

Proposal for encoding the Masaba script in the UCS

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To: Script Encoding Working Group (SEWG) / Unicode Technical Committee (UTC)

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General Overview:

We propose the addition of the Masaba script into the Unicode Standard. The script was created in 1930 to write the Bambara language of Mali. 4 official Letters of Request for the encoding of the Masaba script are attached to the end of this document from the General Director, and Secretary General of the Malian Academy of Languages; the President of the Masaba Association, and the President of the Malian National Languages Friends' Club.

We write on some specific aspects surrounding the history of this script as there has been very little publishing done on the script, therefore we take this opportunity to elucidate on crucial points.

Introduction, History and Use

Masaba is a syllabic script used to write the Bambara language (*ISO 639-3: bam*), the largest lingua franca and official language of Mali, spoken by ~15 million people in total. Bambara can also be considered a variety of the Manding language, spoken in various varieties throughout different West African countries (e.g., Mandinka in Gambia, Maninka in Guinea and Mali, Jula/Dyula in Ivory Coast and Burkina Faso, in addition to Bambara in Mali).

The Masaba script was created in 1930 by *three people*: Woyo Couloubayi (born: ~1910, died: 1982), who is the most well-known contributor, and two others. The three were Bambara-Masasi of Assatiémala, Kayes Region, Mali. Woyo Couloubayi stated that the script came to him during a night of deep reflection. He did not have any knowledge of other West African writing systems (e.g., Vai, Bamum, Mende). Similar to many other West African script inventors, Couloubayi was a Muslim and was aware of writing in the form of the Arabic script. It is not known whether or not he was aware of the Latin script; while Mali was colonized by France, Assatiémala is a relatively remote part of the country. He was illiterate in Arabic and French at the time of creating the Masaba script, but later learned them orally.

The Masasi people ("*masasi*" meaning '*seeds of the royalty*') from Kaarta¹ are originally from Ségou in south-central modern-day Mali where the Couloubayi/Coulibaly dynasty ruled a small kingdom of Bambara people before founding the much more centralized Bamana Empire, also known as the Bambara Empire or Ségou Empire, from 1640-1861. The name of the script, "Masaba", does not come

¹ <http://rulers.org/malitrad.html>

from the word “Masasi”, rather it means “three people” (Bambara: *ma* (three) *saba* (persons)), referring to its three creators. Furthermore, ‘*ma*’, ‘*sa*’, and ‘*ba*’ are the first three graphemes learned by students in the conventional recitation order of Masaba.

Other notable people present around the first era of Masaba’s use include Lamine Konate and Tapa Coulibaly. While Galtier, Gérard (1987) states that Lamine Konate helped Woyo Coulobayi perfect the Masaba script, elders of Assatiémala say that Lamine Konate was a scholar of Masaba, but are not sure if he helped create the script. Galtier also states that Tapa Coulibaly was a pupil of Lamine Konate, while the elders of Assatiémala say that he was taught by Woyo Coulobayi. Regardless, Tapa Coulibaly became a master of the script. He encouraged the people of Assatiémala, Dyabé, Ségala, Sérédji, Koronga, and neighboring villages to learn Masaba. Assatiémala remained the learning center of Masaba and had the highest density of users.

The script was used for tax and debt documentation, calculations, and personal correspondences. Another reason Masaba was created was because there was no formal school in the area. Children would be selected by the regional administration to attend a distant French colonial school even if it was against the wishes of the parents. As most people could not read French, they would have to travel to distant villages to find someone to read their children’s letters sent back from the faraway colonial school. After Masaba’s creation, letters were written in the new script and communication could be enjoyed. The learning of Masaba became even more popular after the passing of Woyo Coulobayi.

Galtier suggested, similarly, that the creation of Masaba was stimulated by a desire for political independence among the Masasi people. Coulobayi and other Masasi of Assatiémala were members of the Hamallaya order, a Sufi sect associated with anti-colonial struggle. In the late 1970s, the local government of Sandaré district raised a bi-scriptal banner decorated in both the Masaba and Latin scripts in celebration of Mali’s Independence Day.

Today, Bambara is mostly written either in the Nko script or the Latin script in Mali. The majority of Masaba script users primarily reside in Assatiémala. There is a Masaba Association (Bambara: *Masaba-Tòn*) in Assatiémala and it was created by Oumarou Coulibaly, who is also the association’s President. After communicating with him, the association’s Secretary for External Relations, Masaba elders, and Seydou Traoré - the Secretary General of the Malian Academy of Languages - it became clear that they all desire Masaba to be encoded into Unicode to serve the community’s continuous use of the script. While the script has been preserved for a century through continuous use in daily life, it is critically endangered with only a few dozen fully literate people today. Just prior to 2023-2024, a few elders in the region that only used the Masaba script, and no other script, throughout their lives have passed away. Despite this, informal schooling of the script has continued from 1930 until today.

A computer font and computer keyboard for the Masaba script have been created and can be downloaded at: <https://github.com/oyousuf/unicode/tree/main/Masaba>.

Script Name

The proposed script name is “MASABA”, which is used by the user community. There is no alternate.

General Structure

The Masaba script is a syllabary which is written left to right in horizontal lines, from the top of a page to the bottom of a page. There are 125 syllabic graphemes as seen in full in Table 1. There are 7 vowels, /ɪ e ε a ɔ o u/, and 20 consonants. Some consonant+vowel combinations (syllables) do not in the Masaba script (as seen in Table 1). There are 7 diacritics in Masaba that are used for nasality, tone, and vowel length. Galtier, Gérard (1987) only reported on 3 diacritics – 4 more were invented after Gérard Galtier’s visit to the region.

It is worth noting that there has been scholarly interest and discussion on the similarities between some glyphs in the Masaba inventory and with some in Vai, Bambara ideograms, cryptographic alphabets of the Hodh in the south-east of modern-day Mauritania, and others (Dolby, 1968; Monteil, 1951; Monod, 1938; see Figures 49-50). Whether these were inspired by shared and ancient ideograms is yet to be determined, however, encoding of the Masaba script will help facilitate this research.

The following is the full Masaba syllabary:

<Latin> /IPA/	<i> /i/	<e> /e/	<ε> /ε/	<a> /a/	<ɔ> /ɔ/	<o> /o/	<u> /u/
-							
<p> /p/							
<t> /t/							
<c> /tʃ/							
<k> /k/							
 /b/							
<d> /d/							
<j> /dʒ/							

<g> /g/							
<f> /f/							
<s> /s/							
<nz> /z/							
<m> /m/							
<n> /n/							
<ɲ> /ɲ/							
<ŋ> /ŋ/							
<y> /j/							
<w> /w/							
<h> /h/							
<l> /l/							
<r> /r/							

Table 1: Chart of all Masaba syllabic graphemes/letters. Empty boxes represent lack of a particular syllabic grapheme in Masaba. /ɲ/ is sometimes written as <ny> in the Latin script. Additionally, following the 1966 Bamako spelling conventions, a nasal velar glide /ŋ/ is to be written as <ɲ>, although in early publications it was often transcribed as “ng” or “nk”.

Prior to 1987, the syllables /u/ and /wu/ used the same grapheme <|>; and the syllables /o/ and /go/ used the same grapheme <⊙>. Later, /wu/ changed to <⊙|> and /go/ changed to <⊙⊙> (see Figures 22-24, and 27).


Punctuation and Numerals/Digits

Spacing between words were not used in handwriting when the script was first created and continues to mostly not be used. Latin-script punctuation (e.g., periods, commas, etc.) is used, and there are no Masaba script-specific punctuation marks.

There are no Masaba script-specific numerals/digits. Hindu-Arabic numerals/digits are used (see Figures 3-5, 7-8, 16, 18, and 20).

Diacritics

There are 7 diacritics in Masaba. While Galtier (1987) noted only 3 diacritics, 4 more were created and have been used in the region since Galtier's 1987 publication.

1. A small right angle, , to the top right of an /i/ vowel grapheme adds nasality to the end of the syllable. This diacritic can only be attached to an /i/ syllable. See Figures 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 11.1, 12.1, 32-33, and 41 for examples.







































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 → 	pi → pin	 → 	gi → gin	 → 	wi → win
 → 	ti → tin	 → 	fi → fin	 → 	hi → hin
 → 	ci → cin	 → 	si → sin	 → 	li → lin
 → 	ki → kin	 → 	mi → min	 → 	ri → rin
 → 	bi → bin	 → 	ni → nin		
 → 	di → din	 → 	ni → nin		

Table 2: All possible uses of the /i/ vowel nasality diacritic.

2. A small loop/knot, \circ^α , to the top right of an /e/ or /ε/ vowel grapheme adds nasality to the end of the syllable. This diacritic can only be attached to an /e/ or /ε/ syllable. See Figures 2.1, 3.1, 4.1, 5.1, 6.1, 8.1, 17-20, and 21.1 for examples.


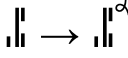

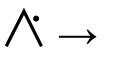

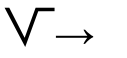

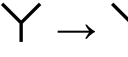

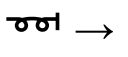

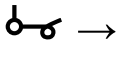

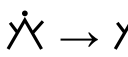

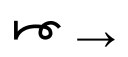

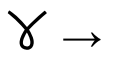

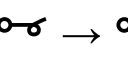

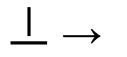

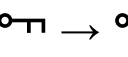

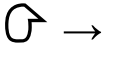
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 → 	te → ten	 → 	je → jen	 → 	le → len
 → 	ce → cen	 → 	ge → gen	 → 	re → ren
 → 	ke → ken	 → 	fe → fen		
 → 	be → ben	 → 	se → sen		

Table 3.1 Uses of the e/ε vowel nasality diacritic for /e/ vowel graphemes/letters.


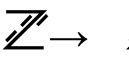

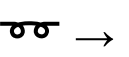

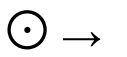

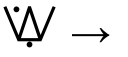

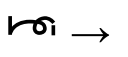

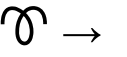

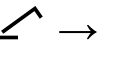

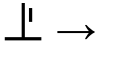

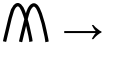

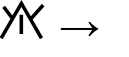

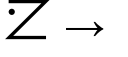

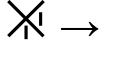

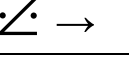

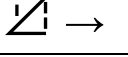

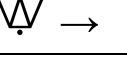

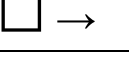

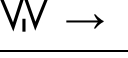

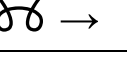

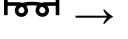

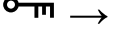

 → 	ε → εn	 → 	je → jen	 → 	nyε → nyεn
 → 	pε → pεn	 → 	ge → gεn	 → 	yε → yεn
 → 	tε → tεn	 → 	fε → fεn	 → 	wε → wεn
 → 	cε → cεn	 → 	sε → sεn	 → 	hε → hεn
 → 	kε → kεn	 → 	nze → nzen	 → 	lε → lεn
 → 	bε → bεn	 → 	mε → mεn	 → 	rε → rεn
 → 	dε → dεn	 → 	nε → nεn		

Table 3.2 Uses of the e/ε vowel nasality diacritic for /ε/ vowel graphemes/letters.

3. A vertical dash, , to the top left of an /a/ vowel grapheme adds nasality to the end of the syllable.

This diacritic can only be attached to an /a/ syllable. See Figures 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 8.1, 10.1, 11.1, 12.1, 14, 16, 29-30, 36, 42, 45-46, and 48 for examples.












































 → 	a → an	 → 	ja → jan	 → 	na → nan
 → 	pa → pan	 → 	ga → gan	 → 	nja → nan
 → 	ta → tan	 → 	fa → fan	 → 	ya → yan
 → 	ca → can	 → 	sa → san	 → 	wa → wan
 → 	ka → kan	 → 	nza → nzan	 → 	ha → han
 → 	ba → ban	 → 	ma → man	 → 	la → lan
 → 	da → dan	 → 	na → nan	 → 	ra → ran

Table 4: All possible uses of the /a/ vowel nasality diacritic.

4. A horizontal line, , above an /a/ vowel grapheme indicates length of the syllable and adds full modulation of the syllable. This diacritic can only be attached to an /a/ syllable. See Figures 2.1, 8.1, 19-20, 30, 39, and 48 for examples.











































 → 	a → ä	 → 	ja → jä	 → 	na → nä
 → 	pa → pä	 → 	ga → gä	 → 	nja → nä
 → 	ta → tä	 → 	fa → fä	 → 	ya → yä
 → 	ca → cä	 → 	sa → sä	 → 	wa → wä
 → 	ka → kä	 → 	nza → zä	 → 	ha → hä
 → 	ba → bä	 → 	ma → mä	 → 	la → lä
 → 	da → dä	 → 	na → nä	 → 	ra → rä

Table 5: All possible uses of the /a/ vowel modulator diacritic.

5. A small circle, $\overset{\circ}{}$, to the top right of an /o/ or /ɔ/ vowel grapheme indicates brevity/shortness of the syllable and a high tone. This diacritic is mainly attached to /o/ syllables. But it is also attached to /ɔ/ syllables that do not have /o/ counterparts. For example, the ‘p’ and ‘b’ row of syllables in Table 1 have /pɔ/ and /bɔ/, but do not have /po/ and /bo/, so this diacritic is placed on /pɔ/ and /bɔ/. However, the ‘t’ and ‘c’ row of syllables in Table 1 **do** have /to/ and /co/, therefore, the diacritic would be placed on these syllables instead of /tɔ/ and /cɔ/. The consonants that do not have an /o/ counterpart are ‘p’, ‘b’, ‘m’, ‘n’, ‘ŋ’, and ‘ŋ’. See Figures 2.1, 3.1, 4.1, 5.1, 6.1, 8.1, 10.1, 12.1-13, and 37 for examples.



























 → 	o → ó	 → 	jo → jó	 → 	wo → wó
 → 	to → tó	 → 	go → gó	 → 	lo → ló
 → 	co → có	 → 	fo → fó	 → 	ro → ró
 → 	ko → kó	 → 	so → só		
 → 	do → dó	 → 	yo → yó		

Table 6.1: Uses of the high tone diacritic for the /o/ syllables.













 → 	pɔ → pɔ́	 → 	mɔ → mɔ́	 → 	ŋɔ → ŋɔ́
 → 	bɔ → bɔ́	 → 	nɔ → nɔ́	 → 	ŋɔ → ŋɔ́

Table 6.2: Uses of the high tone diacritic for the /ɔ/ syllables. Table 6.1 and Table 6.2 show all possible uses for this diacritic.

6. An arc, $\overset{\circ}{}$, at the bottom right of the grapheme indicates nasality. Similar to $\overset{\circ}{}$, this diacritic is mainly attached to /o/ syllables. But it is also attached to /ɔ/ syllables that do not have /o/ counterparts (i.e., /pɔ/, /bɔ/, etc.). See Figures 31, 38, and 48 for examples.



























 → 	o → on	 → 	jo → jon	 → 	wo → won
 → 	to → ton	 → 	go → gon	 → 	lo → lon
 → 	co → con	 → 	fo → fon	 → 	ro → ron
 → 	ko → kon	 → 	so → son		
 → 	do → don	 → 	yo → yon		

Table 7.1: Uses of the nasality diacritic for the /o/ syllables.

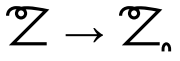
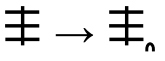
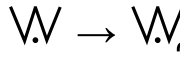
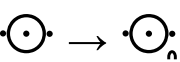
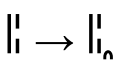
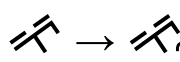

	pa → pa _n		pe → pe _n		pa → pa _n
	ba → ba _n		bi → bi _n		ba → ba _n

Table 7.2: Uses of the nasality diacritic for the ba syllables. Table 7.1 and Table 7.2 show all possible uses for this diacritic.

7. An oval with a rightward tail, , on top of the /u/ vowel grapheme adds nasality to the end of the syllable. This diacritic can only be attached to a /u/ syllable. See Figures 2.1, 4.1, 5.1, 7.1, 8.1, 12.1, 14, 16-18, 34, and 40 for examples.


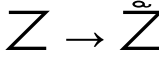
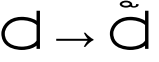
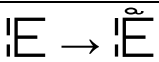
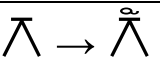
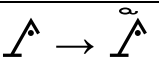
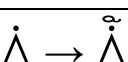
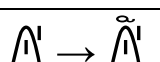
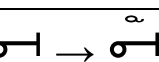
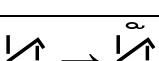
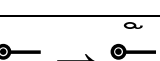
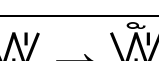
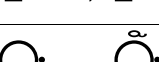
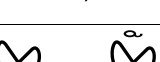
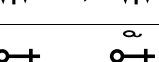
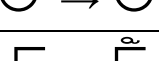
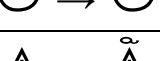
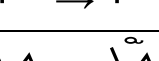
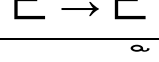
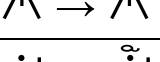




	u → un		ju → jun		ɲu → ɲun
	pu → pun		gu → gun		yu → yun
	tu → tun		fu → fun		wu → wun
	cu → cun		su → sun		hu → hun
	ku → kun		mu → mun		lu → lun
	bu → bun		nu → nun		ru → run
	du → dun		ɲu → ɲun		























Table 8: All possible uses of the /u/ vowel nasality diacritic.

You cannot have more than 1 diacritic on a single grapheme/letter.























Character Repertoire























There are 132 characters to be encoded (125 Masaba syllabic letters/graphemes and 7 diacritics).

Character	Unicode Name
	U+1X000 MASABA SYLLABLE MA
	U+1X001 MASABA SYLLABLE SA
	U+1X002 MASABA SYLLABLE BA
	U+1X003 MASABA SYLLABLE JA

	U+1X004 MASABA SYLLABLE MU
	U+1X005 MASABA SYLLABLE JA
	U+1X006 MASABA SYLLABLE NI
	U+1X007 MASABA SYLLABLE KU
	U+1X008 MASABA SYLLABLE LI
	U+1X009 MASABA SYLLABLE SU
	U+1X00A MASABA SYLLABLE WA
	U+1X00B MASABA SYLLABLE MA
	U+1X00C MASABA SYLLABLE DA
	U+1X00D MASABA SYLLABLE SI
	U+1X00E MASABA SYLLABLE KO
	U+1X00F MASABA SYLLABLE FO
	U+1X010 MASABA SYLLABLE CI
	U+1X011 MASABA SYLLABLE BU
	U+1X012 MASABA SYLLABLE DOO
	U+1X013 MASABA SYLLABLE YI
	U+1X014 MASABA SYLLABLE RI
	U+1X015 MASABA SYLLABLE RE
	U+1X016 MASABA SYLLABLE HA
	U+1X017 MASABA SYLLABLE NYA
	U+1X018 MASABA SYLLABLE LA
	U+1X019 MASABA SYLLABLE NGU

√	U+1X01A MASABA SYLLABLE YEE
⊖	U+1X01B MASABA SYLLABLE GI
┆	U+1X01C MASABA SYLLABLE FEE
‡	U+1X01D MASABA SYLLABLE MI
ṙ	U+1X01E MASABA SYLLABLE JEE
ṙ	U+1X01F MASABA SYLLABLE GE
⊖	U+1X020 MASABA SYLLABLE I
∇	U+1X021 MASABA SYLLABLE DO
⊖	U+1X022 MASABA SYLLABLE KI
⋈	U+1X023 MASABA SYLLABLE CEE
∩	U+1X024 MASABA SYLLABLE KA
⊙	U+1X025 MASABA SYLLABLE BO
⋈	U+1X026 MASABA SYLLABLE NA
⊙	U+1X027 MASABA SYLLABLE FI
⊙	U+1X028 MASABA SYLLABLE YA
┆	U+1X029 MASABA SYLLABLE FA
⇒	U+1X02A MASABA SYLLABLE GO
∩	U+1X02B MASABA SYLLABLE SE
∩	U+1X02C MASABA SYLLABLE ME
∩	U+1X02D MASABA SYLLABLE A
⋈	U+1X02E MASABA SYLLABLE DU
┆	U+1X02F MASABA SYLLABLE NYI

	U+1X030 MASABA SYLLABLE GA
	U+1X031 MASABA SYLLABLE BE
	U+1X032 MASABA SYLLABLE BE
	U+1X033 MASABA SYLLABLE TI
	U+1X034 MASABA SYLLABLE O
	U+1X035 MASABA SYLLABLE TOO
	U+1X036 MASABA SYLLABLE NYA
	U+1X037 MASABA SYLLABLE WE
	U+1X038 MASABA SYLLABLE WOO
	U+1X039 MASABA SYLLABLE RA
	U+1X03A MASABA SYLLABLE LOO
	U+1X03B MASABA SYLLABLE E
	U+1X03C MASABA SYLLABLE HE
	U+1X03D MASABA SYLLABLE LEE
	U+1X03E MASABA SYLLABLE U
	U+1X03F MASABA SYLLABLE HI
	U+1X040 MASABA SYLLABLE NGA
	U+1X041 MASABA SYLLABLE NO
	U+1X042 MASABA SYLLABLE MO
	U+1X043 MASABA SYLLABLE SO
	U+1X044 MASABA SYLLABLE FE
	U+1X045 MASABA SYLLABLE DEE

	U+1X046 MASABA SYLLABLE NGO
	U+1X047 MASABA SYLLABLE OO
	U+1X048 MASABA SYLLABLE FU
	U+1X049 MASABA SYLLABLE SOO
	U+1X04A MASABA SYLLABLE NYO
	U+1X04B MASABA SYLLABLE LO
	U+1X04C MASABA SYLLABLE RU
	U+1X04D MASABA SYLLABLE PA
	U+1X04E MASABA SYLLABLE CO
	U+1X04F MASABA SYLLABLE SEE
	U+1X050 MASABA SYLLABLE KOO
	U+1X051 MASABA SYLLABLE CU
	U+1X052 MASABA SYLLABLE WO
	U+1X053 MASABA SYLLABLE YE
	U+1X054 MASABA SYLLABLE ROO
	U+1X055 MASABA SYLLABLE LU
	U+1X056 MASABA SYLLABLE NE
	U+1X057 MASABA SYLLABLE E
	U+1X058 MASABA SYLLABLE YO
	U+1X059 MASABA SYLLABLE RE
	U+1X05A MASABA SYLLABLE HU
	U+1X05B MASABA SYLLABLE DI

√ṽ	U+1X05C MASABA SYLLABLE YOO
⊙→	U+1X05D MASABA SYLLABLE GOO
×	U+1X05E MASABA SYLLABLE SO
∧	U+1X05F MASABA SYLLABLE GU
⊙=	U+1X060 MASABA SYLLABLE JOO
⊙π	U+1X061 MASABA SYLLABLE BEE
∇	U+1X062 MASABA SYLLABLE JO
↙	U+1X063 MASABA SYLLABLE TE
∧	U+1X064 MASABA SYLLABLE CA
Υ	U+1X065 MASABA SYLLABLE TEE
∧	U+1X066 MASABA SYLLABLE CE
∠	U+1X067 MASABA SYLLABLE KE
⊙	U+1X068 MASABA SYLLABLE DE
W	U+1X069 MASABA SYLLABLE BI
∧	U+1X06A MASABA SYLLABLE NU
∣	U+1X06B MASABA SYLLABLE FOO
∣	U+1X06C MASABA SYLLABLE NYU
⊙	U+1X06D MASABA SYLLABLE WI
↗	U+1X06E MASABA SYLLABLE YU
√.b	U+1X06F MASABA SYLLABLE TO
∧	U+1X070 MASABA SYLLABLE COO
Z	U+1X071 MASABA SYLLABLE JU

	U+1X072 MASABA SYLLABLE PI
	U+1X073 MASABA SYLLABLE PE
	U+1X074 MASABA SYLLABLE TU
	U+1X075 MASABA SYLLABLE PO
	U+1X076 MASABA SYLLABLE PU
	U+1X077 MASABA SYLLABLE GEE
	U+1X078 MASABA SYLLABLE JE
	U+1X079 MASABA SYLLABLE NZE
	U+1X07A MASABA SYLLABLE WU
	U+1X07B MASABA SYLLABLE LE
	U+1X07C MASABA SYLLABLE NZA
	U+1X07D MASABA I VOWEL NASALIZATION MARK
	U+1X07E MASABA E AND EE VOWEL NASALIZATION MARK
	U+1X07F MASABA A VOWEL NASALIZATION MARK
	U+1X080 MASABA A VOWEL LENGTHENER MARK
	U+1X081 MASABA O AND OO VOWEL HIGH TONE MARK
	U+1X082 MASABA O AND OO VOWEL NASALIZATION MARK
	U+1X083 MASABA U VOWEL NASALIZATION MARK

Table 9. Masaba script character repertoire.

General Category and other properties

```

U+1X000 MASABA SYLLABLE MA;Lo;0;L;;;;N;;;;;
U+1X001 MASABA SYLLABLE SA;Lo;0;L;;;;N;;;;;
U+1X002 MASABA SYLLABLE BA;Lo;0;L;;;;N;;;;;
U+1X003 MASABA SYLLABLE JI;Lo;0;L;;;;N;;;;;
U+1X004 MASABA SYLLABLE MU;Lo;0;L;;;;N;;;;;
U+1X005 MASABA SYLLABLE JA;Lo;0;L;;;;N;;;;;
U+1X006 MASABA SYLLABLE NI;Lo;0;L;;;;N;;;;;
U+1X007 MASABA SYLLABLE KU;Lo;0;L;;;;N;;;;;
U+1X008 MASABA SYLLABLE LI;Lo;0;L;;;;N;;;;;
U+1X009 MASABA SYLLABLE SU;Lo;0;L;;;;N;;;;;
U+1X00A MASABA SYLLABLE WA;Lo;0;L;;;;N;;;;;
U+1X00B MASABA SYLLABLE MA;Lo;0;L;;;;N;;;;;
U+1X00C MASABA SYLLABLE DA;Lo;0;L;;;;N;;;;;
U+1X00D MASABA SYLLABLE SI;Lo;0;L;;;;N;;;;;
U+1X00E MASABA SYLLABLE KO;Lo;0;L;;;;N;;;;;
U+1X00F MASABA SYLLABLE FO;Lo;0;L;;;;N;;;;;
U+1X010 MASABA SYLLABLE CI;Lo;0;L;;;;N;;;;;
U+1X011 MASABA SYLLABLE BU;Lo;0;L;;;;N;;;;;
U+1X012 MASABA SYLLABLE DOO;Lo;0;L;;;;N;;;;;
U+1X013 MASABA SYLLABLE YI;Lo;0;L;;;;N;;;;;
U+1X014 MASABA SYLLABLE RI;Lo;0;L;;;;N;;;;;
U+1X015 MASABA SYLLABLE RE;Lo;0;L;;;;N;;;;;
U+1X016 MASABA SYLLABLE HA;Lo;0;L;;;;N;;;;;
U+1X017 MASABA SYLLABLE NYA;Lo;0;L;;;;N;;;;;
U+1X018 MASABA SYLLABLE LA;Lo;0;L;;;;N;;;;;
U+1X019 MASABA SYLLABLE NGU;Lo;0;L;;;;N;;;;;
U+1X01A MASABA SYLLABLE YEE;Lo;0;L;;;;N;;;;;
U+1X01B MASABA SYLLABLE GI;Lo;0;L;;;;N;;;;;
U+1X01C MASABA SYLLABLE FEE;Lo;0;L;;;;N;;;;;
U+1X01D MASABA SYLLABLE MI;Lo;0;L;;;;N;;;;;
U+1X01E MASABA SYLLABLE JEE;Lo;0;L;;;;N;;;;;
U+1X01F MASABA SYLLABLE GE;Lo;0;L;;;;N;;;;;
U+1X020 MASABA SYLLABLE I;Lo;0;L;;;;N;;;;;
U+1X021 MASABA SYLLABLE DO;Lo;0;L;;;;N;;;;;
U+1X022 MASABA SYLLABLE KI;Lo;0;L;;;;N;;;;;
U+1X023 MASABA SYLLABLE CEE;Lo;0;L;;;;N;;;;;
U+1X024 MASABA SYLLABLE KA;Lo;0;L;;;;N;;;;;
U+1X025 MASABA SYLLABLE BO;Lo;0;L;;;;N;;;;;
U+1X026 MASABA SYLLABLE NA;Lo;0;L;;;;N;;;;;
U+1X027 MASABA SYLLABLE FI;Lo;0;L;;;;N;;;;;
U+1X028 MASABA SYLLABLE YA;Lo;0;L;;;;N;;;;;
U+1X029 MASABA SYLLABLE FA;Lo;0;L;;;;N;;;;;
U+1X02A MASABA SYLLABLE GO;Lo;0;L;;;;N;;;;;
U+1X02B MASABA SYLLABLE SE;Lo;0;L;;;;N;;;;;

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U+1X02C MASABA SYLLABLE ME;Lo;0;L;;;;;N;;;;;
U+1X02D MASABA SYLLABLE A;Lo;0;L;;;;;N;;;;;
U+1X02E MASABA SYLLABLE DU;Lo;0;L;;;;;N;;;;;
U+1X02F MASABA SYLLABLE NYI;Lo;0;L;;;;;N;;;;;
U+1X030 MASABA SYLLABLE GA;Lo;0;L;;;;;N;;;;;
U+1X031 MASABA SYLLABLE BE;Lo;0;L;;;;;N;;;;;
U+1X032 MASABA SYLLABLE BE;Lo;0;L;;;;;N;;;;;
U+1X033 MASABA SYLLABLE TI;Lo;0;L;;;;;N;;;;;
U+1X034 MASABA SYLLABLE O;Lo;0;L;;;;;N;;;;;
U+1X035 MASABA SYLLABLE TOO;Lo;0;L;;;;;N;;;;;
U+1X036 MASABA SYLLABLE NYA;Lo;0;L;;;;;N;;;;;
U+1X037 MASABA SYLLABLE WE;Lo;0;L;;;;;N;;;;;
U+1X038 MASABA SYLLABLE WOO;Lo;0;L;;;;;N;;;;;
U+1X039 MASABA SYLLABLE RA;Lo;0;L;;;;;N;;;;;
U+1X03A MASABA SYLLABLE LOO;Lo;0;L;;;;;N;;;;;
U+1X03B MASABA SYLLABLE E;Lo;0;L;;;;;N;;;;;
U+1X03C MASABA SYLLABLE HE;Lo;0;L;;;;;N;;;;;
U+1X03D MASABA SYLLABLE LEE;Lo;0;L;;;;;N;;;;;
U+1X03E MASABA SYLLABLE U;Lo;0;L;;;;;N;;;;;
U+1X03F MASABA SYLLABLE HI;Lo;0;L;;;;;N;;;;;
U+1X040 MASABA SYLLABLE NGA;Lo;0;L;;;;;N;;;;;
U+1X041 MASABA SYLLABLE NO;Lo;0;L;;;;;N;;;;;
U+1X042 MASABA SYLLABLE MO;Lo;0;L;;;;;N;;;;;
U+1X043 MASABA SYLLABLE SO;Lo;0;L;;;;;N;;;;;
U+1X044 MASABA SYLLABLE FE;Lo;0;L;;;;;N;;;;;
U+1X045 MASABA SYLLABLE DEE;Lo;0;L;;;;;N;;;;;
U+1X046 MASABA SYLLABLE NGO;Lo;0;L;;;;;N;;;;;
U+1X047 MASABA SYLLABLE OO;Lo;0;L;;;;;N;;;;;
U+1X048 MASABA SYLLABLE FU;Lo;0;L;;;;;N;;;;;
U+1X049 MASABA SYLLABLE SOO;Lo;0;L;;;;;N;;;;;
U+1X04A MASABA SYLLABLE NYO;Lo;0;L;;;;;N;;;;;
U+1X04B MASABA SYLLABLE LO;Lo;0;L;;;;;N;;;;;
U+1X04C MASABA SYLLABLE RU;Lo;0;L;;;;;N;;;;;
U+1X04D MASABA SYLLABLE PA;Lo;0;L;;;;;N;;;;;
U+1X04E MASABA SYLLABLE CO;Lo;0;L;;;;;N;;;;;
U+1X04F MASABA SYLLABLE SEE;Lo;0;L;;;;;N;;;;;
U+1X050 MASABA SYLLABLE KOO;Lo;0;L;;;;;N;;;;;
U+1X051 MASABA SYLLABLE CU;Lo;0;L;;;;;N;;;;;
U+1X052 MASABA SYLLABLE WO;Lo;0;L;;;;;N;;;;;
U+1X053 MASABA SYLLABLE YE;Lo;0;L;;;;;N;;;;;
U+1X054 MASABA SYLLABLE ROO;Lo;0;L;;;;;N;;;;;
U+1X055 MASABA SYLLABLE LU;Lo;0;L;;;;;N;;;;;
U+1X056 MASABA SYLLABLE NE;Lo;0;L;;;;;N;;;;;
U+1X057 MASABA SYLLABLE E;Lo;0;L;;;;;N;;;;;
U+1X058 MASABA SYLLABLE YO;Lo;0;L;;;;;N;;;;;
U+1X059 MASABA SYLLABLE RE;Lo;0;L;;;;;N;;;;;

U+1X05A MASABA SYLLABLE HU;Lo;0;L;;;;;N;;;;;
 U+1X05B MASABA SYLLABLE DI;Lo;0;L;;;;;N;;;;;
 U+1X05C MASABA SYLLABLE YOO;Lo;0;L;;;;;N;;;;;
 U+1X05D MASABA SYLLABLE GOO;Lo;0;L;;;;;N;;;;;
 U+1X05E MASABA SYLLABLE SO;Lo;0;L;;;;;N;;;;;
 U+1X05F MASABA SYLLABLE GU;Lo;0;L;;;;;N;;;;;
 U+1X060 MASABA SYLLABLE JOO;Lo;0;L;;;;;N;;;;;
 U+1X061 MASABA SYLLABLE BEE;Lo;0;L;;;;;N;;;;;
 U+1X062 MASABA SYLLABLE JO;Lo;0;L;;;;;N;;;;;
 U+1X063 MASABA SYLLABLE TE;Lo;0;L;;;;;N;;;;;
 U+1X064 MASABA SYLLABLE CA;Lo;0;L;;;;;N;;;;;
 U+1X065 MASABA SYLLABLE TEE;Lo;0;L;;;;;N;;;;;
 U+1X066 MASABA SYLLABLE CE;Lo;0;L;;;;;N;;;;;
 U+1X067 MASABA SYLLABLE KE;Lo;0;L;;;;;N;;;;;
 U+1X068 MASABA SYLLABLE DE;Lo;0;L;;;;;N;;;;;
 U+1X069 MASABA SYLLABLE BI;Lo;0;L;;;;;N;;;;;
 U+1X06A MASABA SYLLABLE NU;Lo;0;L;;;;;N;;;;;
 U+1X06B MASABA SYLLABLE FOO;Lo;0;L;;;;;N;;;;;
 U+1X06C MASABA SYLLABLE NYU;Lo;0;L;;;;;N;;;;;
 U+1X06D MASABA SYLLABLE WI;Lo;0;L;;;;;N;;;;;
 U+1X06E MASABA SYLLABLE YU;Lo;0;L;;;;;N;;;;;
 U+1X06F MASABA SYLLABLE TO;Lo;0;L;;;;;N;;;;;
 U+1X070 MASABA SYLLABLE COO;Lo;0;L;;;;;N;;;;;
 U+1X071 MASABA SYLLABLE JU;Lo;0;L;;;;;N;;;;;
 U+1X072 MASABA SYLLABLE PI;Lo;0;L;;;;;N;;;;;
 U+1X073 MASABA SYLLABLE PE;Lo;0;L;;;;;N;;;;;
 U+1X074 MASABA SYLLABLE TU;Lo;0;L;;;;;N;;;;;
 U+1X075 MASABA SYLLABLE PO;Lo;0;L;;;;;N;;;;;
 U+1X076 MASABA SYLLABLE PU;Lo;0;L;;;;;N;;;;;
 U+1X077 MASABA SYLLABLE GEE;Lo;0;L;;;;;N;;;;;
 U+1X078 MASABA SYLLABLE JE;Lo;0;L;;;;;N;;;;;
 U+1X079 MASABA SYLLABLE NZE;Lo;0;L;;;;;N;;;;;
 U+1X07A MASABA SYLLABLE WU;Lo;0;L;;;;;N;;;;;
 U+1X07B MASABA SYLLABLE LE;Lo;0;L;;;;;N;;;;;
 U+1X07C MASABA SYLLABLE NZA;Lo;0;L;;;;;N;;;;;
 U+1X07D MASABA I VOWEL NASALIZATION MARK;Mn;232;NSM;;;;;N;;;;;
 U+1X07E MASABA E AND EE VOWEL NASALIZATION MARK;Mn;232;NSM;;;;;N;;;;;
 U+1X07F MASABA A VOWEL NASALIZATION MARK;Mn;228;NSM;;;;;N;;;;;
 U+1X080 MASABA A VOWEL LENGTHENER MARK;Mn;230;NSM;;;;;N;;;;;
 U+1X081 MASABA O AND OO VOWEL HIGH TONE MARK;Mn;232;NSM;;;;;N;;;;;
 U+1X082 MASABA O AND OO VOWEL NASALIZATION MARK;Mn;222;NSM;;;;;N;;;;;
 U+1X083 MASABA U VOWEL NASALIZATION MARK;Mn;230;NSM;;;;;N;;;;;

Table 10. Masaba script Properties

Chart

	U+1X00	U+1X01	U+1X02	U+1X03	U+1X04	U+1X05	U+1X06	U+1X07	U+1X08
0	⊖	⊕	⊗	⊘	⊙	⊚	⊛	⊜	⊝
1	⊞	⊟	⊠	⊡	⊢	⊣	⊤	⊥	⊦
2	⊧	⊨	⊩	⊪	⊫	⊬	⊭	⊮	⊯
3	⊰	⊱	⊲	⊳	⊴	⊵	⊶	⊷	⊸
4	⊹	⊺	⊻	⊼	⊽	⊾	⊿	⊠	
5	⊡	⊢	⊣	⊤	⊥	⊦	⊧	⊨	
6	⊩	⊪	⊫	⊬	⊭	⊮	⊯	⊰	
7	⊱	⊲	⊳	⊴	⊵	⊶	⊷	⊸	
8	⊹	⊺	⊻	⊼	⊽	⊾	⊿	⊠	
9	⊡	⊢	⊣	⊤	⊥	⊦	⊧	⊨	
A	⊩	⊪	⊫	⊬	⊭	⊮	⊯	⊰	
B	⊱	⊲	⊳	⊴	⊵	⊶	⊷	⊸	
C	⊹	⊺	⊻	⊼	⊽	⊾	⊿	⊠	
D	⊡	⊢	⊣	⊤	⊥	⊦	⊧	⊨	
E	⊩	⊪	⊫	⊬	⊭	⊮	⊯	⊰	
F	⊱	⊲	⊳	⊴	⊵	⊶	⊷	⊸	

Miscellaneous

Masaba is most likely to occur with the Latin script. Past and current users of Masaba have not used nor learned the NKo script. However, there is still a chance Masaba could occur with the NKo script in material created by NKo users. There is a small possibility of Masaba occurring with the Arabic script as well, as the Masasi people are Muslim.

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3. Dalby, David, "the Indigenous scripts of West Africa", *African language studies*, Londres, 1967, vol. 8, pp. 1-51, 1968, vol. 9, pp. 156-197, 1969, vol. 10, pp. 161-181.
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6. Языки мира: Языки манде. — СПб. : Нестор-История, 2017. — 1152 с. — ISBN 978-5-4469-0824-0 (Google Translated: *Languages of the world: Mande languages. - St. Petersburg. : Nestor-History, 2017. - 1152 p. — ISBN 978-5-4469-0824-0*)
7. The page excerpts of the educational book in Figures 14-15, 17, and 19 were created by the proposal author as the user community does not have any computers. The text in the pages was written on paper by the user community (see Figures 16, 18, and 20) and the typed on the digital pages by the proposal author.
8. "[Version Française] 🇲🇱 CALAN-MALI : Le Club des Amis des Langues Nationales du Mali a célébré le jeudi 22 février 2024 à l'AMALAN , la journée mondiale de la langue maternelle ." Facebook, February 24, 2024. <https://www.facebook.com/watch/?v=945719303628563>
9. "CALAN-MALI : Le Club des Amis des Langues Nationales du Mali a célébré ce jeudi 22 février 2024 à l'AMALAN , la journée mondiale de la langue maternelle ." Facebook, February 23, 2024. <https://www.facebook.com/watch/?v=3414821655330962>
10. "Mali : l'avenir des écritures endogènes en question". YouTube, February 23, 2024. <https://www.youtube.com/watch?v=qSa0fLw0VVU>
11. "Mali : l'avenir des écritures endogènes en question" Facebook, February 23, 2024. <https://www.facebook.com/watch/?v=1000844718077978>

Acknowledgments

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This project was made possible in part by a grant from the Mellon Foundation to the Script Encoding Initiative at the University of California, Berkeley.

The image shows a page of handwritten text in the Masaba script, written on lined paper. The script consists of various symbols, including circles, squares, triangles, and lines, some of which are combined to form more complex characters. The text is arranged in approximately 25 horizontal lines. At the bottom of the page, there is a line of text that reads "W. NKO TIFINAG Y T", which appears to be a signature or a reference to a specific script or name. The handwriting is consistent throughout the page, and the lines are clearly defined.

Figure 2. Page 1 of a letter written in the Masaba script by Ourmarou “Kara” Coulibly recounting the events of the AMALAN event in Figure 1.

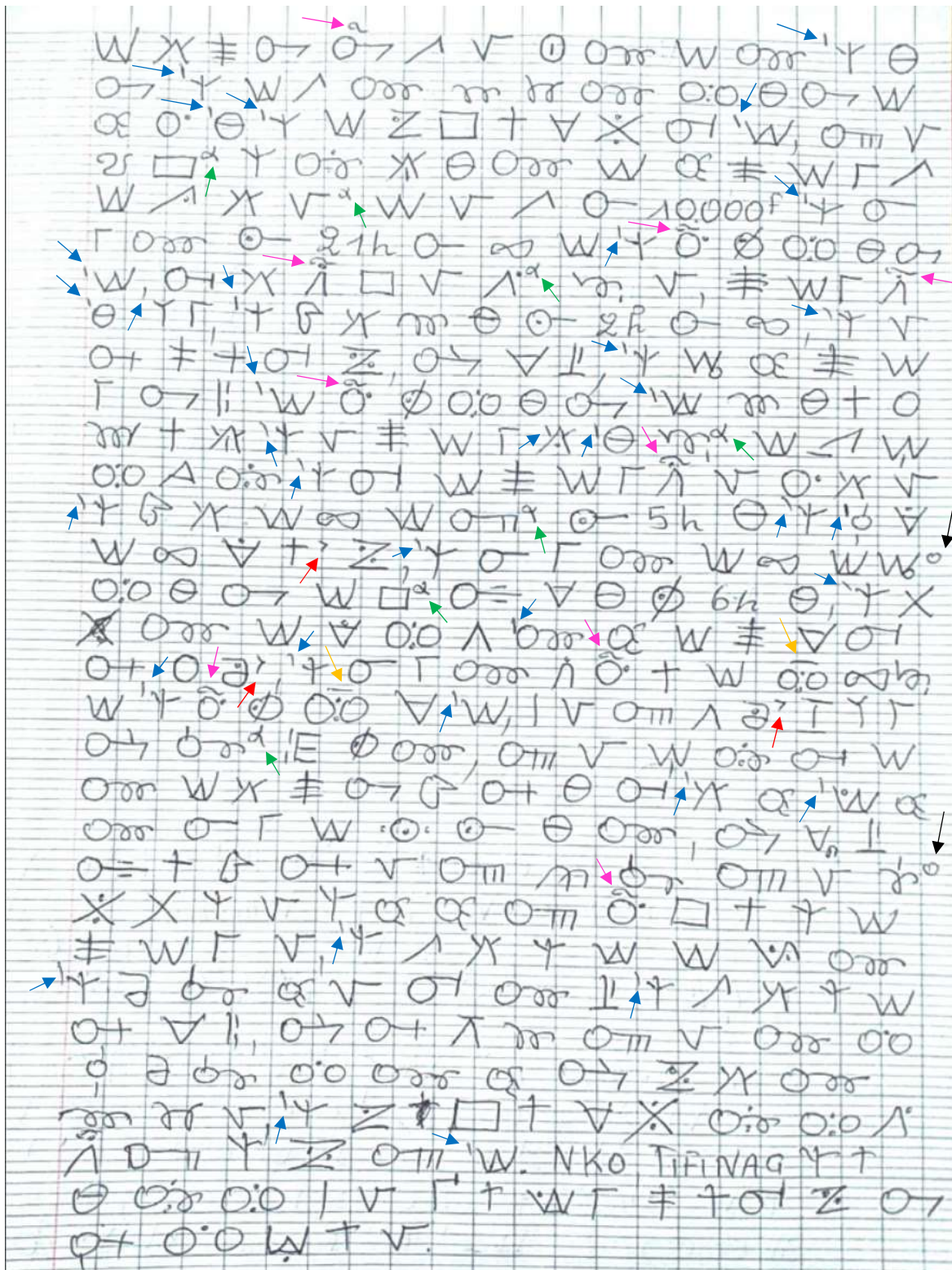


Figure 2.1. Edited version of Figure 2. Arrows: red = $\overset{\circ}{\circ}$ diacritic; green = $\overset{\circ}{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; orange = $\overset{\circ}{\circ}$ diacritic; black = $\overset{\circ}{\circ}$ diacritic (typo: $\phi+\overset{\circ}{\circ}$); pink = $\overset{\circ}{\circ}$ diacritic.

1. Y V W Z W W O T r r O T | V t'
2. Z O t V X t' A' O' O' r X X O W,
Z O (O) T, O W Z t', O O E Z
t'
3. T t t O T Z X I' W O, O: O X O T
Z X I' W O, O T T t t O T | O O X
O T Z X W O V Z Z t' O T O
4. O O O I O T O W Z W' O O O O T O
Z W T O O O E V O T O O O O
O, W A A O T O O O O O, O =
X, W O O A' O O T Y T W O O T O
X O Z O O
5. Y T, T X Z t' O T W W W O O,
O O O O I W O O Z O X O T O
O V O O A' V ||

O T V

O O t' W O O O t' W | T O W X
t' O O O V Y t' (AMALAN) O O X
Z O O O O W' V, O T O O
O t' | O T A O O Z Y t' X O T W A O
O O O
O T W O O T O V O T O T T O O ||
O W X t' O T | A O O O O W
X, O T V A' O T I r W O O O T V O
A' V, O T O O Y O O X O O O, Y O O
X O O O W A' O X O O, W V, O O

Figure 3. Page 2 of a letter written in the Masaba script by Ourmarou "Kara" Coulibly recounting the events of the AMALAN event in Figure 1.

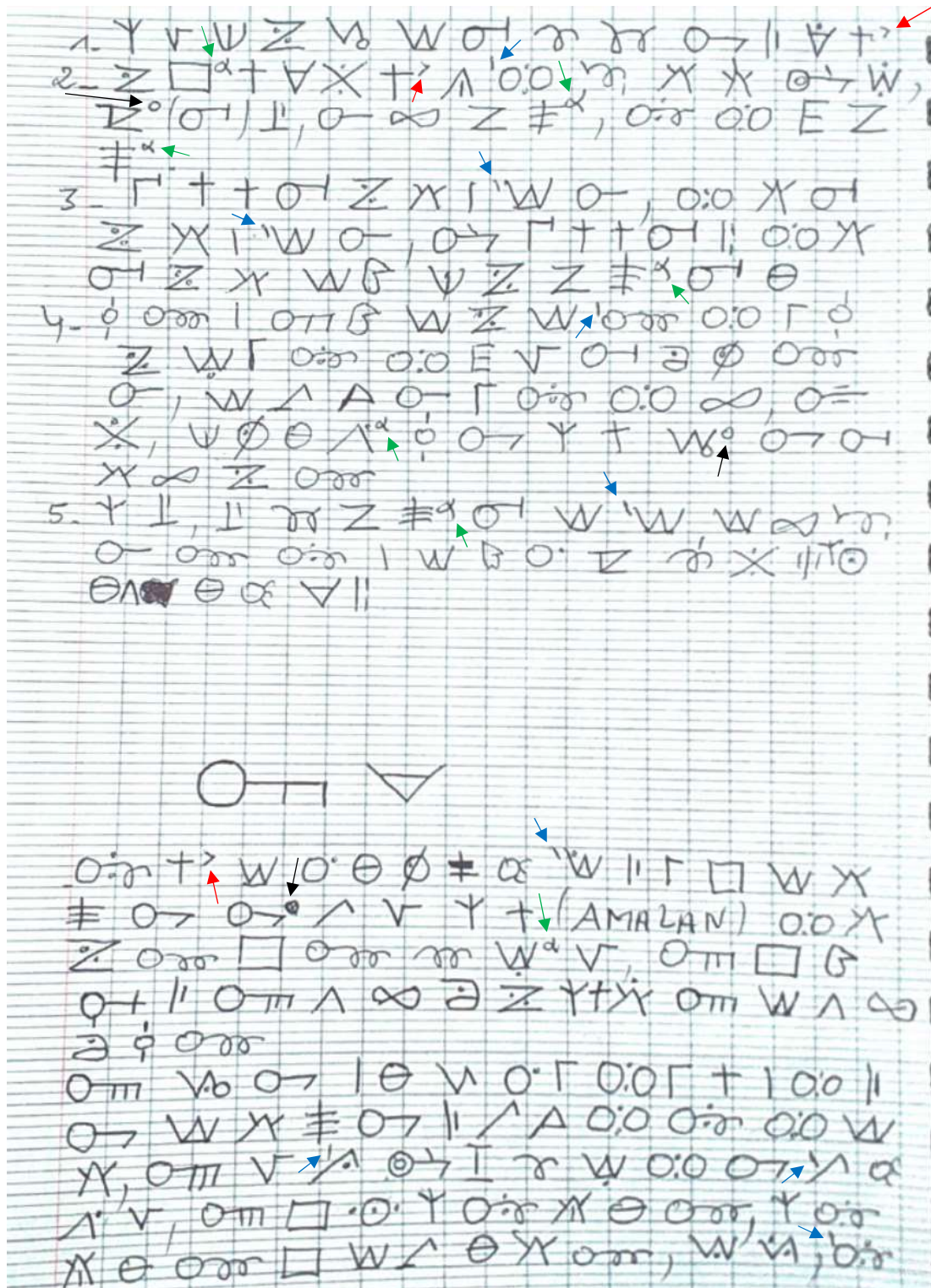


Figure 3.1. Edited version of Figure 3. Arrows: red = $\overset{\circ}{\circ}$ diacritic; green = $\overset{\alpha}{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; black = $\overset{\circ}{\nabla}$ diacritic (typo: $\nabla + \overset{\circ}{\circ}$).

Handwritten text in the Masaba script on a grid background. The text is arranged in approximately 25 horizontal lines. The script consists of various geometric symbols, including circles, triangles, squares, and lines, some of which are combined to form more complex characters. The text appears to be a personal letter or a record of events, as mentioned in the caption. The final line of the text includes the year '1982' and the age '(72 ans)'.

Figure 4. Page 3 of a letter written in the Masaba script by Ourmarou "Kara" Coulibly recounting the events of the AMALAN event in Figure 1.

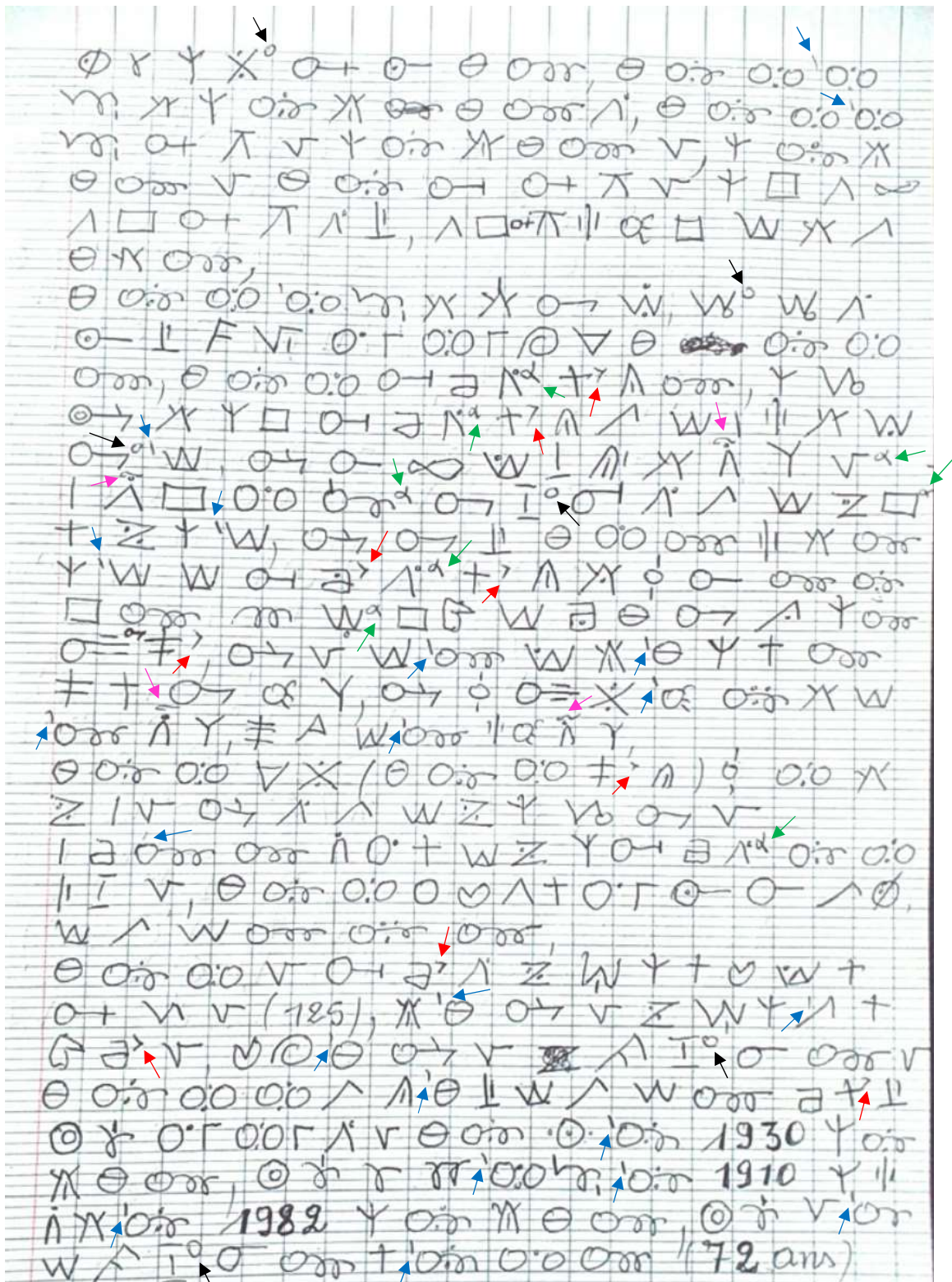


Figure 4.1. Edited version of Figure 4. Arrows: red = $\overset{\circ}{\circ}$ diacritic; green = $\overset{\circ}{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; ; black = $\overset{\circ}{\circ}$ diacritic (typo: $\times + \overset{\circ}{\circ}$); pink = $\overset{\circ}{\circ}$ diacritic.

Handwritten text in the Masaba script on lined paper. The text is dense and covers most of the page. It includes several lines of script, with some lines containing recognizable words or phrases in French, such as "Conseiller technique au ministère de la culture" and "linguiste à la DNFLA". The script is a complex, stylized form of writing.

Figure 5. Page 4 of a letter written in the Masaba script by Ourmarou "Kara" Coulibly recounting the events of the AMALAN event in Figure 1.

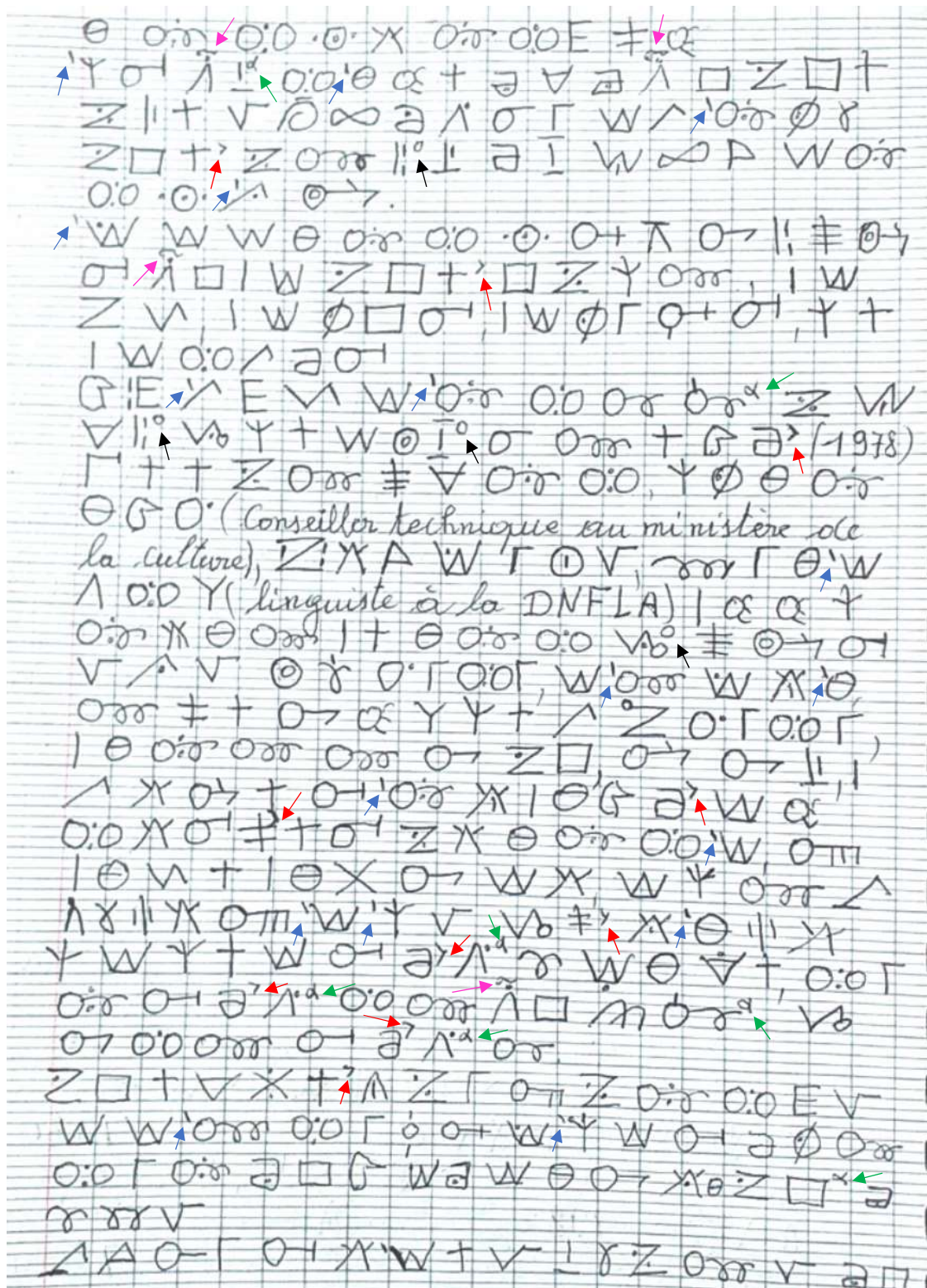


Figure 5.1. Edited version of Figure 5. Arrows: red = ◌̣ diacritic; green = ◌̤ diacritic; blue = ◌̥ diacritic; black = ◌̦ diacritic; pink = ◌̧ diacritic.

Handwritten text in the Masaba script on a grid background. The text is arranged in several lines, with some words in parentheses. The script uses various symbols, including letters, numbers, and special characters, to represent the Masaba language.

W a r r w z v t a w l y o i . o . y
o r w o = x a o f e v x r o
' y w f o t ' y w w o o o i x o z o r r
(Nko, TIFINAG, MASABA) t' v y w z o t x v
x o i v o o o w - a o t y w w o o v
x' y w o i a o o o r r
t' y o x w f a o y w w w y' o o' o' o' y
w z o t v x o i' w

Figure 6. Page 5 of a letter written in the Masaba script by Ourmarou “Kara” Coulibly recounting the events of the AMALAN event in Figure 1.

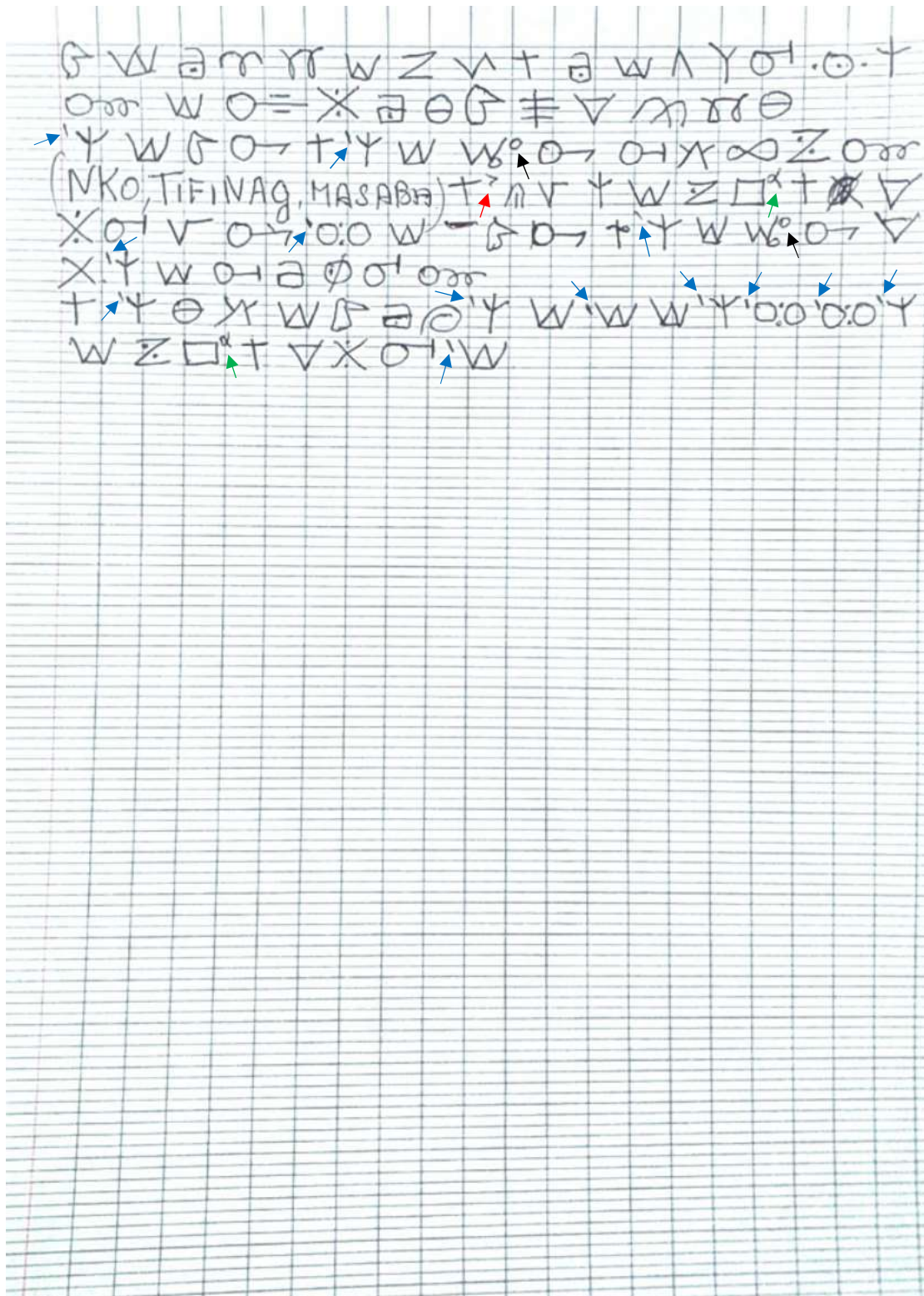


Figure 6.1. Edited version of Figure 6. Arrows: red = $\overset{\circ}{\circ}$ diacritic; green = $\overset{\circ}{\circ}^{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; black = $\overset{\circ}{\circ}$ diacritic.

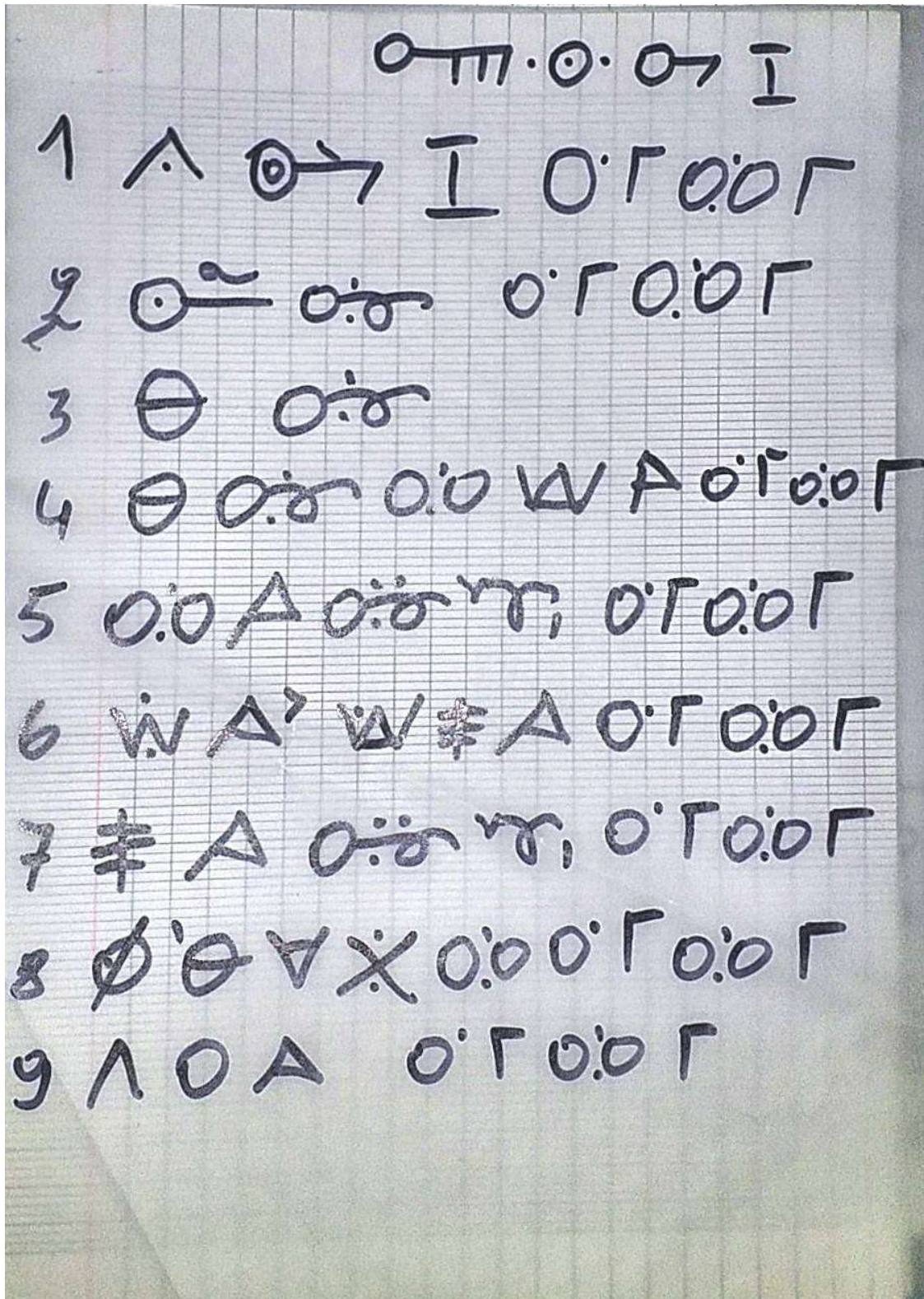


Figure 7. A genealogy of Oumarou "Kara" Coulibaly, president of the Masaba Association in Assatiémala, Mali.

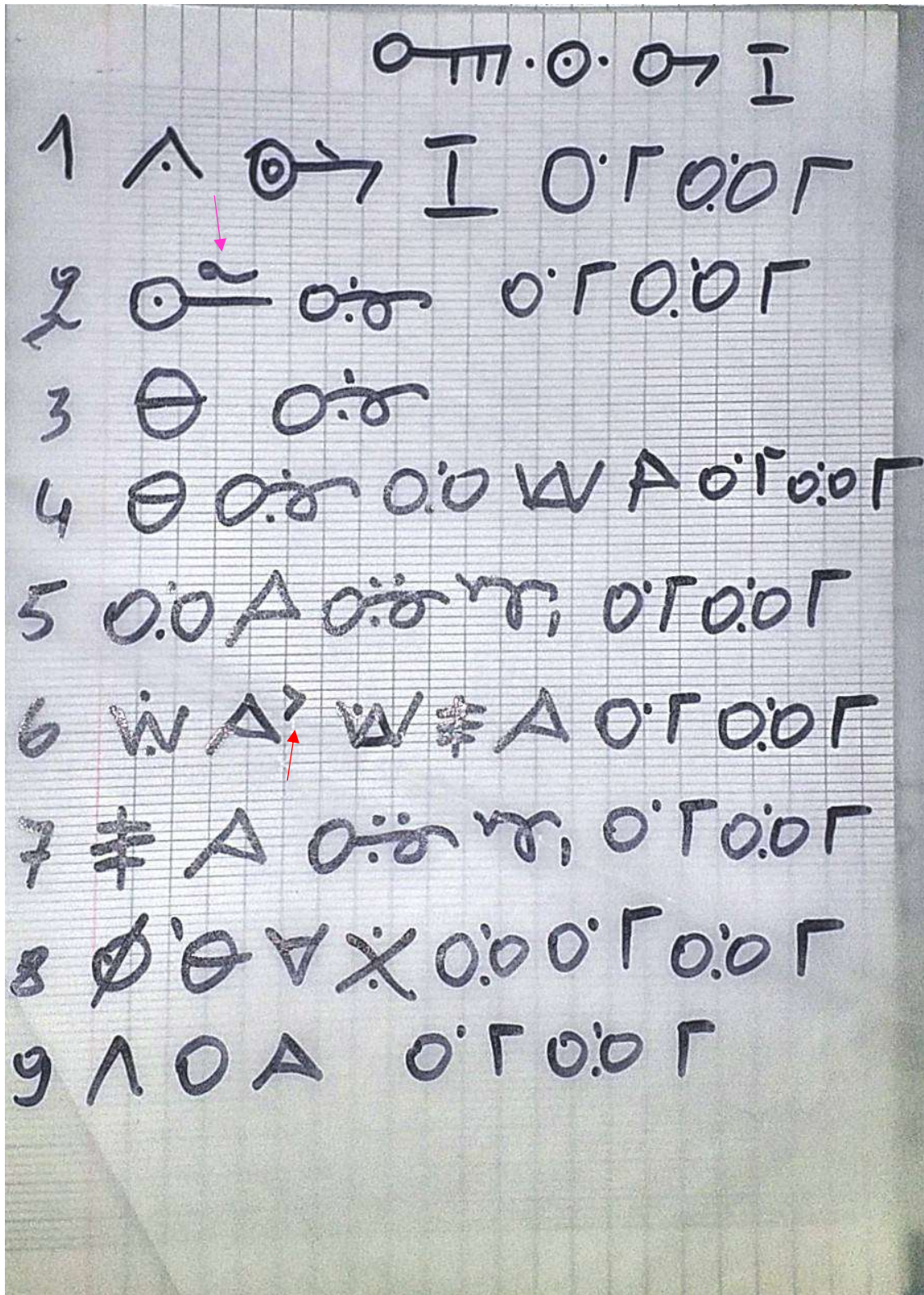


Figure 7.1. Edited version of Figure 7. Arrows: red = \circ diacritic; pink = $\tilde{\circ}$ diacritic.

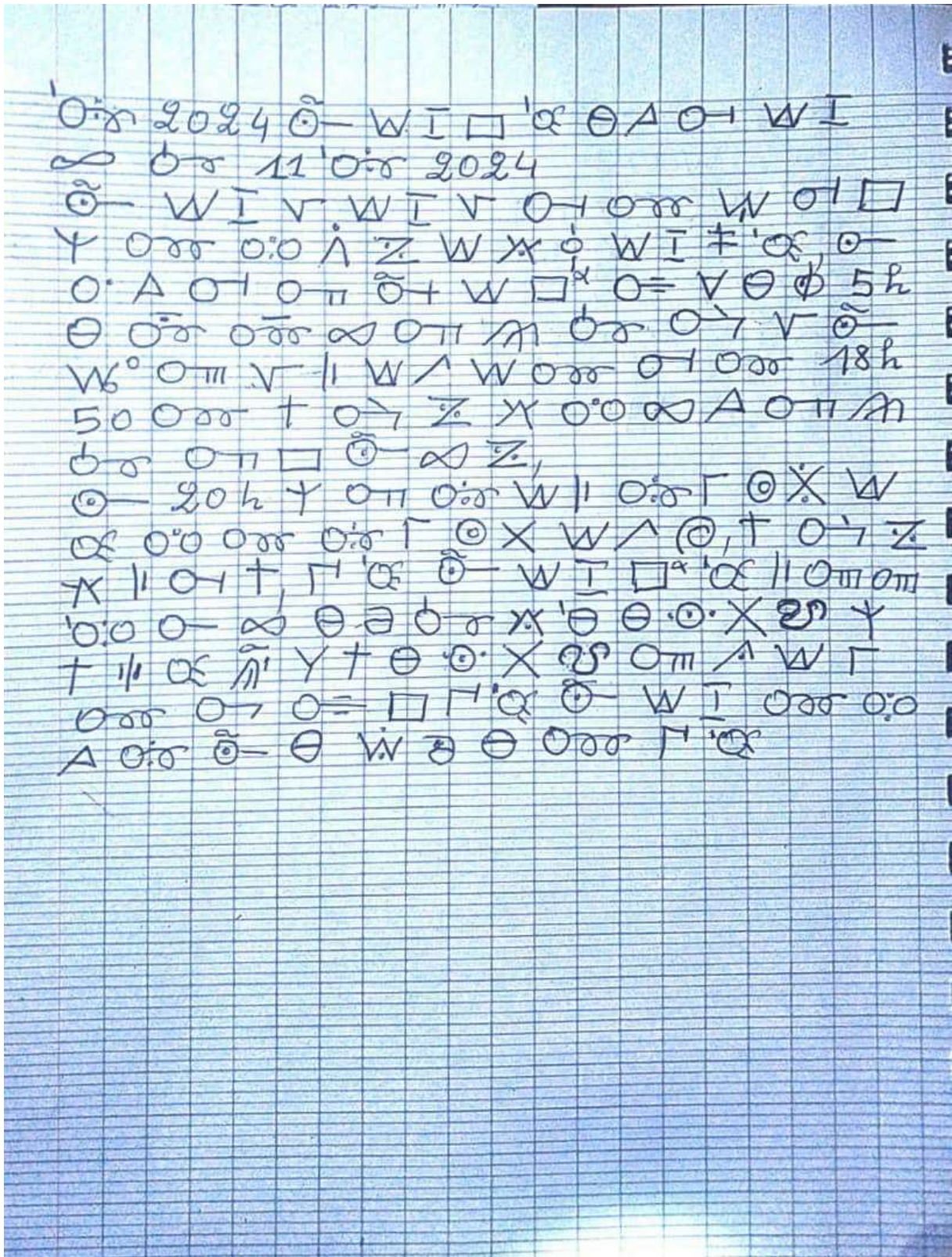


Figure 8. A letter written in the Masaba script.

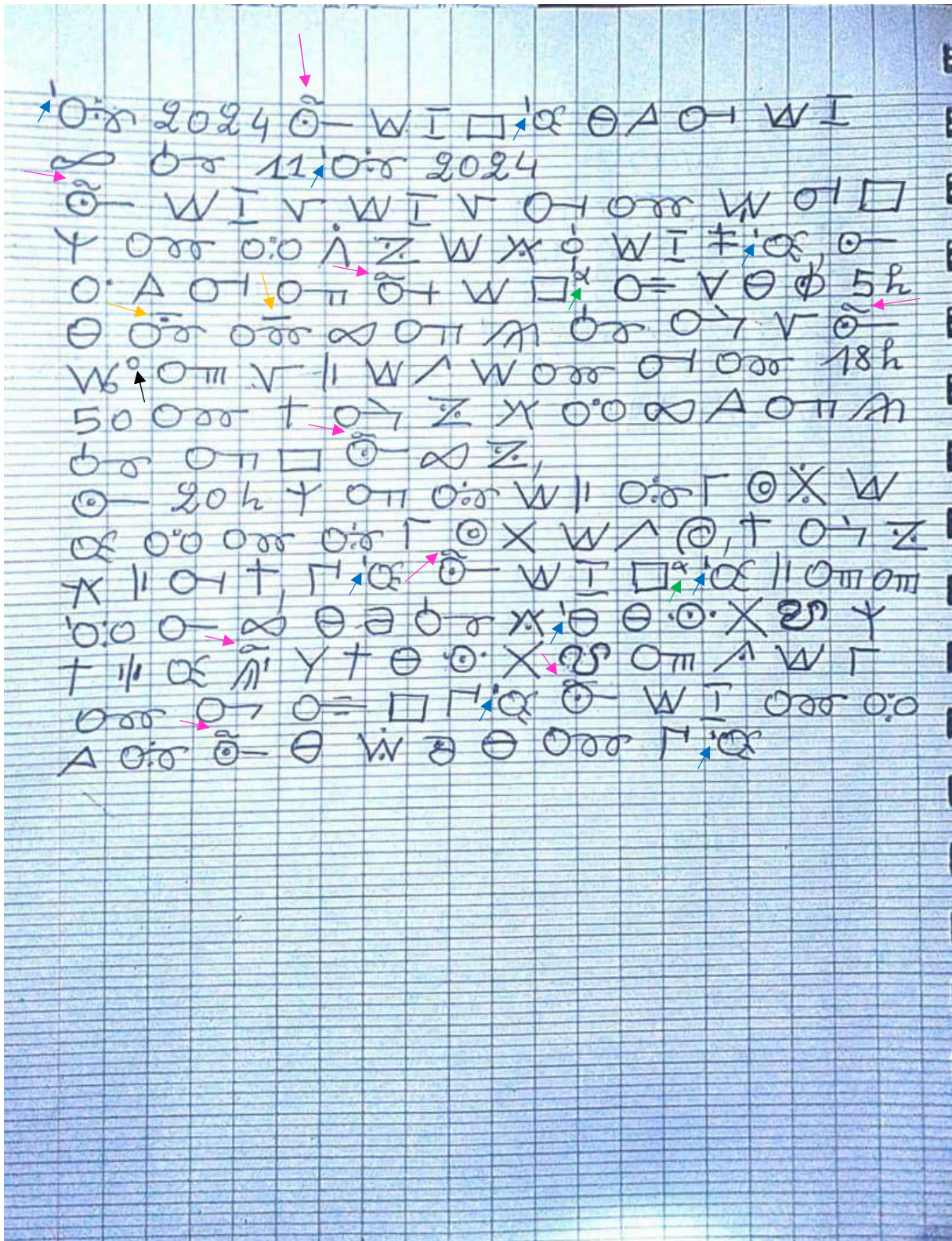


Figure 8.1. Edited version of Figure 8. Arrows: green = $\overset{\circ}{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; orange = $\overset{\circ}{\circ}$ diacritic; black = $\overset{\circ}{\circ}$ diacritic; pink = $\overset{\circ}{\circ}$ diacritic.

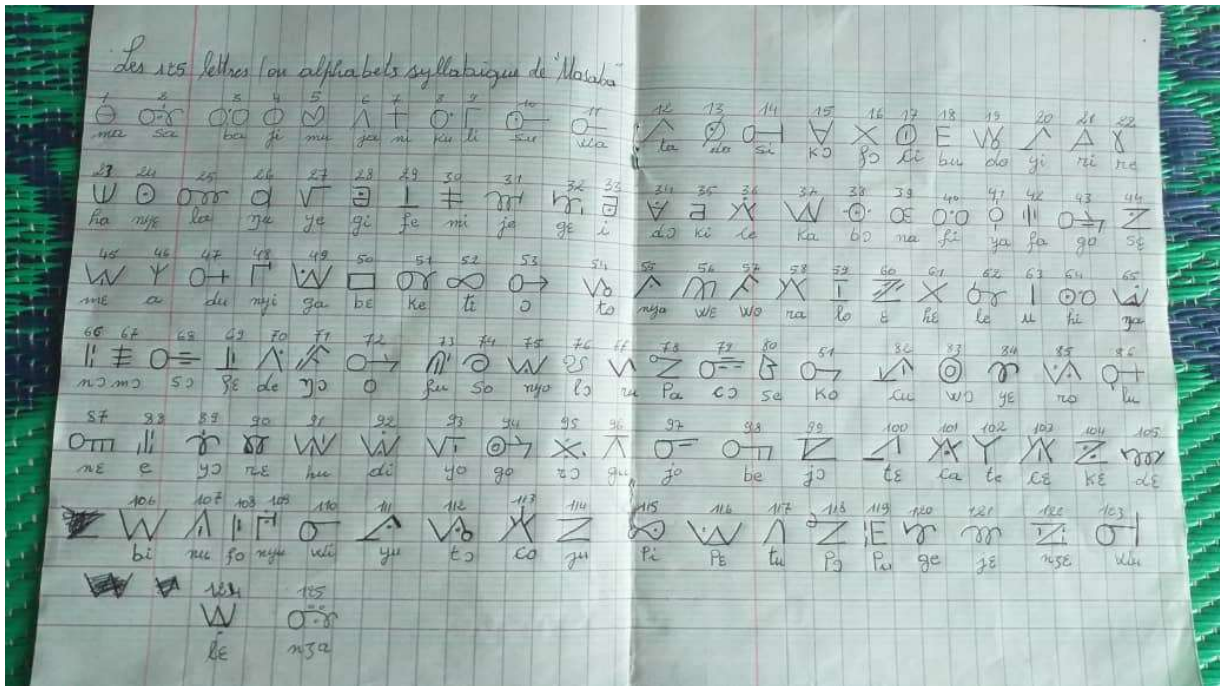


Figure 9. Collocation order of basic Masaba graphemes.

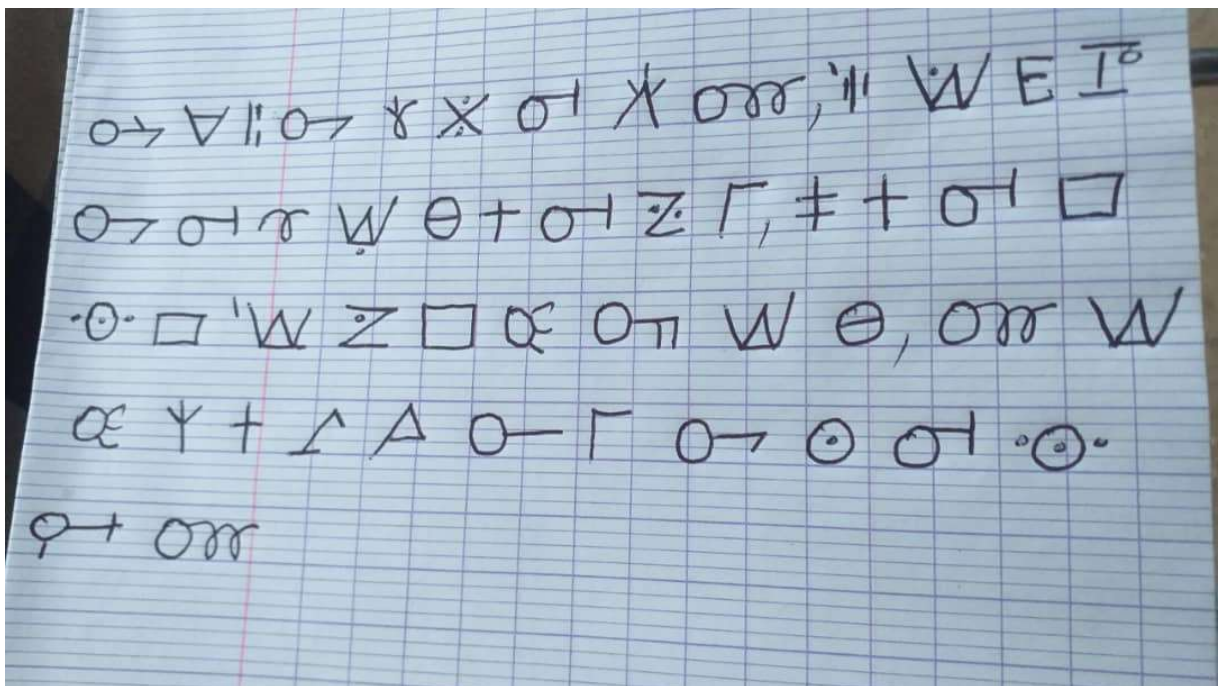


Figure 10. Masaba-transliteration of a Latin-script based Bambara news article. The original Latin-based Bambara is: "O kɔnkɔko ɲɔrɔw cela, fangabulonkow ɲelemaniw keli, minnu be bo benkanseben na ben kama, lakana ani yiriwali koɲew b'olu la."

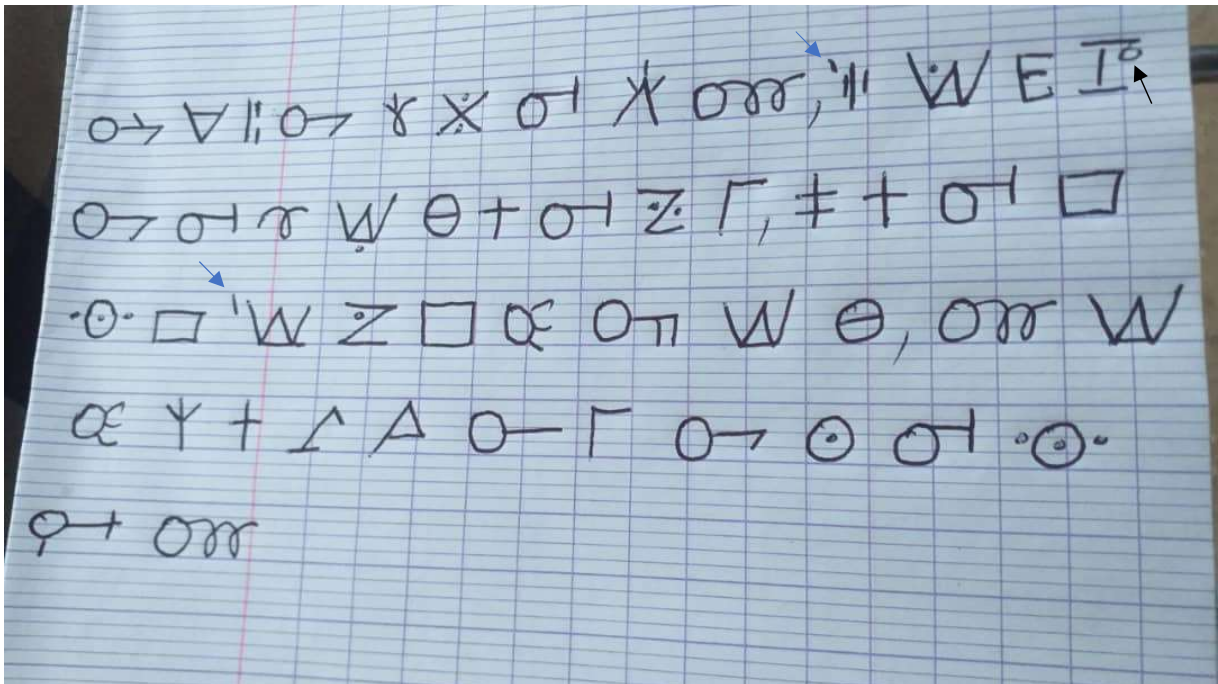


Figure 10.1. Edited version of Figure 10. Arrows: blue = [◦] diacritic; black = [◦] diacritic.

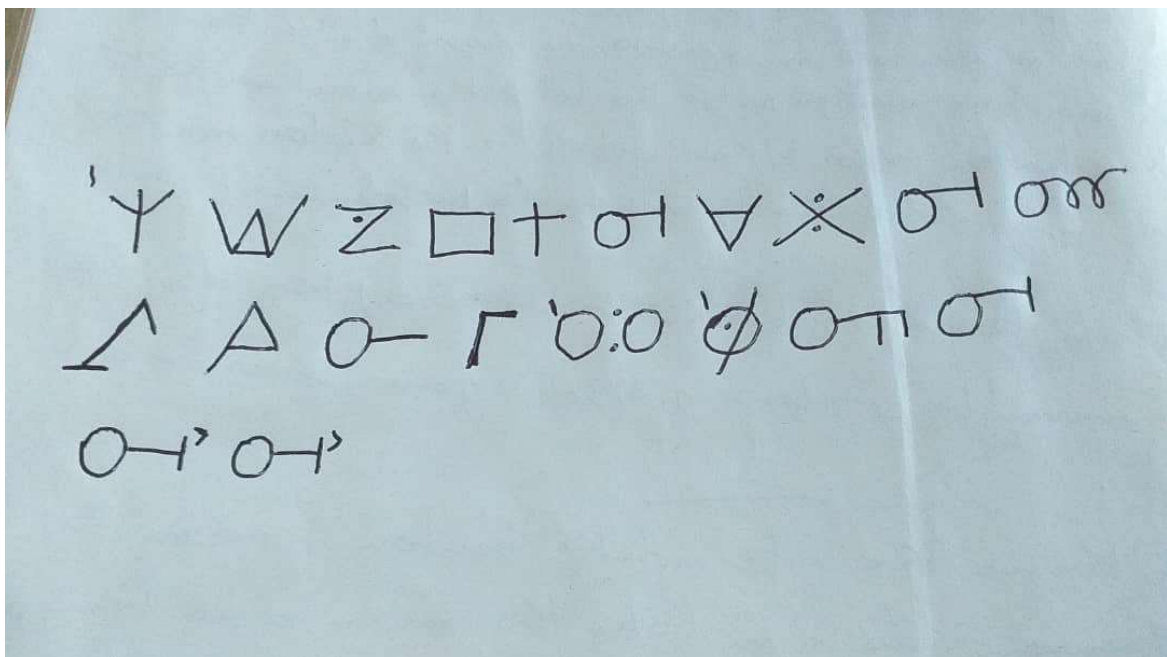


Figure 11. Handwritten Masaba text that was used for the official poster in the AMALAN event in Bamako as seen in Figure 1.

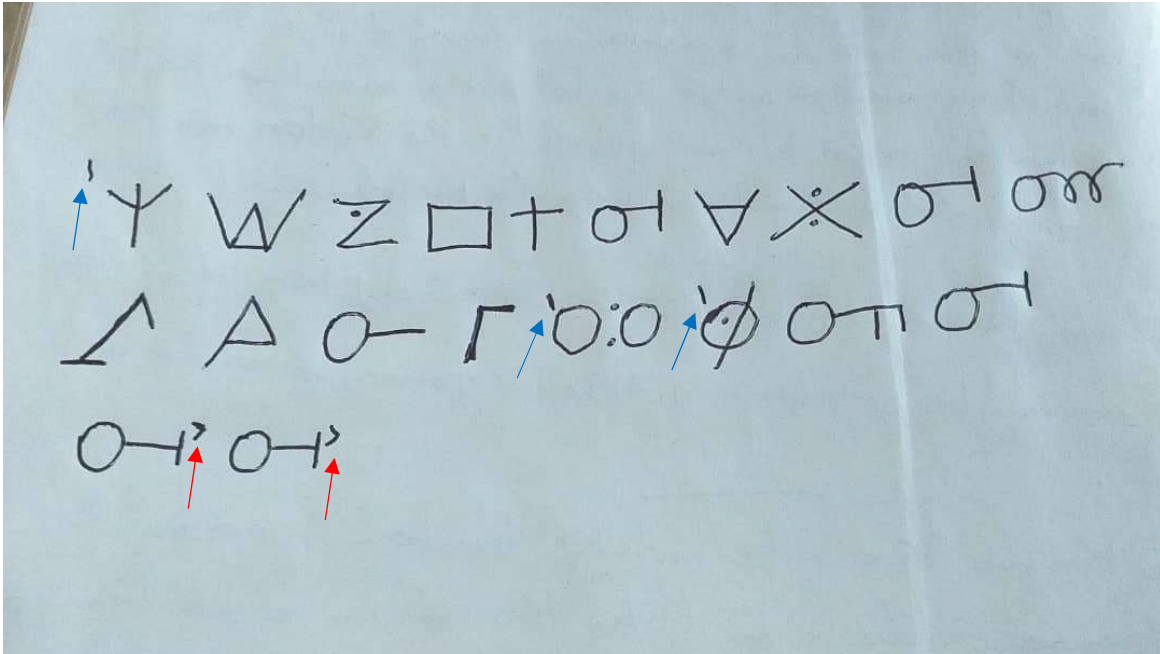


Figure 11.1. Edited version of Figure 11. Arrows: red = ◌° diacritic; blue = $\text{◌}^{\text{◌}}$ diacritic.

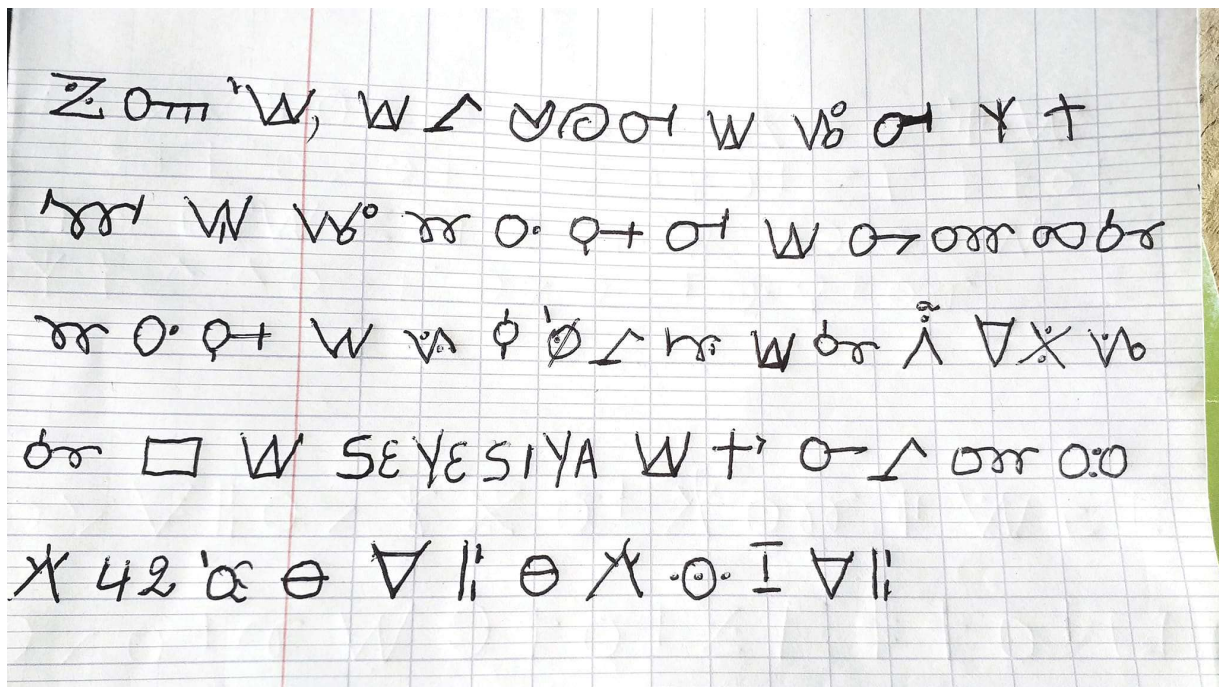


Figure 12. A note (apparently from a news article) written in Masaba. Latin-transliteration: "Kene kan, Kayi musow ka tonw ani demedonjekuluw ka kolatilenjekulu biro y'a dantige k'ale tun kacrotlen be ka SEYESIYA ka nin waatilabaara 42nan makono marabolo kono."

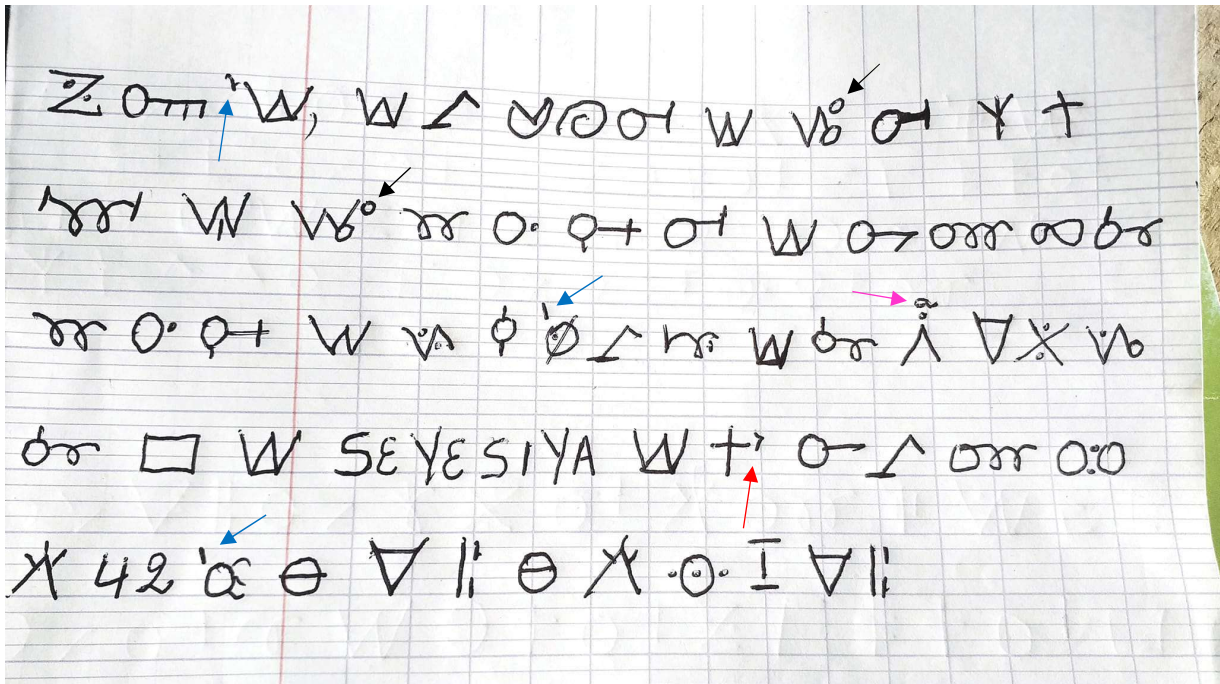


Figure 12.1. Edited version of Figure 12. Arrows: red = $\overset{\circ}{\circ}$ diacritic; blue = $\overset{\circ}{\circ}$ diacritic; black = $\overset{\circ}{\circ}$ diacritic; pink = $\overset{\circ}{\circ}$ diacritic.

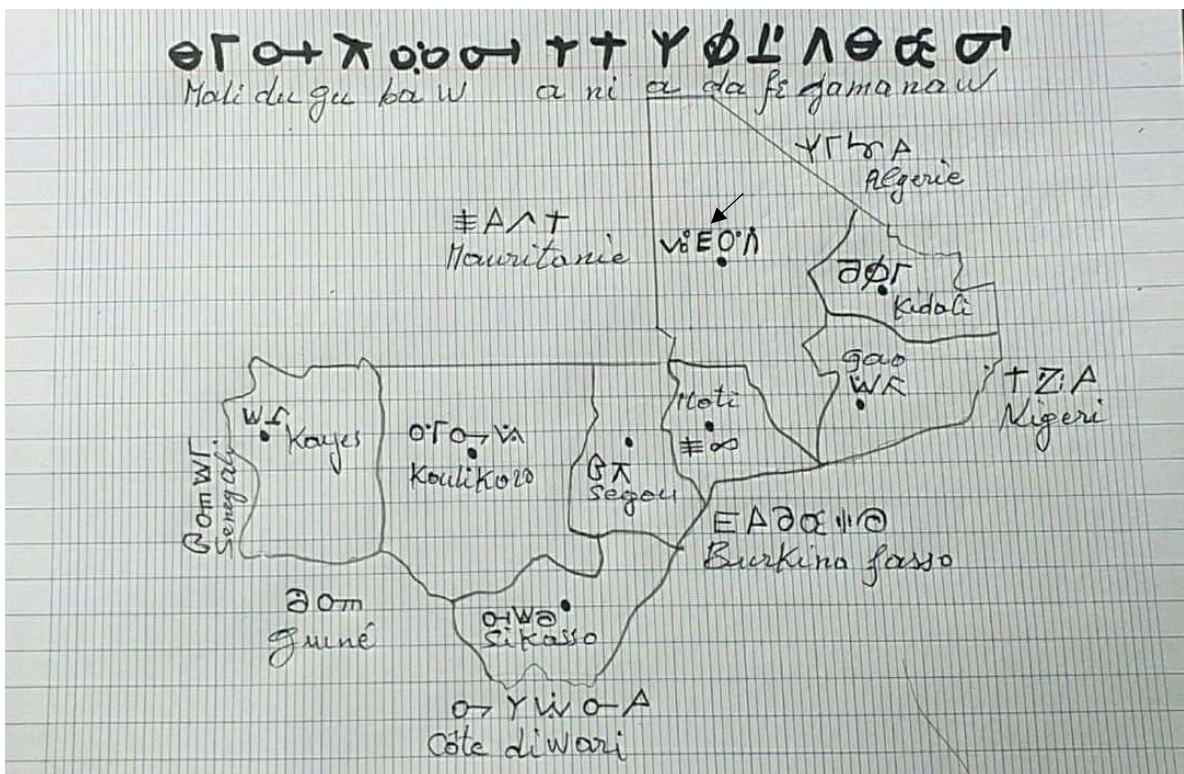


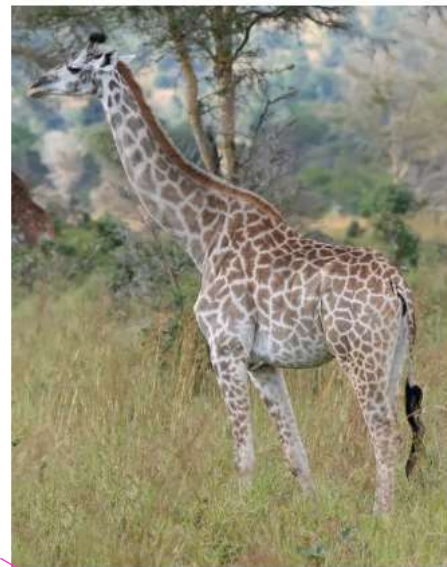
Figure 13. Map of Mali denoting each region and neighboring countries in the Masaba script Arrows: black = $\overset{\circ}{\circ}$ diacritic.

1
bagan 0:0'W



2 0-0-Π

3 0-γX0:0



4 0:0⊖

5 0̇.▽0→||/∩

Figure 14. Page from an educational book in the Masaba script. Arrows: blue = 0̇ diacritic; pink = 0̇ diacritic.



6 𐌲𐌶𐌰



7 𐌲𐌶𐌰



8 𐌲𐌶𐌰



9 𐌲𐌶𐌰

Figure 15. Page from an educational book in the Masaba script.

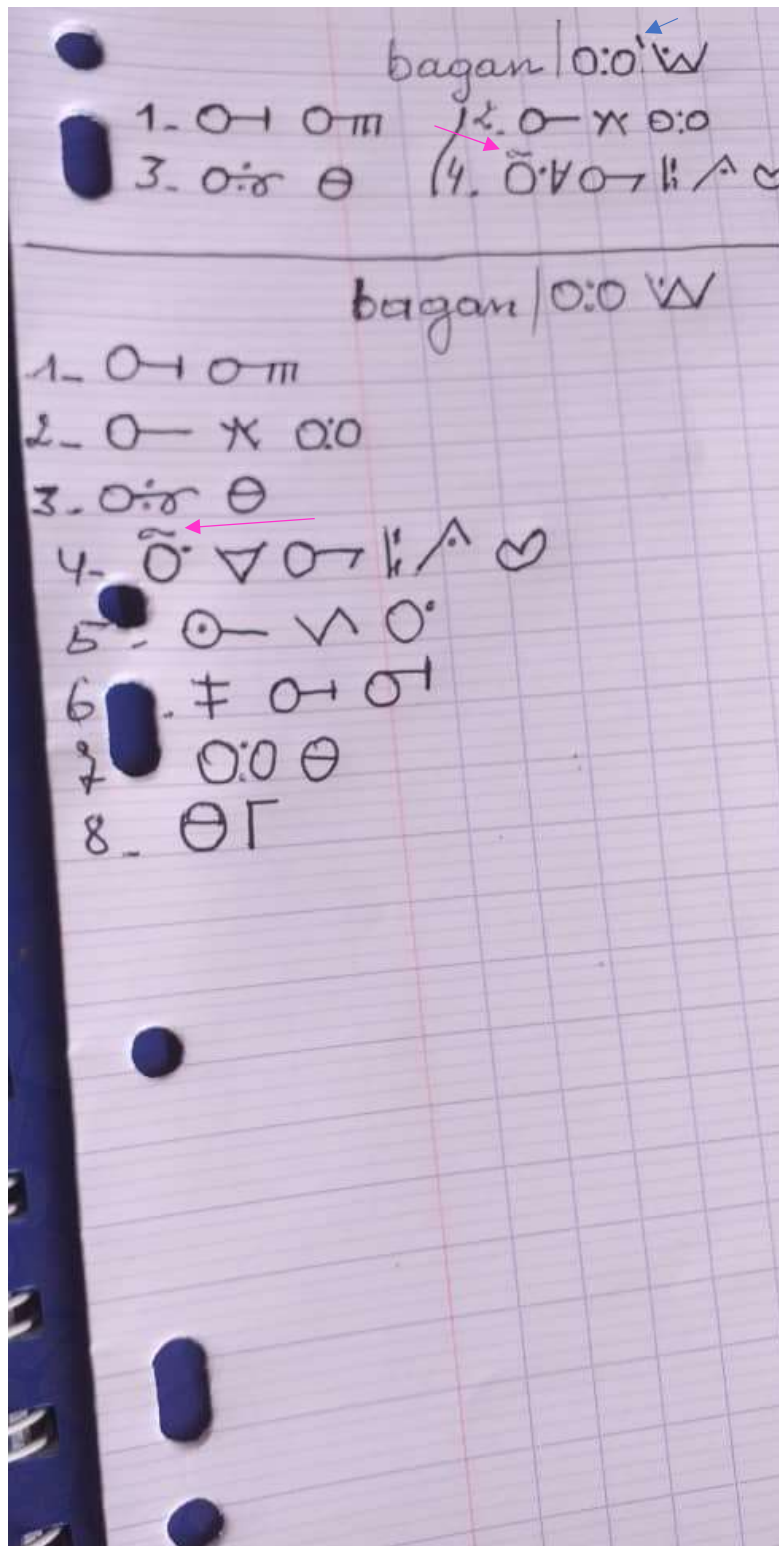


Figure 16. Handwritten answers to the educational pages in Figures 14-15. Arrows: blue = ' diacritic; pink = ÷ diacritic.

15
fari 'l'A

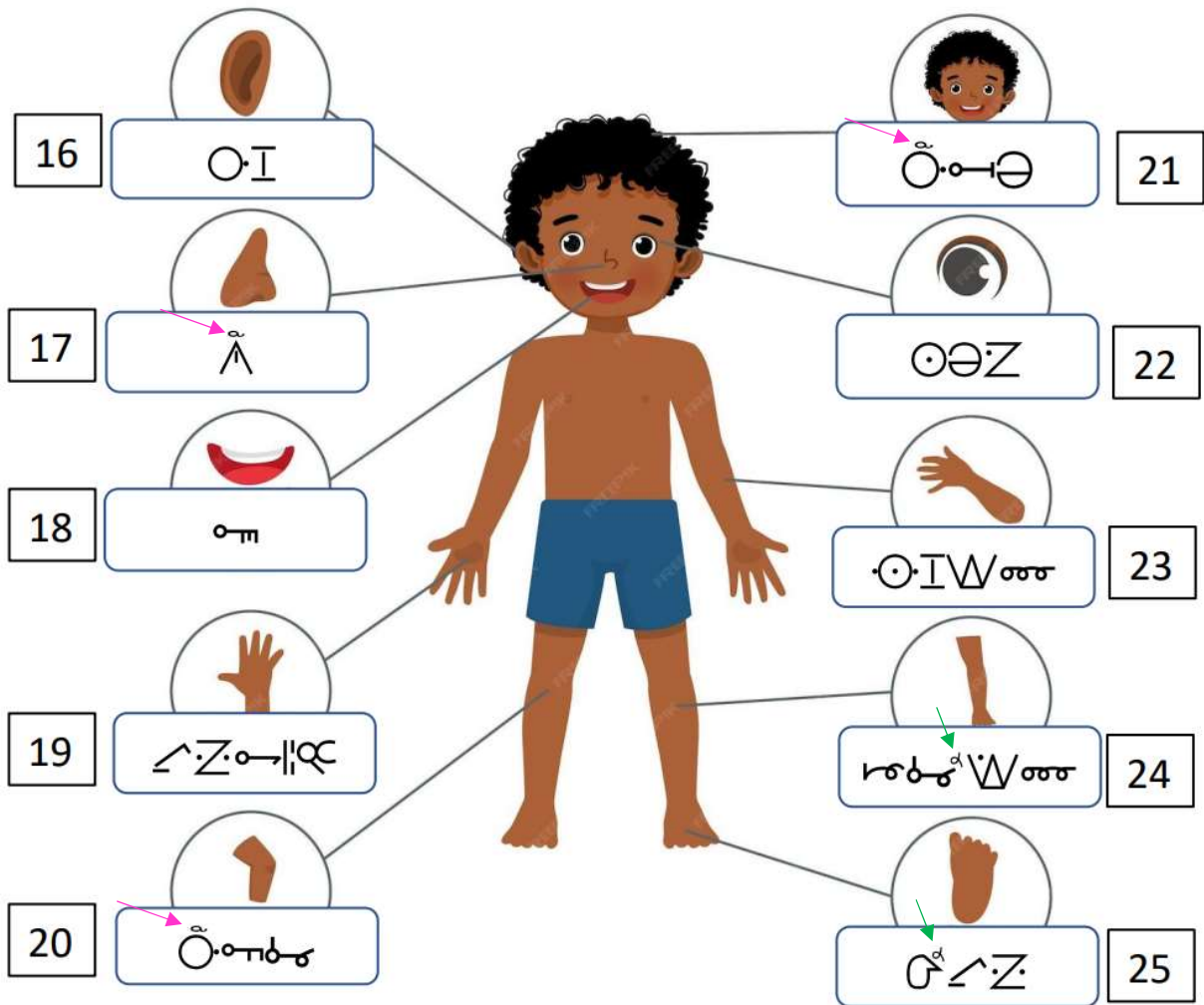


Figure 17. Page from an educational book in the Masaba script. Arrows: green = ^σ diacritic; pink = [○] diacritic.

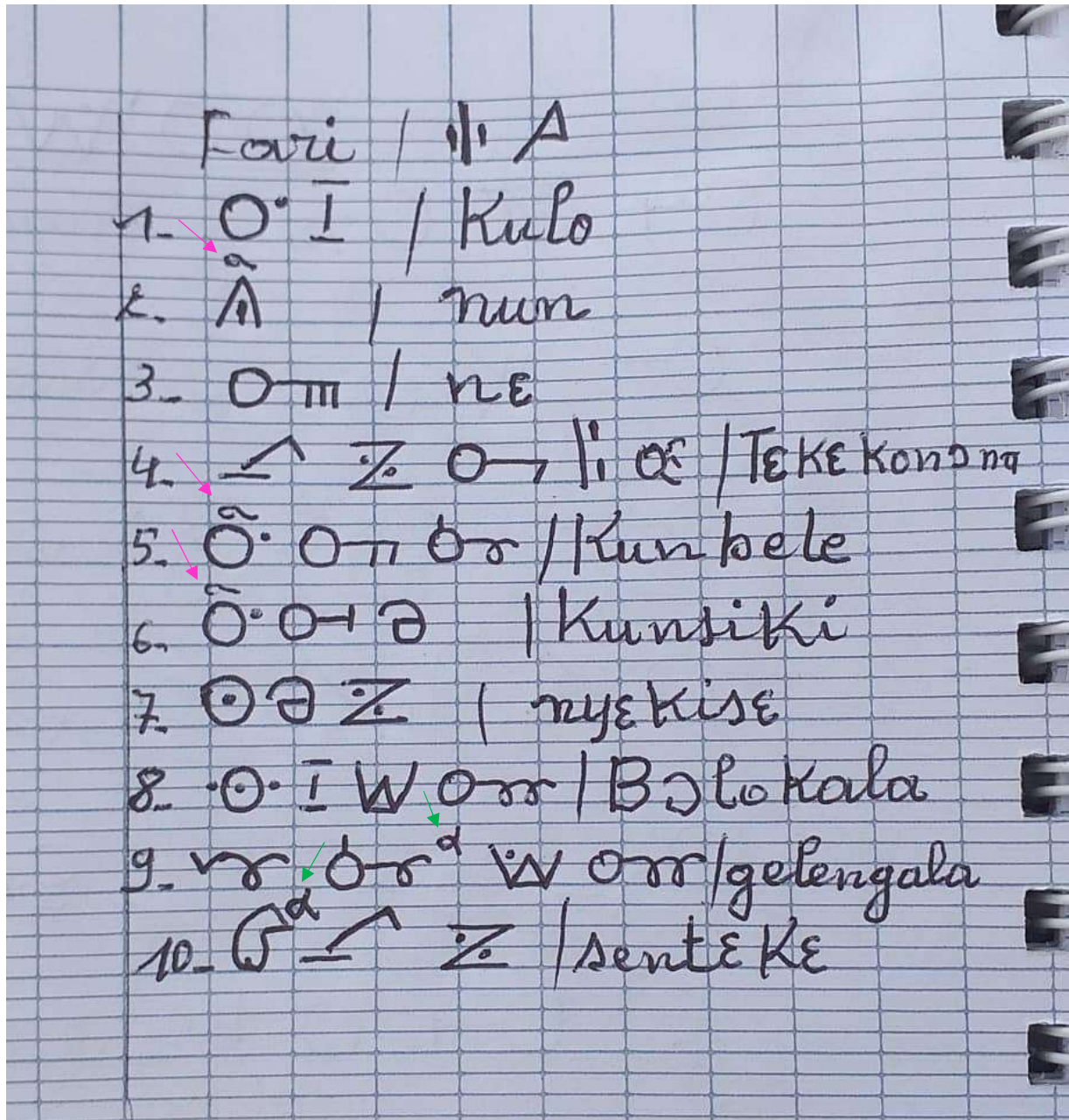


Figure 18. Handwritten answers to the educational page from Figure 17. Arrows: green = $\overset{\circ}{\underset{a}{\circ}}$ diacritic; pink = $\overset{\circ}{\circ}$ diacritic.

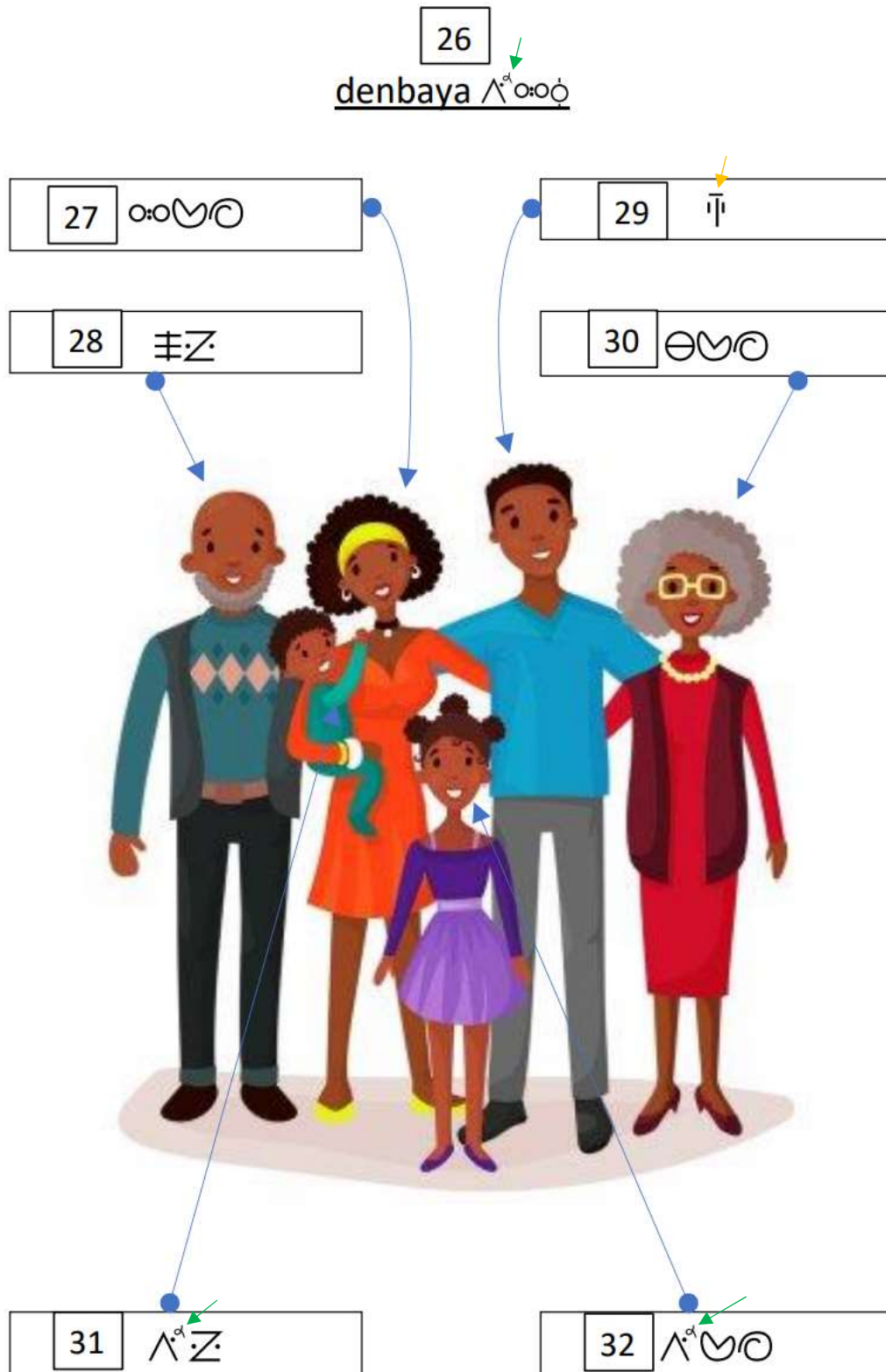


Figure 19. Page from an educational book in the Masaba script. Arrows: green = \circ^{α} diacritic; orange = $\bar{\circ}$ diacritic.

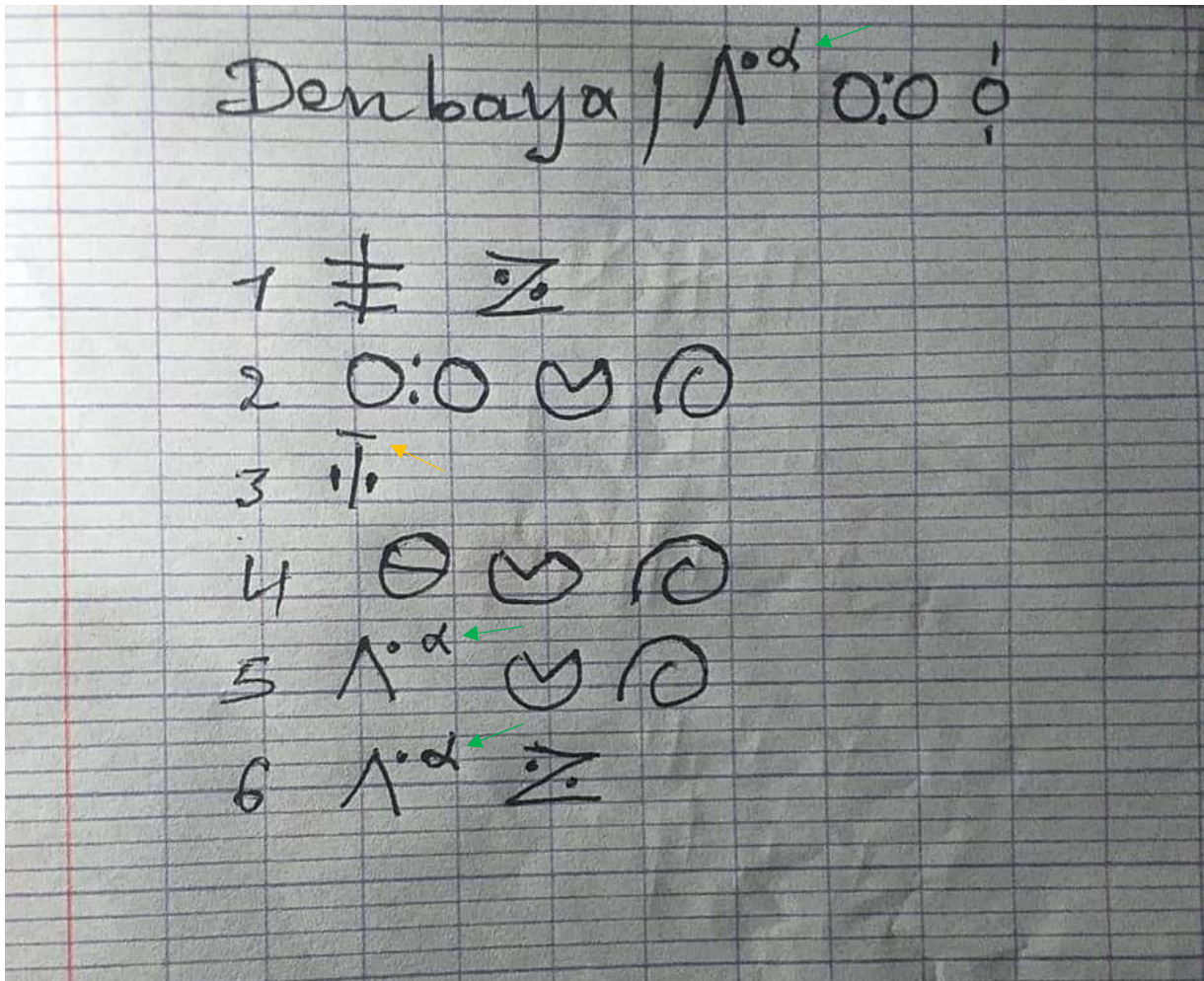


Figure 20. Handwritten answers from the education page in Figure 19. Arrows: red = $\overset{a}{\circ}$ diacritic; orange = $\overset{i}{\circ}$ diacritic.

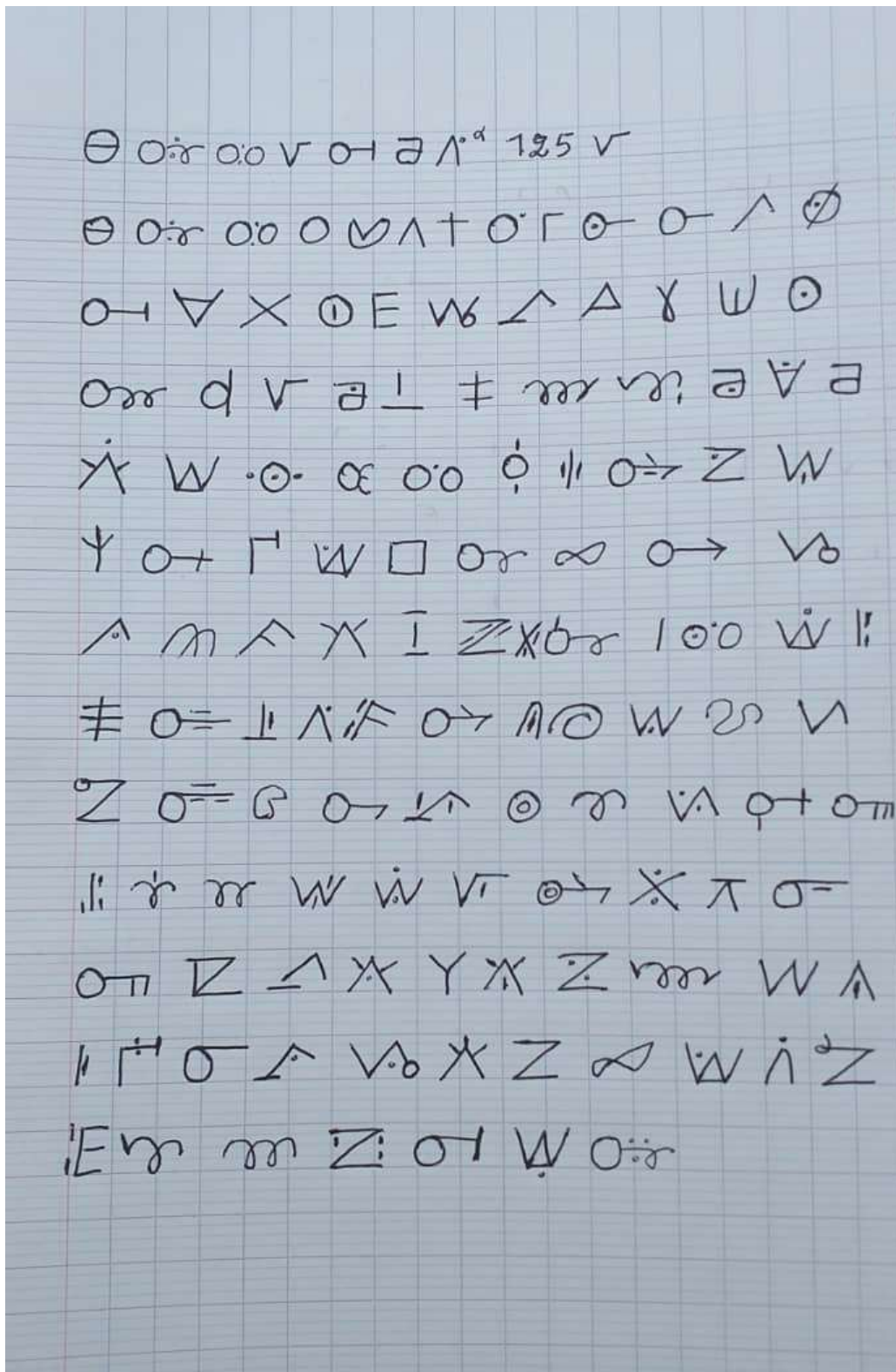


Figure 21. Another page of the collation order of the Masaba script. The first line is Θ 0:0 00 V 0 1 2 5 V

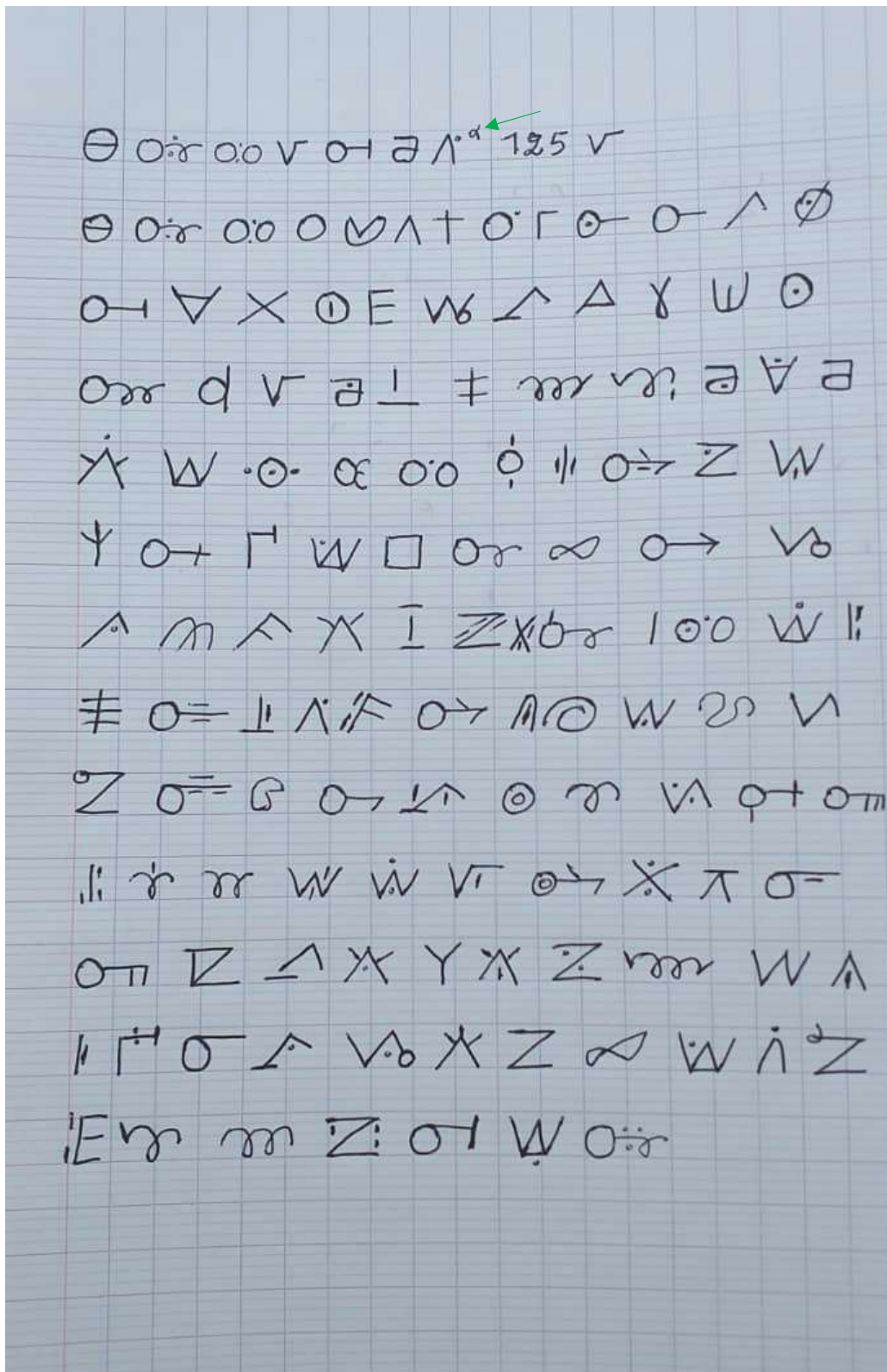


Figure 21.1 Edited version of Figure 21. Arrows: green = $\overset{\circ}{\circ}$ diacritic.

	i	e	ε	a	ɔ	o	u
	⊖	∥	∕	Y	↔	↔	∣
p	⊙		⊖	∕	↔		∣
t	⊙	Y	∕	∕	↔	↔	∧
c	⊖	Y	∕	∕	↔	↔	∕
k	⊖	⊙	∕	⊖	∕	↔	⊙
b	∕	⊙	⊖	⊙	⊙		∣
d	∕	∧	∣	⊙	∕	∕	⊙
j	⊙	∣	∣	∧	∕	↔	∕
g	⊖	∣	∣	∕	↔	↔	∧
f	⊙	∣	∣	∣	∕	∣	∧
s	∣	↔	∕	↔	↔	⊙	∣
nz			∕	↔			
m	∣		∕	⊖	∣		∧
n	∣		∣	∣	∣		∧
ny	∣		⊙	∣	∕		∣
ŋ				∕	∣		∣
y	∕	∕	∣	⊙	∣	∕	∕
w	∣		∕	∣	⊙	∣	∣
h	⊙		∕	∕			∕
l	∣	⊙	∕	∣	∣	∣	∣
r	∣	∣	∣	∣	∣	∣	∣

Figure 22. (Old) chart of the Masaba syllabary by Cleobie Impang, from Kelly (2019); adapter from Galtier (1987). This paper's only reference for the script was Galtier (1987), thus it displayed the old /go/ and /wu/ graphemes, which originally were the same as /o/ and /u/, respectively. This chart also incorrectly uses the IPA i to represent the first vowel on left of the top row, but it should be 'i' as seen in Table 1.

Tableau des signes du Masaba

	i	e	ɛ	a	ɔ	o	u
	⊖	∥	∕	ψ	⊙→	⊙→	
p	∞		∇	∞	∞		!E
t	∞	Y	∕	∕	∇	∇	∧
c	⊖	∧	∧	∧	⊖	∧	∧
k	⊖	∞	∞	∇	∇	⊙→	⊙
b	W	∞	□	o:o	⊙		E
d	∇	∧	∞	⊙	∇	∇	⊙+
j	⊙	∞	∞	∧	∇	⊖	∞
g	⊖	∞	∞	∇	⊙→	⊙→	∧
f	o.o	∥	∥	∥	X	∥	∧
s	⊙	∞	∞	⊙	⊖	⊙	⊙
nz			∞	⊙			
m	∥		W	⊖	∞		∞
n	∥		⊙	∞	∥		∧
ny	∥		⊙	∧	W		∥
ŋ				∇	∞		d
y	∧	∇	∞	⊙	∞	∇	∧
w	⊙		W	⊙	⊙	∧	
h	o.o		X	∇			W
l	∥	∞	∇	∞	∞	∥	⊙+
r	A	∞	∞	∞	∞	∇	∇

Figure 23. (Old) chart of the Masaba syllabary as reported in Galtier (1987). Again, the /go/ and /wu/ graphemes have been changed since this 1987 paper to distinguish them from /o/ and /u/ graphemes.

	i	e	ε	a	ɔ	o	u
–	⊖	∥	∑	Υ	↪	↪	
p	∞		∩	∑	∑		!E
t	∞	Υ	↗	∧	∩	∩	∧
c	⊖	∩	∩	∩	↪	∩	↗
k	⊖	↪	∑	∩	∇	↪	⊙
b	∩	↪	□	o:o	⊙		E
d	∩	∧	∩	⊙	∇	∩	↪
j	⊙	∩	↪	∧	∇	↪	∑
g	⊖	↪	↪	∩	↪	↪	∧
f	o:o	⊥	⊥	∥	×	⊥	∧
s	↪	↻	∑	↪	↪	⊙	↪
nz			∑	↪			
m	⊥		∩	⊖	∩		⊙
n	⊥		↪	∩	∥		∧
ny	⊥		⊙	∧	∩		⊥
η				∩	↗		d
y	∧	∩	∩	⊙	∩	∩	∧
w	↪		∩	↪	⊙	∧	[=u]
h	o:o		∩	∩			∩
l	⊥	↪	∩	↪	⊙	∩	↪
r	∧	∩	∩	∩	×	∩	∩

Figure 24. (Old) chart of the Masaba syllabary from Языки мира: Языки манде. — СПб. : Нестор-История, 2017. — 1152 с. — ISBN 978-5-4469-0824-0 (Google Translated: *Languages of the world: Mande languages.* - St. Petersburg. : Nestor-History, 2017. - 1152 p. — ISBN 978-5-4469-0824-0).

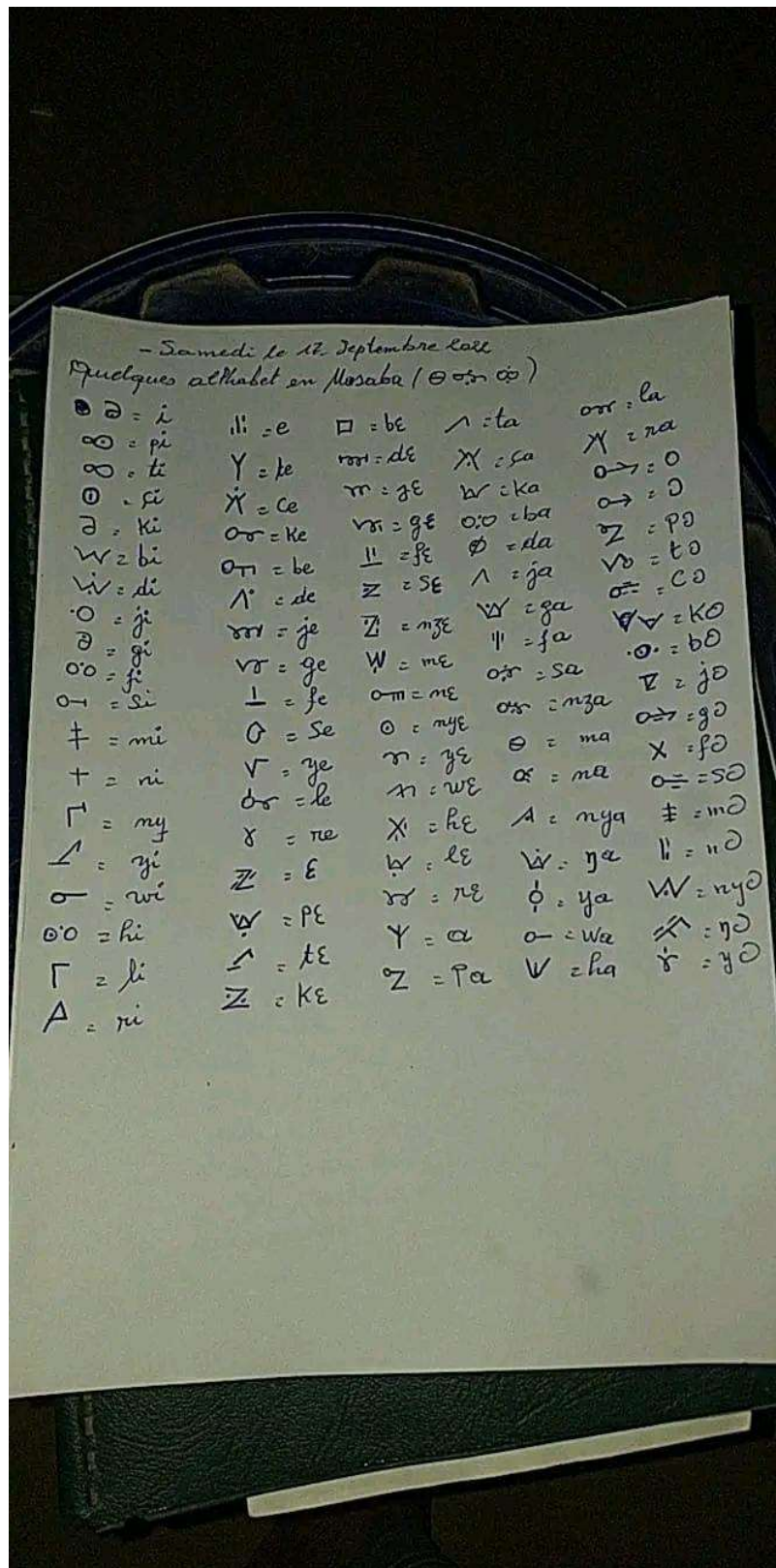


Figure 25. Masaba script with select syllables.

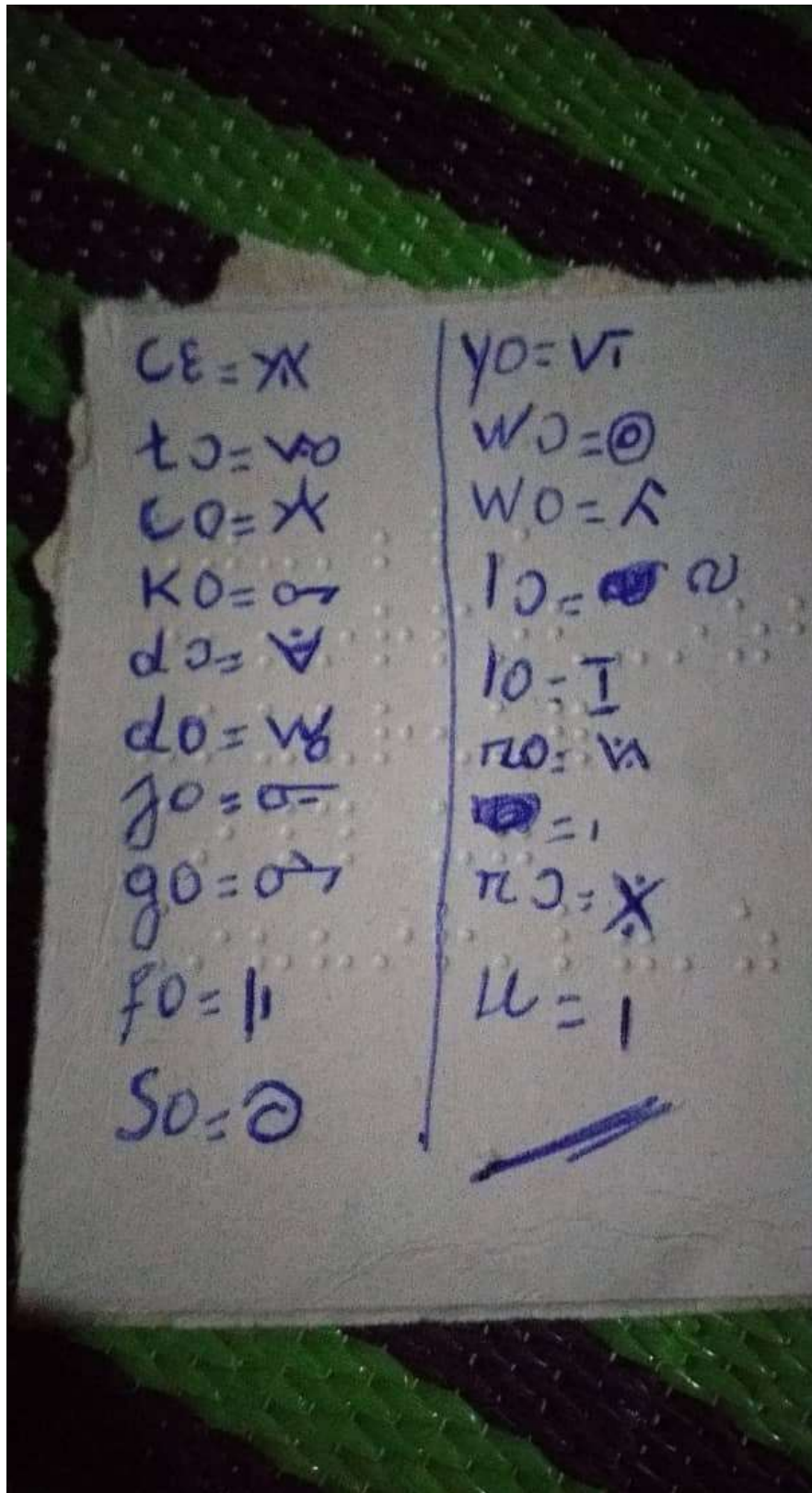


Figure 26. Masaba script with select syllables. Notice the old /go/ grapheme here as well.

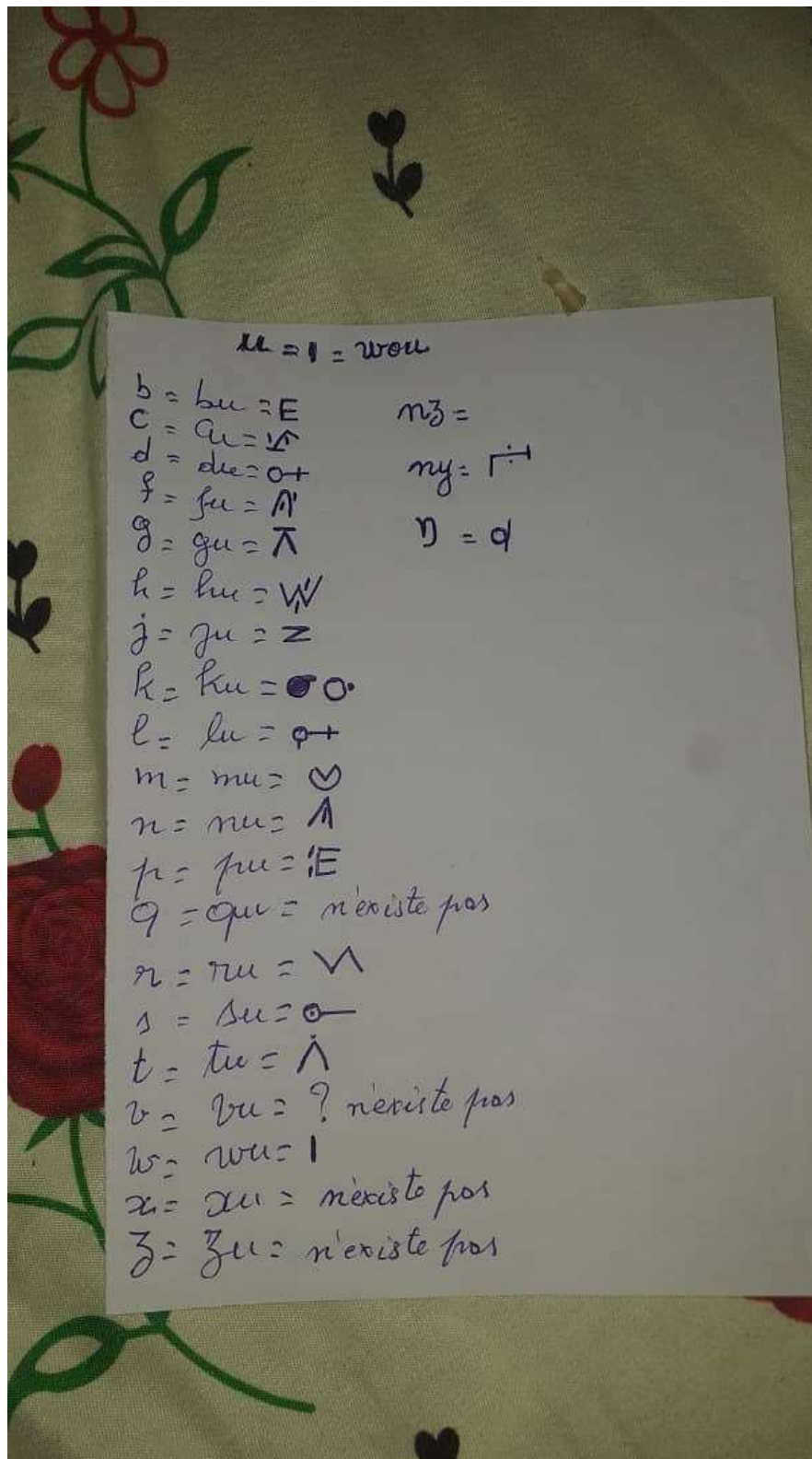


Figure 27. Masaba script with select syllables. At the top it shows that both /u/ and /wu/ used to be represented by the same grapheme: <|>.

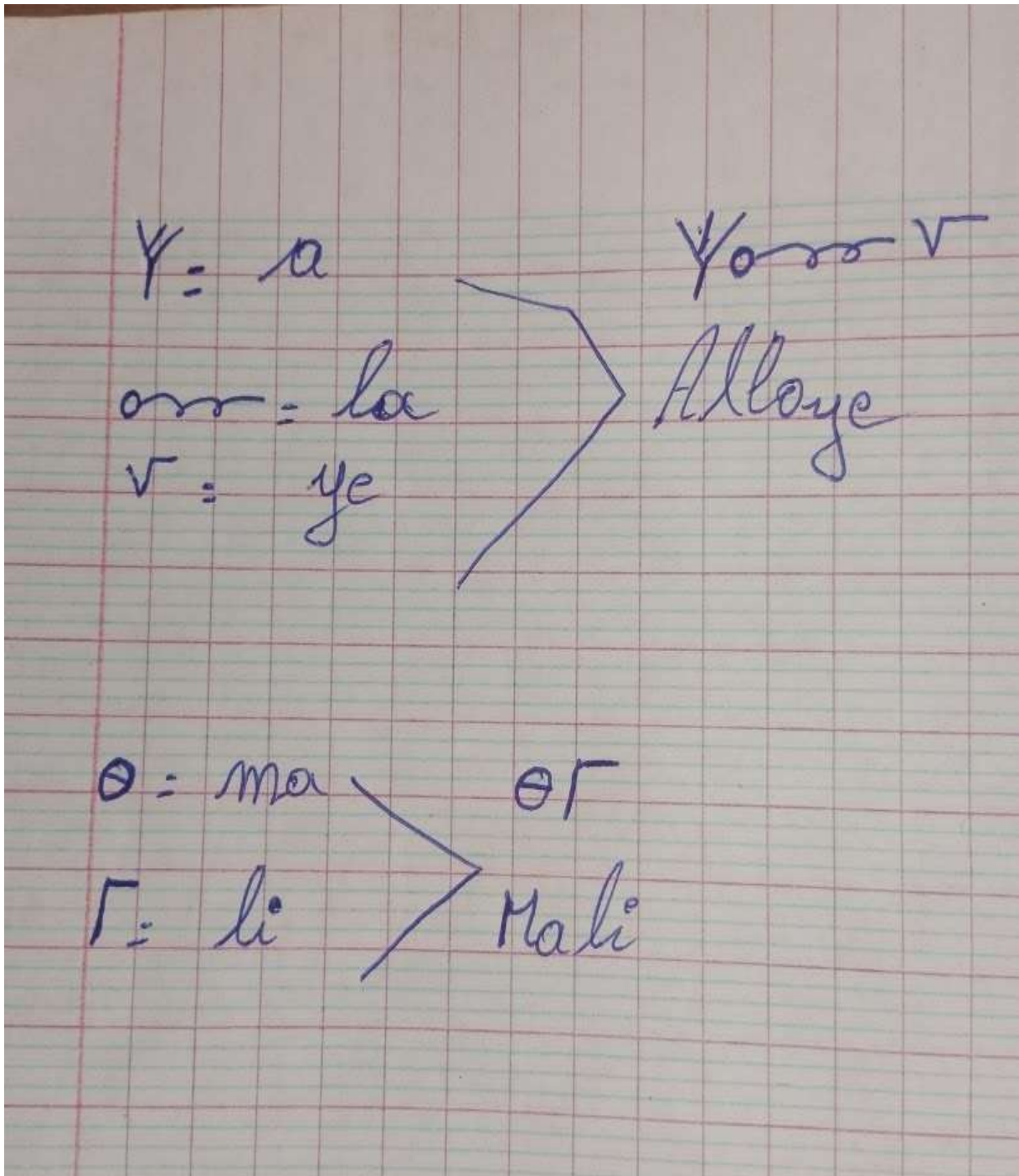


Figure 28. The name 'Allaye' (first name of the Secretary for External Relations of the Masaba Association) and the country of Mali written in Masaba. The Latin transcription of Allaye on the right was misspelled with an 'o', but it is assuredly 'a', as seen on the left next to the Masaba grapheme orr (la).

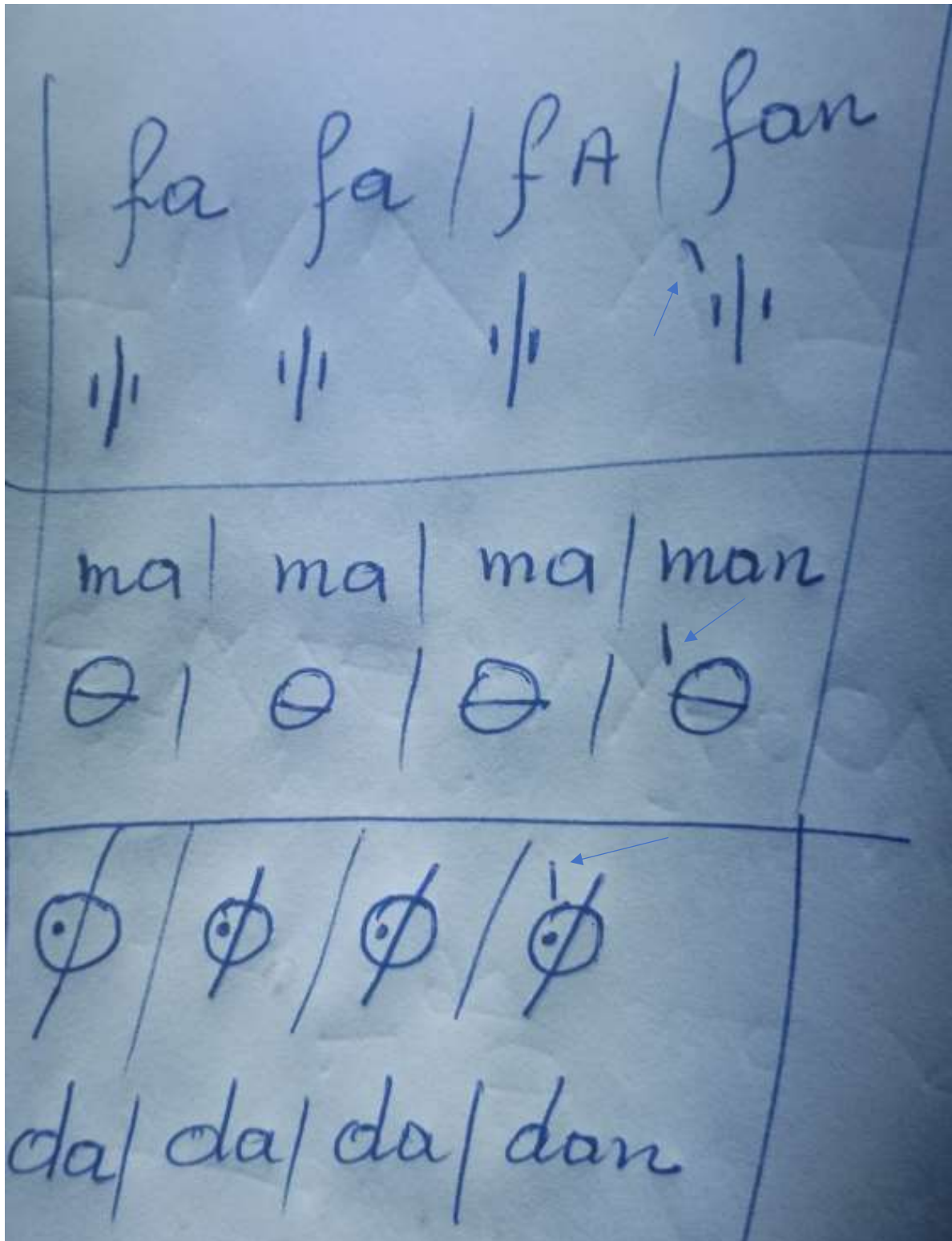


Figure 29. Examples of the /a/ vowel nasality diacritic. Arrows: blue = $\overset{\circ}{a}$ diacritic.

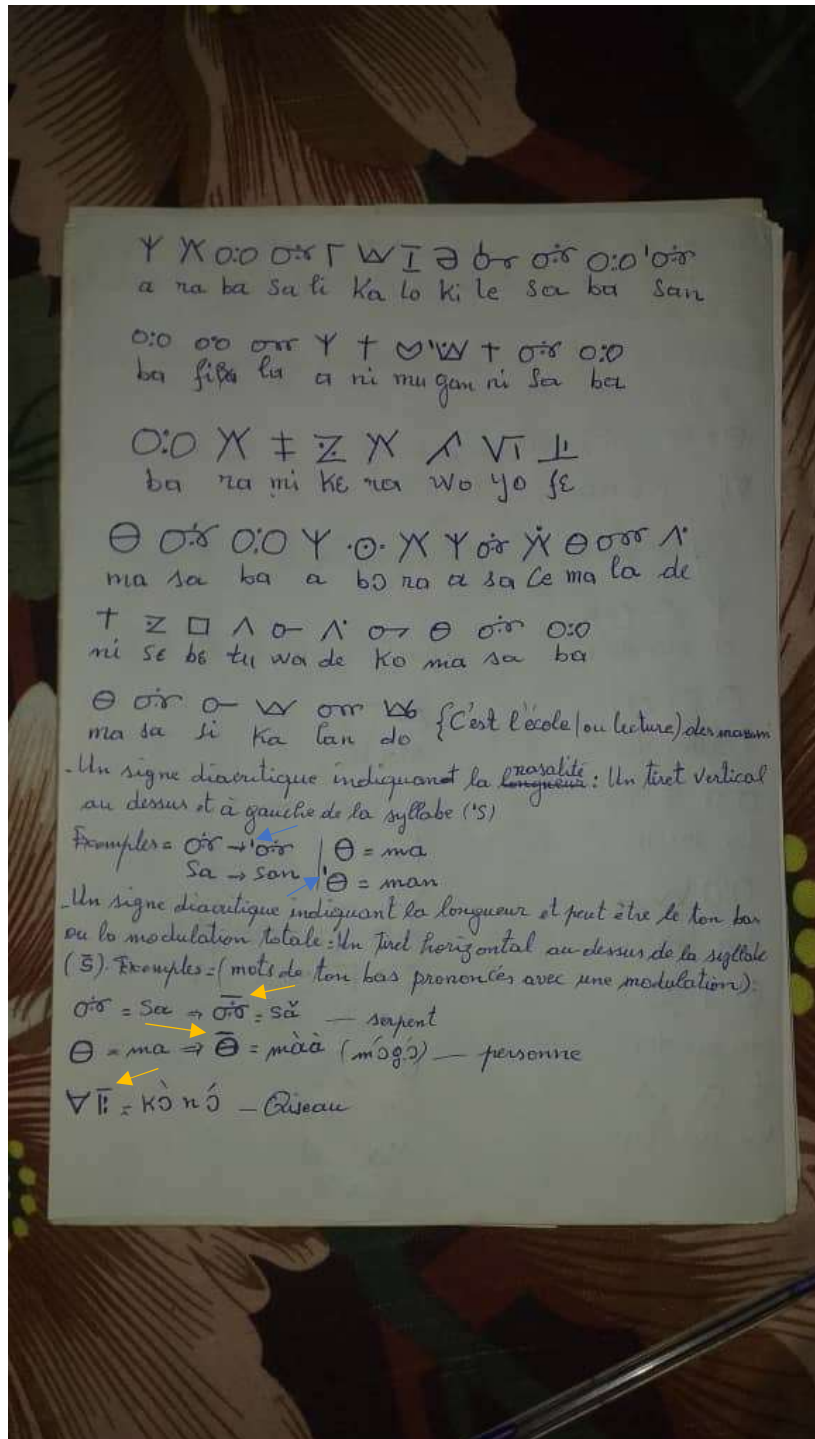


Figure 30. Example sentences in Masaba from the Masaba Association. Examples of the /a/ vowel lengthening/modulation diacritic is given at the bottom of the image. Arrows: blue = $\overset{\cdot}{\circ}$ diacritic; orange = $\bar{\circ}$ diacritic. Note the bottom usage of the $\bar{\circ}$ diacritic is improperly used on an /o/ syllable instead of /a/ syllable.

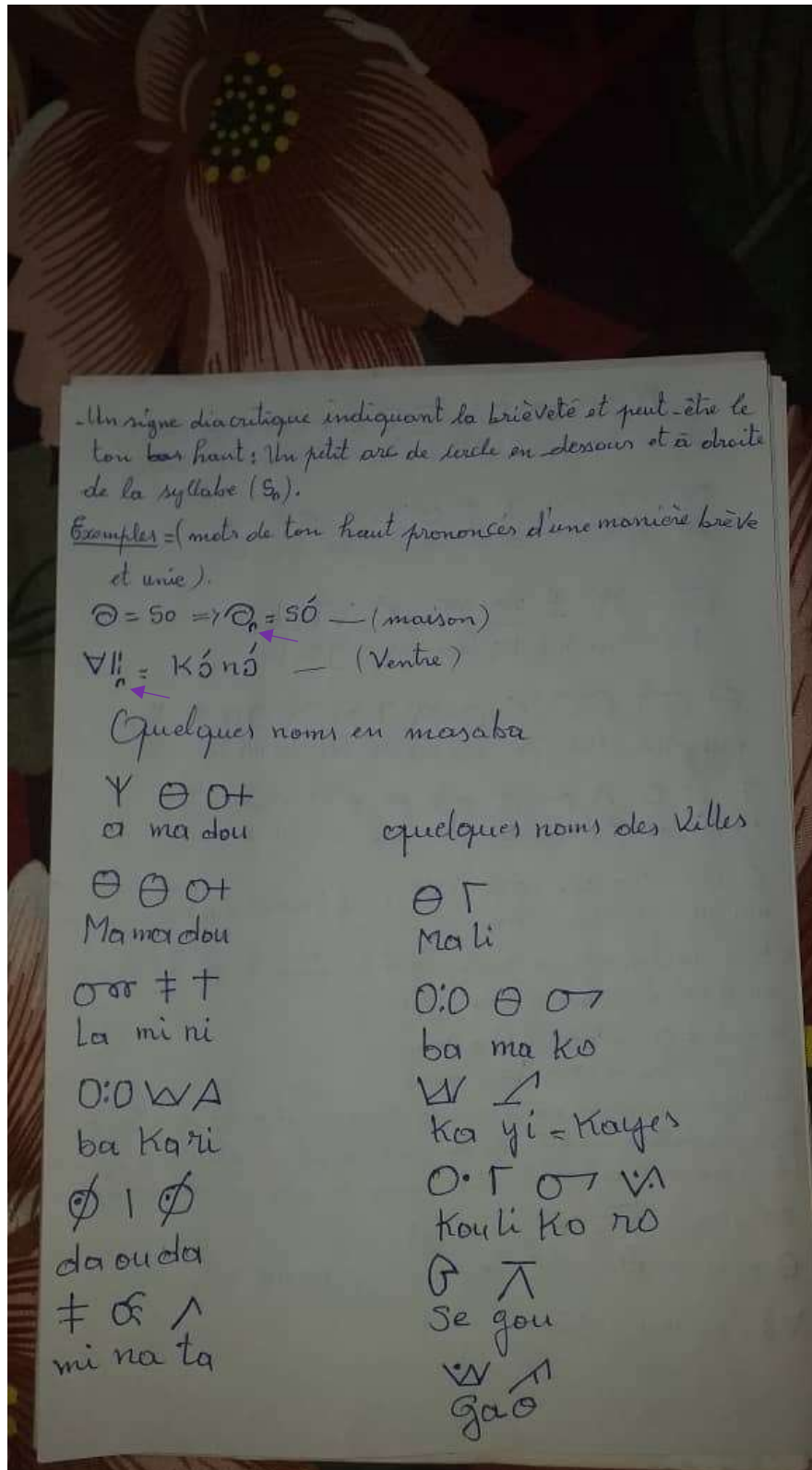


Figure 31. Explanation of diacritics and example words. Arrows: purple = O_0 diacritic.

⊖	⊖ [˘]	i	in
⊖	⊖ [˘]	Pi	Pin
⊖	⊖ [˘]	li	lin
⊖	⊖ [˘]	ti	tin
⊖	⊖ [˘]	ki	kin
W	W [˘]	bi	bin
W	W [˘]	di	din
⊖	⊖ [˘]	ji	jin
⊖	⊖ [˘]	gi	gin
⊖	⊖ [˘]	fi	fin
⊖	⊖ [˘]	Si	Sin
⊖	⊖ [˘]	mi	min
+	+ [˘]	ni	nin
⊖	⊖ [˘]	nyi	nyin
⊖	⊖ [˘]	yi	yin
⊖	⊖ [˘]	li	lin
⊖	⊖ [˘]	hi	hin
⊖	⊖ [˘]	li	lin
A	A [˘]	ri	rin

Figure 32. Masaba vowel /i/ nasality diacritic. The letter ⊖ /ji/ was incorrectly written without the dot on the right.

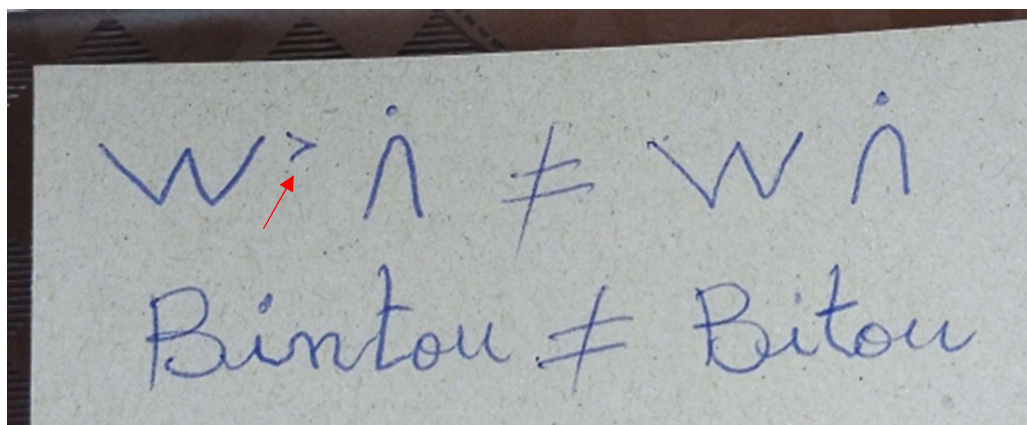


Figure 33. The Malian last name “Bintou”, utilizing the Masaba /i/ vowel nasality diacritic (red arrow) to show its effect on pronunciation.

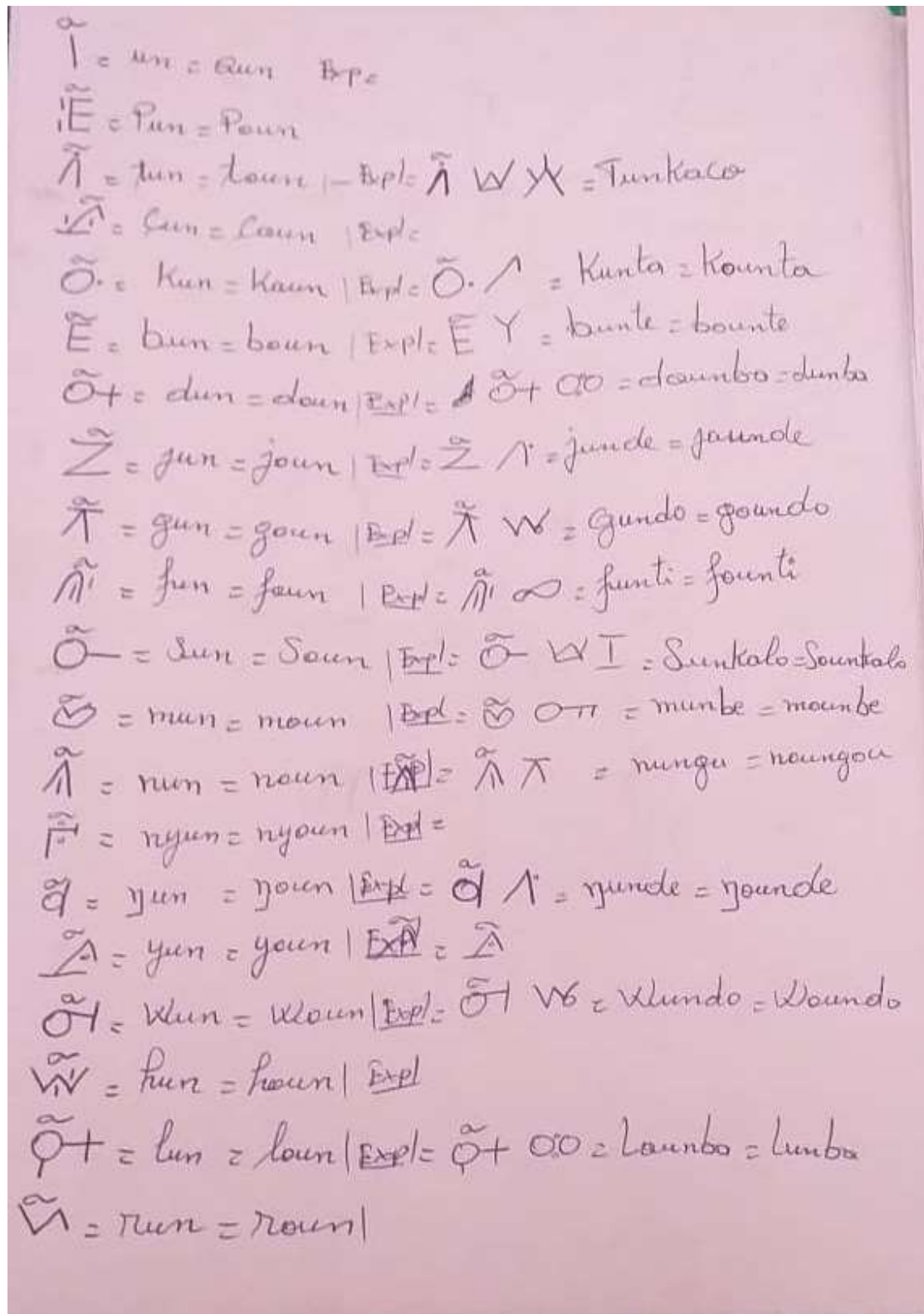


Figure 34. The /u/ nasality diacritic on all possible syllables.

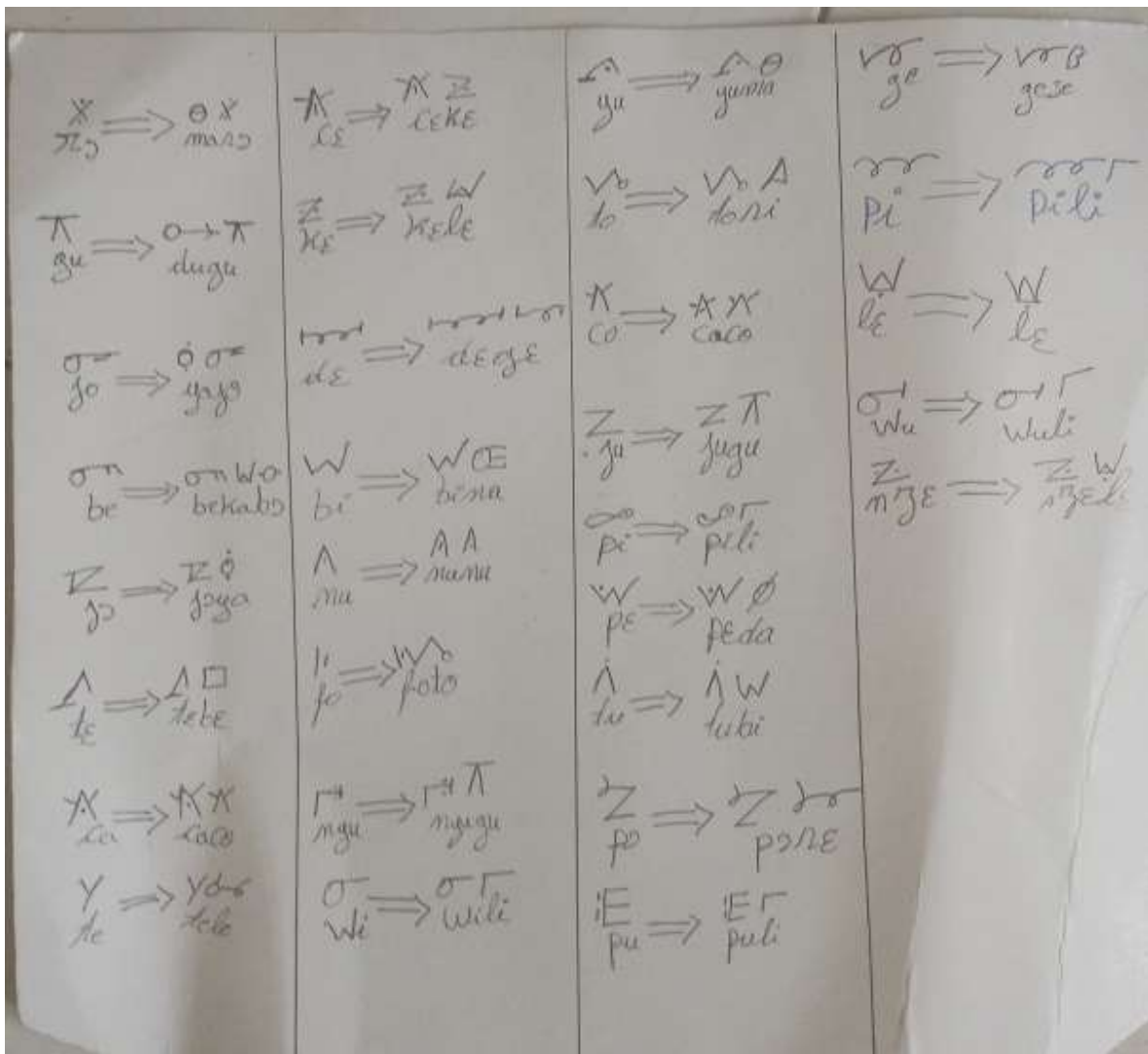


Figure 35. Example Masaba letters and word constructions.

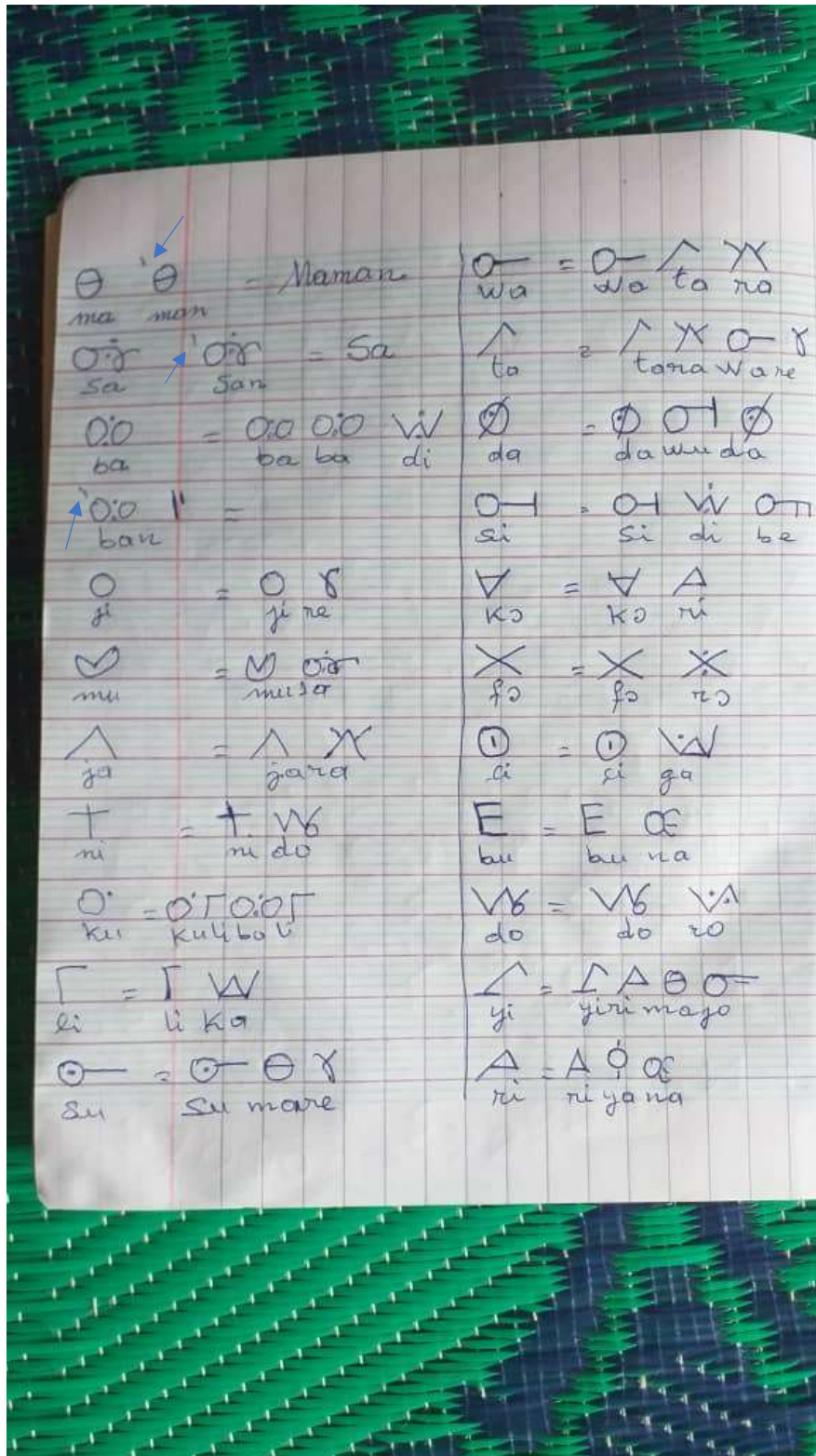


Figure 36. Example Masaba letters and word constructions. In $\odot = \odot\chi$, the \odot is missing a dot to the left. Arrows: blue = $\overset{\cdot}{\circ}$ diacritic.

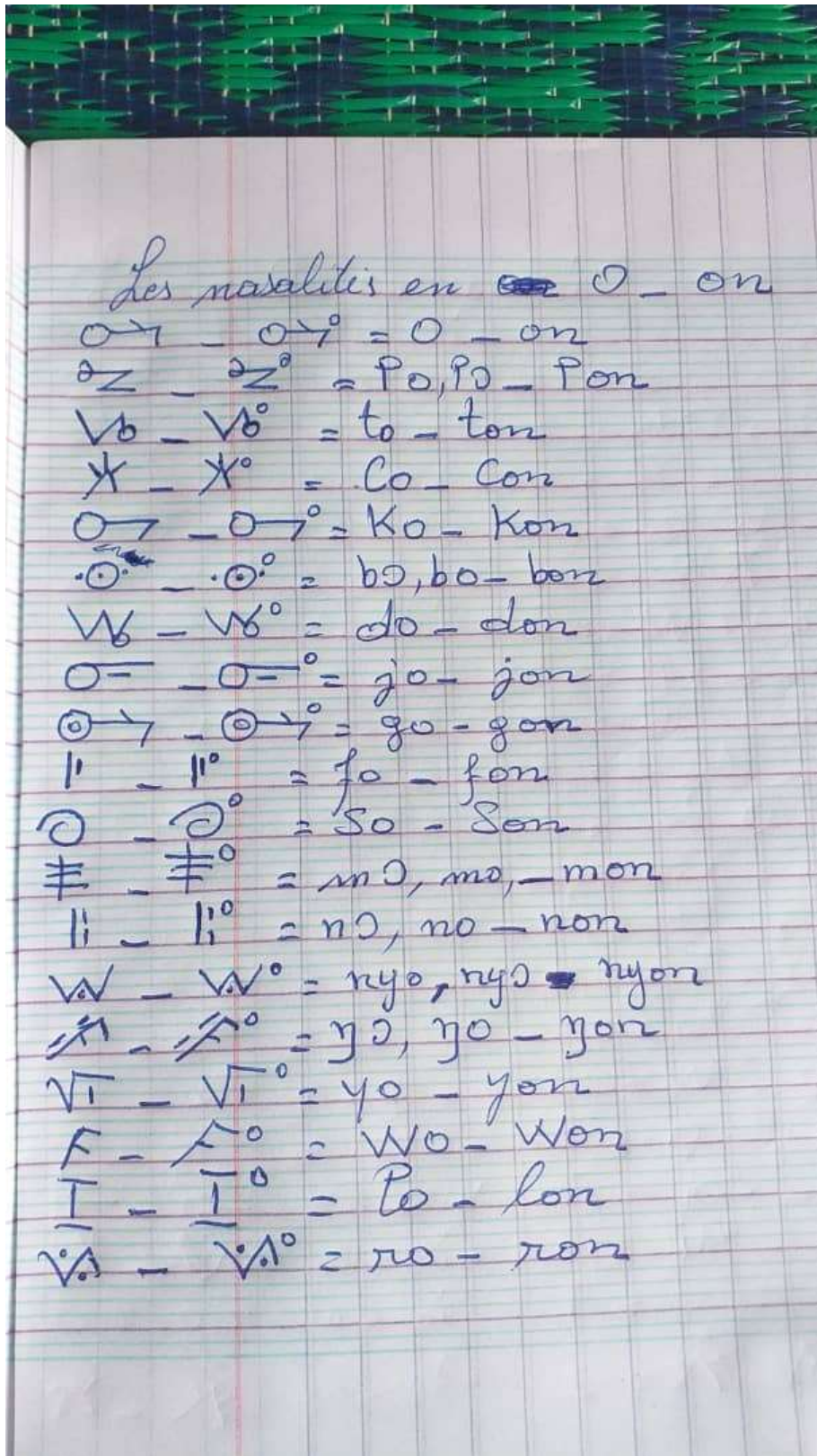


Figure 37. Showcase of the /o/ and /ɔ/ syllable nasality diacritic.

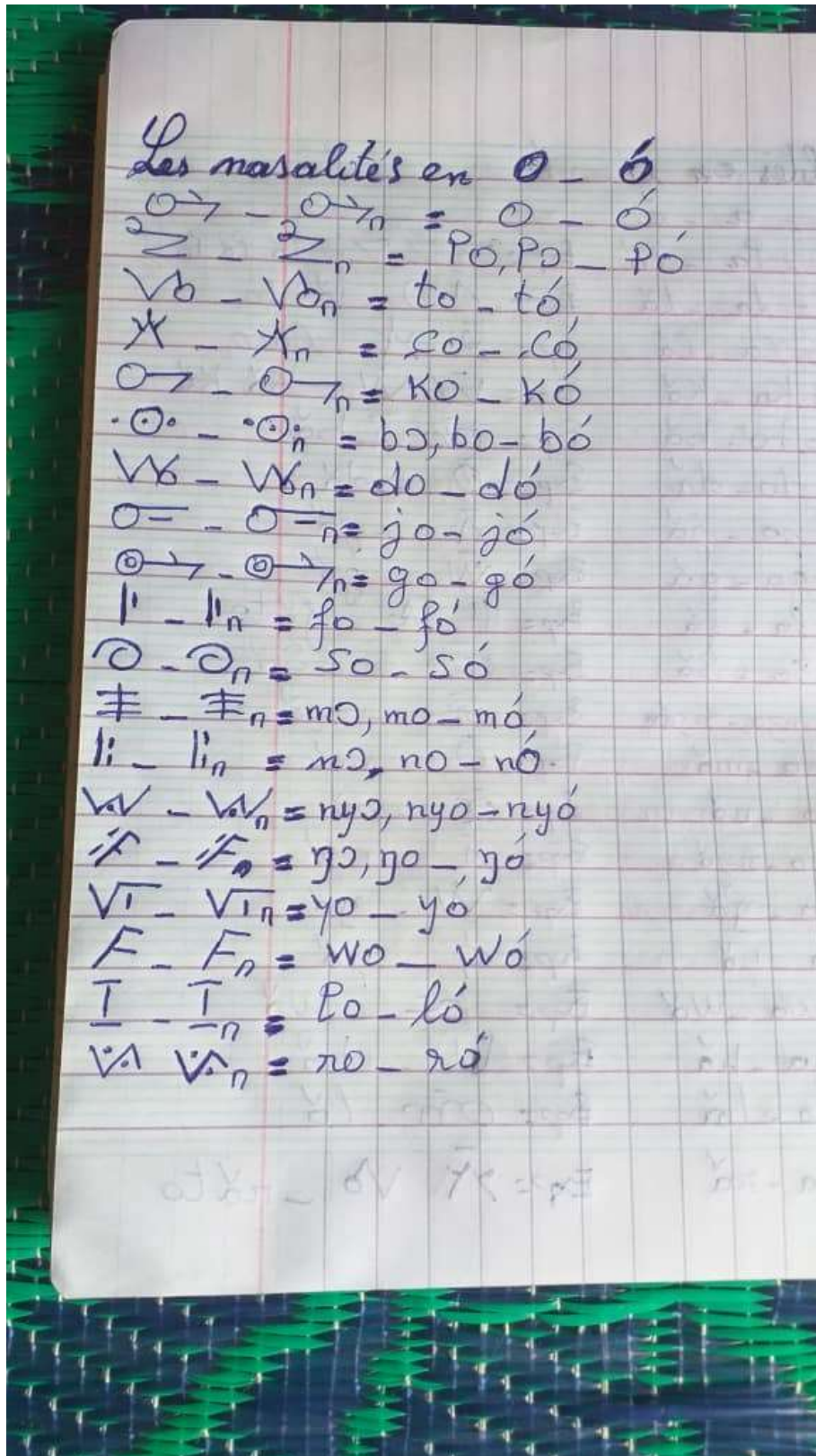


Figure 38. Showcase of the /o/ and /ɔ/ syllable high-tone diacritic.

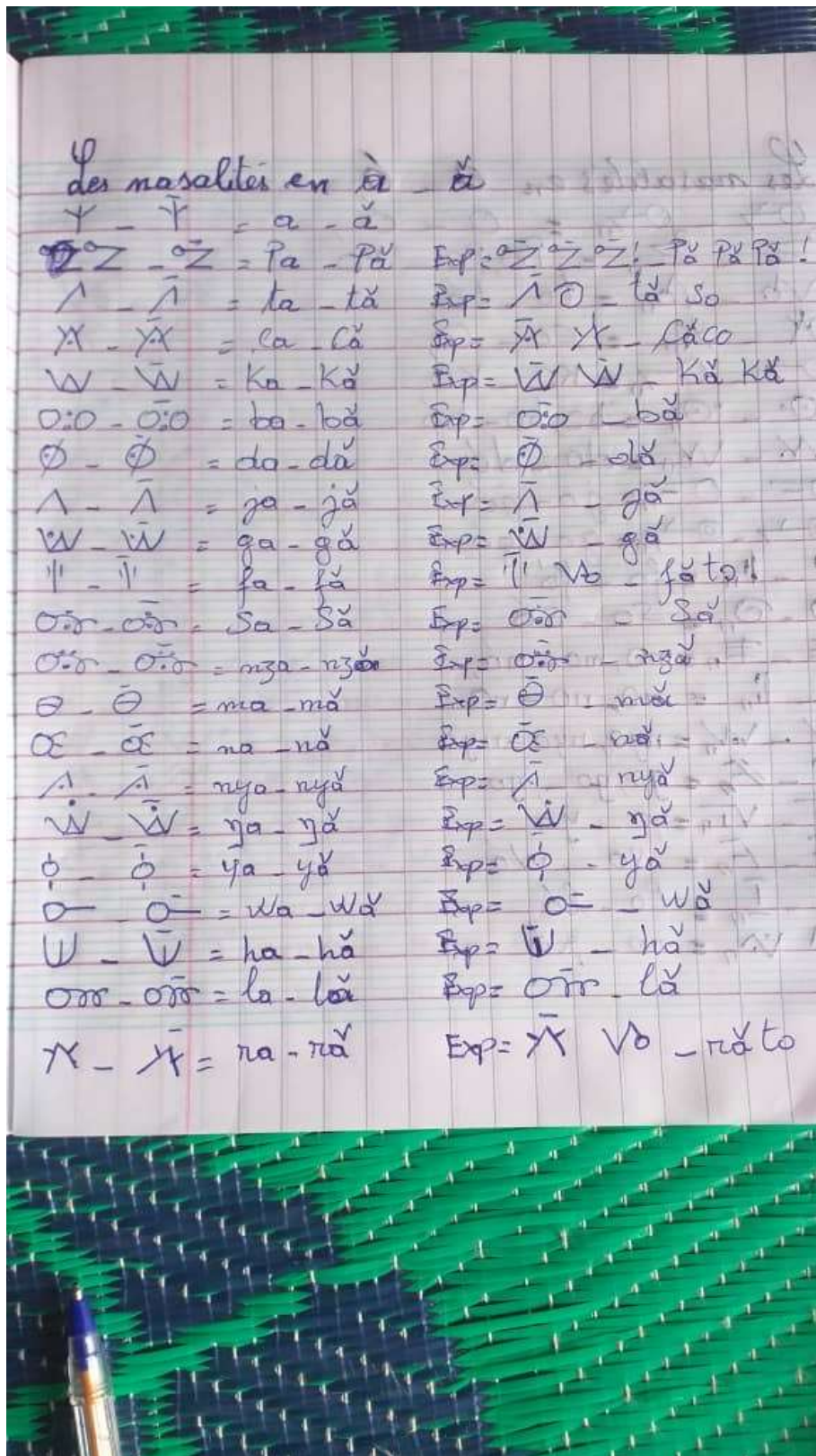


Figure 39. Showcase of the /a/ syllable full modulation diacritic.

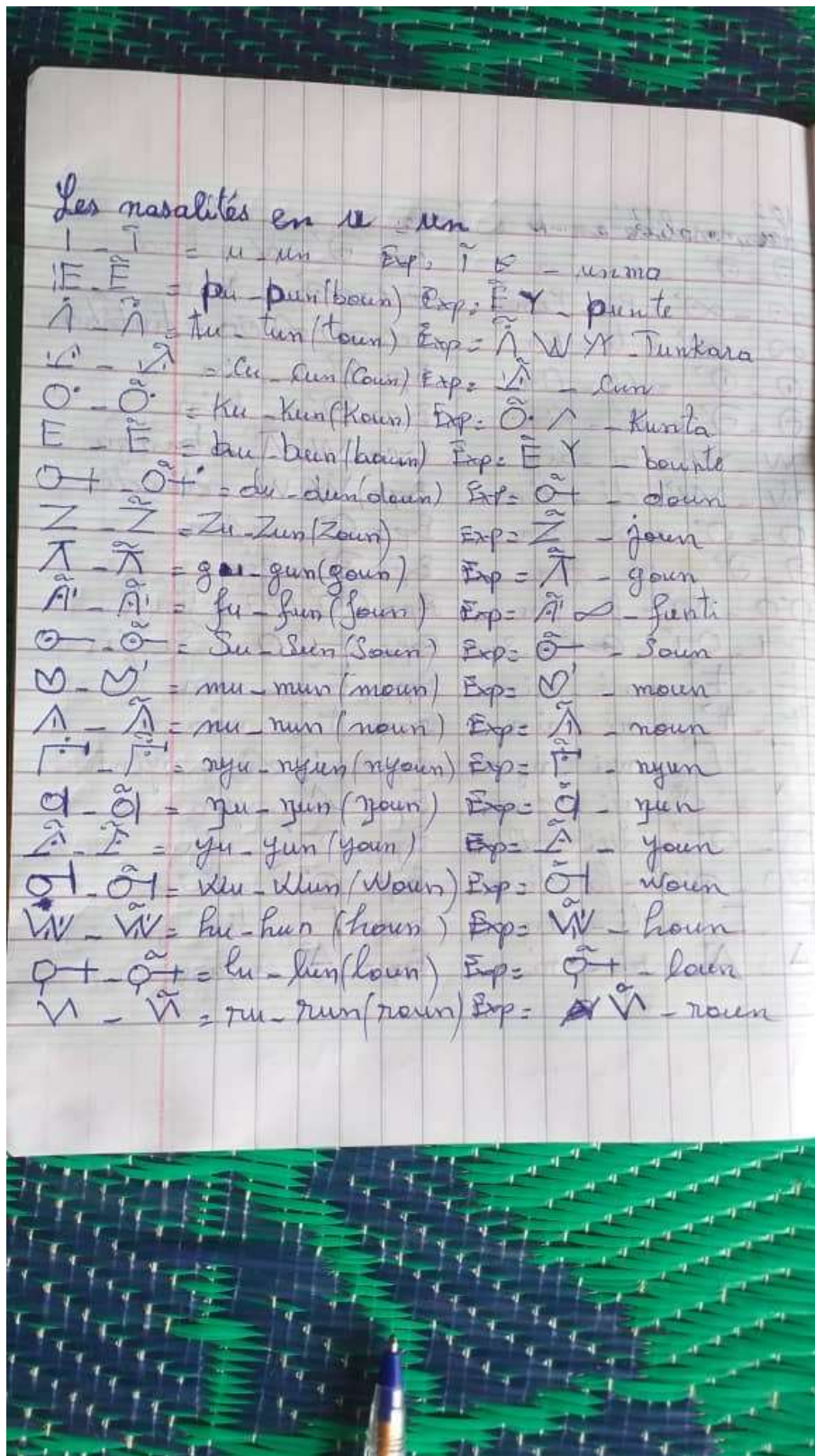


Figure 40. Showcase of the /u/ syllable nasality diacritic.

Les nasalités en /i/ - /in/

$\text{Ḷ} - \text{Ḷ}' = i - in$	Ex: $\text{Ḷ}' \text{W} = \text{indi}$
$\text{Ḷ} - \text{Ḷ}' = pi - pin$	Ex: $\text{Ḷ}' \text{P} = \text{pin}$
$\text{Ḷ} - \text{Ḷ}' = ti - tin$	Ex: $\text{Ḷ}' \text{Ḷ} \text{Ḷ} = \text{tintiba}$
$\text{Ḷ} - \text{Ḷ}' = ci - cin$	Ex: $\text{Ḷ}' = \text{cin}$
$\text{Ḷ} - \text{Ḷ}' = ki - kin$	Ex: $\text{Ḷ}' = \text{kin}$
$\text{W} - \text{W}' = bi - bin$	Ex: $\text{W}' \text{A} = \text{bingu}$
$\text{W} - \text{W}' = di - din$	Ex: $\text{W}' \text{W} = \text{dindi}$
$\text{O} - \text{O}' = gi - gin$	Ex: $\text{O}' = \text{gin}$
$\text{Ḷ} - \text{Ḷ}' = yi - yin$	Ex: $\text{Ḷ}' = \text{yin}$
$\text{O}^{\circ} - \text{O}^{\circ}' = fi - fin$	Ex: $\text{O}^{\circ} \text{O}' \text{O}^{\circ} = \text{finfi}$
$\text{O}^{\circ} - \text{O}^{\circ}' = \text{Si} - \text{Sin}$	Ex: $\text{O}^{\circ} \text{O}' \text{O} = \text{Sinji}$
$\text{Ḷ} - \text{Ḷ}' = mi - min$	Ex: $\text{Ḷ}' = \text{min}$
$\text{Ḷ} - \text{Ḷ}' = ni - nin$	Ex: $\text{Ḷ}' = \text{nin}$
$\text{Ḷ} - \text{Ḷ}' = nyi - nyin$	Ex: $\text{Ḷ}' \text{Ḷ} = \text{nyinti}$
$\text{Ḷ} - \text{Ḷ}' = yi - yin$	Ex: $\text{Ḷ}' = \text{yin}$
$\text{O} - \text{O}' = li - lin$	Ex: $\text{O}' = \text{lin}$
$\text{Ḷ} - \text{Ḷ}' = hi - hin$	Ex: $\text{Ḷ}' \text{Ḷ} = \text{hin}$
$\text{Ḷ} - \text{Ḷ}' = li - lin$	Ex: $\text{Ḷ}' = \text{lin}$
$\text{A} - \text{A}' = ri - rin$	Ex: $\text{A}' = \text{rin}$

Figure 41. Showcase of the /i/ syllable nasality diacritic.

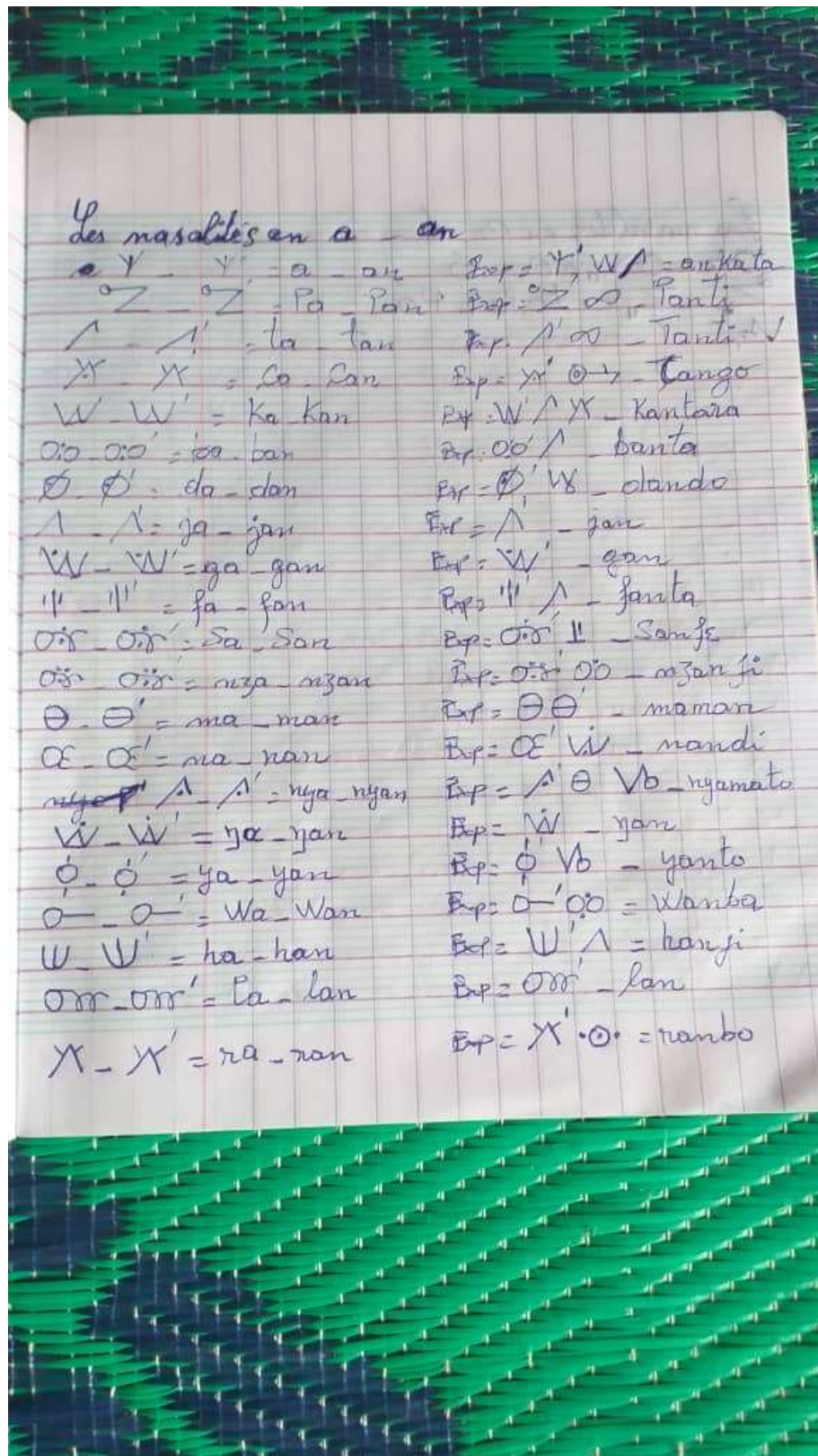


Figure 42. Showcase of the /a/ vowel nasality diacritic.

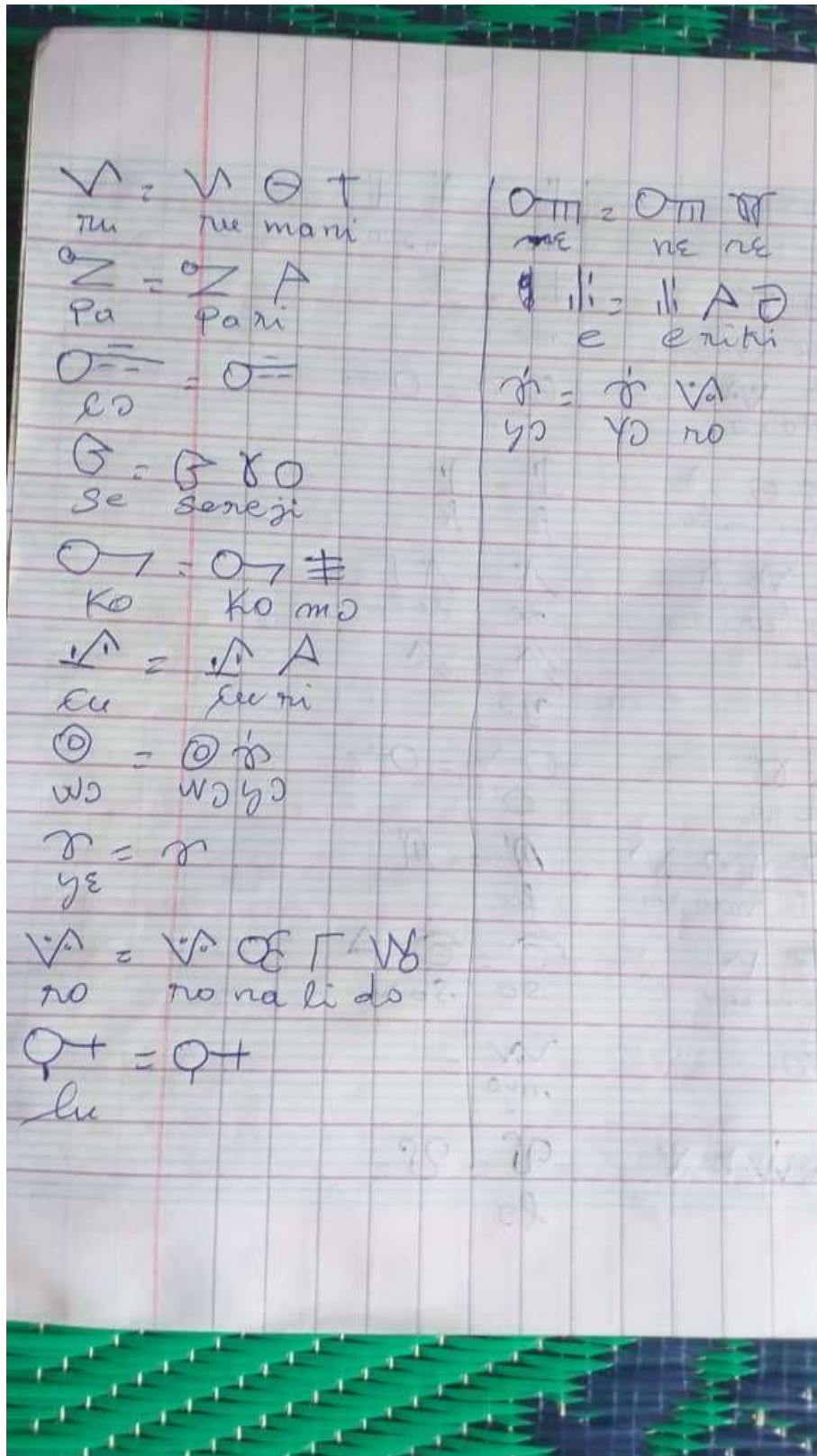


Figure 43. Masaba letters with example words.

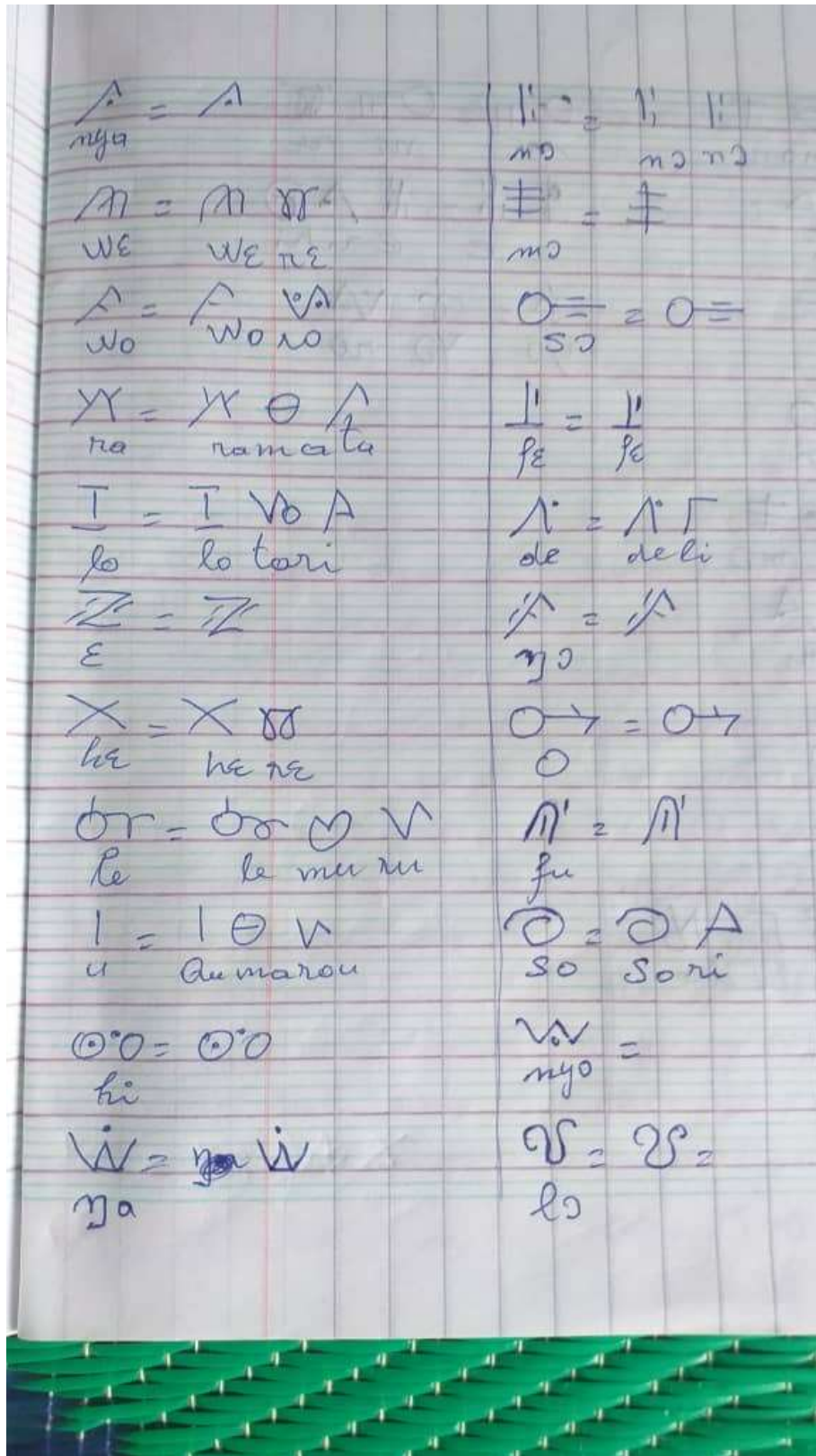


Figure 44. Masaba letters with example words.

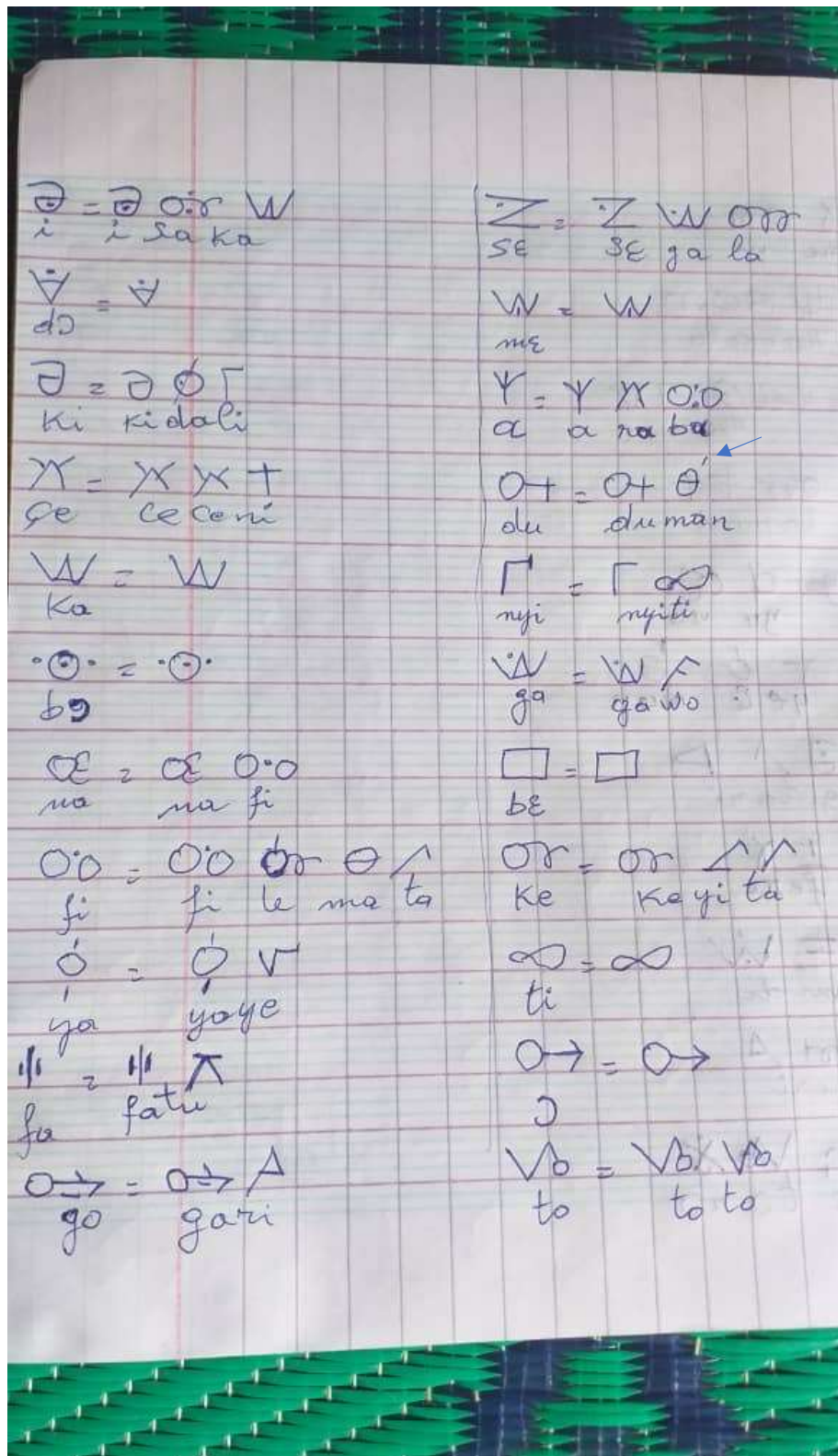


Figure 45. Masaba letters with example words. Arrows: blue = 'o diacritic.

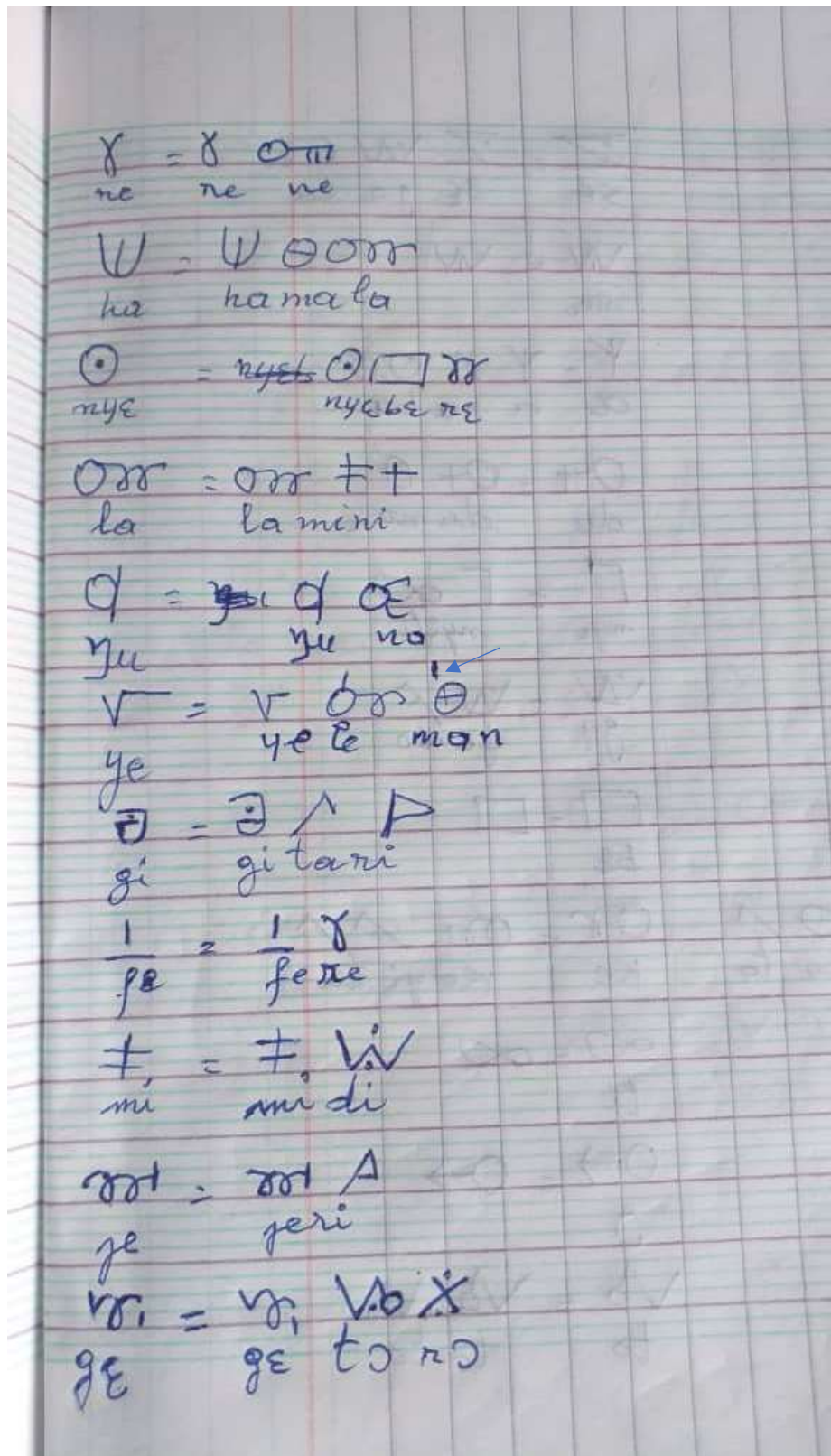
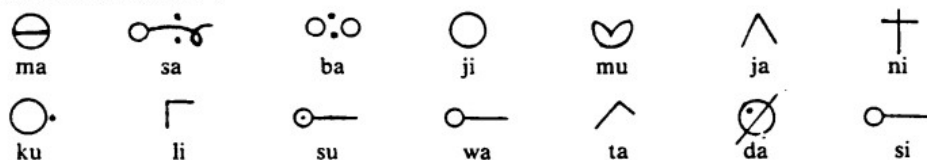


Figure 46. Masaba letters with example words. Arrows: blue = $\overset{\circ}{o}$ diacritic.

et les zones avoisinantes. Le Masaba n'est pas lié à une société d'initiation (du type Komo) ou à une classe sociale particulière. Il est ouvert à tous les âges et aux hommes comme aux femmes. L'apprentissage du Masaba se fait dans le cadre du *masaba-tɔn* (association du Masaba) qui possède son règlement intérieur comme tout *tɔn* qui se respecte.

Les cours ont lieu généralement le soir. On assiste aujourd'hui à un certain délaissement du Masaba qui est lié à la complexité du système, à la présence d'une école dans le chef-lieu voisin de Sandaré, à l'introduction de l'alphabétisation³ dans le village et à l'exode rural. Il est difficile de dire combien de gens ont complètement maîtrisé le système du Masaba, cependant il est utilisé dans un certain nombre de cas : relevés d'impôts, reconnaissances de dettes, correspondance avec les jeunes partis à l'étranger (notamment en France) et prières musulmanes (arabe transcrit en Masaba). D'autre part, le chef d'arrondissement de Sandaré nous apprit qu'il avait récemment fait hisser une banderole bilingue français-Masaba, lors d'une fête de l'indépendance.

Le Masaba s'apprend dans un ordre arbitraire comme une litanie de la manière suivante :



etc.

Lorsqu'on nous eut enseigné l'ensemble du système de cette manière, nous nous aperçûmes qu'il nous manquait certaines syllabes. Nous posâmes alors des questions qui nous permirent de compléter le tableau complet des syllabes du Masaba que voici ci-contre et auquel nous avons donné une allure systématique. Pour lire ce tableau, il faut associer les consonnes figurant sur la colonne de gauche avec les voyelles figurant sur la rangée supérieure. La première ligne de symboles (sans consonne) indique les voyelles prononcées isolément⁴.

Il n'y a pas de signes spéciaux pour les chiffres. Si besoin est, on les écrit en toutes lettres.

On constate dans le tableau de la page suivante que certaines syllabes manquent. Ce sont des syllabes qui n'existent pas en bambara-masasi, telles que *ɲi ɲe, ɲɛ, ho* et *hɔ* (*hɔɾɔn* « noble » est remplacé par *fɔɾɔn*), ou des syllabes possédant une voyelle moyenne mi-fermée (*e* ou *o*) pour lesquelles l'opposition avec la mi-ouverte (*ɛ* ou *ɔ*) possède peu de valeur fonctionnelle. Pour transcrire une de ces syllabes possédant *e* ou *o*, on utilise la syllabe correspondante avec *ɛ* ou *ɔ*.

Exemples : $\cdot \odot \cdot$: *bɔ* sortir
 $\cdot \odot \cdot \Gamma$: *boli* courir

3. L'alphabétisation se fait en bambara transcrit en caractères latins.

4. Le Masaba étant un système peu connu, il est important de signaler qu'il y a eu des erreurs dans la planche n° 18 du catalogue de l'exposition *l'Afrique et la lettre* où ce tableau est reproduit et où les consonnes « n », « ny » et « ɲ » ont été interverties. Le chercheur éventuel devra donc se référer au présent article et non au catalogue de *l'Afrique et la lettre*.

Figure 47. Page 261 of Galtier, Gérard (1987).

Le Masaba s'écrit de gauche à droite. La ponctuation est exprimée par le signe $\text{)}^$, équivalent au point ou à la virgule. Dans sa forme la plus courante, le ton, la nasalité et la longueur ne sont pas notés. Ainsi des syllabes telles que *ta*, *nta*, *taa* et *tan* seront transcrites d'une manière identique : ^ .

Exemples de phrases :

^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^
^	^	^	^	^	^	^	^	^	^

^ ^ ^ ^ ^ ^ ^ ^ ^ ^
ni se be tu wa de ko ma sa ba
nin seben twa (təgə) de ko masaba : le nom de cette écriture est Masaba.

^ ^ ^ ^ ^ ^
ma sa si ka la do
masasi kalan do : c'est l'école (ou lecture) des Masasi.

^ ^ ^ ^ ^ ^ ^ ^ ^
a bə ra a sa ce ma la de
a bəra asacemala de : c'est d'Assatiémala qu'elle vient.

Woyo Couloubayi, l'inventeur du Masaba, était conscient que son système était imparfait et qu'il aurait été nécessaire de le perfectionner pour noter des éléments tels que la nasalité, la tonalité ou la longueur, mais il se heurtait à l'opposition de Tapa Couloubayi qui estimait qu'il ne fallait pas compliquer plus encore le système et que celui-ci était bien tel qu'il était.

Voici les améliorations récentes que Woyo Couloubayi avait apportées au Masaba :

— Un signe diacritique indiquant la nasalité : un tiret vertical au-dessus et à gauche de la syllabe ('S).

Exemples :

'S 'S 'S
san man
 année
 prédicatif adjectival négatif

— Un signe diacritique indiquant la longueur et peut-être le ton bas ou la modulation tonale : un tiret horizontal au-dessus de la syllabe (S).

Exemples (mots de ton bas prononcés avec une modulation) :

S S S
sǎ màá (= mǎgǎ) kǎnǎ
 serpent
 personne
 oiseau

— Un signe diacritique indiquant la brièveté et peut-être le ton haut : un petit arc de cercle en-dessous et à droite de la syllabe (S_n).

Exemples (mots de ton haut prononcés d'une manière brève et unie) :

S_n S_n
só kónó
 maison
 ventre

Figure 48. Page 263 of Galtier, Gérard (1987). Arrows: blue = 'S ; yellow = S ; S_n diacritic. The S diacritic is incorrectly used on the second word here.

COMPARAISON DU MASABA AVEC LES AUTRES SYSTÈMES CONNUS

Il est intéressant de constater que l'élaboration du Masaba s'est faite en 1930, à une époque où l'on assiste à une floraison de nouveaux alphabets africains : ainsi le syllabaire méné (1921), l'alphabet basa du Libéria (années 1920), trois alphabets somali (1922, 1928 et 1930), le « saint » alphabet yorouba (1927), l'alphabet *oberi okaimé* des Ibibio-Efik du Nigéria (1930) et les syllabaires loma et kpellé du Libéria (années 1930). Cependant, le maître d'œuvre du Masaba, Woyo Couloubayi, déclarait ne connaître aucun autre alphabet ou syllabaire similaire au sien.

Il semble que la création de cette graphie chez les Masasi soit liée à leur grand désir d'indépendance. De même que les Kagoro qui vivent aussi au Kaarta, ils représentent une des populations les plus traditionnelles du Mali. L'on ne sera pas étonné d'apprendre que les associations de culte aux génies (*jine-ton*) de Bamako et du Mali occidental placent leur origine au Kaarta. En fait les Bambara-Masasi d'Assatiémala sont musulmans, mais ils sont membres de la confrérie hamalliste, d'inspiration soufie, connue autrefois pour ses prises de position anticolonialistes.

En comparant le Masaba avec les autres écritures africaines connues, on s'aperçoit que le système qui en semble le plus proche est le syllabaire vaï. Or parmi toutes les langues possédant une écriture syllabique, notamment les langues mandé, c'est aussi le vaï qui est la plus proche linguistiquement du bambara. Les Vaï se sont séparés du tronc mandingue à une époque sans doute proche de la création de l'empire du Mali par Soundiata. Il n'est donc pas absurde de supposer une ancienne tradition symbolique commune.

On rencontre dans les deux syllabaires, vaï et Masaba, plusieurs dessins assez similaires. Il faut cependant préciser que la plupart d'entre eux possèdent une valeur phonétique différente. Mais il est possible de faire certains rapprochements, notamment :



Vaï	Masaba	
•I°	ili	e
		je
△		gba/ga
		ha
Y		si
		ki
○		ku
		ke





On rencontre dans le Masaba des signes qui symbolisent clairement les monosyllabes correspondants. Par exemple :




	: sa	serpent
	: ce	homme
	: da	bouche




Certains de ces signes sont compréhensibles à travers le symbolisme traditionnel mandingue. On peut ainsi faire des rapprochements avec quelques idéogrammes *glan glan zo* analysés par Germaine Dieterlen dans *Signes graphiques soudanais* :



Figure 49. Page 264 of Galtier, Gérard (1987).

— Le signe de la femme  (p. 46) qui symbolise le croissant de lune ou la matrice et que l'on peut rapprocher de la syllabe masaba  (*mu*) constitutive du mot *muso* (femme).







— Le signe du poisson  (p. 50) où l'un des éléments fondamentaux est la boucle et que l'on peut rapprocher de la syllabe masaba  (*je*) constitutive du mot *jeye* (poisson) et de la syllabe vaï  ou  (*nyi*) constitutive du mot *nyie* (poisson).






— Le signe de l'oiseau  (p. 52) où la forme en V symbolise les ailes et que l'on peut rapprocher de la syllabe masaba  (*ko*) constitutive du mot *kɔno* (oiseau) et de la syllabe vaï  (*kun*) constitutive du mot *kunde* (oiseau).

Signalons encore les syllabes masaba  (*ji*, « eau ») et  (*ta*, « feu ») correspondant à des pictogrammes mentionnés par Germaine Dieterlen et Youssef Cisse dans leur livre sur la société du Komo (p. 74) puis le symbole  utilisé dans le Masaba pour la voyelle isolée *a* (traduisant les pronoms « il » et « elle ») et que Dominique Zahan (1950) indique comme l'idéogramme de l'homme ou du principe masculin.

Comme le remarque David Dalby, des rapprochements peuvent être aussi faits avec certaines lettres des alphabets cryptographiques arabes du Hodh découverts par Vincent Monteil (1951) ; par exemple la syllabe masaba  (*ja*) est identique à la lettre  (*j*) de l'alphabet cryptographique « el-Qalfaṭīrī ».

Mais les rapprochements les plus marquants sont ceux qui impliquent à la fois le Masaba, le vaï, la tradition idéographique mandingue et les alphabets cryptographiques du Hodh ; en particulier :

— La syllabe masaba  (*to* « plat de mil ou de riz ») correspond à un pictogramme analysé par Germaine Dieterlen dans *Signes graphiques soudanais* (p. 39) où le trait de gauche représente le trajet de la nourriture dans l'œsophage et où la boucle représente le trou du gosier. Et l'on peut en outre rapprocher ce symbole de certaines lettres des alphabets du Hodh :  (*t*) dans l'alphabet « el-Qalfaṭīrī »,  (*t*) dans « el-Yâsînî »,  (*t*) dans « el-Yûnânî »,  (*t*) dans « el-Yûnesî ». Enfin, ce symbole semble apparenté à la syllabe  (*to*) du syllabaire mendé, déjà signalée par David Dalby (1968 : 173).

— La syllabe masaba  (*si*) ressemble à la syllabe vaï  (*si*). Il est difficile de les interpréter symboliquement vu les nombreuses significations du monosyllabe *si* en mandingue. Néanmoins, on peut les rapprocher de plusieurs lettres des alphabets cryptographiques du Hodh :  (*s*) dans l'alphabet « el-Bîṭ'î »,  (*s*) dans « eṭ-Ṭabî'î » et  (*s*) dans « el-Qalfaṭīrī » et « el-Yâsînî ».








— L'un des signes masaba les plus intéressants est peut-être  (*ma*, *maa* « personne ») qu'on peut rapprocher de  (*mo* « personne ») qu'on trouve à la fois dans les syllabaires mendé et vaï. Cette lettre semble aussi apparentée au pictogramme de la personne  chez les Keita du Mandé (*Signes graphiques soudanais*, p. 43) et à la représentation de la consonne « m » dans divers alphabets du Hodh :  dans « el-Yâsînî »,  dans « el-Bîṭ'î »,  dans « eṭ-Ṭabî'î ». En effet, il existe en vaï une forme optionnelle  qui fait le lien entre ces divers symboles.

Figure 50. Page 265 Galtier, Gérard (1987).

ISO Proposal Summary Forms

ISO/IEC JTC 1/SC 2/WG 2

PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS

FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646².

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

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

Please ensure you are using the latest Form from <http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest *Roadmaps*.

A. Administrative

1. Title:	<i>Proposal for encoding the Masaba script in the UCS</i>
2. Requester's name:	<i>Oreen Yousuf</i>
3. Requester type (Member body/Liaison/Individual contribution):	<i>Individual Contribution</i>
4. Submission date:	<i>2024-09-06</i>
5. Requester's reference (if applicable):	<i>oreen.yousuf@gmail.com</i>
6. Choose one of the following:	
This is a complete proposal:	<i>Yes</i>
(or) More information will be provided later:	

B. Technical – General

1. Choose one of the following:					
a. This proposal is for a new script (set of characters):	<i>Yes</i>				
Proposed name of script:	<i>MASABA</i>				
b. The proposal is for addition of character(s) to an existing block:	<i>No</i>				
Name of the existing block:					
2. Number of characters in proposal:	<i>132</i>				
3. Proposed category (select one from below - see section 2.2 of P&P document):					
A-Contemporary	<input checked="" type="checkbox"/>	B.1-Specialized (small collection)	<input type="checkbox"/>	B.2-Specialized (large collection)	<input type="checkbox"/>
C-Major extinct	<input type="checkbox"/>	D-Attested extinct	<input type="checkbox"/>	E-Minor extinct	<input type="checkbox"/>
F-Archaic Hieroglyphic or Ideographic	<input type="checkbox"/>	G-Obscure or questionable usage symbols	<input type="checkbox"/>		<input type="checkbox"/>

² 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)

4. Is a repertoire including character names provided?	Yes
a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document?	Yes
b. Are the character shapes attached in a legible form suitable for review?	Yes
5. Fonts related:	
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	<i>Oreen Yousuf</i>
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	<i>Oreen Yousuf, oreen.yousuf@gmail.com, https://github.com/oyousuf/unicode/blob/main/Masaba/MasabaFont.otf</i>
6. References:	
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?	Yes
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?	<i>Yes – use from national language body</i>
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
	<i>A sorting description is enclosed.</i>
8. Additional Information:	
<p>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 http://www.unicode.org 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.</p>	

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
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?	Masaba Association, user community, Malian Academy of Languages
If YES, available relevant documents:	Enclosed in the proposal.
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	Introduction, History and Use section
4. The context of use for the proposed characters (type of use; common or rare)	Rare
Reference:	Enclosed in the proposal; Introduction section
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference:	Mali
6. After giving due considerations to the principles in the P&P document must the proposed characters 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 scattered)?	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 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?	Yes
If YES, is a rationale for its inclusion provided?	No

If YES, reference: 	
11. Does the proposal include use of combining characters and/or use of composite sequences?	<i>No</i>
If YES, is a rationale for such use provided?	
If YES, reference: 	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
If YES, reference: 	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	<i>No</i>
If YES, describe in detail (include attachment if necessary)	
	
13. Does the proposal contain any Ideographic compatibility characters?	<i>No</i>
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference: 	

MINISTÈRE DE L'ÉDUCATION NATIONALE
REPUBLIQUE DU MALI

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Académie Malienne des Langues
(AMALAN)



République du Mali
Un Peuple – Un But – Une Foi

August 26, 2024

LETTER OF REQUEST

To whom it may concern

I, the undersigned, Dr Adama Diokolo COULIBALY, General Director of the Malian Academy of Languages (AMALAN), hereby officially request that the Masaba and N'ti scripts be encoded in Unicode.

These endogenous scripts are used in the Kayes region of Mali to write the Bamanankan and Soninke languages. Masaba is used to write Bamanankan (Bambara) and N'ti is used to write Soninke.

Yours sincerely,

The Director General

The signature is in blue ink and is written over a circular official stamp. The stamp contains the text 'Ministère de l'Éducation Nationale', 'République du Mali', 'Un Peuple – Un But – Une Foi', and 'Académie Malienne des Langues'. The name 'Dr Adama Diokolo Coulibaly' is printed across the bottom of the stamp.

Dr Adama Diokolo COULIBALY

Knight of the National Order

MINISTRE DE L'EDUCATION NATIONALE
REPUBLIQUE DU MALI

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Académie Malienne des Langues
(AMALAN)



République du Mali
Un Peuple – Un But – Une Foi

August 26, 2024

LETTER OF REQUEST

To whom it may concern

I, the undersigned, Seydou TRAORE, Acting Secretary General of the Malian Academy of Languages (AMALAN), hereby officially request that the Masaba and N'ti scripts be encoded in Unicode.

These endogenous scripts are used in the Kayes region of Mali to write the Bamanankan and Soninke languages. Masaba is used to write Bamanankan (Bambara) and N'ti is used to write Soninke.

Yours sincerely,

The Acting Secretary General



Seydou TRAORE
Associate Researcher

The Director General



Dr Adama Diokolo Coulibaly
Knight of the National Order

Oumarou COULIBALY

**President of the Masaba Association - Tɔn
Assatiemala - Mali**

Republic of Mali

One People – One Goal – One Faith

August 26, 2024

LETTER OF REQUEST

To whom it may concern

I, the undersigned Oumarou COULIBALY, President of the Masaba Association - Tɔn in Assatiemala - Mali, hereby officially request that the Masaba and N'ti scripts be encoded in Unicode.

These endogenous scripts are used in the Kayes region of Mali to write the Bamanankan and Soninke languages. Masaba is used to write Bamanankan (Bambara) and N'ti is used to write Soninke.

Yours sincerely,

The President of the Masaba Association



Oumarou COULIBALY

Dr Mahamadou KONTA

President of The Malian National Languages
Friends' Club (CALAN – Mali)

Republic of Mali

One People – One Goal – One Faith

August 26, 2024

LETTER OF REQUEST

To whom it may concern

I, the undersigned; Dr Mahamadou KONTA, **President of The Malian National Languages Friends' Club (CALAN – Mali)**, hereby officially request that the Masaba and N'ti scripts be encoded in Unicode.

These endogenous scripts are used in the Kayes region of Mali to write the Bamanankan and Soninke languages. Masaba is used to write Bamanankan (Bambara) and N'ti is used to write Soninke.

Yours sincerely,



The President

Dr Mahamadou KONTA

Dr Mahamadou KONTA

République du Mali

Président du Club des Amis des Langues Nationales
du Mali (CALAN - Mali)

Un Peuple – Un But – Une Foi

Bamako le 26 Août, 2024

LETTRE DE REQUETE

A qui de droit

Je soussigné, Dr Mahamadou KONTA, **Président du Club des Amis des Langues Nationales du Mali (CALAN - Mali)**, a l'honneur de solliciter officiellement auprès de votre bienveillance l'encodage des écritures Masaba et N'ti dans l'Unicode.

Ces écritures endogènes sont utilisées dans la région de Kayes au Mali pour écrire les langues bamanankan et soninké. Le Masaba est utilisé pour écrire le Bamanankan (Bambara) et le N'ti est utilisé pour écrire le Soninké.

Je vous prie d'agréer, Madame/Monsieur, l'expression de mes sentiments distingués,



Le Président

Dr Mahamadou KONTA