SOME SALIENT FEATURES OF THE SINHALA ALPHABET

J.B. Disanayaka
Professor Emeritus of Sinhala
University of Colombo

SOME SALIENT FEATURES OF THE SINHALA ALPHABET

Presented at the
CINTEC Workshop on Unicode Compatible
Sinhala Fonts,
held on 13th June 2003

Prof J.B. Disanayaka

B.A.(Cey) M.A. (California)
Phd (Col) D Lit (Col)
Professor Emeritus of Sinhala
University of Colombo

SOME SALIENT FEATURES OF THE SINHALA ALPHABET

J.B. Disanayaka
Professor Emeritus of Sinhala, University of Colombo

In designing the Sinhala keyboard for the computer, it will be necessary to take into account some of the salient features of the Sinhala alphabet. A keyboard for the typewriter or computer has, in general, two kinds of symbols:

1. Non-linguistic symbols
2. Linguistic symbols

1. Non-linguistic symbols

Non-linguistic symbols include the following:

  (i)   numerals
  (ii)   mathematical symbols
  (iii)   punctuation marks and
  (iv)   a few others such as $ &

2. Linguistic symbols

Linguistic symbols are those that denote the sounds of a given language. The sounds of a language are of two kinds:

  (i)   Vowels *(svara)*
  (ii)   Consonants *(vyanjana)*

The Sinhala keyboard will need 4 kinds of linguistic symbols to denote the vowels and consonants of Modern Sinhala:

  2.1   Vowel Letters *(pra:na:kshara)*
  2.2   Consonant Letters *(ga:tra:kshara)*
  2.3   Vowel Strokes *(svara pili)*
  2.4   Consonant Strokes *(vyanjana pili)*

2.1 Vowel Letters

A Vowel Letter is a symbol that stands for a vowel sound which occurs at the beginning of a Sinhala word. The UNICODE contains 18 vowel letters but Modern Sinhala needs only the following 16 vowel letters:

	Vowel Letter	Sound	Example
1	අ	[a]	අ ත ස
2	ආ	[a:]	ආ ග ම
3	ඇ	[ae]	ඇ ස
4	ඈ	[ae:]	ඈ ත
5	ඉ	[i]	ඉ ර
6	ඊ	[i:]	ඊ ය
7	උ	[u]	උ දු ය
8	ඌ	[u:]	ඌ රා
9	ඍ	[ri]	ඍෂ ඍව
10	ඎ	[ri:]	No example
11	එ	[e]	එ ක
12	ඒ	[e:]	ඒ ක
13	ඓ	[ai]	ඓ කෂ ය
14	ඔ	[o]	ඔ ය
15	ඕ	[o:]	ඕ ක
16	ඖ	[au]	ඖ ෂ ධ

2

There are 2 more vowel letters in the UNICODE but they are not in use today. UNICODE retains them as OD8F (short vowel) OD90 (long vowel)

2.2 Consonant Letters

A Consonant Letter is a symbol that stands for a consonant sound.

Sinhala has 43 consonant letters, as follows:

ක	බ	ග	ඝ	ඞ	ඟ	
k	kh	g	gh	ng	ṅg	

ච	ඡ	ජ	ඣ	ඤ	ඦ	ඦ
c	ch	j	jh	gn	gn	ñj

ට	ඨ	ඩ	ඪ	ණ	ඬ	
t•	th•	d•	dh•	n	ñd•	

ත	ථ	ද	ධ	න	ඳ	
t	th	d	dh	n	ñd	

ප	ඵ	බ	භ	ම	ඹ	
p	ph	b	bh	m	ṅ b	

ය	ර	ල	ව	ශ	ෂ	ස
y	r	l	v	sh	sh	s

හ	ළ	ෆ	°	:		
h	l	f	ng	h		

Of these letters the following 3 differ from the others in status:

ඞ	°	:
ng	ng	h

3

(i) The letter ඞ

This is hardly used in modern Sinhala writing. When it is used, it is always in combination with the vowel remover.No other stroke is used with this.

ඞ්	ලඞ්කා	සඞ්බ
	ගඞ්ගා	සඞ්ඝ

In modern writing it is usually replaced by the letter ං (known as *anusva:ra*)

ං	ලංකා	සංබ
	ගංගා	සංඝ

(ii) The letter: ං (*anusva:ra*)

This letter is of frequent occurence but no stroke occurs with it. It comes as the very first symbol in the UNICODE.

    OD82   ං

(iii) The letter: ඃ (*visarga*)

This letter is of rare occurence and no stroke occurs with it. It comes as the second symbol in the UNICODE.

    OD83 ඃ

The UNICODE has placed these two symbols at the very beginning of the alphabet, i.e. even before the vowel letters, because fall into a small subset of consonants.These two letters do not enjoy the potentialities of the other consonant letters of Sinhala. Most Indian alphabets also have equivalents and the UNICODE has placed these letters also at the very beginning of those alphabets.

4

2.2   Vowel Strokes

A Vowel Stroke is a symbol that stands for a vowel sound that occurs after a consonant sound. For example, the vowel ඉ is represented by the vowel stroke known as *is-pilla* when it is preceded by a consonant, thus:

⌐	කි	ගි	ති	මි
	ki	gi	ti	mi

Some vowels are represented by different strokes in different places. For example. the vowel sound උ is represented by 3 kinds of vowel strokes :

⌐	තු	නු	මු	සු
	tu	nu	mu	su
.	කු	ගු	තු	ශු
	ku	gu	tu	shu
౭	රු			
	ru			

In the following letter the vowel stroke is invisible:

ළු
lu

When some vowel strokes are added to consonant letters a part of the consonant letter is removed. For example, when the vowel stroke known as the *pa: pilla* is added to the consonant ද ද and ළ   their lower parts are removed to make room for the stroke, thus:

⌐	ද	ද
	ද	ද
	ළ	ළ

5

Some of the vowel strokes are identical in form with consonant strokes.For example, the stroke known as *kodiya* that is added to certain consonant letters to indicate that the built-in vowel has been removed is identical with one of the vowel strokes used to represent the vowel ඒ

·	ක්	k
·	කේ	k e:

2.3　Consonant Strokes

A Consonant Stroke is a symbol that stands for a consonant sound that occurs in a specific context. Some of the consonant strokes are obligatory. i.e. they must necessarily be used in that context. Some consonant strokes are optional. i.e. they may be used at the discretion of the writer.

For example, the following consonant strokes are obligatory:

ය　　　(known as the *yansaya*)

ෙ　　　(known as *raka:ra:nsaya*)

The *yansaya* represents the consonant sound ය that is preceded by another consonant, thus:

ය		
	කය	k y a
	(ගයා)	g y a:
	වයු	v y u
	ෙදයෝ	d y o:

6

The *raka:ra:nsaya* represents the consonant sound ර that is preceded by another consonant, thus:

ක්‍ර	k r a
ග්‍රා	g r a:
ප්‍රි	p r i
ශ්‍රෝ	sh r o:

The consonant stroke known as *Re:paya* which stands for the consonant ර which is followed by another consonant is optional.

තර්ක	තර්ක	tarka

2.5   Strokes and Their Uses

Both kinds of strokes – vowel strokes and consonant strokes – are used to represent either the presence or absence of sounds. This section will list the strokes and their uses or functions in different contexts.

2.5.1   The Flag : *Kodiya*

This stroke serves the following functions:

(a)   It is used with certain consonant letters to indicate that the built-in vowel has been removed.

ක	ක්
ka	k

When this stroke occurs with the following consonant letters, the stroke is placed in a slightly different way:

ජ	ja	ජ්	j
ර	ra	ර්	r

(b)   It is added to the short vowel එ to make it long:

එ	ඒ
e	e:

(c)   It is used with certain consonants to represent the vowel ඒ Then the consonant letter is also preceded by the *kombuva* ෙ

කේ	ගේ
ke:	ge:

(e)   It is combined with the *aela pilla* and placed after a consonant letter that is preceded by a *kombuva* to represent the long vowel sound ඕ   [o:]

කෝ	ගෝ
ko:	go:
ටෝ	මෝ
to:	mo:

2.5.2 The Cord : *Raehaena*

This stroke serves the following functions:

(a) It is added to certain consonant letters to indicate that the built-in vowel has been removed. Consonants that use this stroke terminate on the top left, such as the following:

ඬ	ඩ්‍	එ	ඵ
nga	ng	ca	c

ට	ට්	ඩ	ඩ්
ta	t	da	d

බ	බ්	ම	ම්
ba	n	ma	m

va	v

ව	ව්

(b) It is added to the short vowel ඔ to make it long:

ඔ	ඕ
o	o:

(c) It is added to certain consonants to represent the long vowel ඒ.Then the consonant letter is also preceded by the *kombuva* ෙ

ෙට්	ෙම්
te:	me:

9

2.5.3 The Vowel Stroke : *Aela Pilla*

This stroke serves the following functions:

(a) It is added to the short vowel අ to make it long:

අ	ආ
a	a:

(b) It is added to a consonant letter to indicate that it contains ආ

කා	ගා	ටා	මා
ka:	ga:	ta:	ma:

දා	ඳා	ඤා	ඥා
da:	nda:	gna:	gna:

(c) It is added to certain consonants to represent the short vowel ඔ. Then the consonant letter is also preceded by the *kombuva* ෙ

කො	ගො	ටො	මො
ko	go	to	mo

දො	ඳො	ඤො	ඥො
do	ndo	gno	gno

2.5.4 Vowel Stroke : *Keti Aeda Pilla*

This stroke serves the following functions:

(a) It is added to the short vowel අ [a] to change it to another vowel ඇ [ae]

අ	ඇ
a	ae

(b) It is added to a consonant letter to indicate that it contains ඇ

කැ	ගැ	තැ	මැ
kac	gae	tae	mae

දැ	ඳැ
dae	ndae

When added to the consonant letter ර this stroke is taller than the normal stroke:

ර	රැ
ra	rae

(c) It is added to the consonant ර to represent the short vowel ඍ.

ර	රු
ra	ru

(d) It does not occur with the subsetof 10 consonants known as *maha:-pra:na* (aspirates), used primarily to write loan words from Sanskrit and Pali

ඛ	ඝ	ඡ	ඨ	ඪ	ඵ
ථ	ධ	භ			

2.5.5 Vowel Stroke : *Dik Aeda Pilla*

This stroke serves the following functions:

(a) It is added to the short vowel අ [a] to change it to another vowel [ae:]

අ	අැ
a	ae:

(b) It is added to a consonant letter to indicate that it contains අැ

කැ	ගැ	ටැ	මැ
kae:	gae:	tae:	mae:

ඩැ	ඳැ
dae:	ndae:

When added to the consonant letter ර this stroke is taller than the normal stroke:

ර	රැ
ra	rae:

(c) It is added to the consonant ර to represent the short vowel රු

ර	රැ
ra	ru:

(d) It is added to the letter ළු to indicate that the vowel it contains is ළූ

ළු	ළැ
lu	lu:

(e) It does not occur with the subset of 10 consonants known as *maha:-pra:na* (aspirates).

12

2.5.6   Vowel Stroke : *Keti Is Pilla*

This stroke is partially similar to the vowel-remover: *raehaena* Thus it is necessary to focus attention on the point where they differ from each other:

ට	ඨ	ටි
ta	t	ti

ම	ම්	මි
ma	m	mi

This stroke serves the following functions:

(a) It is added to a consonant letter to indicate that it contains the short vowel ඉ

කි	ගි
ki	gi

ටි	මි
ti	mi

දි	ඳි
di	ndi

When added to the consonant letter ර   this stroke is slightly different from the normal stroke:

ර	රි
ra	ri

2.5.7   Vowel Stroke : *Dik Is Pilla*

This stroke serves the following functions:

(a)   It is added to a consonant letter to indicate that it contains the long vowel ී

කී	ki:
ගී	gi:
ටී	ti:
මී	mi:
දී	di:
ඳී	ndi:
ෆී	fi:

When added to the consonant letter ර this stroke is slightly different from the normal stroke:

ර	රී
ra	ri:

14

2.5.8 Vowel Stroke : *Keti Kon Pa: Pilla*

This stroke serves the following function:

It is added to a consonant letters to indicate that it contains the short vowel ɓ

ම	ම්
ma	mu

It occurs with the following 31 consonants:

ඛ	ඝ	ච	ඡ	ජ	ඣ
khu	ghu	cu	chu	ju	jhu
ට	ඨ	ඩ	ඪ	ණ	ඬ
tu	thu	du	dhu	nu	ndu
ත	ධ	න	ප	ඵ	බ
thu	dhu	nu	pu	phu	bu
ම	ඹ	ය	ල	ව	ශ
mu	mbu	yu	lu	vu	shu
ස	හ	ෆ			
su	hu	fu			

When this stroke is used with the following consonants, the lower part of the consonant is removed:

ද	ඳ	ඥ	ඣ
du	ndu	gnu	gnu

2.5.9 Vowel Stroke : *Keti Vak Pa: Pilla*

This stroke serves the following functions:

It is added to a consonant letter to indicate that it contains the short vowel ᶜ

ක	කු
ka	ku

It occurs with the following 6 consonants:

කු	අකුර
ku	akura

ගු	අගුල
gu	agula

ඟු	අඟුල
ngu	angula

තු	වතුර
tu	vatura

භු	භුවන
bhu	bhuvana

ශු	ශුභ
shu	shubha

2.5.10 Vowel Stroke : *Dik Kon Pa: Pilla*

This stroke serves the following function:

It is added to a consonant letters to indicate that it contains the short vowel ⟨

⊚	⊇
ma	mu:

It occurs with the following 31 consonants:

⊇	⊜	⊇	⊈	⊈	⊠
khu:	ghu:	cu:	chu:	ju:	jhu:

⊇	⊇	⊇	⊈	⊈	⊇
tu:	thu:	du:	dhu:	nu:	ndu:

⊇	⊇	⊠	⊜	⊇	⊇
thu:	dhu:	ku:	pu:	phu:	bu:

⊇	⊠	⊜	⊂	⊇	⊜
mu:	mbu:	yu:	lu:	vu:	shu:

⊜	⊠	⊙
su:	hu:	fu:

When this stroke is used with the following consonants, the lower part of the consonant is removed:

ℰ	ℰ	⊠	⊠
ℰ	ℰ	⊠	⊠

du:	ndu:	gnu:	gnu

2.5.11 Vowel Stroke : *Dik Vak Pa: Pilla*

This stroke serves the following function:

It is added to a consonant letter to indicate that it contains the long vowel ඌ

ක	කූ
ka	ku:

It occurs with the following 6 consonants:

කූ
ku:

ගූ
gu:

ඟූ
ngu:

තූ
tu:

භූ
bhu:

ශූ
shu:

2.5.12 Vowel Stroke : *Gaeta Pilla*

This stroke serves the following functions:

(a) It is added to the short vowel ඍ to make it long

ඍ	ඎ
ri	ri:

It is important to note that the symbol that precedes this stroke above is different from the symbol for the consonant letter for [s] ස. The difference lies in the presence or absence of the short hyphen-like symbol on its right.

(b) It is added to a consonant letter to indicate that it contains the short vowel ඍ or the sounds ඍ (ru) :

කෘ	ගෘ
kru	gru

තෘ	මෘ
tru	mru

(c) Two of these strokes are added to a consonant letter to indicate that it contains the sounds ඎ

කෘ ්	ගෘ ්
kru:	gru:

තෘ ්	මෘ ්
tru:	mru:

2.5.13 Vowel Stroke : *Kombuva*

It serves the following functions:

(a) It is added to the vowel ඒ [e] to change it to another vowel ඓ [ai]

ඒ	ඓ
e	ai

This letter occurs only in loan words from Sanskrit.

(b) It is placed in front of a consonant to indicate that it contains the short vowel sound ඒ [e]

කෙ	ගෙ
ke	ge
තෙ	මෙ
te	me

(c) It is placed in front of a consonant letter that has either a *kodiya* or *raehaena* to indicate that it contains the long vowel ඒ[e:]

කේ	ගේ
ke:	ge:
තේ	මේ
te:	me:

(d) It is placed in front of a consonant letter that is followed by the *aela pilla* to indicate that it contains the short vowel sound ඔ [o]

කො	ගො
ko	go
තො	මො
to	mo

20

(e) It is placed in front of a consonant letter that is followed by the *aela pilla* and *kodiya* to indicate that it contains the long vowel sound ඕ [o:]
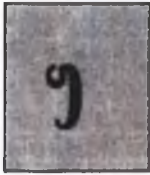
කෝ	ගෝ
ko:	go:

ටෝ	මෝ
to:	mo:

ෆෝ	ඳෝ
fo:	ndo:

ක්‍රෝ	ට්‍රෝ
kro:	tro:

(f) It is placed in front of a consonant letter that is followed by a *gayanu kitta* to indicate that the consonant letter contains the vowel sound ඖ [au]

කෞ	ගෞ	ටෞ	මෞ
kau	gau	tau	mau

ෆෞ	ලෞ	ක්‍රෞ	ට්‍රෞ
fau	lau	krau	trau

(g) Two of these are placed before a consonant letter to indicate that it contains the vowel ඓ [ai]

කෛ	ගෛ	ටෛ	මෛ
kai	gai	tai	mai

ෆෛ	ලෛ	ක්‍රෛ	ට්‍රෛ
fai	lai	krai	trai

21

2.5.14 Vowel Stroke : *Gayanu Kitta*

It serves the following functions:

(a) It is added after the short vowel letter ◌ to make it long:

◌	◌
u	u:

(b) It is added after the short vowel letter ◌ to change it to a different vowel ◌ [au]

◌	◌
o	au

This letter occurs only in loan words from Sanskrit.

(c) Is is placed after a consonant letter that is preceded by a *kombuva* to indicate that it contains the vowel ◌[au]

◌	◌
kau	gau
◌	◌
tau	mau
◌	◌
lau	fau
◌	◌
krau	prau

5.2.15 Consonant Stroke : *Yansaya*

This is an obligatory stroke and it serves the following function:

It is placed after a consonant letter to represent the sound ය [y]

කﳍ	ගﳍ	තﳍ	මﳍ
kya	gy	tya	mya

The letter ය may be followed by other strokes:

කﳍ	kya	කﳍ)	kya:
කﳍ	kyu	කﳍ	kye
කﳍ)	kyo	කﳍ	kyo:

This stroke is not used with the consonant letter ර [ra]. Thus combinations such as the following are considered improper:

රﳍ   රﳍ)

When the letter ය is preceded by the consonant sound ර් [r] it may be represented in one of 3 alternative ways:

(i)   by the use of the two consonant letters separately:

ර්‍ය   ආර්‍ය   මහාචාර්‍ය
rya   a:rya   maha:ca:rya

(ii) by the use of the *re:paya* above the letter ය

ඍ   ආඍ   මහාවාඍ

(iii) by the use of the *re:paya* placed above the *yansaya*

ඍ   ආඍ   මහාවාඍ

23

5.2.16 Consonant Stroke : *Raka:ra:nsaya*

This is an obligatory stroke and it serves the following function: It is placed after a consonant letter to represent the consonant sound ඍ [ra]

ක්‍ර	ග්‍ර
kra	gra

ත්‍ර	ම්‍ර
tra	mra

The letter ඍ may be followed by other strokes:

ක්‍රා	kra:	ක්‍රෑ	krae
ක්‍රෑ	kae:	ක්‍රි	kri
ක්‍රී	kri:	ක්‍රෙ	kre
ක්‍රේ	kre;	ක්‍රෛ	krai
ක්‍රො	kro	ක්‍රෝ	kro:
ක්‍රෞ	krau		

When this stroke is used with the following consonant letter its lower part is removed:

ද	ද්‍ර	ද්‍රා	ද්‍රි
da	dra	dra:	dri

24

2.5.16 Consonant Stroke : *Re:paya*

This is an optional stroke and it serves the following function.

It is placed above a consonant letter to represent the sound ර [r]

ක්	ග්
rka	rga
ට	ම්
rta	rma
ය	
rya	

However, the following combination can also be written with the *yansaya* preceded by ය.

ය	යර්
rya	rya

When a combination has a *re:paya* and a *yansaya*, the former is always placed above the latter.

Thus the following combination in which the *re:paya* is placed above the ය and not above the *yansaya* is considered improper:

යර

2.5.17 Another Consonant Stroke

This consonant stroke serves the following functions.

(a) It is added to certain consonants to indicate that they are half-nasals:

Half Nasal

ග	ඟ
ga	nga
ඩ	ඬ
da	nda
ද	ඳ
da	nda
ජ	ඦ
ja	nja

However, if the half-nasal letters occur as independent letters, there in no necessity to add this stroke to such letters.

(b) It is added before certain consonants to represent the consonant sound ද [d]

ඳට	ඬ	සුඳට /	සුඬ
ඳබ	ඹ	ඳබර /	ඹර

(c) It is used before the consonant ථ [tha] to represent ට [t]

ටථ ⬄ වටථ / වඬ

දුටථ / දුඬ

(d) It is used before the consonant ච [c] to represent ඥ [gn]

ඥච ⬄ සඥචර / සඤචර

(e) It is used before the consonant ඵ (ph) to represent ර

වර / මාර

2.5.18. Conjunct Consonants

In traditional Sinhala writing there was a subset of symbols known as *baendi akuru* or conjunct letters. A conjunct letter is a combination of two consonant letters written as one symbol. These symbols came into being as a device of convenience in writing by hand. Printing, however, displaced most of these symbols. Modern writers use these symbols at their discretion.

These symbols include the following:

letters separately	conjunct letter	example
ක්ව	ඛ	ස්ක්ම / ස්ක්ම
ක්ෂ	ඎ	අක්ෂර / අක්ෂර
ග්ධ	ඝ	මුග්ධ / මුග්ධ
ද්ධ	ඬ	සද්ධක්ම් / සද්ධක්ම්
ද්ව	ඞ	සක්ව / සක්ව
ර්ථ	ඪ	ගුර්ථ / ගුර්ථ
න්ද	ඳ	ආනන්ද / ආනන්ද
න්ධ	ඣ	සන්ධ්‍යා / සන්ධ්‍යා
න්ව	ඥ	අන්වය / අන්වය

The following combinations are also of this type but they are obligatory:

ක්‍ය	කෟ	වෟක
ක්‍ර	කු	වකු

The following letters are, however, not conjunct consonants but independent letters that represent single sounds.

ඥ	gn
ඝ	gh
ඣ	jh