

**Title: Preliminary proposal for encoding the Mandombe script in the SMP of the UCS**

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*Preliminary proposal N3970 containing introductory information about the Mandombe script and details of character composition was submitted in 2010:*

*L2/11-053 “Proposal to add the Mandombe Script”*

*by David Wabeladio, Robert Wazi et Adrien Fwakasumbu*

**1. Introduction.** *Mandombe* (𐑃𐑄𐑅𐑆𐑇), which means “for the Blacks”, is a modern African script which was invented in 1978 by David Wabeladio Payi (\*15.07.1957 – †04.04.2013). It is one of very few scripts which were invented south of the equator. It was first designed to write Kikongo and Lingala, the most important languages of Congo, and then developed further so that basically any language can be written with this script.

Unlike other modern African scripts, Mandombe does not copy the type of letters which are known the Roman or Arabic alphabets, but the symbols are designed according to strong geometrical rules, on the basis of the stylized cyphers 𐑃 (2) and 𐑄 (5), which give the script an outstanding appearance. These shapes are based on the observation of the uncoated portion of the brick wall of his room.

David Wabeladio Payi was a member of the Kimbanguist church. The inventor was given a professorship at the Kimbanguist University in Kinshasa, where he taught the script to numerous students. On December 22, 2011 he was granted the title Doctor honoris causa at the University of Kinshasa.

The Mandombe script primary function was to write religious texts (see Figs. 1–3); presently also secular texts appear in this script, cf. Figs. 4–7.

The script is also taught in the Kimbanguist centers overseas, e.g. Brussels, Paris. There is hope among those who master the script that it will get a communicative function at least within the Kimbanguist church.

The Mandombe script has also an important function as a medium of writing is the graphical use of the letters whose shapes can be combined to create fascinating pictures.

**2. Structure.** Mandombe is written left to right. Structurally, the script is an *abugida* or an alphasyllabary. A sign orientation is used as a distinguishing feature. For syllables having a more complex structure than CV a special set of diacritical signs and other marks are used.

**3. Collating order.** Collation order is that in the code chart. It is based on the traditional arrangement according to letter shapes: DA-BA-GA-FA, MA-KA-PA-LA, VA-NA-TA-SA, RA-WA-YA-ZA.

**4. Character names.** The usual UCS conventions are used, with SH representing /ʃ/, TSH representing /tʃ/, DJ representing /dʒ/, and UE representing /y/ (French *u* or German *ü*).

As the consonant shapes are used mainly for two different consonants (depending on where the vowel is attached), it is suggested that the consonants are named as follows:

MANDOMBE JOINED CONSONANT B OR D

The “joined” addition is due to the fact that Mandombe provides also shapes for consonants in syllable coda (as opposed to syllable-initial consonants), which are useful for writing languages other than Kikongo or Lingala, e.g., for Wolof. For those syllable-final shapes the following name is suggested:

MANDOMBE ISOLATED CONSONANT B

Note that some “isolated” shapes can be used for syllable-initial foreign sounds (like GB, KP).

**Vowels.** Each Mandombe vowel occurs in four different shapes being rotations or flips of the basic shape. These might be provisionally named as follows:

MANDOMBE VOWEL A BASIC

MANDOMBE VOWEL A MIRRORED (meaning, horizontally)

MANDOMBE VOWEL A FLIPPED (meaning, vertically)

MANDOMBE VOWEL A ROTATED (meaning, 180 degrees)

**5. Linebreaking.** Linebreak can occur after a punctuation sign, including syllable separator and word separator. Characters forming a syllable cannot be broken.

**6. Punctuation and digits.** In Mandombe, script-specific punctuation is used, including a syllable separator, which is a blank space, and a word separator, which is a dot resting on the baseline.


Of ten Mandombe digits, five have the shape similar to vowels (I = 1, U = 2, E = 3, O ≈ 4, A = 5). {NB: this order can be an alternative for ordering vowels, instead of the A-E-I-O-U one}.

However, it seems that the vowels and digits require separate codepoints as – at least in some texts – the digits are taller than the respective vowels when resting on the baseline (see Fig. 1).






















**7. Additions and extensions.** Possible additions include calendar characters for a recently devised Kimbanguist calendar (7 symbols for days of week and 12 symbols for combining days of week and months); such calendar characters can be named starting with KIMBANGUMUNA, not MANDOMBE, as suggested in the list below.















There is a potential possibility that other symbols to reflect phonology of some other African languages will be introduced in future (tone marks, letters for click consonants, etc.), and they can be placed in the reserved codepoints.




















## 8. Bibliography

- Pasch, Helma. 2010. Mandombe. *Afrikanistik online*, 7: Available from: <<http://www.afrikanistik-online.de/archiv/2010/2724>>.
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- Rovenchak, Andrij & Jason Glavy. 2011. "Mandombe script", in *African Writing Systems of the Modern Age: The Sub-Saharan Region*. New Haven, Buena Park, New Rochelle, London, Lviv, Abidjan: Athinkra, 84–86. ISBN 978-0-9818294-1-8
- Wabeladio Payi, David. 1996. *Mandombe*  *Écriture negro-africaine: Manuel d'apprentissage à l'usage des apprenants*. Editions du C.E.N.A., Kinshasa.























## 9. Character repertoire

10F00		MANDOMBE JOINED CONSONANT B OR D
10F01		MANDOMBE JOINED CONSONANT F OR G
10F02		MANDOMBE JOINED CONSONANT K OR M
10F03		MANDOMBE JOINED CONSONANT L OR P
10F04		MANDOMBE JOINED CONSONANT N OR V
10F05		MANDOMBE JOINED CONSONANT R OR W
10F06		MANDOMBE JOINED CONSONANT S OR T
10F07		MANDOMBE JOINED CONSONANT Y OR Z
10F08		MANDOMBE JOINED CONSONANT DJ
10F09		MANDOMBE JOINED CONSONANT J
10F0A		MANDOMBE JOINED CONSONANT SH
10F0B		MANDOMBE JOINED CONSONANT TSH
10F0C		MANDOMBE INDIVIDUAL VOWEL CARRIER
10F0D		MANDOMBE INTERVENING CONSONANT R
10F0E		MANDOMBE INTERVENING CONSONANT L
10F0F		MANDOMBE INTERVENING CONSONANT L FLIPPED
10F10		MANDOMBE ISOLATED CONSONANT B
10F11		MANDOMBE ISOLATED CONSONANT F
10F12		MANDOMBE ISOLATED CONSONANT K
10F13		MANDOMBE ISOLATED CONSONANT L
10F14		MANDOMBE YIKAMU <ul style="list-style-type: none"><li>• vertical stroke used in illustrations of Mandombe characters composition</li><li>• similar to MANDOMBE COMMA but different in meaning</li><li>• can be positioned on different levels above the baseline unlike the comma</li></ul>

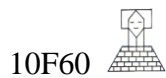
10F15		MANDOMBE ISOLATED CONSONANT S (= KT) <ul style="list-style-type: none"> <li>• also used as joined consonant KT</li> </ul>
10F16		MANDOMBE ISOLATED CONSONANT R
10F17		MANDOMBE ISOLATED CONSONANT Y
10F18		MANDOMBE ISOLATED CONSONANT DJ
10F19		MANDOMBE ISOLATED CONSONANT J
10F1A		MANDOMBE ISOLATED CONSONANT SH
10F1B		MANDOMBE ISOLATED CONSONANT TSH
10F1C		MANDOMBE MVUALA ZA PILUKA-1 <ul style="list-style-type: none"> <li>• used in illustrations of Mandombe characters compositions</li> <li>• similar to MANDOMBE DIGIT SIX</li> </ul>
10F1D		MANDOMBE MVUALA ZA PILUKA-2 <ul style="list-style-type: none"> <li>• used in illustrations of Mandombe characters compositions</li> <li>• similar to MANDOMBE DIGIT NINE</li> </ul>
10F1E		MANDOMBE MVUALA ZA PILUKA-3 <ul style="list-style-type: none"> <li>• used in illustrations of Mandombe characters compositions</li> <li>• similar to MANDOMBE DIGIT SEVEN</li> </ul>
10F1F		MANDOMBE MVUALA ZA PILUKA-4 <ul style="list-style-type: none"> <li>• used in illustrations of Mandombe characters compositions</li> <li>• similar to MANDOMBE DIGIT EIGHT</li> </ul>
10F20		MANDOMBE ISOLATED CONSONANT D <ul style="list-style-type: none"> <li>• also used as joined consonant GB</li> </ul>
10F21		MANDOMBE ISOLATED CONSONANT G
10F22		MANDOMBE ISOLATED CONSONANT M <ul style="list-style-type: none"> <li>• also used as joined consonant KP</li> </ul>

10F23		MANDOMBE ISOLATED CONSONANT P
10F24		MANDOMBE ISOLATED CONSONANT V
10F25		MANDOMBE ISOLATED CONSONANT T
10F26		MANDOMBE ISOLATED CONSONANT W
10F27		MANDOMBE ISOLATED CONSONANT Z
10F28		MANDOMBE VOWEL A BASIC
		• similar to MANDOMBE DIGIT FIVE
10F29		MANDOMBE VOWEL A MIRRORED
10F2A		MANDOMBE VOWEL A FLIPPED
10F2B		MANDOMBE VOWEL A ROTATED
10F2C		MANDOMBE VOWEL E BASIC
		• similar to MANDOMBE DIGIT THREE
10F2D		MANDOMBE VOWEL E MIRRORED
10F2E		MANDOMBE VOWEL E FLIPPED
10F2F		MANDOMBE VOWEL E ROTATED
10F30		MANDOMBE VOWEL I BASIC
		• similar to MANDOMBE DIGIT ONE
10F31		MANDOMBE VOWEL I MIRRORED
10F32		MANDOMBE VOWEL I FLIPPED
10F33		MANDOMBE VOWEL I ROTATED
10F34		MANDOMBE VOWEL O BASIC
		• similar to MANDOMBE DIGIT FOUR
10F35		MANDOMBE VOWEL O MIRRORED

10F36	𐌲	MANDOMBE VOWEL O FLIPPED
10F37	𐌳	MANDOMBE VOWEL O ROTATED
10F38	𐌴	MANDOMBE VOWEL U BASIC • similar to MANDOMBE DIGIT TWO
10F39	𐌵	MANDOMBE VOWEL U MIRRORED
10F3A	𐌶	MANDOMBE VOWEL U FLIPPED
10F3B	𐌷	MANDOMBE VOWEL U ROTATED
10F3C	𐌸	MANDOMBE VOWEL UE BASIC
10F3D	𐌹	MANDOMBE VOWEL UE MIRRORED
10F3E	𐌺	MANDOMBE VOWEL UE FLIPPED
10F3F	𐌻	MANDOMBE VOWEL UE ROTATED
10F40	𐌼	MANDOMBE DIGIT ZERO
10F41	𐌽	MANDOMBE DIGIT ONE
10F42	𐌾	MANDOMBE DIGIT TWO
10F43	𐌿	MANDOMBE DIGIT THREE
10F44	𐍀	MANDOMBE DIGIT FOUR
10F45	𐍁	MANDOMBE DIGIT FIVE
10F46	𐍂	MANDOMBE DIGIT SIX
10F47	𐍃	MANDOMBE DIGIT SEVEN
10F48	𐍄	MANDOMBE DIGIT EIGHT
10F49	𐍅	MANDOMBE DIGIT NINE
10F4A		MANDOMBE SYLLABLE SEPARATOR • it is a blank space

10F4B		MANDOMBE WORD SEPARATOR	<ul style="list-style-type: none"> <li>• it is a dot resting on the baseline</li> </ul>
10F4C		MANDOMBE DOT	
10F4D		MANDOMBE COMMA	
10F4E	 	MANDOMBE COLON	
10F4F		MANDOMBE SEMICOLON	
10F50		MANDOMBE EXCLAMATION MARK	
10F51		MANDOMBE EXCLAMATION MARK MIRRORED	
10F52		MANDOMBE QUESTION MARK	
10F53		MANDOMBE ELLIPSIS	
10F54		MANDOMBE COMBINING A DIPHTONG MARK	
10F55		MANDOMBE COMBINING A DIPHTONG MARK FLIPPED	
10F56		MANDOMBE COMBINING E DIPHTONG MARK	<ul style="list-style-type: none"> <li>• these are short vertical strokes, not dots as in 10F5C</li> </ul>
10F57		MANDOMBE COMBINING E DIPHTONG MARK FLIPPED	
10F58		MANDOMBE COMBINING I DIPHTONG MARK	
10F59		MANDOMBE COMBINING I DIPHTONG MARK FLIPPED	
10F5A		MANDOMBE COMBINING O DIPHTONG MARK	
10F5B		MANDOMBE COMBINING O DIPHTONG MARK FLIPPED	
10F5C		MANDOMBE COMBINING U DIPHTONG MARK	<ul style="list-style-type: none"> <li>• these are dots, not short vertical strokes as in 10F56</li> </ul>
10F5D		MANDOMBE COMBINING U DIPHTONG MARK FLIPPED	
10F5E		MANDOMBE COMBINING NASALIZATION MARK	
10F5F		MANDOMBE COMBINING NASALIZATION MARK FLIPPED	





- 10F60 MANDOMBE SYMBOL MANDOMBE
- 10F61 KIMBANGUMUNA MPANGALA DAY SYMBOL
- 10F62 KIMBANGUMUNA NSONA DAY SYMBOL
- 10F63 KIMBANGUMUNA MBASA DAY SYMBOL
- 10F64 KIMBANGUMUNA NKENGE DAY SYMBOL
- 10F65 KIMBANGUMUNA KONZO DAY SYMBOL
- 10F66 KIMBANGUMUNA NKANDU DAY SYMBOL
- 10F67 KIMBANGUMUNA NDELE DAY SYMBOL
- 10F68 KIMBANGUMUNA KINTOMBO MONTH PLACEHOLDER
- 10F69 KIMBANGUMUNA NKIELA MONTH PLACEHOLDER
- 10F6A KIMBANGUMUNA LUANZA MONTH PLACEHOLDER
- 10F6B KIMBANGUMUNA SIVU MONTH PLACEHOLDER
- 10F6C KIMBANGUMUNA LUNKIESA MONTH PLACEHOLDER
- 10F6D KIMBANGUMUNA SENZA KIAMASANZA MONTH PLACEHOLDER
- 10F6E KIMBANGUMUNA MBANGALA MONTH PLACEHOLDER
- 10F6F KIMBANGUMUNA KUMPUA MONTH PLACEHOLDER
- 10F70 KIMBANGUMUNA VILA MONTH PLACEHOLDER
- 10F71 KIMBANGUMUNA AKUNDE MONTH PLACEHOLDER
- 10F72 KIMBANGUMUNA KUNDI MONTH PLACEHOLDER
- 10F73 KIMBANGUMUNA KUNDI KIANENE MONTH PLACEHOLDER
- 10F74 KIMBANGUMUNA MVUALA VELELA BASIC
- it is an empty box
- 10F75 (reserved)
- 10F76 (reserved)
- 10F77 (reserved)
- 10F78 (reserved)
- 10F79 (reserved)

10F7A	(reserved)
10F7B	(reserved)
10F7C	(reserved)
10F7D	(reserved)
10F7E	(reserved)
10F7F	(reserved)

	10F0	10F1	10F2	10F3	10F4	10F5	10F6	10F7
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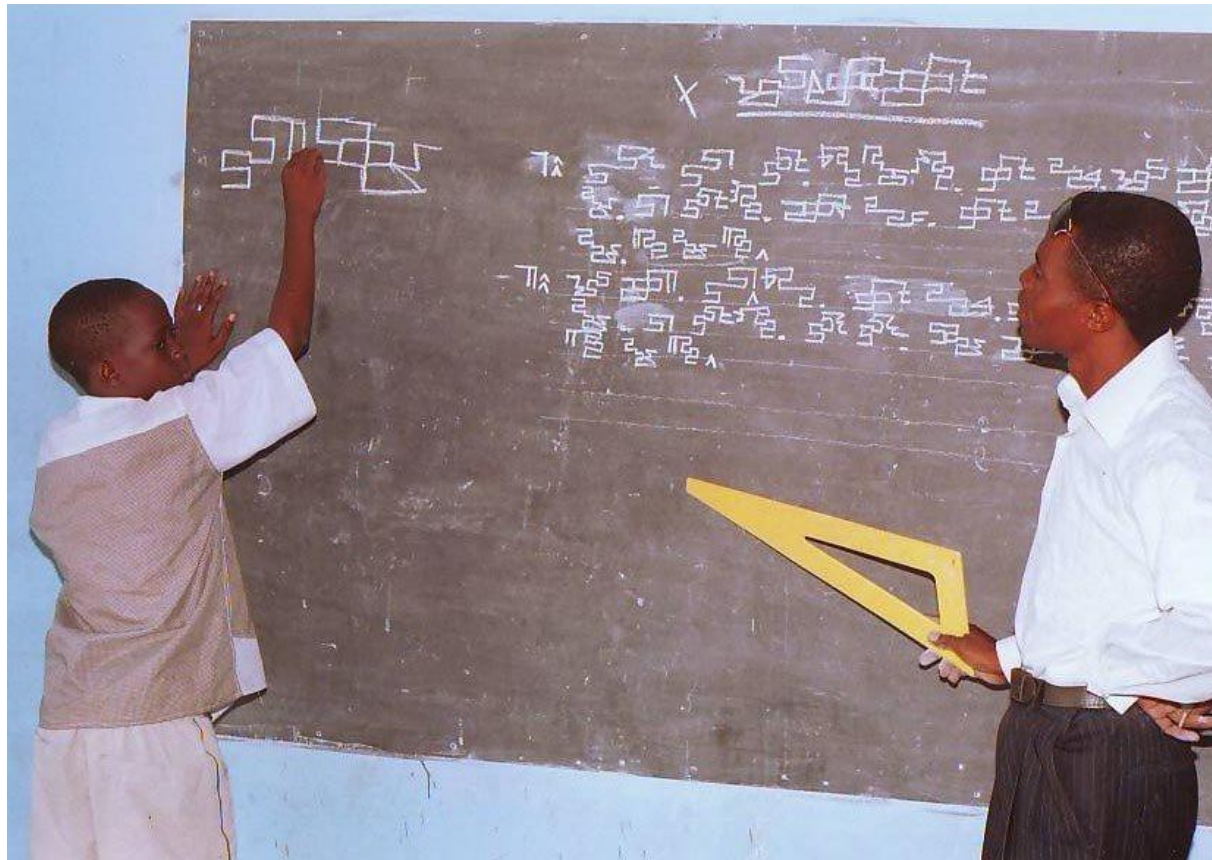


Figure 7: Mandombe class (source: Script Mandombe at Facebook, 30 December 2013)