

Highs and lows:
Towards reconstructing the word-prosodic system
of proto-Ambel

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Université d'Antananarivo

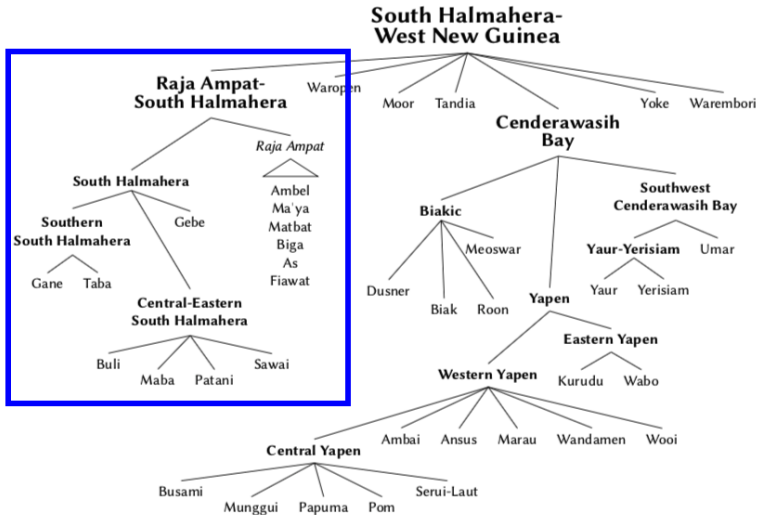
18 July 2018

Highs and lows

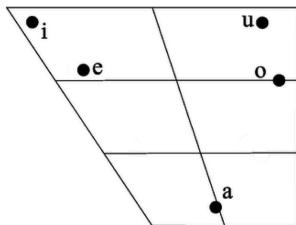
1. Ambel: An overview
2. Tonal correspondences
3. Vowel quality and tone
4. Summary

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Ambel phonology (Arnold 2018a)



	labial	alveolar	velar
stops	p b	t d	k g
fricatives	f (> h)	s	
nasals	m	n	
liquids		l r	
semivowels		y	w

Ambel word prosody (Arnold 2018a,b)

► Metnyo Ambel:

/H/		/Ø/	
tún	‘moon’	tun	‘thorn’
súp	‘bathe.1sc’	sup	‘repeat.1sc’
y-ún	‘1sc-pick.up’	y-un	‘1sc-know’

► Metsam Ambel:

/H/		/LH/		/Ø/	
páy	‘heron’	běy	‘sago’	gey	‘areca nut’

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Tonal correspondences

Set		Metsam		Metnyo		Proto-Ambel
A	-	H	::	H	}	*H
B	-	∅	::	∅		
C	-	∅	::	H	}	*∅
D	-	LH	::	∅		
E	-	LH	::	H	}	*LH

Tonal correspondences

Set		Metsam		Metnyo		Proto-Ambel
A	-	H	::	H	}	*H
B	-	∅	::	∅	}	*∅
C	-	∅	::	H		
D	-	LH	::	∅	}	*LH
E	-	LH	::	H		

Correspondence set B: Metsam Ø :: Metnyo Ø

- Most items in set B can be reconstructed with *i or *u:

	Metsam	Metnyo	
1. 'earthquake'	suy	suy	*suy
2. 'enter'	sun	sun	*sun
3. 'five'	lim	lim	*lim
4. 'honey'	ful	hul	*ful
5. 'nine'	siw	siw	*siw
6. 'octopus'	kit	kit	*kit
7. 'good'	fey	hey	
8. 'house'	now	now	
9. 'two'	low	low	
			...

Correspondence set B: Metsam Ø :: Metnyo Ø

	Metsam	Metnyo	Other RASH cognates	Proto-RASH
7. 'good'	fey	hey	As <i>fi</i> , Biga <i>fi</i> , Buli <i>mafia</i> , Gane <i>fia</i> , Ma'ya 'fi ³ , Matbat <i>fi³</i>	*fi
8. 'house'	now	now	Biga <i>pnu</i> 'village', Buli <i>pnu</i> 'village', Ma'ya 'pnu ³ 'village', Matbat <i>nu³</i> 'village'	*pnu 'village'
9. 'two'	low	low	As <i>lu</i> , Biga <i>lu</i> , Buli [<i>si</i>] <i>lu</i> , Gane <i>plu</i> , Ma'ya 'lu ³ , Matbat <i>lu³</i> , Taba <i>-lu</i>	*lu

Correspondence set B: Metsam Ø :: Metnyo Ø

- Most items in set B can be reconstructed with *i or *u:

		Metsam	Metnyo	
1.	‘earthquake’	suy	suy	*suy
2.	‘enter’	sun	sun	*sun
3.	‘five’	lim	lim	*lim
4.	‘honey’	ful	hul	*ful
5.	‘nine’	siw	siw	*siw
6.	‘octopus’	kit	kit	*kit
7.	‘good’	fey	hey	*fi
8.	‘house’	now	now	*nu
9.	‘two’	low	low	*lu ...

Correspondence set C: Metsam Ø :: Metnyo H

- Most items in set C can be reconstructed with *e, *a, or *o:

	Metsam	Metnyo	
1. 'ascend'	sa	sá	*sa
2. 'canoe'	wan	wán	*wan
3. 'full'	fon	hón	*fon
4. 'rice'	fa	há	*fa
5. 'betel fruit'	nyan	nyán	*nyan
6. 'areca nut'	gey	gíy	*gey
7. 'rain'	mey	míy	*mey
8. 'coconut'	kowt	kút	*kowt
9. 'moon'	town	tún	

13/15
 (~87%)

Correspondence set B: Metsam Ø :: Metnyo Ø

- Most items in set B can be reconstructed with *i or *u:

		Metsam	Metnyo	
1.	‘earthquake’	suy	suy	*suy
2.	‘enter’	sun	sun	*sun
3.	‘five’	lim	lim	*lim
4.	‘honey’	ful	hul	*ful
5.	‘nine’	siw	siw	*siw
6.	‘octopus’	kit	kit	*kit
7.	‘good’	fey	hey	*fi
8.	‘house’	now	now	*nu
9.	‘two’	low	low	

19/24
 (~79%)

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Diachronic effect of vowel quality on tone

▶ Tonogenesis:

- ▶ **U** (Angkuic; Svantesson 1988, 1991)
- ▶ **Limburgian Dutch** (Germanic; Neeleman 1999)
- ▶ **Cèmuhî** (Oceanic; Rivierre 2001)

Open syls with prevocalic
voiceless obstruents
> H if the vowel was *i or *u
otherwise > L

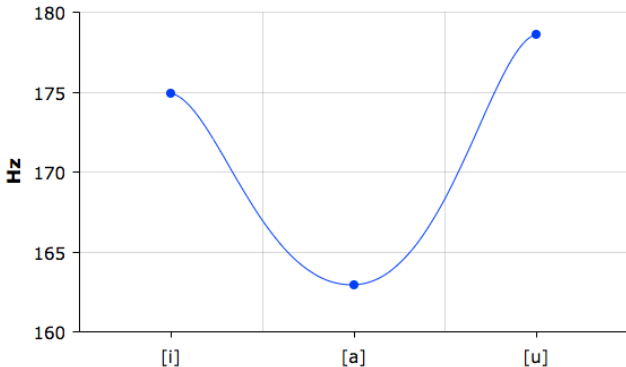
▶ Tone splits:

- ▶ **Bench'** (Omotic; Tesfaye an
- ▶ **Lugbara** (Moru-Madi; Ande
- ▶ **Yerisiam** (SHWNG; Kamholz 2014)
- ▶ **Ma'ya** (SHWNG; Arnold submitted)

Formerly predictable extra-high
pitch on High-toned syllables with
/i/ or /u/ > Extra-High tone

Intrinsic fundamental frequency (IF₀)

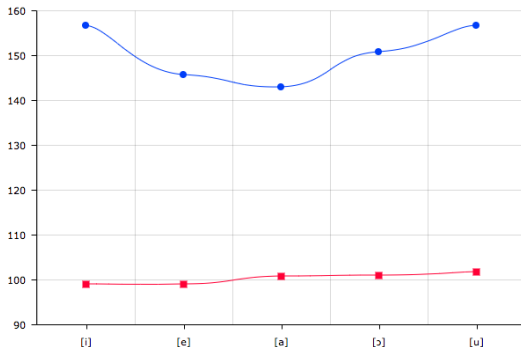
- All else being equal, higher vowels are produced with higher f_0 than lower vowels



English: extrapolated from Whalen and Levitt (1995)

Neutralisation of IF0 in low-pitched contexts

- ▶ ...except in low-pitched contexts



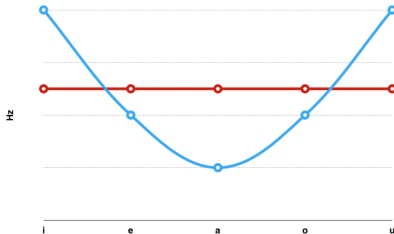
Taiwanese Chinese: extrapolated from Zee (1980)

Diachronic effect of vowel quality on tone

- ▶ Tonogenesis:
 - ▶ **U** (Angkuic; Svantesson 1988, 1989)
 - ▶ **Limburgian Dutch** (Germanic; Boersma 2017)
 - ▶ **Cèmuhî** (Oceanic; Rivierre 2001)
- ▶ Tone splits:
 - ▶ **Bench'** (Omotic; Tesfaye and Wedekind 1994)
 - ▶ **Lugbara** (Moru-Madi; Andersen 1986)
 - ▶ **Yerisiam** (SHWNG; Kamholz 2014)
 - ▶ **Ma'ya** (SHWNG; Arnold submitted)

Intrinsic pitch

- ▶ An auditory mechanism by which hearers perceive higher vowels as *lower* in pitch than lower vowels
- ▶ Thought to be auditory compensation for IF0 – ‘compensatory listening’ (Gussenhoven 2007)

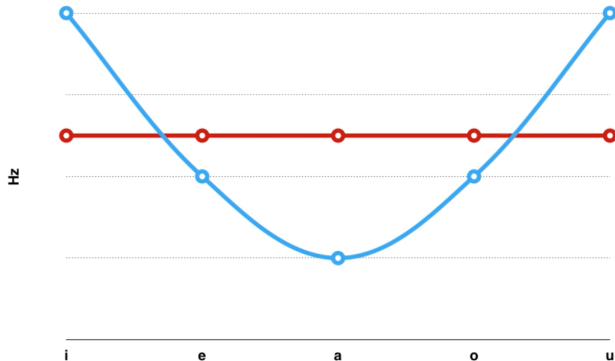


e.g. Hombert 1977; Stoll 1984; Silverman 1987; Fowler and Brown 1997

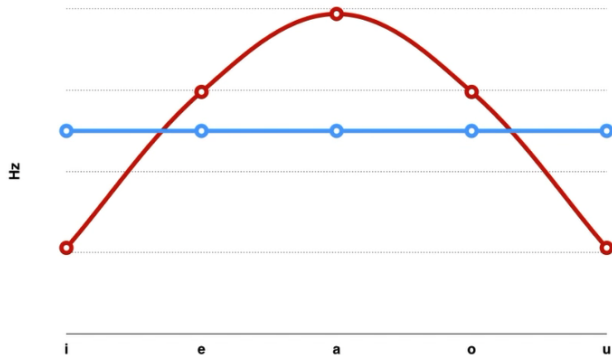
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Summary of the change



Summary of the change



References I

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