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. bimoraic distinction (McCarthy & Prince, 1986, Hayes, 1989), as, for example, in Luganda: [okusona] “to sew” versus [okusona] “to take by surprise”:

\[
\begin{align*}
\text{Short vowel:} & \quad \text{Long vowel:} \\
\sigma & \quad \sigma \\
\text{Nucleus or Coda} & \quad \text{Nucleus or Coda} \\
\mu & \quad \mu \\
\text{root} & \quad \text{root} \\
V & \quad V.
\end{align*}
\]

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 Õ
- short vowel V
- half-long vowel \( V \cdot \)
- 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
determinate their participation in the syllable weight. Tentatively we propose the following moraic structures for these types of vowel:

**Extra-short vowel:**

Extra-long vowel:

**Half-long vowel:**

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):


In the Mixe language we find the typologically uncommon contrast between short, half-long and long vowels (Hoogshagen, 1959; Ladefoged & Maddieson, 1996):

[pet] “climb” versus [pe̞t] “broom” versus [pet] “Peter”

Other classical example of three contrastive vowels length in Czech were appointed by Troubetzkoy:

mu̞ːkva: “flour”, ruka̞ːva: “sleeve”
vo̞ːda: “water”, dobro̞ːta: “kindness”.

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.
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/ → [V·] / VC ---- C

/i/ → [i] /pisa/ → [pisa] “she looks at him”


/i/ → [i:] /pimi?/ → [pimi?] “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”. /Ṽ-C/ → V:N⁵ → [V·N⁵] (= 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”. /Ṽ-C/ → [V·N⁵] / (= lengthened vowel + pre-nasalized oral obstruent).

Referências

“little goat”.

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3 where {-} symbolizes the class 9 nominal prefix constituted by a floating syllabic (and moraic) nasal infrasegment.


