# ME'EN PHONOLOGY 

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## 1. INTRODUCTION

Me'en is a South-East Surmic language spoken by about 40,000 speakers of the two main dialect groups, the Tishena and the Bodi. The Tishena, with approximately 35,000 speakers are found in the administrative region of Kefa in Bero-Shasha Awraja, in Goldiya Awraja, and in Gimira Awraja. The smaller dialect group of the Bodi inhabit an area of the Omo in Southern Omo administrative region.

## 2. CONSONANTS

### 2.1 CONSONANT CHART

Me'en has twenty-five consonant phonemes as shown in the following chart.

| p | t | c |
| :---: | :---: | :---: |
| b | $\begin{aligned} & \mathrm{d} \\ & \mathrm{t}^{?} \end{aligned}$ | $\begin{aligned} & \mathrm{j}_{2} \\ & \mathrm{c}^{2} \end{aligned}$ |
| b | d |  |
|  | s | $\leqslant$ |
|  | z |  |
| m | n | п̄ |
| w | 1 | y |

Note the considerable differences to Ricci's Phoneme chart (1972:107).

- He does not include ejectives nor implosives.
- There are the labialized phonemes /bw/ and/gw/ in his analysis which have not been found here.
- He reports on a /nd/ phoneme, which has been interpreted as a sequence of two phonemes in this analysis.
- Other differences are due mainly to transcription (e.g. his /ng/ is /n/ here.


### 2.2 DISPLAY OF CONTRASTS

In the following sections the relevant distributional displays will be given where contrasts of the phonemes against each other are shown. In each table the upper section deals witb
the initial positions, the middle and lower sections with the medial and final positions respectively. A minimal pair is indicated by a double line between two examples, a nearminimal pair by a single line.

### 2.2.1 VOICEI ESS PLOSIVES

| puy <br> 'bless by spitting' | tuy <br> 'spit' <br> tomók <br> 'property' | cuc <br> 'castrate' ḱyys <br> 'dry season' <br> com kom <br> 'eat together' 'count' <br> combk  <br> 'small rains end of season'  |
| :---: | :---: | :---: |
| whpa menstruation' <br> copi <br> 'make walls' | wotá 'cotton' | kuca <br> 'share' <br> 'ash'coki'sap of padut tree' |
| gap <br> 'garden' | Bat 'lightning' | Bac <br> 'be uncom- <br> fortale' 'accuse' <br> ec  <br> 'shoot' ek |

As can be seen from the above chart, all voiceless plosives are in contrast with all other voiceless plosives in all positions.

## 222 VOICED PLOSIVES



In the above chart only initial and medial positions are provided, and contrast is shown, but there are no voices plosives to be found word-finally in Me'en.

### 2.23 EJECTIVES

| $t^{\text {? }}$ | $c^{?}$ | $k^{\text {? }}$ |
| :---: | :---: | :---: |
| t? orogit | $c^{\text {? }}$ ortec | $\mathbf{k}^{\text {? }}$ oróy |
| 'bush' | 'hair' | 'scratch' |
| bat ${ }^{\text { }}$ isi | mác ${ }^{\text {i }}$ | cak?i |
| 'husk' | 'male' | 'new' |

There is clear contrast between each ejective in initial and medial position, but due to a neutralisation rule as shown below (2.3.2.1), there are no ejectives found word-finally.

### 2.2.4 IMPLOSIVES

B d

| Eul <br> 'take off | dál <br> 'enter' |
| :--- | :--- |
| kúSec <br> 'thigh' | kudéc <br> 'load' |

This table shows contrasts between /d// and/Б/ except for word-final positions where implosives are not found due to the neutralisation as given in section 2.3.2.1.

### 2.2.5 VOICELESS FRICATIVES

| s | s | h |
| :--- | :--- | :--- |
| sáy <br> 'hide' | šǎy <br> 'be ready' | hăy <br> 'mother' |
| asá <br> 'reach' | áša <br> 'retribution' |  |
| pos <br> 'finish' | puš <br> 'drive cattle' |  |

There is clear contrast between $/ s /$ and $/ s / /$ in all positions. The velar fricative is in contrast with both of these in initial, but it is not found medially and finally.

| mór 'heifer' |  |  | nor 'carry' |
| :---: | :---: | :---: | :---: |
| $\operatorname{mint}^{?}{ }^{2}$ <br> 'pepper' | nik <br> 'to skin' | nik <br> 'to close' | nes <br> 'flow' |
| gamác <br> 'Amahara' | hánac 'bird,kind' | gâná <br> 'relatives' | kánac 'baboon' |
| kom 'count' | kon <br> 'stab' | ой <br> 'wash' | won <br> 'rest' |

The above table shows contrasts in all positions.

## 227 SEMIVOWELS AND LATERAL

| w | l | y |
| :--- | :--- | :--- |
| wá <br> 'there' | lan <br> 'friend' | ya <br> 'here' |
| bawt <br> 'spleen' 'bake' | balsí | báyt <br> 'monkey' |
| Sáw <br> 'fast' | sśal <br> 'nine' | Šay |
| 'be ready' |  |  |

$/ w /$, I/ and $/ y /$ contrast with each other in all positions.

## 228 LABIALS

The following chart displays the contrasts within the general labjig area．Word－finally the places for $/ \mathrm{b} /$ and $/ \overline{\mathrm{L}} /$ are again unoccupied，as these phonemes do not occur in that position．
b
Б
p
m
w

| buy ＇be big＇ | Buy <br> ＇take handful＇ | puy 'spit' | moy |
| :---: | :---: | :---: | :---: |
|  | Бac ＇be uncom－ fortable＇ | pác $^{?}$ 〕 <br> ＇Omo <br> river＇ | mác ${ }^{?}$ 〕 <br> ＇husba |
| libá | ibá | 亿pa | imák |
| ＇sorghur | ＂awake＇ | ＇evenin | ＇deny＇ |


| gap | gam | saw <br> ＇garden＇ <br> ＇side＇ |
| :--- | :--- | :--- |
| ＇fast＇ |  |  |

### 22.9 ALVEOLARS




The phonemes $/ d /, / t^{?} /, / d /$, and $/ \mathrm{z} /$ do not occur in final position.

### 2.2.10 ALVEOPALATALS

| c | j | c | $\leqslant$ | İ | y |
| :---: | :---: | :---: | :---: | :---: | :---: |


| cik | jin | $c^{\text {? ik }}$ |
| :--- | :--- | :--- |
| 'sew' Sik | 'bury' | 'laugh' 'hear' 'close' |


| Bacit | $\mathrm{k}^{\text {? }}$ aj ${ }^{\text {r }}$ | mác? ${ }^{\text {i }}$ | kaší | añi |
| :---: | :---: | :---: | :---: | :---: |
| 'Teff | 'sow' | 'brave' | 'cut short' | 'I' |
| Бacák |  |  | áša | ayay |
| 'bite off |  |  | 'retribution' | 'other' |


| wac | gaš | mañ | gay |
| :--- | :--- | :--- | :--- |
| 'colobus' | 'forest' | 'rob' | 'know' |

Here the cells for $/ \mathrm{j} /$ and $/ \mathrm{c}^{?} /$ word-finally are left blank, as these do not occur in that position.

## 2211 VELARS

Below the display of contrasts in the general velar area. Blanks in the matrix are found word-medially for $/ \mathrm{h} /$ and word-finally for $/ \mathrm{g} / \mathrm{k}^{2} /$, and $/ \mathrm{h} /$.

| $\begin{array}{ll} \text { kamán } & \text { gam } \\ \text { 'war' } & \text { 'side' } \end{array}$ | $\mathbf{k}^{?}$ ami 'embrace' | nam <br> 'yawn' <br> nar <br> 'divide' |
| :---: | :---: | :---: |
| dokol Eogbl 'wild-cat"gourd' | $\begin{aligned} & \text { ok }{ }^{\prime} 61 \\ & \text { 'beg' } \end{aligned}$ | Onón 'throw' |
| kakbc kak? ${ }^{6}$ 'wax' 'molar' <br> únkí júngu 'gourd' 'sticky grass' | kánac <br> 'baboon' <br> zunk ${ }^{\text {? }}$ <br> 'sheep' |  |
| duk <br> 'to plant' |  | dun 'be tired' |
| $c^{?}$ ik <br> 'laugh' |  | jin <br> 'bury' |

## 23 Descriptions of Consonants

### 23.1 Stops

In Me'en there are four pairs of stops (voiceless/voiced): /p, b/ (labial), /t, d/ (alveolar), $/ \mathrm{c} / \mathrm{j} /$ (alveopalata), and $/ \mathrm{k}, \mathrm{g} /$ (velar). The voiceless stops occur in any positions, whereas voiced stops occur initially and medially only.


### 23.1.1 Morphophonemic Rule

A palatalization rule has been observed for alveolar plosives occuring in a cluster following an alveopalatal nasal; e.g when the suffix /-do/ (final-marker in non-past and non-pefect sentences with verb at end of sentence) is added, /d/ is palatalized: /man'/ 'to rob' > /marijo/.

### 23.1.2 Phonetic Realisation and Allophones:

- The voiceless set of stops has slightly apirated variants word-finally: [gap ${ }^{h}$ ] 'garden', $\left[\right.$ Kat $^{\text {h }}$ ] 'tougue', [Wotss ${ }^{\text {h }}$ ] 'child', [tuk $\left.{ }^{\text {h }}\right]$ 'mouth'.
- The labial stops $/ \mathrm{p} /$ and $/ \mathrm{b} /$ in non-final positions are realised as bilabial stops [p] and [b]. Intervocallically these are in alteration with the correspondingbilabial fricatives [p],[b]. In addition, the voicless bilabial stop also alternates with the voiceless labiodentalfricative [ $f$ ] in non-final postions.

| [pestr] to stay | [apa]'grandmother' | [uptas $\left.{ }^{\text {h }}\right]^{\text {] }}$ |
| :---: | :---: | :---: |
| [fess] | $\sim$ [ $\mathrm{ap}^{\text {a }}$ ] | $\sim\left[\right.$ uftasts ${ }^{\text {h }}$ ] |
|  | $\sim\left[{ }^{\text {Pa }}\right]$ |  |

[ber] 'spear' [libá] 'sorghum'
$\underset{\sim}{\text { [libaba }}$

- The alveolar stops /t/ and/d/ in non-final positions (see above word-final aspiration) are realised as alveolar stops:
[tiká] 'coffee' [otón] 'wind-instrument' [digi] 'malaria' [modorb] 'deer'
[tšatkátss ${ }^{\text {h }}$ ] 'torn'

The alveopalatal stops /c/ and $/ j /$ are realised as alveoplatal affricates in non-final positions. They have been interpreted as units rather than sequences of consonants. Syllable constraints in Me'en do not allow CC sequences neither in the pre-margin nor in the post-margin of the syllable.

| [tsobats ${ }^{\text {h }}$ ] 'pig' | [kotsi] 'instigate' | [ $\mathbf{k}^{\text {? }}$ atskats ${ }^{\text {b }}{ }^{\text {h }}$ 'always |
| :---: | :---: | :---: |
| [džobith] 'feces' | [ $\mathbf{k}^{\text {? }}$ odrit ${ }^{\text {h }}$ ] 'itching | [ ${ }^{\text {atskats }}$ ] always |

- The velar stops $/ k /$ and $/ g /$ are realized by velar plosives in non-final positions:
[karo] 'root'
[golu] 'grinding stone'
[tsokum] 'chin'
[gogu] 'hide'


### 23.2 Ejectives

There are three ejectives in Me'en, $/ t^{?}, c^{?} /$, and $/ k^{?} /$, alveolar, alveopalatal, and velar respectively. There is no labial ejective. Ejectives only occur in word-initial position and medially (except when in pre-consonantal position). Underlying final and underlying preconsonantal ejectives undergo the morphophonemic neutralisation rule stated below under 2.3.2.1

| /t'orơ git/ 'bush' | 'bat ${ }^{\text {is }}$ a/ ' 'corn bread' |  |
| :---: | :---: | :---: |
| /c olo c ' intestines' | bat 'isá/ 'corn bread' /toc' ise/ 'bald' |  |
| $/ \mathrm{k}$ ? oro $\eta /$ 'neck ${ }^{\text {c }}$ | /mok' $/$ / 'break food' | /zunku/ ' 'sheep' |

### 23.2.1 Morphophonemic Rule

All ejectives and implosives are neutralized to their corresponding voiceless stop counterpart in word-final position and before consonants.

| */lit?/ 'to dodge' <br> */lit? ${ }^{\text {kuwa/ 'they dodged' }}$ but: /lit' 'uwa/ 'he dodged' | $\begin{aligned} & >[\text { lit] } \\ & >[\text { litkuwa }] \end{aligned}$ |
| :---: | :---: |
| */lic? 'to thatch' <br> */lic? ${ }^{\text {kuwa/ 'they thatched }}$ but: /lic?uwa/ 'he thatched' | $\begin{aligned} & >[\text { lic }] \\ & >\text { lickuwa }] \end{aligned}$ |
| */duk?'/ 'to plant' <br> */duk'tuwal 'they planted' but:/duk'uwa/ 'he planted' | $\begin{aligned} & >\text { [duk] } \\ & >\text { [duktwa] } \end{aligned}$ |


| */te Б/ 'to watch' | $>$ [tep] |
| :--- | :--- |
| */te Бkuwa/ 'they watched' | $>$ [tepkuwa] |
| but: /te Duwa/ 'he planted' |  |
| "/cad// 'to tear' |  |
| "/cad kuwa/ 'they tore' $>$ [catkuwa] |  |
| but: /cd uwa/ 'he tore' |  |

### 23.2.2. Phonetic Realisation and Allophones:

The alveolar ejective /t?/ is realised as an alveolar ejective stop [t?].
[t?egu] 'soot'
[mut?al] 'witness'
The alveopalatal ejective /c?/ is realised as an alveoplaltal ejective affricate [ť?].
[ts? $\left.{ }^{\text {? }} \mathrm{oph}\right]$ 'to kiss' $\quad\left[\mathrm{mats}^{\text {? }}\right.$ i] 'male; brave'
The velar ejective $/ \mathrm{k}$ ?/ is realised as an alveopalatal ejective affricatie $\left[t s^{?}\right]$.
$\left[\mathrm{k}^{\text {? }}\right.$ méc] 'knee' [zuฑk?u] 'sheep' [ 'os] 'roast'

### 2.3.3 Implosives

The two implosives, $/ \bar{b} /$, a labial, and /d//, an alveolar, occur in initial position and medially (except pre-consonantal). Underlying final and pre-consonant a positions trigger the neutralisation rule stated above under 2.3.2.1.

```
/Badi/ 'bush' /ku'Бec/ 'thigh' /БicБic/ 'different'
/d`áli/ 'strong' /kudec/ 'load' /doldol/ 'to show'
```

Implosives are rather rare following consonants as in the third column. We assume that they are restricted to reduplicated morphemes.

### 2.3.3.1 Phonetic Realisation and Allophones

The implosives/ $\overline{/}$ / and/d/ are realised as bilabial and alveolar implosives with ingressive pharynx air, [ B$]$ and [d].
$\left[\mathrm{Duk}^{\mathrm{h}}\right.$ ]'to pull' $\quad$ [ku5a] 'dumpling'
[dom] 'to insult' $\quad$ [kuduméc] 'hill'

### 23.4 Fricatives

There are four fricatives in Me'en, a voiceless/voiced alveolar pair /s, z/, a voiceless alveopalatal fricative, $/ \mathrm{s}^{\prime} /$, and a voiceless velar fricative $/ \mathrm{h} /$. $/ \mathrm{s} /$ and $/ \mathrm{s}^{\prime} /$ occur in all positions, /z/ only occurs in initial and medial positions, and, and /h/ only occurs wordinitially.

```
/sáy/hide (n.)' /ge si/ 'bad'
/paskác/ 'end' lgas/' 'beside'
/zaysi/ 'adore' /k?zzi/ 'to belch'
/anza/ 'yoke'
```

/šayl/ 'be ready' /de sxi/ 'to work' /c?is'kác/'worm kind of
/gas"/ 'forest'
/hăy/ 'mother'
Nilo-Saharan languages are known for their lack of fricatives in their phoneme-systems. Of the four fricative phonomes just mentioned above, /h/has a doubfful status in the phoneme inventory. We have seen that it only occurs in word-initial position (there is one example from the Bodi dialect with /h/between vowels: /ahay/ 'things'). But even with /h/ in initial position there are very few lexical items found, and of the twenty in a collection of over 2000 entries in basic dictionary, half of the words have variants ${ }_{h}$ where initial /h/ may be deleted or substituted by another consonant, e.g. /hac'ánán/ ~/ac?ánánán/ 'five, /hư $\mathrm{m} /$ ~/wím/ 'to break'

### 23.4.1 Phonetic Realization of Pricative Phonemes

The alveolar fricatives $/ \mathrm{s}, \mathrm{z} /$ are realized as voiceless and voiced alveolar fricatives [s] and $[\mathrm{z}]$ respectively.


The alveopalatal fricative $/ s / /$ is realized as a voiceless alveopalatal fricative [s].

[tst ${ }^{\text {i }}$ iskats ${ }^{\text {h }}$ ] 'worm,kind of
[tisk] 'fresh grain' [gas] 'forest'

The fricative $/ \mathrm{h} /$ is realized as a voiceless glottal fricative $[\mathrm{h}]$.
[har] 'to vomit'
[hak] 'to hit'

### 23.5. Nasals

The nasals $/ \mathrm{m} / \mathrm{m} / \mathrm{m} / \mathrm{Ir} / \mathrm{and} / \mathrm{m} /$ are produced at the labial, alveopalatal, and velar points of articulation respectively. All nasal consonants occur in all positions.
/mar/ 'be much' /rom s/ 'to dry' /gumdi'/ 'antelope' /wum/ to 'to break'

| /nis/ 'to kill' | /kóno/ 'snake' |  |
| :---: | :---: | :---: |
| /nondi'/ 'female' | /kun/ 'to come' |  |
| /ric5i/ 'to cause' | /garra'/ 'relative' |  |
| /nurj jo/ 'he grinds' |  | /ori/ 'to wash' |
| /nes/ 'to flow' | Ir nal 'name' |  |
| /ư $\ddagger$ ku'/ 'gourd' | /wowl 'to rest' |  |

It should be noted here however, that / $/ \mathbf{4} /$ is not phonemic throughout the Me 'en language area. In the northern area bordering to Gimira/ri/ has lost its distinctiveness with / $\mathbf{m} /$ (e.g. niéc 'branch' instead of rigéc).

### 235.1 Clusters of Nasals and Stops and Morphophonemic Rule

Regarding permissible clusters of nasals plus stops, velar nasals and alveopalatal nasals only occur with their homorganic stop counterparts, but nasals cannot be said to be strictly restricted to clusters with homoganic stops (e.g/m/+/d/ in /amda/ 'food', $/ \mathrm{m} /+/ \mathrm{k} /$ in /kamká m/ 'to be better').

Neutralisation has been observed where clusters of nasals and stops occur. The bourd root /an-/ 'thing' is realized with an alveolar nasal before an alveolar, [andrya] 'this thing', before a velar, it is realized with a velar nasal: [ankon]' 'one thing, something.

### 235.2 Phonctic Realization of Nasal Phonemes

The nasals $/ \mathbf{m} /, / \mathbf{n} /$, $/ \mathbf{r} /$, and $/ \boldsymbol{n} /$ are realised as voiced bilabial, alveolar, alveopa;atal, and velar nasals respectively, $[\mathrm{m}],[\mathrm{n}],[\mathbf{~} \mathbf{]}$, and $[\mathrm{n}]$.
[mar] 'to hate' [rombs] 'to dry'
[amdá] 'grain [wum] 'to break
[ $\mathrm{nik]}$ ' 'to skin' [kono] 'snake'
[mondi] 'female' [kun] 'to come'
[ He Бi] 'to cause' [anit] ' T
[ $\quad$ unŭjo 'he grinds' [ŏ̌] 'to wash'
[ $\eta \mathrm{am}$ ] 'to yawn' [dón] 'that'
[ánku] 'gourd' [won] 'to rest

### 23.6 Approximants

There is one alveolar lateral approximant in Me'en, $/ 1$, an alveolar flap $/ \mathrm{r} /$, and there are two semivowels /w/ and $/ \mathrm{y} /$, a labial and an alveopalatal respectively. All of them occur in any consonant position of the syllable or word, as the following examples will show.
/lim/ 'cut'
/dolme/ 'frog'
/polón/ 'hole'
/ze'V/ 'stick'

The two semivowels/w/ and /y/ have been interpreted as consonants, as they occupy typical consonant places in the Me'en syllable. There are a few examples where a semivowel precedes a syllable-final alveolar plosive, e.g. /bá yt/ 'monkey', /bawt/ 'spleen', but these can be seen as contractions of noun-roots /ba-/, /bay-/, or /baw-/ and the following singular suffixes /-it/ and /-ut/.

### 2.3.6.1 Phonetic Realizations

The alveolar lateral $/ \mathbb{L}$ is realized as an alveolar voiced lateral $[1]$ in ensironments.

| [liyá] 'shame' | [koláy] 'lamb' |
| :--- | :--- |
| [maltá] 'cheating' | [kul] 'drum' |

The alveolar flap is realized as an alveolar voiced flap [ r ] in all environments.

| $[\mathrm{r}$ bso ] 'dog' | [ oru] 'porridge' |
| :--- | :--- |
| $[\mathrm{b} \downarrow \mathrm{rgu}]$ | 'year' |

The semivowels /w/ and /y/ are realized as bilabial [w] and alveopalatal [y] semivowels respectively.

| [woy] 'to walk' | [c'uwá] 'again' |
| :--- | :--- |
| [bawt] 'spleen' | [háw] 'useless' |


| [yel] 'to love' | $[\mathrm{koy}$ '] 'to take' |
| :--- | :--- |
| [bayt] 'monkey' | [roy] 'to milk' |

## 3. Vowels

### 3.1 Vowel Chart

Me'en has seven vowels as shown in the following chart:

| i |  | u |
| :--- | :--- | :--- |
| e |  |  |
| c a |  |  |

### 3.2 Display of Contrasts

In the following display each vowel can be seen constrasting with each other vowel in word initial, medial, and final position.

|  | ek 'push' | k 'release' | ok 'cook' |
| :---: | :---: | :---: | :---: |
| \{pa 'evening' |  | apá 'grandmother' | uptac 'ceiling' |
| $\begin{aligned} & \text { flle } \\ & \text { 'six' } \end{aligned}$ | $\begin{aligned} & \hline \text { ele } \quad \text { cli } \\ & \text { 'mountain"tell' } \end{aligned}$ | alay dleme  <br> 'send' 'rainbow' | Olit ulí 'sugarcane"club' |
| nis <br> 'fart' | nes nes <br> 'flow 'cool' | $\begin{array}{ll} \eta \text { nas } & \eta \mathrm{r} \\ \text { 'burn' } & \text { 'elephant" } \end{array}$ | nor |
| tisi <br> 'fart' | tesi 'stand' | tasi 'think' |  |
| bir 'chose' | ber 'spear' | $\begin{array}{ll} \text { bár } & \text { bor } \\ \text { 'night' } & \text { 'honey' } \end{array}$ | $\begin{array}{ll} \text { or } & \text { burti } \\ \text { 'stir' } & \text { 'pull weeds' } \end{array}$ |
| cim 'put on' | cem 'sit down' | $\mathrm{cm}$ 'eat together' | com <br> 'tree stump' |
|  | $\begin{aligned} & \text { ed } \quad \text { ed } \varepsilon \\ & \text { 'we(excl.)"they' } \end{aligned}$ | $\begin{aligned} & \text { edá } \\ & \text { 'we (incl.)' 'cloud' } \end{aligned}$ | $\begin{aligned} & \text { yimó } \\ & \text { 'you (pl.)' } \end{aligned}$ |
| bolr 'curse' | $\begin{aligned} & \text { bole } \\ & \text { 'boy' } \end{aligned}$ |  | oru 'porridge' |
| kari 'catch in air' | káre 'down' | kará $\quad$ k? aró 'watchhouse"wish' | k?aró <br> 'purposely' |

## 33 Description of Vowels

In Me'en there are three distinctive vowel heights, high, mid, and low, and there are three degrees of frontness, front, central, and back. High vowels are $/ i /$ and $/ \mathrm{w} /$; mid vowels are /e/ and $/ \mathrm{o} /$; and low vowels are / / , /a/, and / / In the first two pairs we have front and back vowels and in the last set we have a front, a central and a back vowel. Each may occur in any position.
/isán/ 'to put' /lim/ 'to cut' /dori/ 'granary'
/ené/ 'owner' /kés/ 'house' /d'oge/ 'hump'
/ $\epsilon 1$ i// 'to talk' /kegit/ 'animal' /d́ Jlm $\epsilon /$ 'frog'
/á cul/ 'meat' /kat/ 'tongue' /mint?á/pepper'
/uŋóc/ 'day' /kư1/ 'drum' /ombuf/ 'blader'
/óri/ 'village' /kơ mác/ 'power' /tiš $0 /$ ' fresh grain'
$/ \mathrm{Jt/}$ 'to stay' /kom/ 'to count' /ke' do/ 'tree,wood'

### 33.1 Phonetic Realiztion of Vowel Phonemes

The high vowels /i/and/u/are realized as front high unrounded and back high rounded vowels [i] and [u] respectively in monosyllabic words with open syllables and when these vowels are lenghtened. Elsewhere (in closed syllables and in multisyllabic words), these vowels are realized by their lax variants [ i$]$ and [ u$]$.

| [ 11 de ] 'where' | [ťs'ryak] 'near' | [ b ] 'cow' |
| :---: | :---: | :---: |
|  |  | [mú] 'also' |

[ $\mathrm{tlák}]$ 'to hang' [c? 'ik]'to laugh at' [mác?i] 'male' [urén] 'python' [lut] 'to deceive' [koru] 'lowland'

The mid vowels /e/ and /o/ are always realized as front mid close unrounded and back mid close rounded vowels [ e ] and [ 0 ] respectively.
[elé] 'mountain' [k?en] 'to pass' [mánté] 'truth'
[ kkats $^{\text {h }}$ ] 'hat' $[\mathbf{k}$ 'oron] 'throat' [koko] 'grandfather'

The low vowels /e/ and /o/are always realized as a front mid open unrounded vowel [ 6 ] and a back mid open rounded vowel [כ].

| rse] 'to put in' | [ $\mathrm{b} \epsilon \mathrm{r}]$ 'spear' | [ $\boldsymbol{\eta}$ Or $\boldsymbol{]}$ ] 'butter' |
| :---: | :---: | :---: |
| [ Jk ] 'to release' | [ b Jr] 'honey' | [ur〕] 'milk' |

The low vowel /a/ is always realized as a central low unrounded vowel [a].
[am] 'to eat' [bas] 'to recover' [bsra] 'warriors'

## 4. Suprasegmentals

### 4.1 Tone

Me'en has two level tones, a high tone and a low tone. Throughout this description, only the high tone is marked by a superscript above the vowels (e.g. a). Whenever a vowel is not market, it carries a low tone.

The following chart shows words that are contrasting in tone.

| /jobit/ 'dung; feces' | /coká c/'cactus-like plant'/yelk/ 'to return s.th.' |
| :--- | :--- | :--- |
| /jó bit/ 'root, kind of /c Jkác/ 'wolf /ye' k/ 'abandoned house' <br> /cim/ 'to put on' /gúrin/ 'thieves' /má dák/ 'fast; very' <br> /cim/ 'definitely' /gurin/ 'stealing' /má dak/ 'saliva' |  |

Tone carries grammatical information regarding verbs. All verb forms except the imperative, have a low tone on the first syllable. The second and following syllables carry high tones. In the imperative, the first syllable is high and the following are low.

```
/\epsilon\eta\epsilon't/ '(he) asks' /usứwáábóy/ 'he has eaten'
/ Emet/ 'ask!' /úsu/ 'eat!
```


### 4.2 Lenth

### 4.2.1 Vowel Length

There is vowel length in Me'en, but it only plays a secondary role. In a dictionary of aproximately 2200 entries, only about 40 examples show vowel length. Of these a large
proportion are adverbs and adjectives whose vowels seem to be "emotionally lengthened";these are expresssions where length underlines e.g. weight /d'áalı/'heavy', oldness /riaagi/ 'old', nearness /jriyadk/ 'near', fastness /piit/ 'fast' etc.. Furthermore, monosyllabic words with open syllables have a tendency to have lengthend vowels, e.g. /ma' a/ 'water',/wi i/ 'hyena', but these are often shortened, when suffixes are attached, /ma' diyañ/ 'my water',/wf duwa/ 'that hyena'. In the following we will only give some of the few examples where vowels in closed syllables are lengthened together with contrastive examples (no minimal pairs).

/kaane/ 'to forbid' /té ek/ 'in' /ba áni/ 'highland'<br>/ká nal 'baboons' /tel/ 'to want' /bangá/machete'

/cet/ 'to prepare a sleeping place'
/sr/ 'to pour'

### 4.22 Gemination of Consonants

Gemination of consonants is found in a very limited number of lexical items, and there are emotional values attributed in a similar way as we have seen for a number of cases concerning vowel length. Among the numbers from two to ten, only 'two', 'four, and 'five' don't hve either a double consonant or a double vowel:

| /ramá $\eta /$ 'two' | /issab J/ 'seven' |
| :--- | :--- |
| /sizzi/ 'three' | /'sset/ 'eight' |
| /wuc/ 'four' | /sa al/ 'nine' |
| /hac?á nán/five' | /t $J \mathrm{~mm}$ Jn/ 'ten' |
| /flle/ 'six' |  |

Other words with "emotionally lenghtened" consonants: /c'? Jllכ/ 'always' /purr/ 'very white', /k Jnnán/ 'be quiet!'

Contrasts are found with the following pairs:

> /sollo'/ 'injera' 1 sé lla/ 'proper name' /solólit/ 'long grass' - /sé la/ 'feather'

Furthermore, Me'en has gemination as a result of assimilation that applies when suffixes beginning in /d/ are attached to roots ending in coronal obstruents, e.g.:

```
/kat/ 'tongue'+/-diyǎfi/ 'my' >/kattiyán/ 'my tongue'
/kés/ 'house' + /-degáy/ 'or' >/késségay/'our house'
/cuc/ 'butcher'+/-d\grave{/ 'sent final marker' >/cuccb/}
```

In the last example, and in any other verb ending in a coronal obstruent, the geminated consonant is grammatically distinctive, as the non-geminated counterpart indicated topicalization in contrast to sentence fianal position:
/...cuccó./ '...he butchers.'
/...cuc $\beth, . . . /$ 'when he butchers,...'

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