Revista Eletrômica Liําgua Vīva

## MORICITY

AND

## THE CONTRASTIVE OR ALLOPHONIC VOWEL DURATION TYPES

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The mora is used in phonology for representing the segmental length. The two way vowel length contrast is expressed through a monomoraic vs. bimoraïc distinction (McCarthy \& Prince, 1986, Hayes, 1989), as, for example, in Luganda: [okusona] "to sew" versus [okuso:na] "to take by surprise":


The above two-way distinction is not sufficient for giving an account of the whole set of the following five duration degrees which are phonologically, allophonically or phonostylistically attested among the world languages:

- extra-short vowel V̆
- short vowel V
- half-long vowel V.
- Long vowel V:
- extra-long vowel V::

As far as we know, the Moraic Phonology theory has not worked out the moraic structure of the extra-short, half-long and extra-long vowels in order to

ISSN: 2237-9800
determinate their participation in the syllable weight. Tentatively we propose the following moraic structures for these types of vowel:

Extra-short vowel:


V̆

Half-long vowel:

V.

Extra-long vowel:


V::

A small number of languages make a triple length distinction in vowels (Laver, 1994:442). One example is the Applecross dialect of Scottish Gaelic distinguishes between three degrees of length (short, long and extra-long) on realization of vowels (Laver, 1994):
[tuł] "to go" versus [u:l] "apple" versus [su:1] "eye".
In the Mixe language we find the typologically uncommon contrast between short, half-long and long vowels ${ }^{2}$ (Hoogshagen, 1959; Ladefoged \& Maddieson, 1996):
[pet] "climb" versus [pe‘t] "broom" versus [pe:t] "Peter"
[pof] "guava" versus [po•f] "spider" versus [po:f] "knot"
[pif] "flea" versus [pi•f] "marigold" versus [pi:S] "cat"
[?oi] "although" versus [?oi•] "he went" versus [?oi:] "very".

Other classical example of three contrastive vowels length in Czech were appointed by Troubetzkoy:
mu:kva: "flour", ruka:va: "sleeve"
vo'da: "water", dobro'ta: "kindness".

[^0]Revista Eletrônica Li̋ngua Viiva
ISSN: 2237-9800

An allophonic alternation between half length and full length is attested in Inari Saami where a phonologically long vowel is realized long if the nucleus is a monosyllabic foot but only half-long elsewhere.

In Chickasaw (Gordon, Munro \& Ladefoged) /V/ $\rightarrow$ [V•] / VC ----- C
/i/ $\rightarrow$ [i] /pisa/ $\rightarrow$ [pisa] "she looks at him"
$\rightarrow$ [ $\left.{ }^{1}\right]$ /pisali/ $\rightarrow$ [pisali] "I look at him"
/i// $\rightarrow$ [i:] /pi:ni?/ $\rightarrow$ [pi:ni?] "boat"
In Contrastive Phonology allophonic half-long vowels of phonemic long vowels are attest in some Bantu languages as in Sukuma [F21] but not in other Bantu languages as Yao [P21].

According to Hubbard (1995) and Maddieson (2003:37):
(a) "Sukuma lengthened vowels are almost exactly intermediate between underlying short and long vowels". /V- $\tilde{\mu}-\mathrm{C} /{ }^{3} \rightarrow \mathrm{~V}: \mathrm{N}^{\mathrm{C}} \rightarrow\left[\mathrm{V} \cdot \mathrm{N}^{\mathrm{C}}\right]$ ( $=$ half-lengthened vowel + post-oralized nasal obstruent).
(b) "Yao has a long/short contrast and significant compensatory lengthening so that vowels before prenasalized stops are as long as underlying long vowels and have more than double the duration of short vowels". /V $-\tilde{\mu}-\mathrm{C} / \rightarrow\left[\mathrm{V}:{ }^{\mathrm{N}} \mathrm{C}\right] /$ ( $=$ lengthened vowel + pre-nasalized oral obstruent).

| "little goat". | SUKUMA [F21] | YAO [P21] |
| :---: | :---: | :---: |
| Morphophonological representation | $\begin{aligned} & \text { /ka- } \tilde{\mu} \text {-buli/ } \\ & \downarrow \end{aligned}$ | $\begin{aligned} & \text { /ka- } \tilde{\mu} \text {-busi/ } \\ & \downarrow \end{aligned}$ |
| Phonemic representation | $\begin{aligned} & \text { /ka:mºuli/ } \\ & \downarrow \end{aligned}$ | $\begin{aligned} & \text { /ka: }{ }^{\text {m}} \mathrm{busi} / \\ & \downarrow \end{aligned}$ |
| Allophonic realization | [ $\mathrm{ka}^{\prime} \mathrm{m}^{\text {buli] }}$ | [ka: ${ }^{\text {mbusi] }}$ |

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[^0]:    ${ }^{2}$ Nevertheless according to van der Hulst, Harry, Keren Rice \& Leo Wetzels (2010). this type of triple contrast observed in some Meso-american languages would be more accurately interpreted as a case of opposition between short, long and glottalized vowels.

[^1]:    ${ }^{3}$ where $-\tilde{\mu}^{-}$- symbolizes the class 9 nominal prefix constituted by a floating syllabic (and moraic) nasal infrasegment.

