/	*bitan*
◌̂	LAMPUNG VOWEL SIGN E	/e/	*ulan*
◌̦	LAMPUNG VOWEL SIGN O	/o/	*bitan*
◌́	LAMPUNG VOWEL SIGN E BICEK	/ə/	*bicek*
◌ı	LAMPUNG VOWEL SIGN AI	/ai/	*tekelingai*
◌̬	LAMPUNG VOWEL SIGN AU	/au/	*tekelungau*

Independent forms of vowels are represented by attaching vowels signs to 𑽁 LAMPUNG LETTER A, as shown below. These vowel signs combine with other consonant letters in the same way to form syllables.

a	𑽁	<𑽁 A>
i	𑽁̆	<𑽁 A, ◌̆ VOWEL SIGN I>
u	𑽁̠	<𑽁 A, ◌̠ VOWEL SIGN U>
e	𑽁̂	<𑽁 A, ◌̂ VOWEL SIGN E>
o	𑽁̦	<𑽁 A, ◌̦ VOWEL SIGN O>
e	𑽁́	<𑽁 A, ◌́ VOWEL SIGN E BICEK>
ai	𑽁ı	<𑽁 A, ◌ı VOWEL SIGN AI>
au	𑽁̬	<𑽁 A, ◌̬ VOWEL SIGN AU>

4.3   Consonant signs

There are combining signs for four final consonants:

	Character name	Value	Indigenous name
◌̓	LAMPUNG CONSONANT SIGN R	/r/	*rejunjung*
◌̿	LAMPUNG CONSONANT SIGN N	/n/	*tekelubang*
◌̄	LAMPUNG CONSONANT SIGN NG	/ŋ/	*datas*

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◌ᴎ	LAMPUNG CONSONANT SIGN H	/h/	*keleniah*

These combine with letters as follows:

kar	⌢́	<⌢ KA, ◌́ CONSONANT SIGN R>
kan	⌢̿	<⌢ KA, ◌̿ CONSONANT SIGN N>
kang	⌢̄	<⌢ KA, ◌̄ CONSONANT SIGN NG>
kah	⌢ᴎ	<⌢ KA, ◌ᴎ CONSONANT SIGN H>

When a vowel sign occurs together with a consonant sign, the latter is placed after the former in the encoded representation:

kung	⌢̦̄	<⌢ KA, ◌̦ VOWEL SIGN U, ◌̄ CONSONANT SIGN NG>

4.4 Virama

The following character is a vowel silencer:

	Character name	Value	Indigenous name
◌ɟ	LAMPUNG SIGN VIRAMA	Ø	*nengen*

It is placed after a consonant letter in the encoded representation:

k	⌢ɟ	<⌢ KA, ◌ɟ SIGN VIRAMA>
g	⌒ɟ	<⌒ GA, ◌ɟ SIGN VIRAMA>

The VIRAMA is not to be used after a vowel sign, consonant sign, or the letter ⌒ A. Such representations will result in the VIRAMA being displayed with a dotted circle, eg. ◌ɟ.

4.5 Digits

Script-specific digits are attested, but their provenance is not known (see figure 13). These digits may need to be encoded.

4.6　Punctuation

Some script-specific punctuation marks are attested, but their provenance is not known (see figure 14). These marks may need to be encoded.

4.7　Linebreaking

Linebreaks may occur after an orthographic syllable. Hyphens or other marks indicating continuance are not used.

5　Collation

The sort order for Lampung is as follows:

KA < GA < NGA < PA < BA < MA < TA < DA <

NA < CA < JA < NYA < YA < A < LA < RA <

SA < WA < HA < GHA < VOWEL SIGN I < VOWEL SIGN U <

VOWEL SIGN E < VOWEL SIGN O < VOWEL SIGN E BICEK < VOWEL SIGN AI <

VOWEL SIGN AU < CONSONANT SIGN R < CONSONANT SIGN NG <

CONSONANT SIGN N < CONSONANT SIGN H < SIGN VIRAMA

6　Character Data

6.1　Character Properties

Properties in the format of `UnicodeData.txt`:

```
15000;LAMPUNG LETTER KA;Lo;0;L;;;;;N;;;;;
15001;LAMPUNG LETTER GA;Lo;0;L;;;;;N;;;;;
15002;LAMPUNG LETTER NGA;Lo;0;L;;;;;N;;;;;
15003;LAMPUNG LETTER PA;Lo;0;L;;;;;N;;;;;
15004;LAMPUNG LETTER BA;Lo;0;L;;;;;N;;;;;
15005;LAMPUNG LETTER MA;Lo;0;L;;;;;N;;;;;
15006;LAMPUNG LETTER TA;Lo;0;L;;;;;N;;;;;
15007;LAMPUNG LETTER DA;Lo;0;L;;;;;N;;;;;
15008;LAMPUNG LETTER NA;Lo;0;L;;;;;N;;;;;
15009;LAMPUNG LETTER CA;Lo;0;L;;;;;N;;;;;
1500A;LAMPUNG LETTER JA;Lo;0;L;;;;;N;;;;;
1500B;LAMPUNG LETTER NYA;Lo;0;L;;;;;N;;;;;
1500C;LAMPUNG LETTER YA;Lo;0;L;;;;;N;;;;;
1500D;LAMPUNG LETTER A;Lo;0;L;;;;;N;;;;;
1500E;LAMPUNG LETTER LA;Lo;0;L;;;;;N;;;;;
1500F;LAMPUNG LETTER RA;Lo;0;L;;;;;N;;;;;
15010;LAMPUNG LETTER SA;Lo;0;L;;;;;N;;;;;
15011;LAMPUNG LETTER WA;Lo;0;L;;;;;N;;;;;
```

```
15012;LAMPUNG LETTER HA;Lo;0;L;;;;;N;;;;;
15013;LAMPUNG LETTER GHA;Lo;0;L;;;;;N;;;;;
15014;LAMPUNG VOWEL SIGN I;Mn;0;NSM;;;;;N;;;;;
15015;LAMPUNG VOWEL SIGN U;Mn;0;NSM;;;;;N;;;;;
15016;LAMPUNG VOWEL SIGN E;Mc;0;L;;;;;N;;;;;
15017;LAMPUNG VOWEL SIGN O;Mc;0;L;;;;;N;;;;;
15018;LAMPUNG VOWEL SIGN E BICEK;Mc;0;L;;;;;N;;;;;
15019;LAMPUNG VOWEL SIGN AI;Mc;0;L;;;;;N;;;;;
1501A;LAMPUNG VOWEL SIGN AU;Mc;0;L;;;;;N;;;;;
1501B;LAMPUNG CONSONANT SIGN R;Mc;0;L;;;;;N;;;;;
1501C;LAMPUNG CONSONANT SIGN NG;Mc;0;L;;;;;N;;;;;
1501D;LAMPUNG CONSONANT SIGN N;Mc;0;L;;;;;N;;;;;
1501E;LAMPUNG CONSONANT SIGN H;Mc;0;L;;;;;N;;;;;
1501F;LAMPUNG SIGN VIRAMA;Mc;0;L;;;;;N;;;;;
```

6.2   Linebreaking

In the format of `LineBreak.txt`:

```
15000..15013;AL  # Lo  [20] LAMPUNG LETTER KA .. LAMPUNG LETTER GHA
15014..1501D;CM  # Mn  [10] LAMPUNG VOWEL SIGN I .. LAMPUNG CONSONANT SIGN N
1501E..1501F;CM  # Mc   [2] LAMPUNG CONSONANT SIGN H .. LAMPUNG SIGN VIRAMA
```

6.3   Syllabic Categories

In the format of `IndicSyllabicCategory.txt`:

```
# Indic_Syllabic_Category=Vowel_Dependent
15014..15018   ; Vowel_Dependent        # Mn   [5] LAMPUNG VOWEL SIGN I..
                                                    LAMPUNG VOWEL SIGN E BICEK
15019          ; Vowel_Dependent        # Mc       LAMPUNG VOWEL SIGN AI
1501A          ; Vowel_Dependent        # Mn       LAMPUNG VOWEL SIGN AU

# Indic_Syllabic_Category=Consonant
15000..1500C   ; Consonant              # Lo  [13] LAMPUNG LETTER KA..
                                                    LAMPUNG LETTER YA
1500E..15013   ; Consonant              # Lo   [6] LAMPUNG LETTER LA..
                                                    LAMPUNG LETTER GHA

# Indic_Syllabic_Category=Vowel_Independent
1500D          ; Vowel_Independent      # Lo       LAMPUNG LETTER A

# Indic_Syllabic_Category=Pure_Killer
1501F          ; Pure_Killer            # Mc       LAMPUNG SIGN VIRAMA

# Indic_Syllabic_Category=Consonant_Final
1501B..1501E   ; Consonant_Final        # Mn   [4] LAMPUNG CONSONANT SIGN R..
                                                    LAMPUNG CONSONANT SIGN H
```

6.4   Positional Categories

In the format of `IndicPositionalCategory.txt`:

```
# Indic_Positional_Category=Right
15019          ; Right                  # Mc       LAMPUNG VOWEL SIGN AI
1501E          ; Right                  # Mc       LAMPUNG CONSONANT SIGN H
1501F          ; Right                  # Mc       LAMPUNG SIGN VIRAMA
```

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```
# Indic_Positional_Category=Top
15014         ; Top                    # Mn      LAMPUNG VOWEL SIGN I
15016         ; Top                    # Mn      LAMPUNG VOWEL SIGN E
15018         ; Top                    # Mn      LAMPUNG VOWEL SIGN E BICEK
1501B         ; Top                    # Mn      LAMPUNG CONSONANT SIGN R
1501C         ; Top                    # Mn      LAMPUNG CONSONANT SIGN NG
1501D         ; Top                    # Mn      LAMPUNG CONSONANT SIGN N

# Indic_Positional_Category=Bottom
15015         ; Bottom                 # Mn      LAMPUNG VOWEL SIGN U
15017         ; Bottom                 # Mn      LAMPUNG VOWEL SIGN O
1501A         ; Bottom                 # Mn      LAMPUNG VOWEL SIGN AU
```

7   References

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
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8   Acknowledgments

Also known as Aksara Lampung and Had Lampung.

	1500	1501	1502	1503
0	15000	15010		
1	15001	15011		
2	15002	15012		
3	15003	15013		
4	15004	15014		
5	15005	15015		
6	15006	15016		
7	15007	15017		
8	15008	15018		
9	15009	15019		
A	1500A	1501A		
B	1500B	1501B		
C	1500C	1501C		
D	1500D	1501D		
E	1500E	1501E		
F	1500F	1501F		

Consonants

15000	⌒	LAMPUNG LETTER KA
15001		LAMPUNG LETTER GA
15002		LAMPUNG LETTER NGA
15003		LAMPUNG LETTER PA
15004		LAMPUNG LETTER BA
15005		LAMPUNG LETTER MA
15006		LAMPUNG LETTER TA
15007		LAMPUNG LETTER DA
15008		LAMPUNG LETTER NA
15009		LAMPUNG LETTER CA
1500A		LAMPUNG LETTER JA
1500B		LAMPUNG LETTER NYA
1500C		LAMPUNG LETTER YA
1500D		LAMPUNG LETTER A
1500E		LAMPUNG LETTER LA
1500F		LAMPUNG LETTER RA
15010		LAMPUNG LETTER SA
15011		LAMPUNG LETTER WA
15012		LAMPUNG LETTER HA
15013		LAMPUNG LETTER GHA

Vowel signs

15014		LAMPUNG VOWEL SIGN I
		= ulan
15015		LAMPUNG VOWEL SIGN U
		= bitan
15016		LAMPUNG VOWEL SIGN E
		= ulan
15017		LAMPUNG VOWEL SIGN O
		= bitan
15018		LAMPUNG VOWEL SIGN E BICEK
		= bicek
15019		LAMPUNG VOWEL SIGN AI
		= tekelingai
1501A		LAMPUNG VOWEL SIGN AU
		= tekelungau

Consonant signs

1501B		LAMPUNG CONSONANT SIGN R
		= rejunjung
1501C		LAMPUNG CONSONANT SIGN NG
		= tekelubang
1501D		LAMPUNG CONSONANT SIGN N
		= datas
1501E		LAMPUNG CONSONANT SIGN H
		= keleniah

Virama

1501F		LAMPUNG SIGN VIRAMA
		= nengen

	Lampung	Rejang
KA	⌢	∧
GA	⌒	∧
NGA	⋔	∥
PA	⌣	√
BA	⌣	/
MA	⌣	⩔
TA	⌣	⋀
DA	⌁	⋀
NA	⌢	M
CA	⋃	⋀
JA	⌢	⋀
NYA	⌣	⋀
YA	⌣	W
A	⌣	⋀
LA	⌣	N
RA	⌣	⋀
SA	⌣	⋀
WA	⌣	⋀
HA	⌣	⋁
GHA	⌣	—

Table 1: Comparison of Lampung and Rejang consonants.

	Lampung	Rejang
VOWEL SIGN I	◌̆	·◌
VOWEL SIGN U	◌̲	.◌
VOWEL SIGN E	◌̂	'◌
VOWEL SIGN O	◌̸	!◌
VOWEL SIGN E BICEK	◌̸	—
VOWEL SIGN AI	◌ı	◌̂
VOWEL SIGN AU	◌̆	◌̦
VOWEL SIGN EU	—	◌̦
VOWEL SIGN EA	—	◌̦

Table 2: Comparison of Lampung and Rejang vowel signs.

	Lampung	Rejang
CONSONANT SIGN R	◌̒	◌̌
CONSONANT SIGN N	◌̈	◌̎
CONSONANT SIGN NG	◌̄	◌̓
CONSONANG SIGN H	◌ᴎ	◌:
SIGN VIRAMA	◌ᴊ	◌°

Table 3: Comparison of Lampung and Rejang consonant signs and VIRAMA.
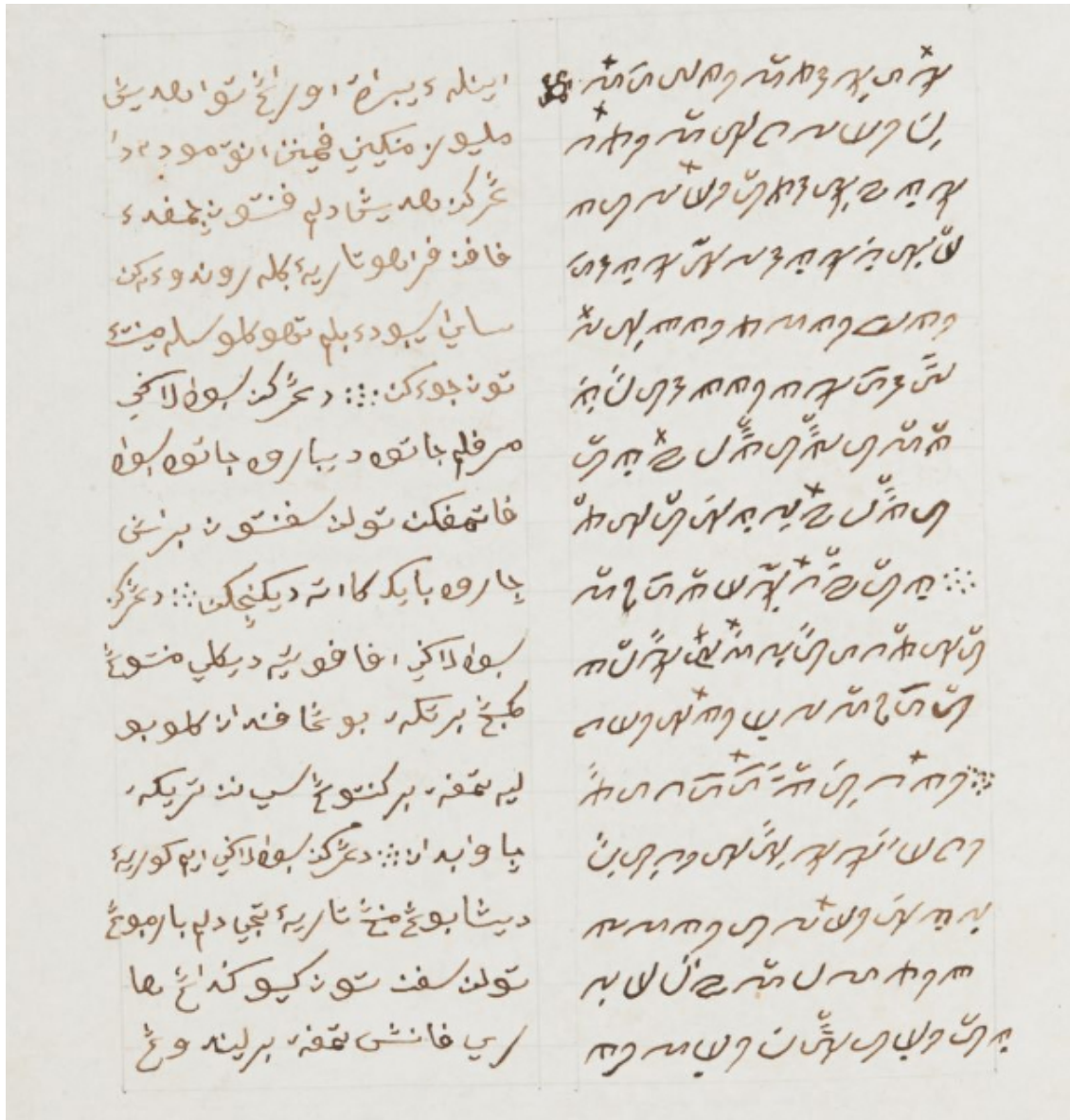
Figure 2: A folio from a manuscript titled "Inilah surat pantun cara Lampung" containing Malay text in Arabic script and Lampung text in Lampung script, dated 1812. (British Library, Mss Malay 4, folio 1r.)
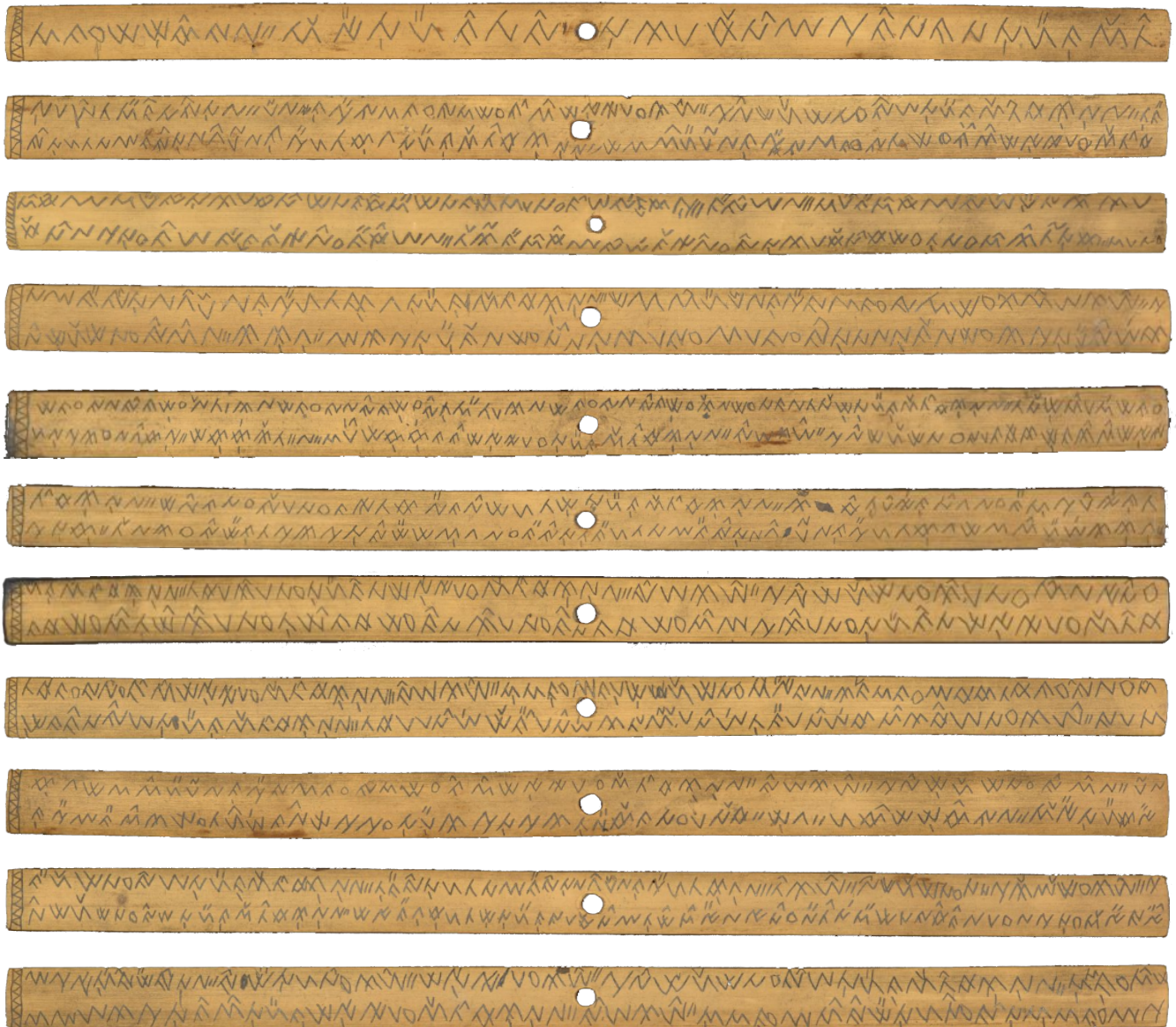
Figure 3: "Seribu maksa, Malay text from South Sumatra", 19th century (British Library, Or 12986, folios 1r-11r.)

REJANG ALPHABET.

ka	ya	nga	ta	da	na	pa	ba	ma	cha	ja	nia

sa	ni	la	eea	ooa	kha	mba	ngga	nda	nja	a

�֍ *Mark of Commencement.*　　　　○ *Mark of Pause.*

The Letters of these Alphabets are governed by a variety of Signs the application of which considerably alters the terminating sound. Those which belong peculiarly to the Rejang are as follows.

Duo deatus which changes the Termination from .... *a to an*
Cajeena or Duo debowa changes a to ah | *Catoolang changes* .... *a to ang*
Cajoonjoong .... *to ar* | *Cameetan* .... *to oo*
Calowan .... *to ee* | *Cateeling* .... *to i*
Cameecha .... *to ay* | *Catooloong* .... *to ow*

ka　kan　kah　kar　kee　kay　kang　koo　ki　kow

The Letters are never joined in writing, each for the most part representing a syllable.
The Writing is from the left hand to the right.

BATTA

a	ha	na	ma	ra	ta	ba	wa	sa	ga

la	pa	gna	ja	da	nya	e	eea	oo

LAMPOON

ka	ga	gna	pa	ba	ma	ta	da	na	cha

ja	gnia	eea	a	la	ra	sa	wa	ha

Figure 4: Inventory of Lampung ("Lampoon") letters (from Marsden 1784: plate following p. 166). A version of this table from Marsden (1811) is given in figure 5.

Figure 5: Description of Lampung in a chart of Sumatran alphabets (from Marsden 1811: plate 1).

Figure 6: Character inventories of various Lampung manuscripts (from van der Tuuk 1868: 139). Continued in figure 7.

Les autres signes sont:

o; p. e.   (li)

ı; „   (ku)

; „   (mĕ) comp. part. I.

ε; „   (bĕ)

_; „   (lang) (ning) (rong)

; „   (bar) (njir)

=; „   (kuh)

; „   (hudjaw)

Ce tableau montre en même temps que les signes spéciaux, qui représentent dans l'écriture actuelle *aj* et *aw*, n'étaient pas encore en usage. Dans cette partie la diphthongue *aj* ne se trouve pas. Comme signe de division, chapitre ou paragraphe on se sert de (comp. le batak *bindu na ĕtĕk*). Ici nous rencontrons aussi le signe d'une voyelle, joint à la consonne finale, quand celle-ci est muette p. e. (*bĕkbĕk*).

III. La troisième parti en A contient l'alphabet suivant:

ka	ga	nga	pa	ba	ma	ta	da	na	tja,	dja,	nja	ja	a	la	ra	sa	wa	ha
								ne se trouve pas dans cette partie										

Le *i*: ; p. e. (*dji*). Les autres signes ne diffèrent point des signes déja mentionnés et les signes des diphthongues ne se rencontrent point.

IV. La quatrième partie contient l'alphabet suivant:

ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha
								ne se trouve pas dans cette partie										

Les voyelles et les autres signes ne diffèrent point de ceux de III.

V. La cinquième partie présente une écriture qui se rapproche de l'écriture actuelle; cependant il s'y rencontre quelques caractères tout différents,

ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha

Le *i*: p. e. (*li*). Les autres signes sont peu différents. Le signe qui marque l'absence d'une voyelle: . Les signes indiquant les diphthonges sont: , à droite de la consonne; p. e. (*pakaj*); au-dessous de la consonne, p. e. (*anykaw*). Dans les six dernières lignes écrites d'une autre main, se trouve pour *da*: pour *la*: et pour le signe qui marque une consonne muette:

VI. La sixième partie contient l'alphabet suivant:
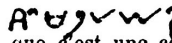
| ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha
ou						ou												

ou

Figure 7: Character inventories of various Lampung manuscripts (from van der Tuuk 1868: 140). Continued in figure 8.
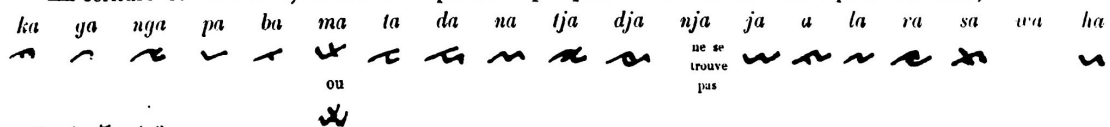
19

Encore ici ne se trouve aucun signe particulier pour les diphthongues; de là ⟨⟩ (*harimaw*), ⟨⟩ (*simpaj*). Il est remarquable qu'on trouve plusieurs formes pour *da* et *nga*. En déduira-t-on que c'est une copie d'un autre Ms. plus ancien, et que le copiste y a introduit par inadvertence des caractères modernes?

MANUSCRIT B.

L'alphabet est moderne, comme il est prouvé par l'usage du signe ⟨⟩ au-dessus des consonnes. Ce signe se trouve aussi dans l'écriture rĕdjang et est une imitation de la nunation arabe. A la page 1 et 2 le signe marquant l'absence d'une voyelle est: ο , de la page 3 jusqu'à la troisième ligne de la page 5: × et à la partie restante par ‖ . D'ailleurs l'écriture ne présente rien de remarquable, si ce n'est qu'à la page 3 jusqu'à la troisième ligne de la page 5, quelques voyelles et l'*n* et l'*h*, comme finales, sont indiqués non par des traits, mais par des points; p. e. ⟨⟩ (*kan*), ⟨⟩ (*lah*).
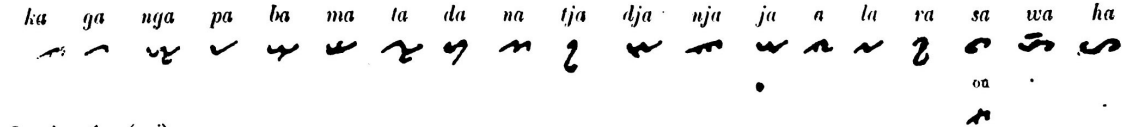
MANUSCRIT C.

L'écriture est moderne, contenant cependant quelques caractères de forme plus ancienne,

ka	ya	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha
⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	ne se trouve pas	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩		⟨⟩

ou ⟨⟩

Le *i*: ⟨⟩ (*ri*)

  u: ⟨⟩ (*bu*) ou ⟨⟩

  ĕ: ⟨⟩ (*kĕ*)

  è: manque

  aj: ⟨⟩ (*gaj*)

  aw: ⟨⟩ (*gaw*).

Le *n* final: ⟨⟩ (*han*), ⟨⟩ (*sin*)

  r *n*: ⟨⟩ (*pŏr*)

  ng *n*: ⟨⟩ (*pang*)

Le signe marquant une consonne muette est tantôt ⟨⟩ ou ⟨⟩ , tantôt ⟨⟩

p. e. ⟨⟩ (*tunggal*), ⟨⟩ (*lantas*)

MANUSCRIT D.

ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha
⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩	⟨⟩

ou ⟨⟩

Le *i*: ⟨⟩ (*mi*)

  oe: ⟨⟩ (*nu*)

  ŏ: ⟨⟩ (*bĕ*)
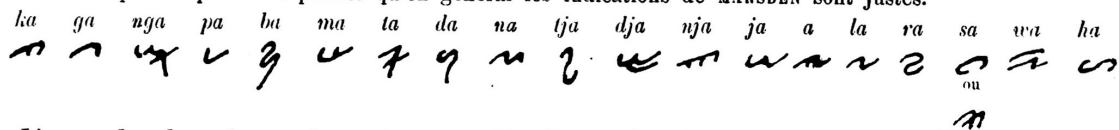
  è: ne se rencontre pas

  n final: ⟨⟩ (*man*)

  aj ⟨⟩ (*baj*)

  aw: ⟨⟩ (*naw*)

  r final: ⟨⟩ (*nĕr*)

Le signe marquant l'absence d'une voyelle: ⟨⟩ (*rungguk*)

Figure 8: Character inventories of various Lampung manuscripts (from van der Tuuk 1868: 141). Continued in figure 9.
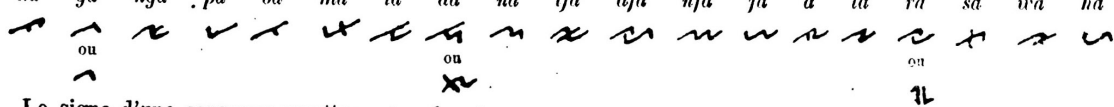
MANUSCRIT E.

Il est prouvé par cet alphabet qu'en général les indications de MARSDEN sont justes.

ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha

L'usage des deux formes de *s* est remarquable. La première forme cependant ne se trouve qu'à la première page.

Le *i*: (*dji*)
   u: (*lu*)
   ŏ: (*tĕ*)
   è manque
 aj: (*baj*)
aw: (*baw*)
  n final: (*man*), (*mĕn*) (*tjin*).
  h *n* : (*luh*)
  r *n* : (*tir*) (*djar*)
Le signe d'une consonne muette: ; p.e. (*ratus*)
Le signe indiquant les paragraphes:

MANUSCRIT G.

ka	ga	nga	pa	ba	ma	ta	da	na	tja	dja	nja	ja	a	la	ra	sa	wa	ha

Le signe d'une consonne muette:
Le *i*: (*ngin*)
  u: (*mu*)
  ŏ: (*dĕ*) (*kĕn*) (*p.* 11)
ng final: (*wang*)
 r *n* : (*hur*)
 n *n* : (*ngan*)
 h *n* : (*gih*)
  è manque; p. e. = Jav. *sakèhè*; *witan* = Jav. *wètan*; *l'aj*: (*waj*)
l'*aw* n'est pas indiqué toujours par un signe particulier; p.e. p. 10, l. 3 on trouve (*akow*)
et (*guraw*)

Figure 9: Character inventories of various Lampung manuscripts (from van der Tuuk 1868: 142).

Figure 10: Comparison of Lampung ("Lampuṅ") and related scripts (from Faulmann 1880: 179).

Figure 11: Chart showing scripts from Sumatra (stitched together from Holle 1882: 10, 11). Shown are letters from *ka* to *da*.

Figure 12: Chart showing scripts from Sumatra (stitched together from Holle 1882: 19, 20). Shown are letters from *dha* to the consonant sign _*h*.

Source: http://www.omniglot.com/writing/lampung.htm
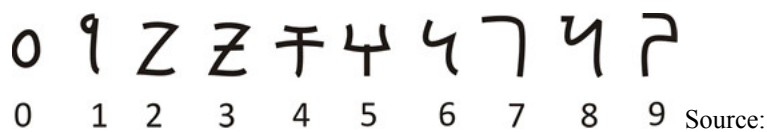
Figure 13: Lampung digits. Additional research is required for determining if these are historically attested or if they are modern innovations.

Source: http://www.omniglot.com/writing/lampung.htm
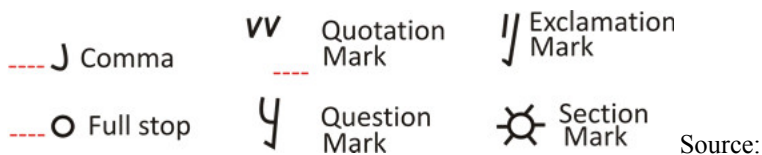
Figure 14: Lampung punctuation marks. Additional research is required for determining if these are historically attested or if they are modern innovations

Source: `https://id.wikipedia.org/wiki/Berkas:Keyboard_Lampung_Script.jpg`

Figure 15: A virtual keyboard for a Lampung font based upon the Latin encoding.

Source: `https://commons.wikimedia.org/wiki/File:Lampung_Emblem.svg`

Figure 16: The emblem of Lampung Province, Indonesia, with the name 'Lampung' represented in the Lampung script.

Source: `https://upload.wikimedia.org/wikipedia/id/5/53/Logo_Lampung_Selatan_Baru.jpg`

Figure 17: An emblem of Lampung with the phrase "*kagom mafakat*" (actually *ragom gawa*) inscribed in the Lampung script.

Source: `https://id.wikipedia.org/wiki/Berkas:Logo-baru-bandar-lampung1.jpg`

Figure 18: An emblem of the city of Lampung with the phrase "*ragom gawi*" (actually *ragom gawa*) inscribed in the Lampung script.

Source: `https://nepatronews.files.wordpress.com/2012/12/metro_2.jpg`

Figure 19: An emblem of the metro transport of Lampung with the phrase "*bumi sai wawai*" inscribed in the Lampung script.

Source: `http:`
`//cdn-2.tstatic.net/tribunnews/foto/bank/images/gapura-bandar-lampung-city_20150722_214640.jpg`

Figure 20: A gate to the city of Lampung with the phrase "*selamat jalandari kota bandar lampung*" inscribed in the Lampung script.

Source: `https://upload.wikimedia.org/wikipedia/id/c/c5/PLANG_JALAN.jpg`

Figure 21: Road sign with text in Lampung.