Magindanao Penultimate Vowels

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Earlier phonemic analysis of Magindanao (Eck, Ms) has shown that four vowels, /i, ñ, a, u/, can be contrasted in stressed and unstressed antepenultimate and ultimate syllables. This paper discusses the vowel contrasts in stressed and unstressed penultimate syllables.

1. Vowel contrasts in unstressed penultimate syllables.

In this environment, the same four contrasts exist but the contrasts are weakened. The phonemes are manifested in the following ways:

/i/ [i][3] tends to appear in open syllables.

/ñ/ [ø] is the normal allophone, and may appear in any of the environments listed below.
[ñ] is in free variation with [ø] in all environments.
[ɨ,u] tend to appear in open syllables followed by a voiced bilabial.
[ɨ] is more apt to appear in an open syllable when the following consonant is an alveolar. In some words it alternates with [ɨ,u]. [ɨ] of /ñ/ contrasts with [i] of /i/ in that the former may elide or shift its vocoid quality to [t,u] while the latter doesn't do either of these.

/a/ [a] and [ø] are in free variation in all environments. The [ø] of /ñ/ contrasts with the [a] of /a/ in that the /ñ/ allophone elides, while the other does not.

/u/ [u] is the normal allophone, and it is in free variation with [u] in all environments. [ɨ,u] of /ñ/ contrasts with that of /u/ in that the former elides but the latter does not.
[o] appears word-initial followed by a /ia/ close knit nucleus. [o] is in free variation with [ɨ,u] in all other word-initial environments.
[ø] appears in open syllables followed by /k/ or by the close knit nucleus /ua/. It contrasts with [ø] of /ñ/ in that the latter appears in any environment, and elides under certain circumstances,[3] while [ø] of /u/ never does.

2. Examples of contrasts and of allophonic variation in unstressed penultimate syllables.
2.1. Phonemic contrastiveness.

2.1.1. /a/ contrasted to /i:/.

1. /la'num/ 'nickname' /la'nus/
   [la'nun, le'nun] [le'nus] 'fog'

2. /la'bing/ /la'ping/
   [la'bing, le'bing] [le'ping] 'twin'
   'old things, but still used'

3. /da'bung/ /da'pung/
   [da'bung] [da'pung]
   'edible spike of the bamboo'

4. ----- /la'bag/
   [la'bag, la'bag] 'swelling on body'

2.1.2. /a/ contrasted to /u/.

1. /a'mai a'mai/ /u'bai/
   [a'may a'may] [o'bai] 'near'
   'in a little while'

2. /ka'dis/ /bu'di/
   [ka'dis] 'dimple' [bu'di] 'fish eggs'

3. /ba'tik/ /pu'ting/
   [ba'tik] 'type of cloth design' (loan word)
   [pu'ting] 'cat'

Both words in the first example are members of the V-initial, ultimately stressed group of stems, and the significant factors governing this class of words has yet to be determined.

2.1.3. /u/ contrasted to /i/.

1. /tu'lan/ /ti'län/ 'to rest'
   [tu'lan] 'bone' [te'len, ti'län]
2. /bug’kut/ /bɪg’kɪd/  
[bug’kut] 'to pull something out from a stack' [bɪg’kɪd] 'to be bound together' (as a tied robe)

3. /bud’ta/ /bəd’tas/  
[bud’ta] 'mud' [bəd’tas, bəd’tas] 'to cross over' (river, street)

4. /tu’kau/ /tə’ku/  
[tu’ko] 'to determine some fact' [tə’ku] 'to nod in reply'

5. /bu’la/ /bə’la/  
[bu’la] [bə’la, ’bla] 'parrot' 'the other side' (location)

2.1.4. /i/ contrasted to /ɪ/.  
1. /mali’mu/ /məlɪ’mu/  
[mali’mu, mɛli’mu] [məlɛ’mu,  mɛlɛimu] 'to love; have pity on' 'easy'

2. /kinan/ /kə’na/  
[ki’nan] 'it was eaten' [kə’na] 'not' (identity)

3. /namis sin’dau/ /lən’dɪŋ/  
[namis sɪn’daw] [lɛn’dɪŋ, lɪn’dɪŋ] 'day after tomorrow' 'wall'

2.2. Allophonic variation.  

Allophonic variation may be shown by the following examples:

/i/ [i] /i’ga/ [i’ga]  
[bəmɛnɡi’ga/ bəmɛnɡi’ga] 'to lie down' 'is lying down'

[u] /namis sin’dau/ /namis sɪn’daw/  
[namis sɪn’daw] 'day after tomorrow'
Allophones vary so much among one another that it isn't possible to separate examples of each one.

/\i/ [lə'man, lɪ'man, lɨ'man, lu'man, lu'man] 'egg'
/kə'man, kɪ'man, ku'man] 'will eat'
/masə'bud, masɨ'bud, masu'bud] 'fat' (adj)
/lə'mu, lu'mu, le'mu] 'will go'
/sə'da, sə'da] 'fish'
/se'nan, sə'nang, sə'nang, sə'nang] 'sun'
/pə'sau, pu'sau, 'psau] 'water lily'
/le'ban, li'ban, lə'ban] 'woven bag'
/ba'la] see 2.1.3, example 5.

In the last four examples, /\i/ has dropped completely out of the final form.

/a/ The allophones are in free variation.

/la'gun, la'gun] 'year'
/ga'bi ka, ga'bi ka] '(you) Eat the evening meal'

/u]/ [gi'na, gu'na] 'when'
/tu'lan, tu'lan] 'bone'
/pu'ting, pu'ting] 'cat'
/o'yag-o'yag] 'soul'
/u'yut, u'yut] 'pocket'
/alə'wan, alu'wan, alə'wan] 'mud fish'

/tu'ko, te'ko] 'to determine some fact'

In normal conversational stress patterns (as opposed to the stress patterns of commands, repetitions, and exclamations), /\i/ is not found in stressed penultimate syllables. Therefore, only three vowels can be contrasted in this environment: /i,a,u/. The phonetic manifestations of these three vowels are: [i,i]; [a]; and [u, ʊ, o]. Contrast is shown by:

3. Vowel contrasts in stressed penultimate syllables.
4. Similarities and differences between affixed and unaffixed bisyllabic words.

Affixed words show the same contrasts in the unstressed and stressed penultimate syllable position as do the unaffixed words with one exception. Affixed words show a strong contrast between /i/ and /ɪ/ in the unstressed penultimate (examples 'it was eaten' versus 'not' in section 2.1.4), whereas if only unaffixed words were considered, [i] could be posited as an allophone of /ɪ/. This interpretation is possible because unstressed penultimate [i] occurs primarily in closed syllables whose coda is an alveolar. The alveolar could be posited as a conditioning factor.

A second difference involves the [e] phone which apparently never appears in the unstressed penultimate of unaffixed words, but which may appear there in affixed words. In affixed words, [e] is mandatorily formed when a prefix-final /a/ combines with a stem-initial /i/ to form the close-knit nucleus /ai/. /ai/ formed across morpheme boundaries must be sounded as [e].

/mai'naut/ [me'not] 'small'
(adj. ma- +root)

5. Predominant vowel harmony patterns in unaffixed bisyllabic words having ultimate stress.

There are three predominant vowel harmony patterns in unaffixed bisyllabic words having ultimate stress. By 'harmony patterns' I refer to the N2 vowels which co-occur with N1 vowels in words of shape C3N2C2(C'2)N1(C1). The predominant patterns are:

1) if the stressed N1 is /ːiː/, then N2 will always be /ːiː/ also;
2) if the stressed N1 is /a/, then N2 is usually /u/ or /i/ ; contiguous consonants determine which one;
3) if the stressed N1 is /u/ or /i/, then N2 usually is /a/.

These patterns are so noticeable that the original analysis of the data (Eck, Ms) posited that all of the stressless N2 phones were actually allophones of /ːiː/.
conditioned by the kind of vowel harmony described above. Under that analysis, stress was predictable: it never fell on stem-penultimate /i/, but otherwise was penultimate. Further data precluded that analysis and established the analysis presented in this paper.

Footnotes

1 I am indebted to David Thomas of the Summer Institute of Linguistics for helpful suggestions in the writing of this paper.

2 Magindanao is a Malayopolynesian language spoken by a half million people living on the island of Mindanao in the Republic of the Philippines. Dyen (1965) doesn't list the language in his classification, but Thomas and Geiser (1973) list it in their Mindanao Sulic group. The author began study of this language in 1971 under the auspices of the Summer Institute of Linguistics. The phonemes are: /i,a,ɪ,u,p,b,m,t,d,n,s,l,k,g,ng/ and stress. Guttural stop is not phonemic, but precedes and follows pauses beginning and ending, respectively, with a vowel. All alveolars are retroflexed.

Salagunting Datu Akid and Magid Malagir of Dalican, Cotabato, were the main sources of the data used in this analysis.

3 The notation used in this paper is:

- = reduplication juncture
, = phonetic alternation within ( ).
\( \iota \) = a syllabic consonant

4 /ɪ/ elides between /l/ and a following voiced non-nasal. It elides in other environments also, but these have not been classified yet.

5 David Thomas has said that [r] is probably an allophone of /ɪ/ in Koho, a language of Vietnam. The Magindanao pattern may be similar.

6 The other place [i] occurs is word-initial (one example only, in unaffixed words), as in /i'ga/, which could be explained by the vowel harmony discussed in the following section.
Bibliography


Eck, Jerry. Ms. Magindanao phonemics.

