Encoding of the Bassa Vah Script in the UCS Preliminary Proposal Submitted to the Script Encoding Initiative Charles Riley 20 March 2009

The Vah script of the Bassa owes most of its development and current form to Thomas Flo Lewis, who worked with the typesetting of it beginning as early as 1907¹, producing various texts in the script through at least the 1930's. Dr. Lewis, a Bassa from Liberia, studied in Syracuse for several years. There are traditions that trace the script's origin through contact between Lewis and Jenni Dirah, son of a slave who may have drawn on an older code of pictograms that in use among the Bassa, for which there is little supporting documentary evidence. The Vah script and any of its possible antecedents are independent from another effort to develop an alphabet for the Bassa language that dates to the 1830's in the work of the missionary William Crocker.

Dr. Lewis actively published while in Syracuse, and later in Dresden between 1915 and 1920. There is evidence of texts being produced in both places, although it is not known whether any of the texts from this period (1907-ca.1935) still exist. He returned for some time to Liberia in the 1910's and 1920's, and according to Dalby's record of an account of Abba G. Karnga, taught many students, including Barni Cheevehn, Jacob B. Logan, a Senator Morgan, and Representative Thomas H. Greeves. Graham Greene, on his travel through Liberia as recounted in his *Journey Without Maps*, reported having collected a fragment of a text in Bassa Vah script².

Since 1959, the script has been promoted through the Bassa Vah Association and United Bassa Organizations in the Americas (UNIBOA), and by individuals including Karnga, Dr. Joseph M. N. Gbadyu, Dr. Syrulwa Somah, and Varnie N'jola Karmo, among others.

Character repertoire

According to Dalby (1967), there are characters in Vah for 23 consonants: p, kp, m/6, f, t, n, dy/ny, d/l, r, s, c, k, w, xw, b, gb/gm, v, d, z, j, g, h, hw; seven vowels: i, a, u, e, ϵ , δ , o; and five tonal diacritics: high, low, mid, low-high glide ('drag'), and high-low glide ('double'). Dalby accounts for the consonantal character names, following a source from the Bassa Vah Association but retranscribing into phonetic characters, as: (n)ni, ka, se, fa, mi, ye, ga, di, kpa, ja, xwa, wa, zo, gbu, do, ce, hwu, to, ba, vu, hĩ, pa, (w)ra. Names for the vocalic characters were not listed in the source he consulted, but he does provide three names from analysis by Gail Stewart: ede for e, aga for a, and ogo for o. Karmo indicated to me through a telephone conversation that Dalby's rendering is not entirely accurate; Karmo's own consultations with elders indicate that most character names have an associated tone that Dalby did not include. The final version of names provided for encoding will have to be revisited with Bassa elders familiar with the script, but in the meantime Karmo notes that ka, fa, y[i]e, kpa[h], and pa carry high tones; mbe, wa, and [wadda=Dalby's (w)ra] carry mid tones; gbu, ce, [uwu=Dalby's hwu], vu, and [yein=Dalby's hi] carry low tones; jò, zò, and tò carry low-high tones³. Karmo's rendering of the names according to his sources runs as follows: enni, ká, se, fá, mbe, yie, gah, dii, kpah, jó, xwah, wa, zó, gbù, do, cè, uwu, tǒ, ba, vù, yèin, pa, wadda. More consultation with Bassa speakers and elders will be needed to verify the phonetics and finalize decisions on the names as represented in the repertoire. The sort order for the consonantal characters is fixed, as in the above lists; vowels appear in sources sorting separately in various orders: i, a, u, e, ϵ , δ , o; or a, δ , o, u, e, ϵ , i.

¹ "Son of African Chief to Take Degree", *The Post-Standard*, Syracuse NY, 6/5/1907.

²http://www.uniboa.org/bassalanguage.html provides an account of the Dresden publishing, and Dalby (1967), pp. 32, notes that he had correspondence with Greene in 1964, but that by that time the fragment he had collected could not be found.

³The exact tonality of the character names will need further study and verification. Some in-depth analysis is available from Dalby (op. cit.), p. 38 fn. 1. Different interpretations of tonemics are offered by June Hobley, W. J. Pichl, the Bassa Vah Association, and Dalby.

Casing

The introduction of a lower cased set of characters for the Vah script came recently, at Karmo's initiative during the 1990's while he was working with elders to develop a font for the script. The idea of casing met with the assent of the elders Karmo contacted, but has not however as yet been widely adopted. It is recommended to provide for their encoding, as some charts published online do consistently include the cased set of characters for reference.⁴

Diacritic positioning

Combining diacritics are used to indicate tonality of each vowel. The positioning of the diacritics is made with respect to the interior of the largest partially or wholly enclosed space of each vocalic glyph; the diacritic should be toward the center without touching the edges.

Punctuation and Digits

For the full stop, either the Latin period or a + symbol may be used. Western (Arabic) digits are used, there are no unique Bassa Vah digits to be encoded.⁵ Use of the Western colon is also attested, from Karnga (1995). More information on punctuation is needed, and according to Karmo, Dr. Gbadyu is the individual most familiar with the history of the script's use of punctuation.

Draft Code Chart and Nameslist

A draft code chart and nameslist is attached. The code chart uses a font by Jason Glavy.

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⁴For example, see http://www.uniboa.org/bassalanguage.html and http://www.omniglot.com/writing/bassa.htm.

⁵See Karnga (1995) and Dalby (op. cit., p. 39) for examples and explanation.

	16B0	16B1	16B2	16B3	16B4
0	m	V	3	V	•
	16B00	16B10	16B20	16B30	16B40
1	16B01	16B11	16B21	^) 16B41
2	£	Z	£	Z	^
3	16B02	16B12	16B22	16B32	16B42
	16B03	16B13	16B23	16B33	16B43
4	9	Ξ	9	E	i
	16B04	16B14	16B24	16B34	16B44
5	Q	7	Q	7	- -
	16B05	16B15	16B25	16B35	16B45
6	S	3	8	8	
	16B06	16B16	16B26	16B36	
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	16B07	16B17	16B27	16B37	
8	7	ð	7	ъ	
	16B08	16B18	16B28	16B38	
9	7	O	7	О	
	16B09	16B19	16B29	16B39	
Α	щ	(T)	J.	(1)	
	16B0A	16B1A	16B2A	16B3A	
В	4	ਓ	ч	೯	
	16B0B	16B1B	16B2B	16B3B	
С	Ŋ	<	J	<	
	16B0C	16B1C	16B2C	16B3C	
D	o	16B1D	7	₹ 16B3D	
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Е	5		5		
F	16B0E		16B2E	HHH	
	7		7		
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	16B0F		16B2F		

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16B3E

<reserved>

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16B00 3 BASSA VAH CAPITAL LETTER ENNI
16B01 ∩ BASSA VAH CAPITAL LETTER KA
16B02 让 BASSA VAH CAPITAL LETTER SE
16B03 > BASSA VAH CAPITAL LETTER FA
16B04 9 BASSA VAH CAPITAL LETTER MBE
16B05 O BASSA VAH CAPITAL LETTER YIE
16B06
    8 BASSA VAH CAPITAL LETTER GAH

→ BASSA VAH CAPITAL LETTER DHII

16B07
16B08 ㅋ BASSA VAH CAPITAL LETTER KPAH
16B09 7 BASSA VAH CAPITAL LETTER JO
16B0A → BASSA VAH CAPITAL LETTER HWAH
16B0B 💆 BASSA VAH CAPITAL LETTER WA
16B0C → BASSA VAH CAPITAL LETTER ZO
16B0D ∂ BASSA VAH CAPITAL LETTER GBU
       BASSA VAH CAPITAL LETTER DO
     Z BASSA VAH CAPITAL LETTER CE
16B10 V BASSA VAH CAPITAL LETTER UWU
16B11 👶 BASSA VAH CAPITAL LETTER TO
16B12 Z BASSA VAH CAPITAL LETTER BA
16B13 1 BASSA VAH CAPITAL LETTER VU
16B14 E BASSA VAH CAPITAL LETTER YEIN
16B15 7 BASSA VAH CAPITAL LETTER PA
16B16 🖰 BASSA VAH CAPITAL LETTER WADDA
16B17 The BASSA VAH CAPITAL LETTER A
16B18 6 BASSA VAH CAPITAL LETTER O
16B19 O BASSA VAH CAPITAL LETTER OO
16B1A 🗘 BASSA VAH CAPITAL LETTER U
16B1B & BASSA VAH CAPITAL LETTER EE
16B1C < BASSA VAH CAPITAL LETTER E
16B1D → BASSA VAH CAPITAL LETTER I
16B1E
        <reserved>
16B1F
        <reserved>
16B20
     з BASSA VAH SMALL LETTER ENNI
16B21
     16B22
     ъ BASSA VAH SMALL LETTER SE
16B23
     > BASSA VAH SMALL LETTER FA
16B24
    9 BASSA VAH SMALL LETTER MBE
16B25
    σ BASSA VAH SMALL LETTER YIE
16B26
     BASSA VAH SMALL LETTER GAH
16B27

→ BASSA VAH SMALL LETTER DHII

16B28
     ¬ BASSA VAH SMALL LETTER KPAH
     → BASSA VAH SMALL LETTER JO
16B2A 3 BASSA VAH SMALL LETTER HWAH
16B2B
    □ BASSA VAH SMALL LETTER WA
16B2C
    □ BASSA VAH SMALL LETTER ZO
16B2D
    BASSA VAH SMALL LETTER GBU
16B2E
       BASSA VAH SMALL LETTER DO
16B2F
     z BASSA VAH SMALL LETTER CE
16B30
       BASSA VAH SMALL LETTER UWU
16B31
       BASSA VAH SMALL LETTER TO
16B32
     BASSA VAH SMALL LETTER BA
16B33
     BASSA VAH SMALL LETTER VU
16B34
     E BASSA VAH SMALL LETTER YEIN
16B35
     7 BASSA VAH SMALL LETTER PA
16B36
    ъ BASSA VAH SMALL LETTER WADDA
16B37
     n BASSA VAH SMALL LETTER A
16B38 % BASSA VAH SMALL LETTER O
16B39 O BASSA VAH SMALL LETTER OO
16B3A @ BASSA VAH SMALL LETTER U
16В3В 👨 BASSA VAH SMALL LETTER EE
16B3C < BASSA VAH SMALL LETTER E
16B3D → BASSA VAH SMALL LETTER I
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16B3F
16B40
BASSA VAH COMBINING HIGH TONE
16B41
BASSA VAH COMBINING GRAVE TONE
16B42
BASSA VAH COMBINING MID-LOW TONE
16B43
BASSA VAH COMBINING DRAG TONE
16B44
BASSA VAH COMBINING DOUBLE TONE
16B45
BASSA VAH FULL STOP