



# Characters

- ◌̋ 1AD0 COMBINING VERTICAL-LINE-ACUTE.
- ◌̎ 1AD1 COMBINING GRAVE-VERTICAL-LINE.
- ◌̏ 1AD2 COMBINING VERTICAL-LINE-GRAVE.
- ◌̐ 1AD3 COMBINING ACUTE-VERTICAL-LINE.
- ◌̑ 1AD4 COMBINING VERTICAL-LINE-MACRON.
- ◌̒ 1AD5 COMBINING MACRON-VERTICAL-LINE.

# Properties

- 1AD0;COMBINING VERTICAL-LINE-ACUTE;Mn;230;NSM;;;;;N;;;;;
- 1AD1;COMBINING GRAVE-VERTICAL-LINE;Mn;230;NSM;;;;;N;;;;;
- 1AD2;COMBINING VERTICAL-LINE-GRAVE;Mn;230;NSM;;;;;N;;;;;
- 1AD3;COMBINING ACUTE-VERTICAL-LINE;Mn;230;NSM;;;;;N;;;;;
- 1AD4;COMBINING VERTICAL-LINE-MACRON;Mn;230;NSM;;;;;N;;;;;
- 1AD5;COMBINING MACRON-VERTICAL-LINE;Mn;230;NSM;;;;;N;;;;;

# References

Crazzolara, Pasquale J. (1960) *A study of the Logbara (Ma'di) language: grammar and vocabulary*. London & New York: Oxford Univ. Press.

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Kaye, Jonathan Derek & Hilda Koopman (1982) *Lexique Vata*. In Kaye, Koopman & Sportiche (eds.), *Projet sur les langues kru*, 303–341. Université du Québec à Montréal.

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Vogler, Pierre (1988) *Le Parler Vata*, Strasbourg.

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# Figures

**Tone Marks**

**33.** The tone of a syllable will be shown on vowels (or consonants) by means of the conventional marks given below. The tone of a syllable may be simple (level) or combined (kinetic). (See also § 53.)

(a) Marks for simple tones:

high tone (h.t.) <sup>ˊ</sup>; **tí** cow; **éwá** beer; **tí mvá** cow calf  
 mid tone (m.t.) <sup>ˋ</sup>; **òzòó** rain; **é'dá** to show; **tí** mouth  
 low tone (l.t.) <sup>ˋ</sup>; **lè** to like; **sí** with

(b) Marks for combined tones (unbroken ascent or descent from one level to another by combination of the simple tones):

high-low tone <sup>ˊˋ</sup>; **tí zá** beef; **ópí ní** the chief's  
 high-mid tone <sup>ˊˋˋ</sup>; **ádríl** (or **ádrí**) brother; **átí** father  
 mid-high tone <sup>ˋˊ</sup>; **òzò** or **òzòó** rain  
 mid-low tone <sup>ˋˋˊ</sup>; **tsò-tsò** to strike  
 low-mid tone <sup>ˋˋˋ</sup>; **fè** he gives  
 low-high tone <sup>ˋˋˊ</sup>; **lǎ** they read (past)  
 intermediate tones: see § 53, p. ii.

Figure 1. Crazzolaro (1960: 7) explaining the diacritics.

**INTONATION** 11

**50.** (1) A low-toned verb adds to its low tone a slightly raised tone-tail, a 2/5 tone. Examples:

**fè** to give, but: **àfa fè** to give something

**51.** (2) A high-toned verbal root, e.g. **embá**, takes an additional slightly falling tone-tail, a 4/5 tone. Examples:

**embá** to teach      **èri andzi embá** he is teaching the children

**52.** (3) A mid-toned verb sometimes adds a slightly rising tone-tail, from 3/5 to 4/5. Examples:

**mvu** to drink      **éwá mvú** to drink beer

Figure 2. Crazzolaro (1960: 11). Use of the diacritics for 'incomplete action' intonation.

308. (b) Describing mental state, physical behaviour, manners, &c.:

- (32) èri a'á kòmú sí *he was kneeling*  
(33) ma ásinĩ əvö èmvò (= ètsáandí) be *I am heart-broken/sorely grieved*  
(34) éñóffĩ a'á ə'dó éñófilé *its claws are like leopard's claws*  
(35) dzó 'alé əndzí ; kàni kó èri 'bə, èri əvö àlârö *the hut is dirty; when they have swept it, it will be clean*  
(36) èmĩ əvö (= adri) è'yere, ma fě rá *be quiet, I shall give (you)*  
(37) mvá 'dĩ èri əvö àfa nĩ kókêrö *this boy is ignorant (without knowing things)*  
(38) embá mvĩnĩ əvözó (= mà əvö) mókêrö *he exhorted his son to behave properly*  
(39) èri əvö əvlàvi kókêrö *he is/was breathless*

Figure 3. Crazzolara (1960: 69). Grammatical examples illustrating three of the requested diacritics.

etú<sup>1</sup>-etú = tũtu, pĩpi, vn. to swell; ásinĩ etú-etú his belly is swollen, raised (cf. next etú).  
etú<sup>2</sup> (cf. tu), vn. to come up, mount; mĩ etú mávö 'bùá 'dó! come up to me! (say, on a tree); è'bĩnĩ etú Éñáóá fish swim up the Enyao river.

Figure 4. Crazzolara (1960: 247). A dictionary entry illustrating three of the requested diacritics.

- ' - middle tone.
- ˆ - falling high-to-mid tone
- ^ - falligh high-to-low tone
- ˘ - falling mid-to-low tone
- ˙ - rising low-to-high tone
- ˚ - rising low-to-mid tone
- ˛ - rising mid-to-high tone (mid rise tone)
- ˜ - high rise tone (as in Wedekind's records of Janjero)
- ˝ - very low tone
- ˞ - very high tone

falling mid-to-low  $\overset{\text{N}}{\underset{\text{V}}{\grave{a}}} = \text{a4-2}$ , rising mid-to-high  $\overset{\text{V}}{\underset{\text{N}}{\acute{a}}} = \text{a4-6}$ , etc.

Figure 5. Dolgopolsky (2013: 2995) explaining the diacritics.

{PH} ḥāra, Sa {R} ha'rā 'faeces', Sml {ZMO, DSI} ḥār, Sml N {Abr.} ḥār 'faeces, excrement', Sml ḥār- v. 'defecate', Bn ḥār 'diarrhoea', Rn {PG} ḥār

C: Bj {R} naɥ- scv. 'spend the night, sleep, rest' ¶ R WBd 187 || Ch: WCh: Klr {J} ḥā vi. 'lie, sleep', Sha {J} ḥā (pf. ḥāh-í) vi. 'sleep', {IL} ḥā vi. 'lie (liegen)', ? Dr nōn 'sleep' ||| CCh: Mtk {Sb.} ḥunε 'lie (liegen)' |||

HgB suχú, FIG seḡi, HgK sakú / seχú, HgG seḡi v. 'drink' ||| ECh: Nd {J} sáḡa id. ¶ JI II 111, ChC s.v. 'drink', Stl. ZCh 177 [no. 296], J T 146, J

(pl. žàunàní) id. || NrBc: My {Sk. in ChC} yáwùn, {ChL} yéwìn, Sir {Sk.} yōwání, Mbr {Sk.} yáwìn, Jmb yáwàn id. || Bg {J} yuwan, {Csp.} yuwan, {Sh.} ywàn, Grn {Hrn.} yíwón, {Csp.} yōwón id. ||| CCh: Tr {Nw.} žùwàn

Figure 6. Dolgopolsky (2013: 1726, 1966, 2778). The vertical-grave tone mark, some set over a macron indicating vowel length. Note the <ō> (blue arrow), where the vertical mid tone contrasts with the horizontal macron. The languages are N. Somali and the Chadic languages Kulere, Sha, Ndam, Siri and Boghom.

\*ʔ∇m- 'catch, seize', {JS} \*ʔam 'take' > CCh: Tr {Nw.} ǒm 'catch', ZmB ʔám {J} 'take', {Sa.} 'steal', ?? Msg {Mch.} imã v. 'seize', {Lk.} imε, imε 'fangen, ergreifen, nehmen' ||| ECh: Ll {Cp., ChC} ǒm v. {Cp.} 'hold', {ChC} 'hold, seize', 'swallowing noisily' ||| Lame {Sa.} id. gùròk id. ||| ECh: Mu {J} gǒró (pl. gǒrâr), Tmk {Cp.} gǒr, Kwn {J} kǒr, Ke {Eb.} kúr 'neck' (in KwK \*g-WCh {Stl.} \*ʔakʷi 'he-goat' ({AD} 'goat') > Hs àkuyà 'he-goat', àkʷíyà 'goat' ||| Kfr {Nt.} ɔk id. ||| Ron {J}: Df ʔǎh, Btr ǎχ, Klr ʔǎh id. ||| Krkr {Lk, J} sb. {Kr.}: HgNk yε, HgF nǎgyè, HgG òyè, HgK ʔyε(-ndε), FIK ʔíy, FIG

Figure 7. Dolgopolsky (2013: 130, 728, 833, 1600). The vertical-acute tone mark. The languages are Lele, Tumak, Daffo, Butura and Fali of Kiria, all Chadic.

bɜ 'soul' (transcribed in Gk [Horapollon] as βαύ) (× N \*beʔy∇ 'body, self, q.v. ffd.) ¶¶ Cf. also Ch: Ke {Eb.} fú:li 'blasen, wehen', Kir {ChL} 'small' ||| CCh: Mln {ChL} kʷéη, Bdm {Lk.} gɛnǎ, Lame {ChL} kʷánzèyǎǎ id. ||| ECh: Kwn {J} končé, Jg {J} kóyǎn, Kjr kańi id. ¶ ChC s.v. 'small',

Figure 8. Dolgopolsky (2013: 1157). The acute-vertical tone mark. The languages are Kera and Jegu (Mogum), both Chadic.

2.75. Le système tonal se résume comme suit :

registres	ponctuels		modulés unidirectionnels		modulés bidirectionnels	
		descendants	montants	descendants montants	montants descendants	
haut	/	^		~		
moyen haut		↙	↘	↘↙	↙↘	↘↙↘
moyen bas	-	∩	∪			∩↘
bas	\		∪			

Figure 9. Vogler (1988: 52). The diacritics marked in blue are requested. The more complex ligatures marked in purple will be requested separately.

L'ordre de succession des phonèmes et tons est le suivant :

a, ā, b, B, c, d, e, ε, ē, f, g, gb, γ, i, ī, t, j, k, kp, l, m, n, ny, η, o, ω, ɔ, ɔ̄, p, s, t, u, ū, v, z ; /, |, -, \, ↘, ↙, ∩, ∪, ^, ^, ∩.

Figure 10. Vogler (1988: 421). List of phonemes.

(40) w : bassa **kpá** ; klao **kpá'** ; guéré **kpá** ; grebo **klá'** ; tepo **klá** ; glio-oubi **kala** ; e :  
 bété **kwá** 'os'

Figure 11. Vogler (2017: 13), with the compound tone <̂̂> set as a sequence <̂̂> due to a lack of font support. The problem with this solution is that normally a tone mark such as <̂̂> without a consonant or vowel letter to carry it will be interpreted as a *floating tone*, a very different phenomenon. (Not that the same *ad hoc* solution is used for the diacritic ̂ on the second word in the set, *kpá*.)

sɪā	: V "gagner, avoir le dessus"
sɪā̀k̀l̀ẁ	: N sg (-k̀l̀) "coquille d'escargot"
k̀p̀p̀p̀á	: N sg (-p̀) "albinos" (
k̀s̀ā	: V "choisir"
k̀s̀à (-s̀è, -s̀ẁ)	: Ad sg (-s̀, -s̀) "sec"
k̀ j̀l̀ō	: V "se relever"
k̀ kl̀ā̀l̀è	: V "attraper"
k̀kl̀ā	: N sg (-k̀l̀) "
k̀k̀l̀ẁ	: N sg (k̀k̀l̀)
k̀k̀l̀ẁk̀ẁ	: Ph "cocorico"
k̀k̀l̀ẁ pî	: V "être mal,
ɪl̂	: conjonction subordinative "alors que"
ɪl̂	: N cl (ɪl̂) "sommeil"
ɪl̂	: V "s'amuser de façon répréhensible"
ɪl̂ ɣl̂	: V "rêver" ("déchirer le sommeil")

Figure 12. Vogler (1988: 490, 464, 460, 453). Contrasts between <̂̂> (blue) and <̂̂> (yellow). A more complex diacritic is marked in purple.

m̂n̂n̂ŷìĉì (m̂n̂ŷìĉì)	: N sg (-ĉì) "narine"
dē glā	: V "réfléchir"

Figure 13. Vogler (1988: 472, 434). Vertical-acute <̂̂> (blue) contrasts with macron-acute <̂̂> (yellow).

107 nà lā nà kw̄l̄ d̄w̄d̄w̄k̄ s̄ nà lā nà kw̄l̄ d̄w̄d̄w̄k̄ Ne baisse pas ton front,

Figure 14. Vogler (1988: 419). A contrast in running text.

asi	NE	masi ngua	MACHINE
uduma	GA	mudumc	PGT (POGMADE)
en	NA	minl	NEZ
yenu	NU	nyenl	MIRROIR

Figure 15. Kaye & Koopman (1982). A manual-typewriter substitution for ⟨<sup>̣</sup>⟩. An analogous substitution is made for ⟨<sup>̂</sup>⟩, ⟨<sup>̣</sup>⟩ is used for *6*, etc. (The initial letter of each line is clipped in this photocopy.)

These four distinctions can occur with normal, short, or double length vowels. Double length vowels also occur with combinations of the above tones, the shift from one tone to the other often giving the impression of a gliding repetition of the vowel sound, rather than of a continuous voicing:

- ▶ <sup>̣</sup>· high to middle high
- ▶ <sup>̂</sup>· normal to middle high
- ▶ <sup>̣</sup>· middle high to normal
- <sup>̂</sup>· normal to high
- ▶ <sup>̂</sup>· middle high to high
- <sup>̂</sup>· normal to low

Figure 16. Weltfish (1937: 3). In addition to ⟨<sup>̣</sup>⟩ as in Dolgopolsky (yellow), we have the vertical-macron ligatures ⟨<sup>̣</sup>̣⟩ (red).

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I. TEXTS BY EFFIE BLANE

*pi·tahawira·t<sup>̣</sup>* Band, *t<sup>̣</sup>sa·stawirahi·ka* Woman-ceremonial-gift-horse  
(in the Pipe Dance)

*e tiratúkspari ekuxruksitská tiráwā·hat kare·sikā·pa·kis*  
“- In my travels he (God) wanted God, Heaven for him not to be poor

Figure 17. Weltfish (1937: 4). ⟨<sup>̣</sup>̣⟩ in addition to simple ⟨<sup>̣</sup>⟩.

*nawahú· weretká·pā·kis*  
“See, now, I am poor

*tipi·raski*  
‘It is a boy.’

Figure 18. Weltfish (1937: 5). The vertical diacritic combined with the macron, ⟨<sup>̣</sup>̣⟩, and with the acute, ⟨<sup>̣</sup>̣⟩. Combinations with the grave do not occur in these texts.



passé accompli ponctuel	inaccompli (présent, habituel)
ρλ̄	ρλ̄ <i>lancer</i>
gbλ̄zì	gbλz̄ <i>choisir</i>

Figure 19. Marchese (1983: 237). A typewriter substitute for vertical and macron (the two orders do not contrast and so did not need to be distinguished).

ISO/IEC JTC 1/SC 2/WG 2  
**PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
 FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup>.**

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

Please read Principles and Procedures Document (P & P) from [std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html](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 [std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html](http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html).  
 See also [std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html](http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html) for latest *Roadmaps*.

**A. Administrative**

<b>1. Title:</b>	<i>Additional phonetic click letters</i>	
2. Requester's name:	<i>Kirk Miller</i>	
3. Requester type (Member body/Liaison/Individual contribution):	<i>individual</i>	
4. Submission date:	<i>2023 July 26</i>	
5. Requester's reference (if applicable):		
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>no</i>
Proposed name of script:		
b. The proposal is for addition of character(s) to an existing block:		<i>yes</i>
Name of the existing block:	<i>Combining Diacritical Marks Extended</i>	
2. Number of characters in proposal:		<i>6</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"/>	
4. Is a repertoire including character names provided?		<i>yes</i>
a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document?		<i>yes</i>
b. Are the character shapes attached in a legible form suitable for review?		<i>yes</i>
5. Fonts related:		
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	<i>Kirk Miller</i>	
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	<i>SIL (Gentium Release)</i>	
6. References:		
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?		<i>yes</i>
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?		<i>yes</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)?		<i>no</i>

**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 Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at [www.unicode.org](http://www.unicode.org) for such information on other scripts. Also see Unicode Character Database ([www.unicode.org/reports/tr44/](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.

<sup>1</sup> 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)

### C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain	<input type="checkbox"/>	<i>no</i>
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.)? If YES, with whom? If YES, available relevant documents:	<input type="checkbox"/>	<i>yes</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference:	<input type="checkbox"/>	
4. The context of use for the proposed characters (type of use; common or rare) Reference:	<input type="checkbox"/>	<i>transcription</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference:	<input type="checkbox"/>	<i>yes</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	<input type="checkbox"/>	<i>yes</i>
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
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? If YES, is a rationale for its inclusion provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? If YES, reference:	<input type="checkbox"/>	<i>no</i>
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary)	<input type="checkbox"/>	<i>no</i>
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:	<input type="checkbox"/>	<i>no</i>