Proposal to encode the Minim Dag Noore script in the UCS Oreen Yousuf

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

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Subject: Minim Dag Noore Script

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We propose the addition of the Minim Dag Noore script into the Unicode Standard. Since its invention in 2006, the script has been used to write the Mooré language (also known as "Mossi") of Burkina Faso and neighboring countries.

Considerations for encoding the script

- The Minim Dag Noore script is a bidirectional script (i.e., it can be written either right-to-left (RTL) or left-to-right (LTR)). However, it is not at all a boustrophedon script. Additionally, writers do not mix directions when writing.
- There are <u>separate glyphs</u> for each writing direction.
 - o While most letters look very similar, or almost mirror each other, in their RTL and LTR forms (ex: the letter PA written RTL: الله vs. LTR: الله vs. LTR:
 - We propose encoding the RTL glyphs because the majority of users write RTL. However, a non-significant percentage of users write LTR. We believe the LTR version of the script can be handled by fonts. We ask the SEWG if this is the best course of action, or if they consider encoding both sets of glyphs to be the better approach.
- The script is <u>bicameral</u> for each writing direction, meaning there are RTL uppercase letters and LTR uppercase letters. However, only one case is used at a time when writing. A sentence is either fully written in uppercase or fully written in lowercase.
- There are three characters in the script that are very similar in appearance and use to Arabic-script characters:
 - <u>"Täblebnde" and "Täppo"</u> are the Minim Dag Noore equivalent to parenthesis. They resemble U+FD3F ORNATE RIGHT PARENTHESIS and U+FD3E ORNATE LEFT PARENTHESIS, which are occasionally used in some Arabic-script languages.
 - "Woglogo" is a Minim Dag Noore character that appears as a line on the baseline and connects adjacent characters. This is the equivalent to U+0640 ARABIC TATWEEL.
 - We ask the SEWG if these should be unified with the existing encoded characters, or if they should be encoded as well due to the bidirectional nature of Minim Dag Noore.
- While there are certain <u>mathematical numbers</u> in the script, which are distinct from <u>normal</u> <u>digits/numerals</u>, they are not significantly used by the community. Therefore, while we present them here for documentation purposes, they are **not** proposed for encoding at this time.
- Lowercase letters have <u>positional forms</u> and join at the baseline (uppercase letters do not). Only the <u>isolated forms are proposed for encoding</u>. The positional forms are much less complex than those in the Arabic script.

Sources: At the end of the document, we have provided ample <u>evidence</u> of use by multiple authors in the community that are not the script creator nor related to the script creator. We include excerpts from 15 typed books, handwritten works, educational materials/primers, digital media, images of in-person and virtual classes of people learning the script, and an interview with a Burkinabe scholar who also wrote a letter of attestation of the script's suitability for Mooré.

I Background

The Mooré language (ISO 639-3: *mos*) is a Gur language spoken by about 12 million people. It is the native language of the Mossi people who primarily live in Burkina Faso, but also neighboring countries like Benin, Ivory Coast, Ghana, Mali, Togo, Niger, and Senegal. Along with being one of the four official languages of Burkina Faso, it also acts as a lingua franca of the country and a Latin orthography is employed by the government when written.

On November 23, 2006, the Minim Dag Noore script (سمّالتمّالي المحرية) was created by Mahamadi Ouédraogo, a Burkinabe man born in 1982 in the village of Lamba in the Békuy commune, Tuy Province, Hauts-Bassins Region, Burkina Faso. Ouédraogo created the script in 2006 after extensive scholarly work and spiritual travel throughout West and North Africa. There is motivation to encode the script due to the community's need for text interchange, particularly on mobile devices since many script users do not have access to computers. Without external or state funding, the community has produced fonts (by utilizing Arabic and English codepoints), literature, and educational material through grassroots efforts.

The script has appeared on a Burkinabe National Television (RTB) news report, and discussed at the Department of Linguistics and National Languages at *Institut des Sciences des Sociétés* (INSS) (Institute of Social Sciences), an institution within the framework of the National Centre for Scientific and Technical Research (CNRST). While there is no government support of the script, in 2016 Ouédraogo met and interviewed with Bétéo D. Nébié and Inoussa Guiré, the former and current (as of August-September 2022) director, respectively, of the Department of Linguistics and National Languages at INSS. Nébié and Guiré "let [Ouédraogo] undergo some tests and [...] found that his alphabet was coherent." An official letter certifying this is attached after the Acknowledgments section of this proposal. Additionally, to the proposal author's knowledge, the first non-Burkinabe academic to document the use and structure of the script was paleographer Jannis Kostelnik after conducting fieldwork in the area of use.

There are 1,000+ people that have learned and used the Minim Dag Noore script, growing far beyond the inventor's social circle. Most users of the script live in various areas of Burkina Faso, Ivory Coast, Mali, Senegal, and in certain European countries. The script is taught in-person in group settings, and online (e.g., WhatsApp, Facebook). There are 2 very large and active WhatsApp group-chats devoted to teaching/learning the script with a few hundred script users/learners in them. People actively partake in exercises in the WhatsApp groups. While most learners in the WhatsApp groups are from the previously mentioned countries, there are notably many people joining from Arab countries. March 2024 saw an influx of a few hundred new students into the WhatsApp group chats perhaps due to a new TV/radio report on Ouédraogo. The WhatsApp groups have also attracted some political attention as one of the new members is former presidential candidate Yeli Monique Kam.

The user community has developed 3 fonts for the script that have been used to write several books on various topics (e.g., poetry, proverbs, etc.) and create primers, documents, pamphlets, and digital content in online videos. The script is included in materials written by individuals *other* than the script creator.

A layout of how the community types in the Minim Dag Noore script can be seen from a keyboard layout, and a subsequent linguistic analysis of said layout, in Figures 29-31 in Section IX, which will be helpful for keyboard designers. The community essentially uses the Arabic and English keyboards/codepoints with their fonts to type their script.

A very important aspect of the Minim Dag Noore script is that it can be, and is, used to write the Arabic language (ISO 639-3: *ara*) in addition to Mooré. The phonetic values of a subset of the letters change when the writer uses the script to write the Arabic language instead of Mooré.

II Script Name

The proposed Unicode name for the script is "MINIM DAG NOORE", which means "the doors of knowledge/science" in the Mooré language. The canonical name of the script is שَمُلَّكُ الْجِينِ and is spelled "Minim Dag Nuure" in the Latin orthography for Moore.

III Structure

The Minim Dag Noore script is an alphabet at its core, but has heavy elements of an abjad. Minim Dag Noore is both a sinistrograde (right-to-left) script and a dextrograde script (left-to-right). This means the script is written either from right-to-left (RTL) or left-to-right (LTR) in a remarkably unique case of bidirectional text among the world's writing systems. Minim Dag Noore is <u>not</u> a boustrophedon script, wherein the first line of text is written in one direction and the subsequent line is written in the opposite direction. Depending on how a person learns the script, they will write either RTL or LTR. People can easily read both RTL and LTR and there is no confusion in reading direction in a group of people that has both RTL and LTR writers. While the majority of people write RTL, there is a non-insignificant number of LTR users. People do not mix directions when writing.

There are lowercase and uppercase letters for each direction of writing. Lowercase letters are joined at the bottom similar to the Arabic, NKo, and Adlam scripts. There are positional forms for the lowercase letters (as seen in <u>Table 22</u>), though they are not as drastic as positional forms in the Arabic script.

Name	IPA		etters ograde)	LTR Letters (Dextrograde)		
		Lowercase	Uppercase	Lowercase	Uppercase	
Α	/a/	~	Λ	<u>~</u>	A	
ВА	/b/	مہ	Ø	۵.	מ	
DJA	/g ⁱ /	<u>a</u>	모	عد	丑	
DA	/d/	لمہ	占	۵	4	
НА	/h/	هـ	X	&.	X	
wou	/w/	~	2	9	ರ	
ZA	/z/	প্র	Ю	X.	머	
PAHE	/p/	~&	×	&	Z	
VATE	/v/	2	Z	<u>s</u> .	Z	
YI	/j/	ત	Ω	2	Ω	
KA	/k/	त	£	2	£	
LA	/١/	ىد	Ю	بد	Ю	

MA	/m/	سے	m	兀.	Ш
NA	/n/	<i>P</i> L	94	9L.	94
SA	/s/	£	E	٤	Σ
FA	/f/	للہ	Ш	<i>J</i>	П
NGAS	/g/, if occurring after /ŋ/	2	ອ	2.	C
QAX	[k], [ɣ] and possibly [g ⁱ] as allophones of /g/. /k ⁱ / as allophone of /k/	æ	G	£.	C
RA	/r/	~₃	Z	8	Z
TA	/t/	*	Ψ	上	H
SANG	/ŋ/	Ж	Ю	PL.	Ю
GA	/g/	2	С	۵	C

Table 1. Basic character inventory of the Minim Dag Noore script when writing Mooré.

The letters A, WOU, and YI, are considered the 3 "base vowel-letters" and are used with diacritics to create several different vowels (shown in the 'Diacritics' subsection below).

Other letters

Writing WOU or YI with a diacritic word-initially always represents a vowel with semi-vocalic onset, e.g. [wo] or [yi], comparable to Arabic Wāw $\mathfrak g$ or Yā' $\mathfrak g$ with a following short vowel, i.e., $\mathfrak g$ or $\mathfrak g$. However, there are two additional letters similar to WOU and YI that are used for word-initial vowels without a preceding semi-vowel, which is unusual in Mooré and mostly occurs in loanwords (e.g., $Esp\tilde a^ni$ ("Spain", from French Espagne)).

	10 a 1111 0 1 a 3 (c.g.) 2 3 p a 1	(- p)	-11911-			
	Word-initial lowercase vowel WOU	Example	Word-initial lowercase vowel YI	Example		
RTL	2	و لس	~ 1	بیکتیم		
LTR	2	چىر	124	نوکلی		
	Latin Orthography:	υm	Latin Orthography:	iriytre		

Table 2.1. Lowercase word-initial vowel letters.

 \mathbf{A} + respective vowel diacritic* corresponds to an initial /I/, /e/, / $\tilde{\mathbf{e}}$ /, / $\tilde{\mathbf{i}}$ /, / $\tilde{\mathbf{i}}$ /, / $\tilde{\mathbf{e}}$ /.

 φ + respective vowel diacritic* corresponds to an initial $\langle \sigma \rangle$, $\langle \sigma \rangle$, $\langle \tilde{\sigma} \rangle$, $\langle \tilde{u} \rangle$, $\langle u \rangle$, [oa].

* See Diacritics table (Table 4) below to see vowel diacritics for Mooré.

This word-initial vowel YI letter can also be used when writing the Arabic language and represents [(IPA: /ʔi/).

There are also uppercase word-initial vowel letters:

u_	ppercase word	ercase word-initial vower letters.										
	Direction	Word-initial	vowel WOU	Word-initial vowel YI								
	Direction	Uppercase	Lowercase	Uppercase	Lowercase							
	RTL	RTL		Λ	~							
	LTR	V	2	Λ	12							

Table 2.2 Uppercase and lowercase word-initial vowel WOU and YI.

Both the sinistrograde (RTL) script and the dextrograde (LTR) script have distinct letters for representing word-final lowercase vowels:

Abasga Yıbasga Wubasga (Word-final (Word-final (Word-final Examples **Examples Examples lowercase** lowercase **lowercase** vowel A) vowel YI) vowel WOU) RTL ح æ__ LTR Latin Latin Latin bũndi SÕ рà Orthography: Orthography: Orthography:

Table 3. Word-final vowel graphemes. Note: any empty spaces between the letters in the examples above is due to an imperfect font; all text is, and should be, connected in the examples above.

These should be encoded as they are considered separate letters and are collated differently than the "normal" A, WOU, and YI letters in <u>Table 1</u> (see <u>Figure 46</u> in Section IX).

Diacritics

There are many (non-spacing) diacritics in the Minim Dag Noore script. To write the Mooré language, the following diacritics are used.

Name	Diacritic		RTL		LTR	Mooré Latin	IPA
		Base	Base + Diacritic	Base	Base + Diacritic	Orthography	
	له ا	~	~ ~ ~ a		a	/a/	
Abila	ै	ھ	a 4	9	ğ	υ	/ʊ/
		٩	a Ç	ર્વ	2	ι	/1/
		~	٠.	s.	j.		/ə/
Sobila	்	4	৽প্	ф	ġ	o	/o/
		વ	• 6	ર્વ	· کے	е	/e/
			\$∘	ø.	Å.	ã	/ã/
Hõbila	ំ	~	°व्	9	ŷ	õ	/õ/
		۶	.	ط	å.	ẽ	/ẽ/
	_	~	ار ال	s.	؞		/७/
Zĩbila	ំ	4	n 4 7	9	ð	ũ	/ũ/
		વ	ે લ	ર્વ	مُ	ĩ	/ĩ/
	_	~	ر. م	<u>~</u>	<u>چ</u>		/æ/
Dibila	័	4	u 4 7	ф	ģ	u	/u/
		વ	u ન્	ર્વ	مّ	i	/i/
	10	~	≯ 6	/s	<u>~</u>		/a~p/
Zoabila	ី	م	9 4 7	ð	\$	oa	[oa]
		વ	⁹ લ્	ર્વ	2	3	/٤/

Table 4. The 6 vowel diacritics used on top of the 3 base vowel-letters to write the Mooré language. When a vowel-letter does not have a vowel-diacritic on top of it, it is generally assumed the vocalic realization comes from Abila

Notice from $\underline{\text{Table 4}}$ that diacritics' shapes are fixed and do not change orientation when used on either the RTL or LTR versions of the script.

 $^{^{\}circ}$. Writing vowels with uppercase letters will be discussed later. While /9/, /8/, /2/, and /2/2 do not natively occur in Mooré (hence the empty cells in the Latin orthography column), verified by a consulted scholar familiar with Mooré phonology, the letter+diacritic combinations are used in the script, most likely for emphasis or volume.

"Zaouga" is used when displaying the 6 vowel diacritics in isolation (for pedagogical texts) and for using the script to write the Arabic language. We sometimes refer to Zaouga as "vowel diacritic holders" in the proposal. "Zoubedre" is used for vocalization in uppercase text in addition to the same pedagogical purposes as Zaouga.

Case	Direction of Writing	Default	a	•	৽	ា	េា	១
Zaouga (for lowercase)	RTL	ئ	2 1	نہ	د	1	<u>د</u>	4
	LTR	_	²	<u>`</u>	°	a 🚄	<u>_</u>	4
Zaoubedre (for uppercase)	RTL	I	a I	i	0	د ا	I	ъ Т
	LTR		a	i	0	د ا	ر ا	1

Table 5. Zaouga and Zaoubedre.

When writing **Mooré** in <u>capital</u> letters (not in lowercase), in either direction, specific vowel marks are used in lieu of the 3 base vowel-letters (as seen in <u>Tables 1</u> and <u>4</u>). These vowel-marks are placed below a consonantal letter. In Mooré, following the consonant that these marks are placed below, a Zaoubedre with a vowel diacritic atop it is written to specify exactly which vowel is produced. So, in summary, one must use a below vowel-mark and the subsequent Zaoubedre's vowel diacritic value to produce a specific vowel. If a Zaoubedre and/or its vowel-diacritic is not written after the consonant, an inherent Abila diacritic and its vocalization can be assumed.

These diacritics can also be used on any letters (including the base vowel-letters) when writing Arabic.

There are two distinct marks that represent YI, called Masgodga. One is used for capital letters (i.e., when writing Mooré) and one used for lowercase letters (i.e., when writing Arabic). <u>See Figures 39.1-39.3</u> in Section IX for examples of how to read/interpret vowels in uppercase text.

			Favring land Varral	Ex	camples of Use		
Below '	Vowel-Mark		Equivalent Vowel- Letters	Moor	·é	Arabic*	
			Letters	LTR	RTL	Alabic	
Mastırga (ı	represents		~ A	άιΖΞιΜ <mark>α</mark> Ι	I _区 mi並Zi┆	ڷ؏ڗؾٟ؇ۏ	
vowel A)		<u> </u>	Mooré Lowercase	مهٔ المُسلامًا لِمُعالِمُهُم		نَسْتَعِد	
			Equivalent →	Latin: burk	* ,		
Mastekre (represents		resents • 3		מַנְאַבּוָשֹׁמַן	IØMjāZ <u>i</u> Ö	ٳڡۣڲڂؾٟۧٵڣ	
vowel	vowel WOU)		Mooré Lowercase Equivalent →	مهراگتمگا	لتمسمكيتم	نَسْتَعِينُ	
				Latin: burk			
	used for		ט ט	ľδη <mark>ι</mark> Ξτιά	IÖM! T Z!Ò		
Masgõdga	Uppercase	្ន	Mooré Lowercase	مهرگمتمحّا	لتمسكيتم	-	
(represents			Equivalent →	Latin: burk			
vowel YI)	used for				القلاتيماد		
	Lowercase	ू	ማ ው	-		نَسْتَعِينُ	

Table 6. Below vowel-marks. Red = specified diacritic in the word; Blue = specified vocalization. *While Arabic can be written both RTL and LTR in Minim Dag Noore, it's mostly written RTL.

It is important to note that these below-vowel marks in <u>Table 6</u> cannot be used together with the vowel-diacritics in <u>Table 4</u>.

Takre, $^{\frown}$, is a diacritic used to mark long vowels. Takre can be used on two adjacent vowel-letters. It is visually stretched over the top of both vowel-letters. When this happens, Takre can be used in conjunction with vowel-diacritics.

Takre (LONG	Examples								
VOWEL	Lowe	ercase	Uppercase						
DIACRITIC)	RTL LTR		RTL	LTR					
ি	متک	250	vठង់ក៏ <u>v</u>	<u>Ÿ</u> 而お5♥					
Latin Orthography:	ba	aag	AA MANUWA						
Across 2 base vowel-letters	\f\ \f\ \f\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	22 23 22 24 23 24	ΩΛ ΩΛ ΩΩ ΛΩ ΩΩ ΛΩ	<u>ህ</u> ይህ ይል ይህ ይል ህያ					

Table 7. Minim Dag Noore script Takre (long vowel diacritic). See <u>Figure 14</u> in Section IX to see Takre stretched over two vowel letters; see <u>Figure 16</u> to see another diacritic above Takre stretched over two vowel letters; and see <u>Figure 19</u> to see 2 diacritics above Takre stretched over two vowel letters.

If a vowel-diacritic has already been placed on a basic vowel-letter, a distinct long-vowel letter follows the respective base vowel-letter. When writing in lowercase (regardless of direction) this long-vowel letter is always connected to the preceding vowel, but separated from the following consonant. In that respect, as well as in shape, it exhibits parallels to an Arabic Alif representing a long vowel /a:/, <\>. The uppercase version of the script (also regardless of direction) has its own long-vowel letter — a long vertical bar/line, and is also, naturally, not connected to the following letter.

	Takzısgo (for	lowercase)	Takbedre (for i	uppercase)	
	RTL	LTR	RTL	LTR	
Lowercase	l	J			
Examples	یم <mark>ا</mark> س ⊷	سرخي م	ا ا	اْنِل —	
Latin Orthography:	ree	m	FÃÃ		

Table 8. Long-vowel letters.

There are other (non-spacing) diacritics used in the Minim Dag Noore script for various linguistic phenomena.

linguistic pher	nomena.					
Name	Diacritic	Function	Exan	nple		
Kengre	3	* Reduplication/gemination	جالگذ yunni			
Gõdga	ఄ	* Consonantal ending of a lexeme. Used only when writing Arabic.	مِعْسِ	bısmı		
		* [Exceptionally] short vowels * Placeholder diacritic for vowel phonemes absent from Mooré * Free variation of /r/ ⇔ /d/ and /s/ ⇔ /h/ * Conversion of Mooré phonemes to Arabic phonemes	~ 2 ~ 8	p <mark>à</mark>		
Tirgo	<u></u>		RTL	LTR		
Tırga		This diacritic can continuously stretch (without interruption) over two vowelletters, similar to Takre in Table 7. However, if 2 adjacent letters both use this diacritic, and they are not both vowels, the diacritic is disjointed	13 14 14 14 14 14 14 14	89 82 92 22 82 23		
Yıkre	ဃ ်	* Prenasalized consonants * Syllabic nasals of languages other than Mooré * Palatalization of /n/	گفک •	ngess		
Kuuga	ਿ	* Distinction of words that are homophone or only tonally distinct	āl <u>c</u> zi	KAAREE		
Gemgango	č	* Accommodation of manners and places of articulation absent from Mooré (especially labial-velars)	ethiopie			
Pirgu	^	* Abbreviated terms * Marker of French loanwords * Word-medial pronunciation of /w/ as a consonant	filawa filawa			

Mooré (especially implosives)	Zılımbila	ঁ	* Accommodation of manners and places of articulation absent from	υυlaιka
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Table 9. Other diacritics used in the Minim Dag Noore script. *There are many references, those listed in this table only represent some.

The table below shows how multiple diacritics can be used on a single letter. Only linguistically valid diacritic combinations are shown in the table below, but font designers should carefully study and deduce all potential diacritic combinations.

OWITHTUN	ે	ំ	ំ	ै	៉	ឺ	5	3 .	ं	៊	19	ੌ	š	î	ँ
a	-							3a	3व	। व ं	३ व	िढ	>a	< 3	►a
৾		-						3•ે	3•○	<u>.</u>	а •	ि•ो	ě	૽૾	ំ
ి			-					300	30	ि	ခဲ့ ၀	ಂ	> °	ô	ំ
ૼ				-				٥υ ٤	១ ៣೦	Ino	ទ ្ធ೧	្រ	>0	^ n>	•0°
ঁ					-			٥υ ٤	् । इ	I u o	ا ا ا	្រ	>u<	^ U^	្
ુ						-		390	३९	। ७	ទំ ១	िऽ	>9	<9	• %
্							-	ा६	ाह		ाह		ા.	ं।	
័								-		310	3 a °	3ि	3 >	3 <	3 ∤
ु									1	ाह	3 ទ្ធ	3[○)<د	3<○	3►
¯										-	<u>ब्र</u>				
ъ С											-	্ব	* `	% ^	* ○
ੋ												-			
č													-		
î														-	
ै															-

Table 10.1. Vertical positioning of multiple diacritics above a single letter when writing Mooré. Empty cells are linguistically impossible.

As mentioned earlier under <u>Table 6</u>, the below vowel-marks (Masturga $\underline{\ }$, Masgodga $\underline{\ }$ / $\underline{\ }$, and Mastekre $\underline{\ }$) cannot be combined with the vowel-diacritics (Abila $\underline{\ }$, Sobila $\underline{\ }$, Hõbila $\underline{\ }$, Zîbila $\underline{\ }$, Dibila $\underline{\ }$, and Zoabila $\underline{\ }$). Therefore, the below vowel-marks can be combined with the following single-diacritics:

	៍	3	े	ਂ	29	ੋ	š	î	•
	ি	3	3 0	<u> </u>	20	ੋ	š	î	ँ
<u> </u>	<u> </u>			<u> </u>	- - - -			_ 	
्	ृ	3 · ·	ى د	ि	े	ਿੰ	٠ ١	्र र	٠ (
়	<u></u>	3 ∙	3 ○ •	·	် •	ੌ •	` •	î.	·

Table 10.2 Linguistically valid combinations of the below vowel-marks and diacritics.

Finally, below are all of the linguistically possible combinations for below-vowel marks with multiple diacritics above a letter:

310 r 310 310 r 310 310 r 310 310 r 310	w w w			
	w w	३ ।ि ।	3(ः ।	31.
, , , , ,	าย	٦(<mark>١</mark>	३।ः ।	ાદ
		ा	् ।	३।
, , , ,	~) []	>[ि	>(ૄ
, , ,	_	<u>्</u> ।	<u> </u>	্।
с _с	3	3 1	3 ।	<u>3</u> ।
ر ع	سِ	3% [3 a	3 a o
	3	3[○[3ि।	3[்
3>	w	ا دو	3> ○	3>
3<0 3<0	, w	ا °3،	3 <○	3 <○
ુ .	Ψ	3•ૄા	3 ►	3 ⊁
ाध गा	w	1 1 5	ा	310
उक्डि विह	3	3 वृः [3 व ि	3 🏻
3ि । वि	3	³िा	₃ि।	3[
> ৷ 3>০	3>	1 ः	₃>ः ।	3>
<υ 3<υ	3<] >>E	3<○	3<○
- (3+)	3₽] ∙દ	3 ►	3⊁்
्राह नाह	ಇ	। ।	श्व ा	३।
ႏြ ႏြ	ข	<u>।</u>	<u>গু</u>	३ि
>্ ।	ફ>	३> ि ।	\$>○	§>
a<	8	३ < ` L	३<ः	३<
ે ~	w ▼	ृ	* _ _	३►ं

Table 10.3 Linguistically valid combinations of below vowel-marks and multi-diacritic pairs above a letter.

Miscellaneous & Punctuation

A character named "Woglogo" in the Minim Dag Noore script extends the length of a letter. It is written on the baseline and can be used when only writing in lowercase letters. It looks the same in RTL and LTR text.

	Evampla		Lengther	er positio	n when a	attached	l to letter	+ another letter (RA)
Woglogo	Example Letters	Direction	Isolated	Initial	Both	Final	Isolated	RTL: جع LTR: جد
	Letters		- Initial	IIIICIGI	sides	Tillai	- Final	72
		RTL Æ	_ ئـ	عد	_£_	٤_	ـ ـ ـ ـ ـ ـ	٤ ي
	SA/s/	LTR £	_ &_	ــــــــــــــــــــــــــــــــــــــ	_٤_	٤	٤	گے
_	NAA /s/	RTL سے	ـ ي	<u>ــ</u> ــــ			<u>ب</u>	ســـــــــــــــــــــــــــــــــــــ
	MA /s/	LTR エ	_ 1			π	ル _	л

Table 11. Minim Dag Noore script letter lengthener.

The Minim Dag Noore script has a character called Baare (which looks like: \P) which is used for multiple purposes: as a period, comma, and/or a paragraph/section separator. See Figures 10 and 20 in Section IX for examples.

Minim Dag Noore when writing the Arabic language

Minim Dag Noore can be, and is, used to write the Arabic language in addition to Mooré. The most famous Arabic-language publication by the Minim Dag Noore community is a transliteration of the Qur'an. The sinistrograde script (RTL) is used to write Arabic. While capital letters can technically be used to write Arabic, lowercase letters are much more common. The phonetic value of several Minim Dag Noore letters changes when the script is used to write Arabic.

Name		etters	Original Letter IPA for Mooré	New IPA for the	Arabic-script
Ivallie	Lowercase	Uppercase		letter	equivalent
PAHE	-\$	茎	/p/	/ħ/	ح
VATE	ڲٙ	茎	/v/	/tʕ/	ط
NGAS	ā	5	/g/, if occurring after [ŋ]	/s٢/	ص
QAX	يَ	Ē	[k], [ɣ] and possibly [gj] as allophones of /g/, [kj] as allophone of /k/	/q/	ق
SANG	死	Æ	/ŋ/	/0/	ث
GA	Ī.	Ē	/g/	/ɣ/	غ.
AI	<u>ت</u> د.	a I	Vowel diacritic Ai (ʿa)	/٢/	ع
СНО	نہ	ī	Vowel diacritic Cho (Šū')	/ʃ/	ش
HON	<u>~</u>	ō	Vowel diacritic Hon (Ḫū')	/x/	خ
JUN	<u>-</u> د.	<u> </u>	Vowel diacritic Jun (D̄ī')	/ð/	٤
DU	<u>۔</u>	Ē	Vowel diacritic Du (Dī')	/dʕ/	ض
ZOA	4	<u>.</u>	Vowel diacritic Zoa (Za)	/ð٢/	ظ
YI	.ન્લ	Λ	/j/ + diacritic	/?/ preceded by /i/	ئ
WOU	Ą	Š	/w/ + diacritic	/?/ preceded by /u/	ؤ
A YI	₩	$\overline{\Omega}\Lambda$	-	Arabic alif maqşūrah uses	ی
YI	٦,	Λ	word-initial vowel YI - /j/	/ʔi/	ļ

Table 12. Note that the remaining Minim Dag Noore letters are also used to write Arabic and have the same phonetic value as when they are used for Mooré.

Numbers

There are two sets of digits (both are base 10), and a set of mathematical numbers used in the Minim Dag Noore script. When representing multi-digit numbers, both sets of digits have the least-significant number on the right and the most-significant number on the left, and numbers increase in significance as you go from right-to-left, similar to Arabic and Latin, but opposite to NKo and Adlam. This is true regardless of writing direction; in RTL and LTR, digits increase in significance from right-to-left.

However, it's important to note that the writing direction of text affects how people actually write multi-digit numbers. When writing RTL, multi-digit numbers are written in the same manner as in Arabic (i.e., the least-significant digit is written first and the most-significant digit is written last), but when writing LTR, numbers are written in the same manner as English/French/etc. (i.e., the most-significant digit is written first and the least-significant digit is written last); see Figure 37 in Section IX to see an example of this.

The following digits/numerals are the default Minim Dag Noore digits used for most purposes.

Minim Dag Noore	0	۷	¥	2	L	ତ	8	ע	ד	6	۷0	۷0	۷00	200
Hindu- Arabic	0	1	2	3	4	5	6	7	8	9	10	20	100	200

Table 13. Minim Dag Noore script digits/numerals.

The following digits/numerals are alternates distinctly used in special contexts such as supplicative texts, certain proverbs, secretive writing, or in texts involving the names of God.

Minim Dag Noore	•	1	۲	44	f	ዋ	4	J	n	수	J•	7.]••	۲.
Hindu- Arabic	0	1	2	3	4	5	6	7	8	9	10	20	100	200

Table 14. Alternate/special Minim Dag Noore script digits/numerals.

The letters of the Minim Dag Noore script also have numerical value, and are tied to the alternate/special digits in <u>Table 14</u>. This is similar to how the Arabic-speaking world used Arabic Abjad numerals (Arabic: حسّاب ٱلْجُمَّل Latin transliteration: hisāb al-jummal). Minim Dag Noore Abjad numerals use all of the basic character inventory, and in the table below you will see how all of the Minim Dag Noore letters needed to write Mooré are used as Abjad numerals, and also six of the modified letters used to write the Arabic

language.

	"Minim Dag	Minim Doa	E accesto de la cela	Equivalent Arekin	
		Minim Dag	Equivalent	Equivalent Arabic	Abjad Numeral
Letter Name	<i>Noore</i> " Abjad	Noore Special	Hindu-Arabic	"Common"	Maghrebi
	Numeral	Digit Value	Value	Abjad Order	Abjad Order
А	<i>→</i>]	1	1	.,
	~`			,	
ВА	۵	ዣ	2	ب	
DJA	ज	Ψ	3	ج	
DA	Α	ቶ	4	د	
НА	2	P	5	ه	
WOU	*	4	6	9	
ZA	ন	U	7	ز	
PAHE	-Ş	Λ	8	ح	
VATE	\$	Ŷ	9	ط	
YI	٩	1•	10	ى	
KA	Þ	ፐ•	20	٤	ک
LA	پ	₩•	30	ل	
MA	Æ	4.	40	۵	
NA	R	ዋ•	50	ن	
SA	7	4.	60	س	ص
AI	ء لہ	U•	70	ع	
FA	لله	U•	80	ف	1
NGAS	2	个•	90	ص	ض
QAX	æ]••	100	ق	
RA	な	ፐ "	200	ر	

SO	نہ	Ψ••	300	m	س
TA	پ	t	400	ت	
SANG	X.	φ••	500	ث	
HON	å	y	600	خ	
JUN	۵.	U••	700	ذ	
DU	د.	0••	800	ض	ظ
ZOA	<u>د</u>	ተ"	900	ظ	غ
GA	2]•••	1,000	غ	ش

Table 15. Minim Dag Noore script Abjad numerals; comparison with Arabic-script Abjad numerals. See <u>Figure</u> 36 in Section IX for an example. The letters here represent the full "alphabet" as users learn them.

The Minim Dag Noore system has a mathematical notation system for mathematics as well. **However,** these are not proposed for encoding at this time due to not significantly being used by the community.

Minim Dag Noore Mathematical Notation	Hindu-Arabic numerical value	English short form name	Power of 10
۶	0	zero	
I	1	one	10°
0	10	ten	10¹
়	+5 to '1' ; +50 to '10'	adds 5 to the '1' symbol, adds 50 to the '10' symbol. Goes underneath the '1' and '10' symbol	
_	100	hundred	10 ²
Г	1,000	thousand	10³
٦	1,000,000	million	10 ⁶
	1,000,000,000	billion	10 ⁹
	1,000,000,000,000	trillion	1012
Ш	1,000,000,000,000,000	quadrillion	1015
П	1,000,000,000,000,000,000	quintillion	1018
*	1,000,000,000,000,000,000,000	sextillion	1021

 $Table \ 16. \ Minim \ Dag \ Noore \ script \ mathematical \ notation \ symbols. \ \underline{See \ Figures \ 25} \ and \ \underline{33-35} \ in \ Section \ IX \ for \ examples.$

The following shows how each of the above mathematical notation symbols is used. The notation for one can be written up to 5 times in a row, each increasing its value. Afterwards, a dot is written below a single symbol to represent 6. Another line is written after the line+dot combination to represent 7. This pattern repeats until 9. The same pattern applies to 10-90. 100 is represented with a horizontal line, and can be horizontally stacked up to 3 times to represent up to 300. Afterwards, a second column of one additional horizontal line appears to the left of the previous 3 horizontal bars to represent 400. This column can also be stacked up to 3 times to represent 600 in total. The process repeats until 900.

Hindu-Arabic numerical value	0	1	2	3	4	5	6	7	8	9
Minim Dag Noore Mathematical Notation	M	I	II	Ш	IIII	==	ļ	İ	<u>II</u>	í≡
Hindu-Arabic numerical value		10	20	30	40	50	60	70	80	90
Minim Dag Noore Mathematical Notation		0	00	000	0000	00000	ō	00	00	000
Hindu-Arabic numerical value		100	200	300	400	500	600	700	800	900
Minim Dag Noore Mathematical Notation		-	=	Ш	-≡		==	-≡≡	=≡≡	≡≡≡

Table 17. Illustration of how the Minim Dag Noore script mathematical notation system works. It's **important to note** that 7, 9, 70, and 90 have dots that appear *between* the lines/circles on the bottom, rather than directly below the lines/circles (as it occurs for 6, 8, 60, and 80). Also note the vertical position of a new column of horizontal bars for the hundreds numerals.

The higher magnitude symbols are shown below. It is used similar to a digit system.

Higher Magnitude Minim Dag Noore Mathematical Notation	Hindu-Arabic numerical value	Equivalent Scientific Notation
IL	1,000	1x10³
П	1,000,000	1x10 ⁶
IC	1,000,000,000	1x10°
I	1,000,000,000,000	1x10 ¹²
Ш	1,000,000,000,000,000	1x10 ¹⁵
П	1,000,000,000,000,000,000	1x10 ¹⁸
l★	1,000,000,000,000,000,000	1x10 ²¹

Table 18. Mathematical notation symbols of higher magnitude.

Symbols

Name	Symbol	Used to write	Example
Daya	0	Days	% ₹00% ⊝₹₹ 0₹₹
Kiisi	y	Months	2006 11 23
Yuuma	*	Years	

Table 19. See Figures 25 and 30 in Section IX for examples.

The Minim Dag Noore script uses the following parentheses.

Tãblebnde (Closing	Tãppo (Opening	RTL Example	Hindu-Arabic
Parenthesis)	Parenthesis)		Equivalent
		4 2 2	(25)

Table 20. Minim Dag Noore script parentheses. See Figures 2, 6, and 11 in Section IX for examples.

IV Character Repertoire

Below is the character repertoire to encode. The glyphs represented below are the RTL rendering of the script. It should be noted that the forms vary in appearance when written LTR. This variation is handled during text rendering rather than with separate encoding. Type designers should note these differences when developing typefaces to support both RTL and LTR versions of the script.

Character	Unicode Name
1	U+1X000 MINIM DAG NOORE CAPITAL LETTER A
a	U+1X001 MINIM DAG NOORE CAPITAL LETTER BA
<u> </u>	U+1X002 MINIM DAG NOORE CAPITAL LETTER DJA
4	U+1X003 MINIM DAG NOORE CAPITAL LETTER DA
X	U+1X004 MINIM DAG NOORE CAPITAL LETTER HA
2	U+1X005 MINIM DAG NOORE CAPITAL LETTER WOU
Ю	U+1X006 MINIM DAG NOORE CAPITAL LETTER ZA
X	U+1X007 MINIM DAG NOORE CAPITAL LETTER PAHE
Z	U+1X008 MINIM DAG NOORE CAPITAL LETTER VATE
Ω	U+1X009 MINIM DAG NOORE CAPITAL LETTER YI
2	U+1X00A MINIM DAG NOORE CAPITAL LETTER KA
Ю	U+1X00B MINIM DAG NOORE CAPITAL LETTER LA
M	U+1X00C MINIM DAG NOORE CAPITAL LETTER MA
91	U+1X00D MINIM DAG NOORE CAPITAL LETTER NA
E	U+1X00E MINIM DAG NOORE CAPITAL LETTER SA
Ш	U+1X00F MINIM DAG NOORE CAPITAL LETTER FA
D C	U+1X010 MINIM DAG NOORE CAPITAL LETTER NGAS
G	U+1X011 MINIM DAG NOORE CAPITAL LETTER QAX
Z	U+1X012 MINIM DAG NOORE CAPITAL LETTER RA
Ψ	U+1X013 MINIM DAG NOORE CAPITAL LETTER TA
Ю	U+1X014 MINIM DAG NOORE CAPITAL LETTER SANG
С	U+1X015 MINIM DAG NOORE CAPITAL LETTER GA
Λ	U+1X016 MINIM DAG NOORE CAPITAL WORD INITIAL VOWEL YI
A	U+1X017 MINIM DAG NOORE CAPITAL WORD INITIAL VOWEL WOU
I	U+1X018 MINIM DAG NOORE TAKBEDRE
ı	U+1X019 MINIM DAG NOORE ZAOUBEDRE
~^	U+1X01A MINIM DAG NOORE SMALL LETTER A

م	U+1X01B MINIM DAG NOORE SMALL LETTER BA
<u>a</u>	U+1X01C MINIM DAG NOORE SMALL LETTER DJA
لم	U+1X01D MINIM DAG NOORE SMALL LETTER DA
2	U+1X01E MINIM DAG NOORE SMALL LETTER HA
~4	U+1X01F MINIM DAG NOORE SMALL LETTER WOU
A	U+1X020 MINIM DAG NOORE SMALL LETTER ZA
~}	U+1X021 MINIM DAG NOORE SMALL LETTER PAHE
2	U+1X022 MINIM DAG NOORE SMALL LETTER VATE
حم	U+1X023 MINIM DAG NOORE SMALL LETTER YI
न	U+1X024 MINIM DAG NOORE SMALL LETTER KA
ىد	U+1X025 MINIM DAG NOORE SMALL LETTER LA
سے	U+1X026 MINIM DAG NOORE SMALL LETTER MA
<i>I</i> L	U+1X027 MINIM DAG NOORE SMALL LETTER NA
٤.	U+1X028 MINIM DAG NOORE SMALL LETTER SA
للہ	U+1X029 MINIM DAG NOORE SMALL LETTER FA
2	U+1X02A MINIM DAG NOORE SMALL LETTER NGAS
عد	U+1X02B MINIM DAG NOORE SMALL LETTER QAX
~⇒	U+1X02C MINIM DAG NOORE SMALL LETTER RA
پ	U+1X02D MINIM DAG NOORE SMALL LETTER TA
K	U+1X02E MINIM DAG NOORE SMALL LETTER SANG
2	U+1X02F MINIM DAG NOORE SMALL LETTER GA
٦,	U+1X030 MINIM DAG NOORE SMALL WORD INITIAL VOWEL YI
~ 2	U+1X031 MINIM DAG NOORE SMALL WORD INITIAL VOWEL WOU
^	U+1X032 MINIM DAG NOORE ABASGA
بع	U+1X033 MINIM DAG NOORE YIBASGA
·	U+1X034 MINIM DAG NOORE WUBASGA
l	U+1X035 MINIM DAG NOORE TAKZISGO
7	U+1X036 MINIM DAG NOORE ZAOUGA
0	U+1X037 MINIM DAG NOORE DIGIT ZERO
-	

L	U+1X038 MINIM DAG NOORE DIGIT ONE
Y	U+1X039 MINIM DAG NOORE DIGIT TWO
Z	U+1X03A MINIM DAG NOORE DIGIT THREE
L	U+1X03B MINIM DAG NOORE DIGIT FOUR
9	U+1X03C MINIM DAG NOORE DIGIT FIVE
8	U+1X03D MINIM DAG NOORE DIGIT SIX
F	U+1X03E MINIM DAG NOORE DIGIT SEVEN
9	U+1X03F MINIM DAG NOORE DIGIT EIGHT
6	U+1X040 MINIM DAG NOORE DIGIT NINE
•	U+1X041 MINIM DAG NOORE ALTERNATE DIGIT ZERO
1	U+1X042 MINIM DAG NOORE ALTERNATE DIGIT ONE
۲	U+1X043 MINIM DAG NOORE ALTERNATE DIGIT TWO
Ψ	U+1X044 MINIM DAG NOORE ALTERNATE DIGIT THREE
f	U+1X045 MINIM DAG NOORE ALTERNATE DIGIT FOUR
P	U+1X046 MINIM DAG NOORE ALTERNATE DIGIT FIVE
4	U+1X047 MINIM DAG NOORE ALTERNATE DIGIT SIX
U	U+1X048 MINIM DAG NOORE ALTERNATE DIGIT SEVEN
Λ	U+1X049 MINIM DAG NOORE ALTERNATE DIGIT EIGHT
个	U+1X04A MINIM DAG NOORE ALTERNATE DIGIT NINE
ं	U+1X04B MINM DAG NOORE ABILA
৾	U+1X04C MINM DAG NOORE SOBILA
ి	U+1X04D MINM DAG NOORE HOBILA
ិ	U+1X04E MINM DAG NOORE ZIBILA
់	U+1X04F MINM DAG NOORE DIBILA
ំ	U+1X050 MINM DAG NOORE ZOABILA
ি	U+1X051 MINIM DAG NOORE TAKRE
<u> </u>	U+1X052 MINIM DAG NOORE MASTIRGA
្ន	U+1X053 MINM DAG NOORE MASGODGA UPPERCASE
्	U+1X054 MINIM DAG NOORE MASGODGA LOWERCASE
<u> </u>	

়	U+1X055 MINIM DAG NOORE MASTEKRE
ఀ	U+1X056 MINM DAG NOORE KENGRE
ិ	U+1X057 MINM DAG NOORE GODGA
៑	U+1X058 MINM DAG NOORE TIRGA
~ °	U+1X059 MINM DAG NOORE YIKRE
ੋ	U+1X05A MINM DAG NOORE KUUGA
č	U+1X05B MINM DAG NOORE GEMGANGO
î	U+1X05C MINM DAG NOORE PIRGU
ँ	U+1X05D MINM DAG NOORE ZILIMBILA
_	U+1X05E MINM DAG NOORE WOGLOGO
0	U+1X05F MINIM DAG NOORE DAYA
	U+1X060 MINM DAG NOORE KIISI
*	U+1X061 MINM DAG NOORE YUUMA
•	U+1X062 MINIM DAG NOORE BAARE
	U+1X063 MINM DAG NOORE TAPPO
· ·	U+1X064 MINM DAG NOORE TABLEBNDE

Table 21. Character repertoire of the Minim Dag Noore script.

Chart

	U+1X00	U+1X01	U+1X02	U+1X03	U+1X04	U+1X05	U+1X06
0	Λ	ອ	প্ৰ	٦,	6	្	\forall
1	Ø	C	ઋ	-2	•	5	*
2	러	Z	2	*	1	<u> </u>	•
3	4	¥	ત્ર	بع	7	្ម	
4	X	Ю	લ્	L	4	्र	É
5	2	C	ىد	l	4	়	
6	Ю	Λ	سے		ዋ	3	
7	X	A	<i>I</i> L	0	4	3	
8	Z	I	£	۷	U	ੋ	
9	Ω	ı	للہ	Y	Λ	2 О	
Α	æ	~	2	Z	个	ੋ	
В	Ю	مہ	ی	T	ं	č	
С	Ш	ঞ	~∴	9	ំ	î	
D	91	لمہ	۲.	ጸ	ి	ំ	
Е	ш	2	Ж	F	ै	_	
F	נ	~	2	9	៉	0	

Additional information on characters

Joining information

- The bottom of all lowercase letters can join together on both sides.
- Uppercase letters never join together.
- Word initial vowel letters (SMALL WORD INITIAL VOWEL YI; SMALL WORD INTIAL VOWEL WOU) connect on both sides as well.
- Word-final letters connect as well: ABASGA; WUBASGA; and YIBASGA connect on the right (as they are used in RTL text), and LEFT ABASGA; LEFT WUBASGA; and LEFT YIBASGA connect on the left (as they are used in LTR text).
- Vowel-diacritic holders connect on both sides (ZAOUGA and LEFT ZAOUGA).
- The long-vowel grapheme TAKZISGO connects on the right (as it is used in RTL text) and LEFT TAKZISGO connects on the left (as it is used in LTR text).
- The letter connector/extender WOGLOGO connects on both sides.

1 -44			RTL				LTI	R	
Letter	Final	Medial	Initial	Isolated	Isolated		Initial	Medial	Final
А	~	^	۲	~		<u>s.</u>	~	٨	s.
ВА	ھ	a	٩	9		م	۵.	٥	þ
DJA	म	<u>a</u>	भ	<u>a</u>		ۍ	ڡ	ع	عد
DA	لم	٨	٨	لم		مہ	۵	٨	۵
НА	Æ.	<u>&</u>	2	2		&	&	&	&
WOU	م	Ą	4"	4		ð	ð	.	ф
ZA	ਕ	ᆔ	의	প্র		X.			ar.
PAHE	æ.	\$	Ş	2		&	8	8	8
VATE	2	£	2	£		\$	S.	S.	S.
YI	જ	£.	ç	ક		2	2	2	م
KA	न	<u>c</u>	ल	ব		2	Q.	2	见
LA	ىد	بع	با	ىد		بع	بح	بح	بعر
MA	ىلى	ىلىـ	س	سے		ル	元	エ	۲
NA	<i>I</i> L	Æ	PL	IL.		ىلا	Я	R	ىلا
SA	£	٤	£	£		٤	٤	٤	٤
FA	لمله	Ж	Ц	لله		JL.	IL.	N.	J L.
NGAS	2	2	2	2		2.	2	2	2.

QAX	عد	e	£	æ	٤	٤	٤	ع
RA	☆	\$	4	4	\$	ょ	8	क्
TA	*	*	7	پ	上	上	火	光
SANG	K	R	Ж	Ж	PL.	æ	Æ	æ
GA	2	2	2	2	۵	2	2	2
SMALL WORD INITIAL VOWEL YI		ч	ส	ب را	ħ	b <u>.</u>	h	
SMALL WORD INITIAL VOWEL WOU			2	~ 2	2 -	2		
ABASGA	^			*	*			*
YIBASGA	٤			٤	3			3
WUBASGA	L			L	٦			د
ZAOUGA	4	_	4	ب	4	-	4	4

Table 22: Positional forms for the Minim Dag Noore script.

The Isolated forms are used in the character repertoire table (Table 21) and the Code Chart.

Punctuation

See Section III, subsection "Miscellaneous".

Numbers

See Section III, subsection "Numbers".

V Properties

General Category and other properties

```
U+1X000; MINIM DAG NOORE CAPITAL LETTER A; Lo; 0; R; ;; ;; ;N; ;; ;;
U+1X001; MINIM DAG NOORE CAPITAL LETTER BA; Lo; 0; R;;;;; N;;;;
U+1X002; MINIM DAG NOORE CAPITAL LETTER DJA; Lo; 0; R; ;; ;; N; ;; ;;
U+1X003; MINIM DAG NOORE CAPITAL LETTER DA; Lo; 0; R;;;;; N;;;;
U+1X004; MINIM DAG NOORE CAPITAL LETTER HA; Lo; 0; R;;;;; N;;;;
U+1X005; MINIM DAG NOORE CAPITAL LETTER WOU; Lo; 0; R;;;;; N;;;;
U+1X006; MINIM DAG NOORE CAPITAL LETTER ZA; Lo; 0; R;;;;; N;;;;
U+1X007; MINIM DAG NOORE CAPITAL LETTER PAHE; Lo; 0; R;;;;; N;;;;;
U+1X008; MINIM DAG NOORE CAPITAL LETTER VATE; Lo; 0; R;;;;; N;;;;;
U+1X009; MINIM DAG NOORE CAPITAL LETTER YI; Lo; 0; R;;;;; N;;;;;
U+1X00A; MINIM DAG NOORE CAPITAL LETTER KA; Lo; 0; R;;;;; N;;;;
U+1X00B; MINIM DAG NOORE CAPITAL LETTER LA; Lo; 0; R;;;;; N;;;;
U+1X00C; MINIM DAG NOORE CAPITAL LETTER MA; Lo; 0; R;;;;; N;;;;;
U+1X00D; MINIM DAG NOORE CAPITAL LETTER NA; Lo; 0; R;;;;; N;;;;
U+1X00E; MINIM DAG NOORE CAPITAL LETTER SA; Lo; 0; R;;;;; N;;;;;
U+1X00F; MINIM DAG NOORE CAPITAL LETTER FA; Lo; 0; R;;;;; N;;;;
U+1X010; MINIM DAG NOORE CAPITAL LETTER NGAS; Lo; 0; R;;;;; N;;;;;
U+1X011; MINIM DAG NOORE CAPITAL LETTER QAX; Lo; 0; R;;;;; N;;;;
U+1X012; MINIM DAG NOORE CAPITAL LETTER RA; Lo; 0; R;;;;; N;;;;
U+1X013; MINIM DAG NOORE CAPITAL LETTER TA; Lo; 0; R;;;;; N;;;;
U+1X014; MINIM DAG NOORE CAPITAL LETTER SANG; Lo; 0; R;;;;; N;;;;;
U+1X015; MINIM DAG NOORE CAPITAL LETTER GA; Lo; 0; R;;;;; N;;;;;
U+1X016; MINIM DAG NOORE CAPITAL WORD INITIAL VOWEL YI;0;R;;;;;N;;;;;
U+1X017; MINIM DAG NOORE CAPITAL WORD INITIAL VOWEL WOU; 0; R;;;;; N;;;;;
U+1X018; MINIM DAG NOORE CAPITAL TAKBEDRE; Lo; 0; R; ;; ;; N; ;; ;;
U+1X019; MINIM DAG NOORE CAPITAL ZAOUBEDRE; Lo; 0; R;;;;; N;;;;
U+1X01A; MINIM DAG NOORE SMALL LETTER A; Lo; 0; R;;;;; N;;;;;
U+1X01B; MINIM DAG NOORE SMALL LETTER BA; Lo; 0; R;;;;; N;;;;;
U+1X01C; MINIM DAG NOORE SMALL LETTER DJA; Lo; 0; R;;;;; N;;;;;
U+1X01D; MINIM DAG NOORE SMALL LETTER DA; Lo; 0; R;;;;; N;;;;
U+1X01E; MINIM DAG NOORE SMALL LETTER HA; Lo; 0; R;;;;; N;;;;
U+1X01F; MINIM DAG NOORE SMALL LETTER WOU; Lo; 0; R;;;;; N;;;;;
U+1X020; MINIM DAG NOORE SMALL LETTER ZA; Lo; 0; R;;;;; N;;;;
U+1X021; MINIM DAG NOORE SMALL LETTER PAHE; Lo; 0; R;;;;; N;;;;
U+1X022; MINIM DAG NOORE SMALL LETTER VATE; Lo; 0; R;;;;; N;;;;
U+1X023; MINIM DAG NOORE SMALL LETTER YI; Lo; 0; R;;;;; N;;;;;
U+1X024; MINIM DAG NOORE SMALL LETTER KA; Lo; 0; R;;;;; N;;;;;
U+1X025; MINIM DAG NOORE SMALL LETTER LA; Lo; 0; R;;;;; N;;;;
U+1X026; MINIM DAG NOORE SMALL LETTER MA; Lo; 0; R;;;;; N;;;;;
U+1X027; MINIM DAG NOORE SMALL LETTER NA; Lo; 0; R;;;;; N;;;;;
U+1X028; MINIM DAG NOORE SMALL LETTER SA; Lo; 0; R;;;;; N;;;;;
U+1X029; MINIM DAG NOORE SMALL LETTER FA; Lo; 0; R;;;;; N;;;;
U+1X02A; MINIM DAG NOORE SMALL LETTER NGAS; Lo; 0; R;;;;; N;;;;
U+1X02B;MINIM DAG NOORE SMALL LETTER QAX;Lo;0;R;;;;;N;;;;;
U+1X02C; MINIM DAG NOORE SMALL LETTER RA; Lo; 0; R;;;;; N;;;;;
U+1X02D; MINIM DAG NOORE SMALL LETTER TA; Lo; 0; R;;;;; N;;;;;
U+1X02E; MINIM DAG NOORE SMALL LETTER SANG; Lo; 0; R;;;;; N;;;;
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U+1X02F; MINIM DAG NOORE SMALL LETTER GA; Lo; 0; R;;;;; N;;;;;
U+1X030; MINIM DAG NOORE SMALL WORD INITIAL VOWEL YI; Lo; 0; R;;;;; N;;;;;
U+1x031; MINIM DAG NOORE SMALL WORD INITIAL VOWEL WOU; Lo; 0; R;;;;; N;;;;;
U+1X032; MINIM DAG NOORE ABASGA; Lo; 0; R;;;;; N;;;;;
U+1X033; MINIM DAG NOORE YIBASGA; Lo; 0; R;;;;; N;;;;
U+1X034; MINIM DAG NOORE WUBASGA; Lo; 0; R; ; ; ; ; N; ; ; ; ;
U+1X035; MINIM DAG NOORE TAKZISGO; Lo; 0; R;;;;; N;;;;;
U+1X036; MINIM DAG NOORE ZAOUGA; Lo; 0; R;;;;; N;;;;;
U+1X037; MINIM DAG NOORE DIGIT ZERO; Nd;0;0N;;0;0;0;N;;;;;;
U+1X038; MINIM DAG NOORE DIGIT ONE; Nd; 0; ON; ; 1; 1; 1; N; ; ; ; ;
U+1X039; MINIM DAG NOORE DIGIT TWO; Lo; 0; ON; ; 2; 2; 2; N; ; ; ; ;
U+1X03A; MINIM DAG NOORE DIGIT THREE; Lo; 0; ON; ; 3; 3; 3; N; ; ; ; ;
U+1X03B; MINIM DAG NOORE DIGIT FOUR; Lo; 0; ON; ; 4; 4; 4; N; ; ; ; ;
U+1X03C; MINIM DAG NOORE DIGIT FIVE; Lo; 0; ON; ;5;5;5; N;;;;;
U+1X03D; MINIM DAG NOORE DIGIT SIX; Lo; 0; ON; ; 6; 6; 6; N; ; ; ; ;
U+1X03E; MINIM DAG NOORE DIGIT SEVEN; Lo; 0; ON; ; 7; 7; 7; N; ; ; ; ;
U+1X03F; MINIM DAG NOORE DIGIT EIGHT; Lo; 0; ON; ; 8; 8; 8; N; ; ; ; ;
U+1X040; MINIM DAG NOORE DIGIT NINE; Lo; 0; ON; ;9;9;9;N;;;;;
U+1X041; MINIM DAG NOORE ALTERNATE DIGIT ZERO; Lo; 0; ON; ; 0; 0; 0; N;;;;;
U+1X042; MINIM DAG NOORE ALTERNATE DIGIT ONE; Lo; 0; ON; ;1;1;1;N;;;;;
U+1X043; MINIM DAG NOORE ALTERNATE DIGIT TWO; Lo; 0; ON; ; 2; 2; 2; N; ; ; ; ;
U+1X044; MINIM DAG NOORE ALTERNATE DIGIT THREE; Lo; 0; ON; ; 3; 3; 3; N;;;;;
U+1X045; MINIM DAG NOORE ALTERNATE DIGIT FOUR; Lo; 0; ON; ; 4; 4; 4; N;;;;;
U+1X046; MINIM DAG NOORE ALTERNATE DIGIT FIVE; Lo; 0; ON; ; 5; 5; 5; N; ; ; ; ;
U+1X047; MINIM DAG NOORE ALTERNATE DIGIT SIX; Lo; 0; ON; ; 6; 6; 6; N;;;;;
U+1X048; MINIM DAG NOORE ALTERNATE DIGIT SEVEN; Lo; 0; ON; ; 7; 7; N; ;;;;
U+1X049; MINIM DAG NOORE ALTERNATE DIGIT EIGHT; Lo; 0; ON; ; 8; 8; 8; N; ; ; ; ;
U+1X04A; MINIM DAG NOORE ALTERNATE DIGIT NINE; Nd; 0; ON; ; 9; 9; 9; N; ; ; ; ;
U+1X04B; MINIM DAG NOORE ABILA; Mn; 230; ON;;;;; N;;;;;
U+1X04C; MINIM DAG NOORE SOBILA; Mn; 230; ON; ; ; ; ; ; ; ; ;
U+1X04D; MINIM DAG NOORE HOBILA; Mn; 230; ON; ;;;; N;;;;
U+1X04E; MINIM DAG NOORE ZIBILA; Mn; 230; ON; ;;;; N;;;;
U+1X04F; MINIM DAG NOORE DIBILA; Mn; 230; ON; ; ; ; ; N; ; ; ; ;
U+1X050; MINIM DAG NOORE ZOABILA; Mn; 230; ON; ;;;; N; ;;;;
U+1X051;MINIM DAG NOORE TAKRE;Mn;230;ON;;;;;N;;;;;
U+1X052; MINIM DAG NOORE MASTIRGA; Lo; 220; ON; ;;;; ; N; ;;;
U+1X053; MINIM DAG NOORE MASGODGA UPPERCASE; Lo; 220; ON; ;;;; N;;;;;
U+1X054; MINIM DAG NOORE MASGODGA LOWERCASE; Mn; 220; ON;;;;; N;;;;;
U+1X055; MINIM DAG NOORE MASTEKRE; Mn; 220; ON; ; ; ; ; ; ; ;
U+1X056; MINIM DAG NOORE KENGRE; Mn; 230; ON; ;;;; N;;;;;
U+1X057;MINIM DAG NOORE GODGA;Mn;230;ON;;;;;N;;;;
U+1X058;MINIM DAG NOORE TIRGA;Mn;230;ON;;;;;;N;;;;;
U+1X059; MINIM DAG NOORE YIKRE; Mn; 230; ON; ; ; ; ; ; ; ; ;
U+1X05A; MINIM DAG NOORE KUUGA; Mn; 230; ON; ; ; ; ; N; ; ; ; ;
U+1X05B; MINIM DAG NOORE GEMGANGO; Mn; 230; ON; ;;;;; N;;;;;
U+1X05C;MINIM DAG NOORE PIRGU;Mn;230;ON;;;;;N;;;;
U+1X05D;MINIM DAG NOORE ZILIMBILA;Mn;230;ON;;;;;N;;;;;
U+1X05E;MINIM DAG NOORE WOGLOGO; Lm;0;ON;;;;;N;;;;;
U+1X05F;MINIM DAG NOORE DAYA;Lo;0;ON;;;;;N;;;;
U+1X060; MINIM DAG NOORE KIISI; Lo; 0; ON; ;;;; N; ;;;;
U+1X061; MINIM DAG NOORE YUUMA; Lo; 0; ON; ; ; ; ; N; ; ; ;
U+1X062; MINIM DAG NOORE BAARE; Po; 0; ON; ;;;; N; ;;;;
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U+1X063;MINIM DAG NOORE TAPPO;Ps;0;ON;;;;;N;;;;
U+1X064;MINIM DAG NOORE TABLEBNDE;Pe;0;ON;;;;;N;;;;
```

Character properties for the Minim Dag Noore script.

Line breaking information

Answering the following questions will help the Unicode experts determine the appropriate line break properties:

- Words are separated using a space; U+0020 SPACE.
- Lines breaks only occur at word boundaries.
- There is no special mode (e.g., how hyphenation is used in English) to allow line breaks within words.
- Line breaks cannot occur within numbers.
- Line breaks cannot occur before punctuation characters.

The Minim Dag Noore script is most likely to occur with the Arabic script. See Figures 15, 24, and 26 in Section IX for examples of intralinear/interlinear Arabic-script and Minim Dag Noore-script text. It is also likely to occur with the Latin script as the Burkina Faso government officially uses the Latin script to write Mooré.

VI Collation

The basic alphabetic order is shown below:

abetic order is shown below:											
Order	Name		etters ograde)		etters ograde)						
			Uppercase	Lowercase	Uppercase						
1	А	~	Λ	<u>a.</u>	A						
2	BA	4	Ø	مم	۵						
3	DJA	भ	모	عر	모						
4	DA	لمہ	<u>ል</u>	مہ	Ā						
5	НА	&	X	&.	X						
6	wou	Ą	2	9	오						
7	ZA	<u></u>	Ю	X .	ОН						
8	PAHE	Ą	X	&	Z						
9	VATE	£	Z	L	Z						
10	YI	ક	Ω	2	Ω						
11	KA	র	£	2	T						
12	LA	ىد	Ю	بع	Ю						
13	MA	سے	Щ	ル	Ш						
14	NA	<i>I</i> L	94	ىلا	94						
15	SA	£	ш	٤	Σ						
16	AI	a 🚣	a	~	a 						
17	FA	لله		JL.	U						
18	NGAS	2	ວ	2.	ວ						
19	QAX	e.	C	٤	C						
20	RA	☆	Z	か	Z						
21	SO	نہ	i	上	i						
22	TA	አ	¥	上	I						

Page **32** of **83**

23	SANG	Ж	Ю	PL.	Ю
24	HON	ů	°	<u> </u>	°
25	JUN	ئہ	٦	<u>_</u>	د ا
26	DU	ئہ	I	<u>-</u>	ر ا
27	ZOA	۴.	u I	4	ro I
30	GA	2	С	٥	ם
31	WORD INITIAL VOWEL YI	بر ا	Λ	Pa.	V
32	WORD INITIAL VOWEL WOU	~ 2	A	5 -	V
33	TAKZISGO/ TAKBEDRE	l	I	J	I
34	ABASGA	٨		•	
35	YIBASGA	٤		3	
36	WUBASGA	•		د	

Table 23. Basic collation order of the Minim Dag Noore script.

See Figure 46 in Section IX to see collation in community primers.

Capital letters are ordered before lowercase letters. This is true for both the RTL and LTR versions of the script. Regarding directionality for collation, RTL is ordered before LTR for the same cases as RTL is more frequently used by the community. Therefore, collation should be: Uppercase RTL, Uppercase LTR, Iowercase LTR. Iowercase RTL, Iowercase LTR.

There are 19 diacritics in the Minim Dag Noore script. When accounting for writing Mooré and Arabic, all letters can be used with all diacritics. Here is how collation is affected when diacritics are used:

UNMARKED LETTER < ABILA < SOBILA < HOBILA < ZIBILA < DIBILA < ZOABILA < TAKRE < MASTIRGA < MASGODGA UPPERCASE < MASGODGA LOWERCASE < MASTEKRE < KENGRE < GODGA < TIRGA < YIKRE < KUUGA < GEMGANGO < PIRGU < ZILIMBILA

Here is a table visualizing the order with the letter ${\buildrel {\sim}}$ (A) :

1 st	Unmarked letter	~	11 th	Masgõdga Lowercase	ب ر
2 nd	Abila	\$ e	12 th	Mastẽkre	∻
3 rd	Sobila	} .	13 th	Kengre	ζ ε
4 th	Hõbila	\$ °	14 th	Gõdga	\$ ^ε
5 th	Zĩbila	} v	15 th	Tırga	۲.
6 th	Dibila	ر کر	16 th	Yıkre	~
7 th	Zoabila) 6	17 th	Kuuga	\
8 th	Takre	\	18 th	Gemgango	ž
9 th	Mastırga	<u>ئ</u>	19 th Pirgu		ŝ
10 th	Masgõdga Uppercase	₹1	20 th	Zılımbila	`{

Table 24. Order of diacritics on letters.

As seen in <u>Tables 10.1-10.3</u>, multiple diacritics can be used on a single letter. All individual diacritics are ordered first, then 2-diacritic combinations, then 3-diacritic combinations, then the next letter in the script is ordered. 2-part and 3-part diacritics are ordered according to the basic diacritic order in <u>Table 24</u>. Below is an exhaustive table of how every linguistically possible diacritic and diacritic combination is ordered for any particular letter:

ucic	u io	ally	, pai	ticui	ar ie	itei.													
1	िष	ំ	ి	ា	៉	ु	ি	<u> </u>	្ន	্	়	3 .	ः	៑	ૣૢ૽	ि	`	^	ំ
2	े ८६	3व	ाव	े हु	िं	>a :	€8>	-8-											
3	3•	3•	<u>.</u>	*	ं	ě	ê	ំ											
4	३ ०	30	ि	್ತಿ	ိ	š	်	ိ											
5	3 ೧ ೦	300	ار د	្ខា	િ	>n	^ ∩ ়	• 0											
6	្ ខ	១ ០	آu آ	្ខាធិ	៏	>u<	^ ∪`	ਾ											
7	3 %	ुहर	िहा	្ន	्र	>9	\$	្	ļ										
8	्राह	्रा ः	ु)(्र				1										
9	ি	3 ।	ુ ા	<u> </u>	<u>ু</u>	<u></u>	<u>`</u>	<u>^</u>	<u>*</u>										
10	ែ រ	3 ि L	ា	<u>।</u>	ា	ି -	1 ><	ं।	<u>-</u>										
11	ា ា	3 ℃	³ ि ℓ	ाः	ૂ	ि।	، د	۱ ،	ે (
12	্	3 •	ુ દ	়	್ •	<u>ੌ</u>	ě	़	៎										
13	3।	3 व	3ि	3>	3<○	3 ▶													
14	ाह	3 व	ुह	ंरध	3<	3 ⊁ ે													
15	े ।																		

16	গ ি	ু %	\$<	ॐ																		
17	૩ા∶	ा ाह	<u>।</u> अ		र्।	3। ।	3 श्	3ि।	3>`	3<○	³► 	ा ।	್] ि <u>।</u>	ं<ह] >€	ુ _	<u>a</u>	<u>ূ</u>	<u>}</u>	\$ _	<u></u>
18	ाः	1	ាខ	.।	्।	1 18	3 ្ខ ្	3 ि ॄ] <£	ا >د]ે•દ	ា ាខ	ា ិខិន	្រ	1 ે<દ	1 >∕દ] ∙દ	ू इ	្ន	ै %	³< _ [1 ે • ફ
19	૩ા ૃ) ाε	ीह	>ا ر	√ا∵ ر	3 ि ८	3 જૄ ∟	3િ ∟	3>∵ ৻	3<○ ι	3• ે ા	ाह	្ខេះ	3ि ८	ى ⇒د	٦ >د	ુ• દ	्रा	્ર	ر ﴿	ر د	ો વ્હ
20	3।ः•	• ाह	े ।	٠.	<u>े</u>	3।ः	3 वृ •	3ि∙	3>○•	3<○・	3⊦ः	ः ाह	3 वृ ○ •	₃ि•	• ः	3<○•	ુ•	<u> </u>	ূ •	٠ •	ş< •	ે •

Table 25. Order of all diacritics and diacritic combinations. Read the top to bottom, and left to right. Row 1 is ordered first (left to right), then row 2, etc.

In summary, the capital letters are ordered first, then lowercase. Remember that all of the diacritic possibilities can occur on capital letters as well as lowercase. For any letter, the unmarked letter (for example \rightsquigarrow (A)) is ordered first, then the same letter with all possible diacritic combinations in <u>Table</u> 25, in the order they appear (left-to-right, top to bottom), then the next letter (i.e., \rightsquigarrow (BA)).

VII References/Citations

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- ... 2014, 242 pages, by: Zakaria Ouédraogo. Figure 4. بالتحارات بما يأتي والاستخارة والاسرار
- 5. مديخ ونشيدة الدينية والشعر , 40 pages, by: Abdul Wahab. <u>Figure 5</u>.
- 6. نصوص القرآنية, 2021, 61 pages, by: Abdul Rahim. <u>Figure 6</u>.
- 7. بوضوح أمور الدينية الاسلامية , 14 pages, Figure 7.
- 8. والحكايات من الحكمة والحكايات من الحكمة والحكايات . 2017, 15 pages, by: Zakaria Ouédraogo. <u>Figure 9</u>.
- 9. يتكلم عن الحروف وتعلمها, 2018, 69 pages, by: Mahamadi Ouédraogo. <u>Figure 15</u>.
- 10. يتكلم عن الطب والدواء, 47 pages, by: Abdel Rahim Yaogo. Figure 11.1-11.2
- 11. استخارة والنظر النجوم, 20 pages, by: Zakaria Ouédraogo. Figure 10.
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Additional Resources

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 - https://www.facebook.com/watch/?v=1559147544197689
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- 4. "مينيم بيسى miniim dag noore" YouTube, December 12, 2017.
 - https://www.youtube.com/watch?v=-SUmTcauHFM
- 5. "Moore miniim biissi" YouTube, January 2, 2018.
 - https://www.youtube.com/watch?v=t7KOsK8i6N0
- 6. "Fondation miniim dag noore nouveau alphabet" YouTube, January 25, 2018.
 - https://www.youtube.com/watch?v=iKNuWxNpxpk
- 7. "Moor yelbuna Moor bipaala" YouTube, October 31, 2019. The title roughly translates to "Mooré proverbs [in] new Mooré [letters]"
 - https://www.youtube.com/watch?v=QaMCnwyfdsU
- 8. "2 décembre 2023" YouTube, December 2, 2013.
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- 16. "Prononciation de nouveau alphabet du mooré 06" YouTube, July 10, 2018. https://www.youtube.com/watch?v=T3deNL44LrU
- 17. "Prononciation de nouveau alphabet du mooré 07" YouTube, July 10, 2018. https://www.youtube.com/watch?v=tPBVdQKF3CE
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VIII Acknowledgements

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MINISTERE DE L'ENSEIGNEMENT SUPERIEUR DE LA RECHERCHE SCIENTIFIQUE ET DE L'INNOVATION BURKINA FASO

UNITE-PROGRES-JUSTICE

SECRETARIAT GENERAL

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE ET TECHNOLOGIQUE Ouagadougou le 14 septembre 2016

INSTITUT DES SCIENCES DES SOCIETES (IN.S.S.)

03 BP 7047 Ouagadougou 03 Tél: (226) 50 35 55 97/95 Fax: (226) 50 35 55 96

Attestation

Je, soussigné Bétéo D. NEBIE, chef du Département de Linguistique et des Langues Nationales (DLLN), atteste avoir présidé une réunion de chercheurs du département avec monsieur Mahamadi OUEDRAOGO, chercheur indépendant. La rencontre a eu lieu dans la salle de réunion de l'INSS ce mardi 13 septembre 2016, de 12h 06 à 14h 24, et a concerné un système d'écriture inventé par monsieur OUEDRAOGO.

Au terme de ces échanges consécutifs à deux précédents, plusieurs remarques ont été faites, sous réserve d'investigations plus approfondies :

- Le système inventé par monsieur Mahamadi Ouédraogo semble cohérent.
- Il semble être spécifique en attendant d'éventuelles vérifications supplémentaires.
- Il peut et doit être perfectionné à plusieurs niveaux ; des conseils variés ont été prodigués dans ce sens par les chercheurs.
- Il mérite un encouragement soutenu.

En foi de quoi, cette attestation a été établie pour servir et valoir ce que de droit.

Bétéo D. NEBIE



IX Examples

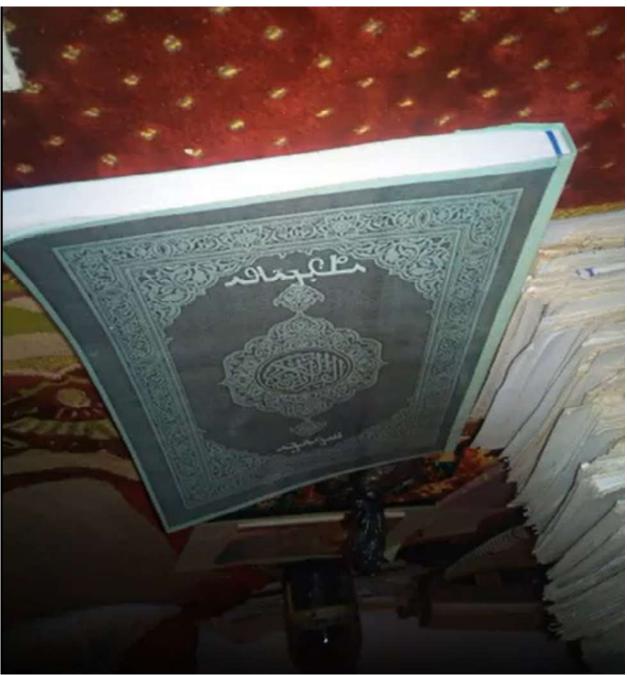


Figure 1. Qur'an, 2021, written by Mahamadi Ouédraogo. https://www.youtube.com/watch?v=lgkUEwlJJwl.

مطلمله

ىئىسى ئىلى ئىلىنى ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلى ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھى ئىلىنىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھىڭ ئىلىنىڭ ھى

مِلْجِهُ

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Ӛ҇Ѳ҇ӚѬ҇ҿ҇Ѷ ΛΟΪΩΕ DVGIVD **ӘठСंПЭЙ МАХЭЩОЙ УММР ЖУЮДИХ ЭРМОСОТ VMŽ ቴኒኒիኒ የሚቪኒ VMŽ ዝሪክଳି ህ ዝር፤ እ** HOHEOU MX XZIVNVOS TOOC HM NOHV ΩΛΩΩΤΩ ME ZOZM VI Y X ប្រហ្វែ ក្នុងប្រព័រ្ធបទិ៩ បក់ក្នុងប្បីប្រមុំ ១៤៤ ១៩៤៤ មិននិក្សាក្នុងប្រ (名) 耐皮耐肺旁边 V的 原苯某氯苯 原的 原义 原苯苯苯氯唑义义 3Miz W **MZDONC** ญี่เดีย ญี่เกิดเรา 出而る (F) 而び!! ダV!! 原図的る 裏るV!C VIND VAREV OVOOR ⊻፴⊻ቫኛ ሪቪV ልሽ ልሽዲጠቂጠር (A) ዝህዝቪቃଳው ፴월 Vଳሪ ブί⊻፴V ន្តិ00V ក៏នៃទីVថា រុំក្រុក ក្រុនិសិស្ស ស្កា (9) มีช่วะมู่บั **ΒΟΡΙΊΛΟ ΥΘΗΝΈ ΛΕΙΝ ΕΝΕΙΟΝ ΙΣΊΟΣΕ** ጀኒኒያ ህህ ህሽ ህ정적분៣ሕ ላው ଲጅው ውህር ህ፤ህ정

Figure 3. Surat Al-Baqarah, 2022 647-page Quran. Red arrow: Uppercase word-initial vowel YI. Note that this is in Arabic.

مِعْسِ عُلاِّهِ عُلِيَّةً سُلا عُلِيَّةً مِنْ مِعْسِ

المحمد مثلغ للما عمامه المالم

Figure 4. 2014, 242-page book on contemplation and Istikharah (Arabic: الأستخارة), written by Zakaria Ouédraogo.

عمقمه سميد علم بملا

سَمُخَدِّ مَهْمَلُونَ كَيْهِ خُسُوسَ سَمْطِعِهِ جُسَيَةً السَهِدِ

عيد عسمة عالجهله

عَمَدِهُ عَيْمِهِ مِنْ مِنْ سِلاً يَمحَمُ مِنْ سِلاً عَمجَمُ مَنْ مِهِمِيكِ لا مِظْمُدُ

عَيْلاد عَسته مالِحَكِمُ

مدَ منسم للمقد مبهفِم س للهِ عَلَى خاللہ منسم للم المنافع منافع منافع ممام

عَيْلاء عَسمة حالاته في

للع مقامد مثلمً لأنام لا كَمَالِكُ الأمد الع النسمة مجد لله عَمِملنا الصمّامد

عَلَيْك هِ مسته مثلاً لَهُ

ملائام معمد الله لمؤلَّف الله للمحمد الع مِعْمَدُ عَلَيْمِهُ لَمِنْكُمْ مَرْمَالِهُ مِنْكُمْ لِمُعْمَدُ الله وَمُعَمِّدُ عَلَيْهُ مِنْكُمْ مَرْمَالِهُ مِنْكُمْ لِمُعْمَدُ عَلَيْهُمْ مُنْكُمْ مَرْمَالِهُ مِنْكُمْ مُنْكُمْ مُنْكُمُ مُنْكُمْ مُنْكُمُ مُنْكُ

عيلام عسمة حالإحلال

لله للهُ منسمد خسمد للنا علاسد له المعادد المحقود للنا الله وهد الع منسد للذ

عيُّك كمسمة معلامكم

Figure 5. Book on Mooré poetry, written by Abdul Wahab.

بَعْ مِدِيدَ مِنْدِيدَ هِكَ عِدِمِهِو هِكَ عِد مِنْدِهِ هِكَ مِنْدِهِ هِكَ مِنْدِهِ هِكَ مِنْدِهِ هِكَ مِنْدِه هِكَ مِنْدِيدَ مِنْدِيدَ مِنْدِيدَ هِكَ مِنْدِيدَ هِكَ مِنْدِيدَ مِنْدِيدَ مِنْدِيدَ هِكَ عِلَيدِ هِكَ عِلَيد مِدَدِيدَ مِنْدِيدَ هِكَ مِنْدِيدَ هِكَ عِدَدِيدَ مِنْدِيدَ هِكَ عَلِيدِهِ هِكَ عَلِيدِيدَ هِكَ عَلِيدَ هِكَ عَلِيدَ مِنْدِيدَ هِكَ عَلِيدَ مِنْدِيدَ هِكَ عَلِيدَ مِنْدِيدَ هِكَ عَلِيدَ مِنْدُودِ هِكَ عَلِيدَ مِنْدُودِ هِكَ عَلِيدَ مِنْدُودِ هِكَ عَلِيدَ مَنْدُودِ هِكَ عَلِيدَ مَنْدُودِ هُكَ عَلِيدَ مَنْدُودِ هِكَ عَلِيدَ مَنْدُودِ هِكَ عَلِيدَ مَنْدُودِ هِكَ عَلَيدَ مَنْدُودِ هِكَ عَلَيدَ مَنْدُودِ هِكَ عَلَيدَ مَنْدُودِ هِكَ عَلَيدَ مِنْدُودِ هِكَ عَلَيدَ مِنْدُودِ هِنْ هُمَ عَلَيدَ مِنْدُودِ هِنْ مِنْدُودِ هِنْ مُنْ مُنْدُودِ هِنْ مُنْدُودِ هِنْ مُنْدُودِ هِنْ مُنْ مُنْدُودِ هُمُ هُودِيدَ مِنْدُودِ هُمُ هُودُ مِنْدُودِ هُمُ هُودُ مِنْدُودِ هُمُ مُنْ مُنْدُودِ هُمُ مُنْدُودِ هُمُ مُنْدُودِ هُمُ مُنْ مُنْدُودِ هُمُ مُنْ مُنْدُودُ مِنْدُودُ مِنْدُودُ مِنْدُودُ مُنْدُودُ مُنْ مُنْدُودُ مِنْدُودُ مُنْدُودُ مِنْدُودُ مُنْدُودُ مُنْدُ

عميد علاقد

معس عليه مطحقسات مطحقمس

جَمِّهِ بِمِيْهِ بِمِيْهِ بِكَيْلِهُ ﴿ كَ الْكِيمِ لِمُقَالِهُ مِقْلِهُ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِي مِعْبَئِلُهِ اللهِ مِمِهِ مِيَّلِهِ مِيْهِ مِيَّلِهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ مِيْهِ م مِنْمُنِيْهُ اللهِ عَمِيْهُ عَلِيْهُ مِيْهُ عَلِيْهُ مِيْهُ مِيْهُ مِيْهُ مِيْهُ مِيْهُ مِيْهُ مِيْهُ مِيْهُ

DEMP ZzgE

معسمطيع مطهقسلا مطههمس

عَمِدَة مطاعة علمد

Figure 6. 2021, 61-page book Quran, written by Abdul Rahim.
Page **45** of **83**

مِكَسِ عَلَيْكُمَ عَلَيْكُمِسِكُ عَلَيْكُمَسِ سالد غُمالد گُديالد النَّ مِمْلَّ الْحَسَّ مِهِ يہ علمبيك مُنهِلُمْس كبيالد علمبيك مِمْلً مِهِيہ علمبيك كَهْنَ لَمُهُالِ مَهْطال مُهُلً مِكَد مُعْلَى الْحَم عَلَى مِمْلًا عَلَيْكِ مُعْلِكُمْ الْحَم عَلَى مِمْطال كُهُمَا الْحَم عَلَى مِمْلًا عَلَيْكِي مُعْلَامُس مِمْطال

مَنْهِمْ مَ مَىلكَ مَّهِسَلَمَ لَمُمَالكُ مَكَّغَ المُّمِمُ المُّمَامِ يُّتُمَمِّمُ فِنَا مِهَ فِكَّنَ

لممالك مك

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لا عَمِسه مِهْ الله لا عَمام علان على الذه مبت المهاكمة
لا عَمِسه المهاكية نوسين على المهام علان على الذه مبت المعالية لا معالية على المعارية على المبت الم

Figure 8. 2014 book on wisdom and Istikharah.

معسى معقيقى معتبة سياك معتبة تحسى فساك عُماك عُمياك الأي مِمْال الله الله الله الله الله عملات المحمد معميك معمد معميك معمد معميك مهال عُمِك المحمالة مِمْاك المحمالة المحما

ک خلا مہُلافۂ ۱ متک لات کمنمف کنالکئی کا کہ کا



Figure 9. 2017, book on advice/wisdom and 100 proverbs, written by Zakaria Ouédraogo. Arrow: Takre diacritic over two vowel letters, and an additional Zoabila above the letter WOU.

4

معسى عقيقى عقيتهسائى عقيتهسى قس الد عمالات قديلات الن مملاً التس مجيد علمديك متهملهس عديلات علمديك مملاً مجيد عمديك علمديك مملاً مجيد عمديك لمفالي مفائل عمد التم علم مملاً عملا منائل التم علم مملاً عملا منائل

مثمِد مہ سمِتیہ ممّاعہ عمْعکہ عملا علہ مِثالمع علی المِّمّ عمد معلہ النّمِعليّ کے المُمہ للنا



Figure 10. 20-page Mooré language educational book, written by Zakaria Ouédraogo. Red arrow = Baare punctuation mark.

مسحقسق يجيع تهيم بجع يَّوْلُكُمُ الْخُ الْكُمُ مُّوْلُمُ كُمُ نُوِّ 12 July 12 يوكس الع ومد التس لمواكد ك كمد لاهس علم فكن ممهم عناس الع على

Figure 11.1. Medical book, written by Abdel Rahim Yaogo. Arrows: purple = Gõdga diacritic; pink = Kengre diacritic; green = below-letter vowel-marks.

ممملكم لمعس علم من ممولم عثماله لافحه مم گوطع مطلاسله الامهد ۳۰۰ همًا فِي النَّمَةُ لِمِي فَهِلْيٌّ م عَمَالُمُ عم عمد لحمد علم مكن عمل من عد عدي عد تعاللم لا لأن مىلى للبير بِمَعَلَمْ يَا مَعْمَلُمُ مِلْ المحمد لحمس علم فيلنا

Figure 11.2. Medical book, written by Abdel Rahim Yaogo. Alternate/special Minim digits are underlined in red. Arrow: red = long-vowel diacritic with Hõbila above YI.

Figure 12. 2008, book titled (paraphrasing): "The Secrets and Works of the Almoravids". The topic is on the Almoravid dynasty (المرابطون), written by Mahamadi Ouédraogo.

ALPHABET

DEUX (02) DIRECTIONS

INVENTE PAR MAHAMADI

LE. 23/11/2006

L'Alphabet a cette particularité et le privilège d'être l'un des rares alphabets à s'écrire et se lire dans deux (02) sens :

Hymne national bf en moore avec nouveau alphabet gauche à droite (EN MAJUSCULE)

*ជ*រុខដូរ៉ា កំរន់! កំរុខេក កំរុស១ បស្លឹ! សិ ៩:ដំ!

Figure 13.1. 2017, book on various topics, the page above is the National Anthem of Burkina Faso, written by Ahmed Sodgo. Red arrow: Zaoubedre with vowel diacritic on top. This is written in the uppercase LTR version of the Minim Dag Noore script.

Hymne national bf en moore avec nouveau alphabet gauche à droite (en minuscule)

مهُرِعمُالم للملا للمَّاكد ممُلاكم مالَّمُ لام هَلِب ﴿ مَعْ لَوْمِهُوْ مَاعَمَةٌ مُمَالِمُهُ مَمْتَمُالِهُمُ ممُالممُا هُمكُ مِهِدٌ لِمُقَالِمُهُ مَ المُقَالِمُ مَا للمُالمَّمم المُ يُّم عَلَم عُملًا مِهِتًا عَمَّلُمُ المُنْكَمَا مُ لَوْمُتِن مُلامُونٌ لمُنْكُولُ مِمَّاكِم لَّهُمِّتمُ لَّامُكُمًّا مِمهامِةً مُتِممُهُا مَّ المُدَكمَّا لَمُّلمَّةً ومُالمَ مُتممعُ المُخْمَ للمُلاكمُ لخناهم للما عَمَاتُم وَلَكُمُ وَلَكُمُ مُحَدِّ بِمَوْمَعُ لَمُ عُمِلِ اللَّهُ عَلَّا مُعَكَّمُلًا لَمُمَّا يُلُّكُ عَلَّا لِمُكَّا عِلْكُمُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ ال لم لاڤاليم لام لاڦالام المّاليما المّالمة مما مكالمها مممؤمتما لمكالما لمرالم ما لمَلامُليهُم مهامُلا مَمناً وَمُهم ممَّمُهُ مممؤمتملا ممتولا لمثلاث م مثلاث ممالهم عمد لمُلاك لمُلكهم ما لمبمممًا تمهد لإغاثة عد للمقاتبين المهرية المعمدة المحمدة المحمدة المعادمة المعا يمام محمدم عهد الهالاغ مهالالم خمّ

Figure 13.2. The lowercase LTR version of the above book.

L

معس معلام معليه معليه علم بناز المحالم
مىملى كېتكىللىكلى الغ مېكىلىمىد گەنگى كام المىكلىم گەنگى كام الائىسمى گەنگى كېمئىگى گەنگى كام كانىسمېلىشقالاكى گەنگى كام كام كانگىم كىلىمىلىم مىلىم كام الىلىم كەنگىم كىلىمىلىم مىلىم كاملا نىچىلى الن كىتىسلىم كاتىلىم ئىچىلىمىلىم ئىلىل نىچىلى الن كىتىسلىم كاتىلىم ئىچىلىمىلىم

ممّاك ليّم المالله لامس علم بمكن

Page 1 / 47/ — Q +

Figure 14. 2017, medical book, written by Abdel Rahim Yaogo. Arrows: red = long-vowel diacritic, green = word-final vowel grapheme.

بسم الله الرحمن الرحيم اللهم صل على سيدنا محمد وعلى آله وصحبه وسلم تسليا آمين.

L32rmr small

اللهم صل على سيدنا ومولانا محمد رسول الله صلى الله عليه وعلى آله وصحبه في كل لمحة ونفس بعدد كل معلوم لك يا رب العالمين

1



Figure 15. 2018, book on learning to read, written by Mahamadi Ouédraogo. Blue arrow = the A YI digraph used when writing Arabic.





Figure 16. Book on various educational topics, shown above are African nations written in the Minim Dag Noore script. Arrows: red = word-initial vowel 'YI' letter; blue = word-final vowel letters; pink = Takre stretched over two letters with Zoabila above the letter YI; green = Turga diacritic.

كرس الأود عسي ينتعد ತ್ತು ಪ್ರಾತಿ ಪ್ರತಿ ಪ್ರಾತಿ ಪ್ರತಿ ಪ್ರಾತಿ ಪ್ರತಿ ಪ್ರಾತಿ ಪ್ರತಿ ಪ್ರಾತಿ ಪ್ರತಿ ಪ್ರವಿ ಪ್ರತಿ ಪ್ರವಿ ಪ್ರತಿ ಪ್ರವಿ ಪ್ರತಿ ಪ್ರವಿ ಪ್ರಕ್ಷ ಪ್ರತಿ ಪ್ರತಿ ಪ್ರಕ್ಷ ಪ್ರಕ್ಷ ಪ್ರಕ್ಷ ಪ್ರಕ್ಷ ಪ್ರತಿ ಪ್ರಕ್ಷ ಪ್ರತಿ ಪ್ರಕ್ಷ ಪ್ರತಿ ಪ್ いんろ あんとうい あっかい しんかん しんかん उद्देश मिर्म्य करेंग्रेय करेंग्रे علمد عام على مرقسه عايد المعرقة iti to in sen sem it it transfer order ئىناقلىن كى مىتكۇلۇمى متع بعد عدمنونا عدمميمعدد askermanta In ander see too to trã lus rage Interde les où to unu Baran philippia Under int ele unu al ele at the aire the air tead the sale

Figure 17. Handwritten text on religion.

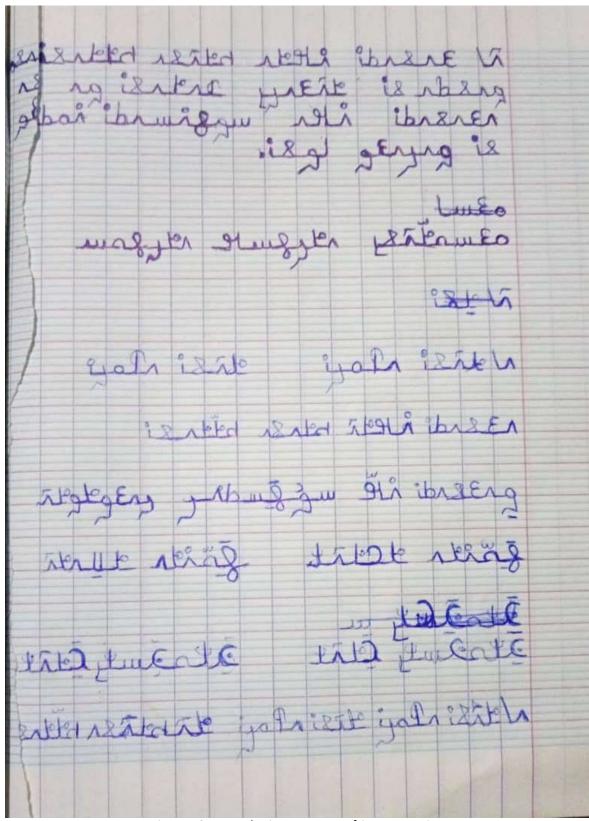


Figure 18.1. Handwritten text on African countries.

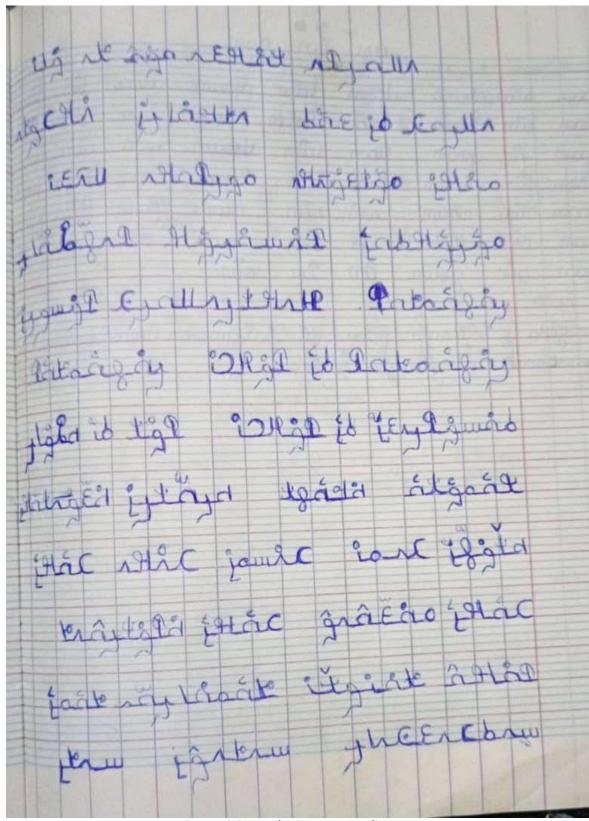


Figure 18.2. Handwritten text on literacy.

- ١٩ مَعْلُ مَمْلُكُمْ اللَّهُ اللَّهُ اللَّهُ عَمْلًا مَا
- ٧٦ خط مهلالماً لاملا الله عليه المهلاء المالية المال المالاء
- ∪ منط مهدالمعًا علمُوع عنطس مهاط عمد عد الدريِّ المُللِّ
 - ١١ مع موالليء عدم وثير عدم لات يملد من مم
- ♦١ مع مقالمًا مقاله مه سيمك النه عنه النا عمل مقد النا المقرّة
 - ٠٠ خط مهلالهم و مند مقله مناع علم عهم مد المسلمة
- الم خط مهلالية الله مّعلا يهم مبهين لانسمة كهسن علىلا عمالمه
 - ٢٠ مَعْ مَوْالْمُعَ * كَوْالْمُ عَنِمُ سَمَّةً كَوْالْمُ عَنَاهُ نُمَّاهُ
- - ٣٠ مع مقالميَّ المعلى مَّاه المهم لمثال مَّاهن
- - ٧٠ منا ممالكيًّا كمِّناك إدال مد مُما إداك
 - الم خط مَوْالْمُعَ ا كُوفِالْمُهِ النَّمْدَ كُومَا لِدُّمَا لِمُنَّا مِدْ بِمِمْكُ تُ

Figure 19. 2016, book of proverbs. Alternate/special Minim Dag Noore numerals written in red. Red arrows = Takre stretched over two vowel letters and some examples of 1 or 2 diacritics above Takre.



Figure 20. The 1st Mooré proverb in a video of 10 proverbs. https://www.youtube.com/watch?v=QaMCnwyfdsU Red arrow = Baare punctuation mark. The man in the image is Moro Naba Kougri (born Moussa Congo). "Moro Naba" is a title for the king/ruler of Wogodogo, one of the Mossi Kingdoms located in present-day Burkina Faso. The kingdom takes its name from its historic capital, now the Burkinabe national capital of Ouagadougou.

نشيد الوطني لبوركينا فاسو بالمورية حروف الشمالية مثلة مطامة عمالما فعماله معمالها

Figure 21.1. A screenshot from a video singing the Burkina Faso national anthem in Mooré with lyrics written in the lowercase left-to-right version of the Minim Dag Noore script. https://www.youtube.com/watch?v=WLzXKKpK53A

מבובבטושמא האבבו האווכה הטונטדע שטונטדענבט

UNIONEIVU YN 150712 YDCID LUNGIN YDMUTHOUTH ZAR DZŪ IZĪŽZDĪL. Č TDĪZCAĪ UAIKOA ĪĪ RICA ZAR NEM TEACHTI. ZVIAU UITETI Q IETTOVI ZUINUIN ZUICY ZZIUMU! MUIOCUII UYZNZM UIMOYZII' Q ZUIZCYII TUTH YOUNGEINI TUCHTUI YOUR ILEYONIU YOUNG MUUUL SULL TELEST CYZY ZYZYZI NY ZUIT MI ZUY ADORE AN INCOMET AN INCOMER CHINK AN INUNCOME EXCZUIL DIUNY ZVIICZUII EUINGY BUINGZIUYY ZUINZUI να τισγευστέδο σεξίση ευρίση εργγεί να MUZE VYULZOMUNE VOMZE EVIETU V IEVIETU IPVENZU POICE HAD SALESO A SEALESO SEASON AN SOLVENTE ZVI TUMCZUII ZZIZ ZVEVZUII" TUO ZUEUI GVOZY IZUM HZCZI UZKDY HYCYMY IZ:9I HUYYUZOMUUE SIDE AUTHOZUTY! GU! YZJAU! ZYJI NYJ ZZICUJI " GYZ THEE YOU GAT HAD SYLLES DIUE ECHAR AN HUZONUI INCHIN CHINI ME AR AND

Figure 21.2. A screenshot from a video singing the Burkina Faso national anthem in Mooré with lyrics written in the uppercase LTR version of the Minim Dag Noore script. https://www.youtube.com/watch?v=WLzXKKpK53A Arrows: red = long-vowel letter; blue = LTR word-final vowel letter YI.

Burkina Faso fäag-m-meng yuulle (Ditanye)

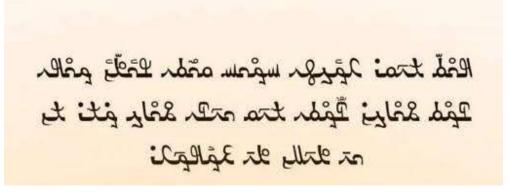
Burkîmba pînd n kisga wôrbo la yande hal youm tusri, B kisga făadba sen yi yuga hal youm koabga n wa ne yembdo,

B tödga silem-weegā sēn toeeme n lebg yaoolem yembdo, B kisga silem-weegā yembdo ne a tēng-n-teendbā fāa gilli. Wusg n bas raoodo la kēer me sid zāgsame, La pān-kongrā la töogrā la tuulgā kaagre, Zilmā raagre kenga d nin-buildā pelse La b paasa b raoodo n leb n zēk b burkīndi.

Reesgo

La yung a ye taa, a ye taa kumba nin-buiida vum kibare.
La yung a ye taa bal puge waa... tilgre! sor pakame,
Ti b rik n babsd vi-noogo, yung a ye lagma tond nin-buiida
Ne nin-buiida sen be duni wa faa puge
N baood tilgre la paoongo, ne b suura faa
Kall ti d t-oge, ba d na ki d teng yinga!.

Figure 22. A screenshot of from a video singing the Burkina Faso national anthem in Mooré with lyrics written in the Latin script. This is, presumably, a follow-up accompanying video to the video showcased in Figures 23.1-23.2 that used the Minim Dag Noore script. https://www.youtube.com/watch?v=XFUZogTTCqE



عيد) Figure 23. Example of a short digital text consisting of greetings and blessing to celebrate Eid al-Fitr (عيد) 'Îd al-Fiţr') in May 2023. Arrows: red = long-vowel diacritic; green = Tırga diacritic; blue = Kengre diacritic

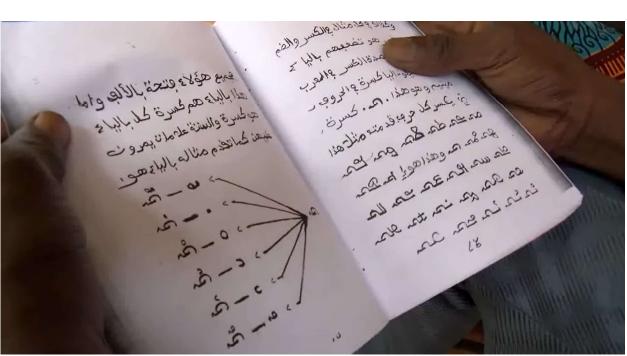


Figure 24. Minim Dag Noore script primer written in Arabic and Mooré. https://www.youtube.com/watch?v=2fWBEp3BJhg

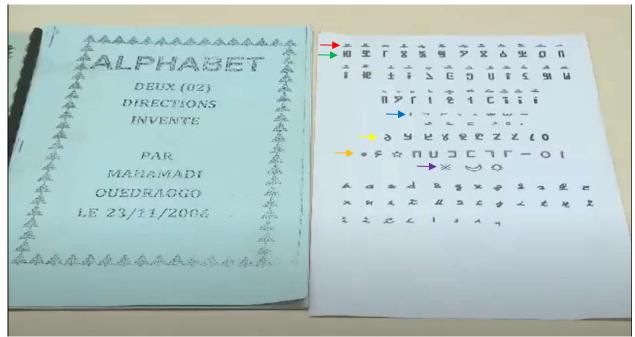


Figure 25. Educational material on the Minim Dag Noore script. The paper on the right displays Minim Dag Noore script letters. https://www.youtube.com/watch?v=RsQSz6943-o Arrows: red = LTR lowercase letters; green = LTR uppercase letters; blue = diacritics; yellow = numerals; orange = mathematical notation; purple = date symbols.

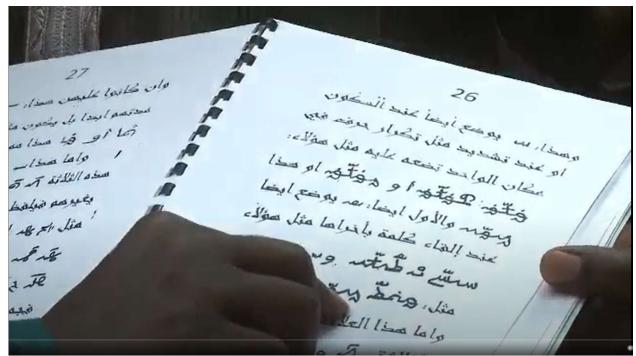


Figure 26. Interlinear Mooré and Arabic text in the Minim Dag Noore and Arabic scripts. https://www.youtube.com/watch?v=RsQSz6943-o

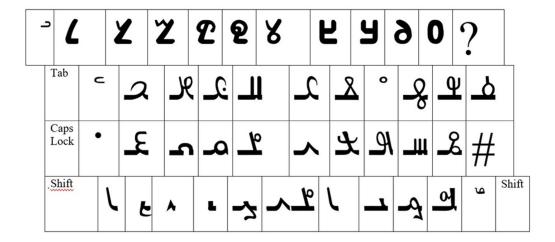


Figure 27. The Minim Dag Noore keyboard layout; compare with an Arabic keyboard below (Figure 91). (Figures 90-92 are from "Technological Adaptation and the Role of Social Media in the Proliferation of the Newly Created Minim Script from Burkina Faso" by: Jannis Kostelnik)

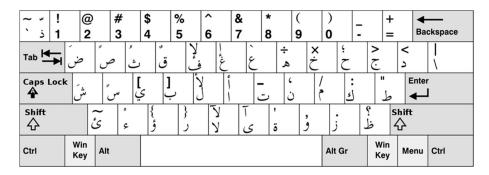


Figure 28. Arabic keyboard that the community are using with Minim Dag Noore script fonts.

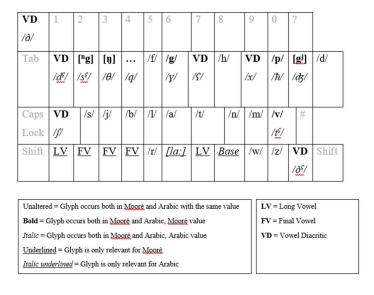
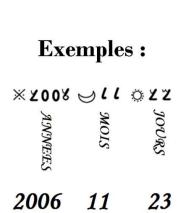


Figure 29. Script/linguistics analysis comparing Mooré with Arabic.

TROIS (03) SYMBOLES DATEURS

Trois symboles permettent, en association avec les chiffres, de déterminer le jour, le mois et l'année dans tous les calendriers possibles :



 $\times \cup \circ$

Figure 30. Minim Dag Noore script date symbols.

DEUX SORTES DE SIGNES NUMERIQUES SIGNES NUMERIQUES CLASSIQUES

SIGNES TRANSAFRICAIN S	6	9	F	8	9	e	Z	Z	L	0
SIGNES CLASSIQUES	9	8	7	6	5	4	3	2	1	0

Figure 31. Minim Dag Noore script numerals (top) and Hindu-Arabic equivalents (bottom).

ك مُسْمَدِهُ لا مُعْامِهُ لا كُنَامِهُ 9 الْعَنَ 9 الْبِهَ لا مَهْامِمُ لا الْمُلَّمَ لا الْمُلَّمَ لا الْمُلَّمَ لا الْمُلَّمَ لا الْمُلَّمَ لا الْمُلَّمَ لا

Figure 32. Minim Dag Noore script numerals and Mooré-language names written out besides them.

Le nouveau alphabet possède ses propres chiffres prêts à toutes formes de mathématiques. Douze chiffres initiaux constituent la base de cette mathématique :

LES DOUZE CHIFFRES INITIAUX												
CHIFFRES NOUVEAU ALPHABET	•	۶	☆	П	Ц	J	С	٦	Γ	-	0	I
CORRESPONDANCE S FRANCAISES	plus de 5	zero	cinqliard	quatrliard	triard	billiard	milliard	million	mille	cent	dix	m

Le calcul avec ces chiffres se fait avec les signes

La présentation détaillée des chiffres initiaux

Figure 33. Minim Dag Noore script mathematical notation symbols.

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المِمَالُّلْمِكُم 🌣

1 000 000 000 000 000 000



1 000 000 000 000 000 000 000

Figure 34. Minim Dag Noore script mathematical notation symbols.

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CINQ (03) MOIS REVOLUS D'ASSIMULATION

Le temps requis pour l'assimilation complète des lettres et des chiffres y compris l'écriture, la lecture et le calcul est estimé à trois mois maximum pour un sujet motivé et attentionné. Un sujet distrait les aura assimilés en cinq mois révolus

Une méthode simple et rapide de cet alphabet et ses chiffres a déjà imposé son efficacité à travers quelques expériences effectuées.

Figure 35. Minim Dag Noore script mathematical notation symbols written in combinations to create different values.

Figure 36. Mooré Abjad numerals.

	<u>ሂ</u> ዐሂ፻	75
de droite à gauche	L'année en cours est 2024. L'année prochaine sera 20	25.
de gauche à droite	العام الحالي هو 2024. والعام القادم سيكون 2025	
	አዐ አ ቆ አዐአፊ	

Figure 37. An example of how Minim Dag Noore script digits are written/read LTR (top) and RTL (bottom) using French and Arabic as examples.

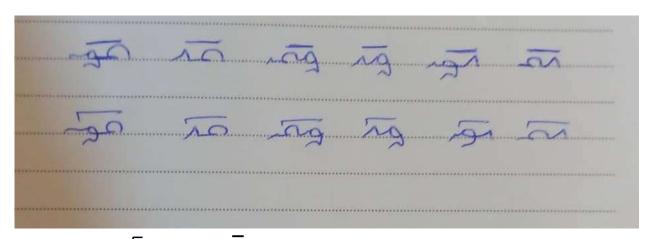


Figure 38. How Takre $^{\bigcirc}$, and the Turga $^{\bigcirc}$ diacritic can stretch over 2 base-vowels at the same time.

ΔίΖὰιΜὄΙ ፳ἰθϔ!! ἄιΣሮ διΖό!! Թ ΰιθϔ!! ፳ဣ ὑΙဣ ជίχζί!

Figure 39.1. An excerpt from a page written in uppercase RTL Minim Dag Noore script.

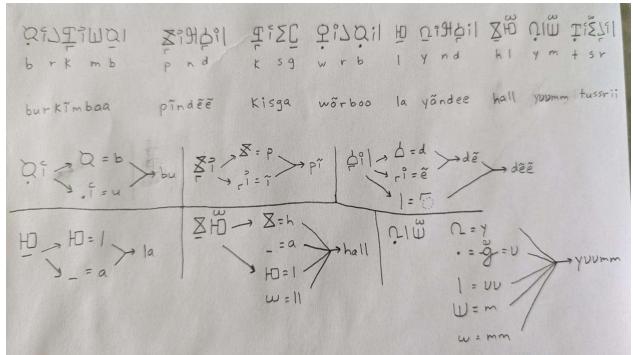


Figure 39.2. The proposal author's attempt to transliterate Figure 39.1's excerpt into the Latin Mooré orthography described in Table 4.

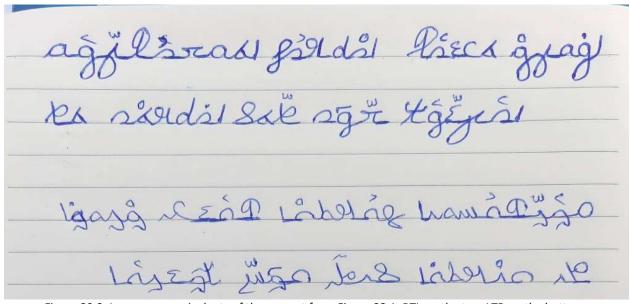


Figure 39.3. Lowercase equivalents of the excerpt from Figure 38.1. RTL on the top; LTR on the bottom.



Figure 40. Classroom of students learning the Minim Dag Noore script. https://www.youtube.com/watch?v=2fWBEp3BJhg



Figure 41. A classroom of 13-14 students learning the Minim Dag Noore script. https://www.youtube.com/watch?v=NAJSLo1NJ6Q





Figure 42. Classroom learning the Minim Dag Noore script.

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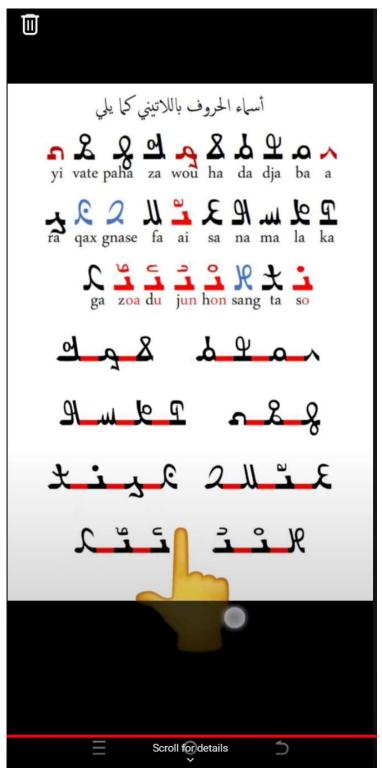


Figure 43. A screenshot from a mobile phone screen-recording of a teacher using an emoji as a pointer to virtually teach the Minim Dag Noore script. This is an exercise that is then sent in one of the very large WhatsApp group chats for people to engage in exercises. https://www.youtube.com/watch?v=aUbPGYQA4J8

A) (HA &) (DA &) (DJA &) (BA a) (A A) 와) (YI a) (VATE &) (PAHE &) (ZA 出) (WA 山) (AI 音) (SA &) (NA அ) (MA 山) (LA 中) (KA 土) (chau 土) (ra ച) (quaxi &) (ngache a) (FA (zoi 二) (du 毛) (june 土) (hon ²) (sang 水) (ta (ga &)

Figure 44. A screenshot from a video teaching the Minim Dag Noore script letters. https://www.youtube.com/watch?v=fjdUMeu33eM



Figure 45. Screenshot of video pointing out the Kengre (left) and Godga (right) diacritics

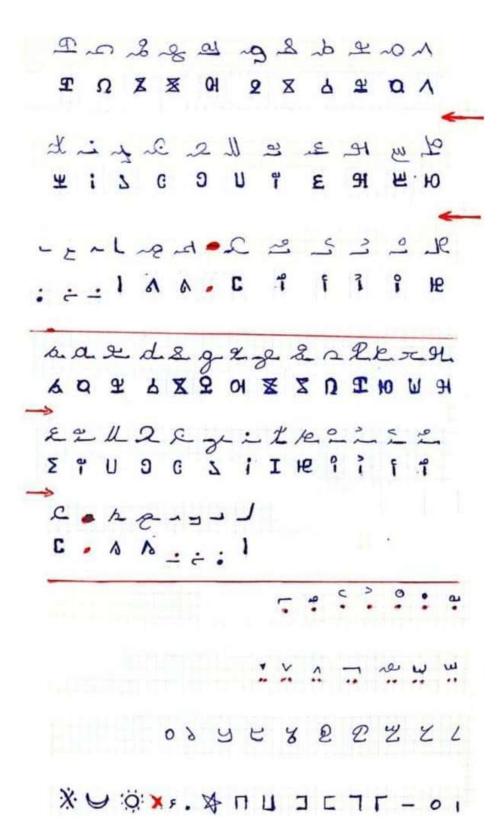


Figure 46. Collation of RTL (top) and LTR (middle) lowercase and uppercase letters in the Minim Dag Noore script.



Figure 47. RTB interview about the Minim Dag Noore script with Dr. Inoussa Guiré, director of the Department of Linguistics and National Languages at *Institut des Sciences des Sociétés* (INSS) (Institute of Social Sciences), an institution within the framework of the National Centre for Scientific and Technical Research (CNRST). https://www.youtube.com/watch?v=2fWBEp3BJhg



Figure 48.1. "Burkina Faso" written in the Minim Dag Noore script. https://www.youtube.com/watch?v=2fWBEp3BJhg



Figure 48.2. "Ouagadougou" written in the Minim Dag Noore script. https://www.youtube.com/watch?v=2fWBEp3BJhg

X 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 10646¹

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

2. Requester's name: Oreen Yousuf 3. Requester type (Member body/Liaison/Individual contribution): Individual contribution 4. Submission date: 2025 May 29 5. Requester's reference (if applicable): 6. Choose one of the following:
4. Submission date: 2025 May 29 5. Requester's reference (if applicable):
5. Requester's reference (if applicable):
6. Choose one of the following:
This is a complete proposal:
(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):
Proposed name of script:
b. The proposal is for addition of character(s) to an existing block:
Name of the existing block:
2. Number of characters in proposal: 101
3. Proposed category (select one from below - see section 2.2 of P&P document):
A-Contemporary X B.1-Specialized (small collection) B.2-Specialized (large collection)
C-Major extinct D-Attested extinct E-Minor extinct
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided?
a. If YES, are the names in accordance with the "character naming guidelines"
in Annex L of P&P document?
b. Are the character shapes attached in a legible form suitable for review?
5. Fonts related:
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
Organ Vauguf
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
Mahamadi Ouédraogo via Oreen Yousuf (oreen.yousuf@gmail.com)
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?
 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
A very detailed sorting description is enclosed in this document.
8. Additional Information:
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

¹ 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)

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.

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? Script user community; script creator	
If YES, available relevant documents: Enclosed in this document.	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	Yes
Reference: Enclosed in this document.	
4. The context of use for the proposed characters (type of use; common or rare)	Rare
Reference: Enclosed in this document.	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: Burkina Faso and neighboring countries; some script users in	Arab countries.
6. After giving due considerations to the principles in the P&P document must the proposed characters be en	ntirely
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?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	No
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?	No
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	