Ablaut vectorisation matrix

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This article examines vectorisation; the direction and magnitude of vowel alternation in some languages. The paper observes that some languages allow ablaut among front vowels [i~ι~e~ε] or just within back vowels [u~v~o~o~p] – vertical ablaut (V). Other set of languages allow ablaut between vowels of the same height [i~i~u~u], [e~ø~9~o] – horizontal ablaut (H) while the last category of languages permit central vowels to alternate in a slanting manner with front or back vowels $[\varepsilon \sim a \sim u]$ – oblique ablaut (O). When a language has one of the three directions (vertical or horizontal or oblique) it is univectorial like Mbuk[bpc], (Tschonghongei 2018:172) - vertical ablaut and a ratio difference of ascending to descending alternations? While Ajumbu [muc] is dominated by oblique ablauts. When two of the three directions appear as VH or VO or HO; it is bivectorial as in Aghem[agq], (Hyman 1979) which has both horizontal and oblique (HO), and when all three dimensions are seen in a language it a trivectorial language as in Mundabli [boe], (Voll 2017). The latter aspect of vectorization is the magnitude (M) whose transitions (T) may be graded as weak, strong, stronger, strongest and hard. When alternation takes place in single segment transition T1 for instance [v~u] it implies that the magnitude is M1 = weak. But when an alternation [a~u] skips through six transitions (T1+T1+T1+T1+T1+T1) it is equal to a magnitude of six and termed an oblique harder magnitude. The study presents ablaut in Beboid, West and Central Ring languages in a historical perspective in order to typologize morphological alternations. Hence, each vectorisation may be summarised in an Ablaut Vectorial Code: (1), [a~u]{UOM6}. Figure 1 below indicates ablaut routes.

- 1) [a~u]{UOM6} UpwardObliqueHarder: [tá] ~ [túkð] "come" (PFV ~ IPFV), Ajumbu, [3], (2019:11)
- 2) $[\mathbf{v} \sim \mathbf{u}] \{AVM1\} Ascending Vertical Weak: <math>[\mathbf{g}\mathbf{b}\acute{\mathbf{v}}] \sim [\mathbf{g}\mathbf{v}\acute{\mathbf{u}}]$ "foot~feet" (SG~PL), Mbuk [2], (2018:172)
- 3) [u~i]{FHM3} FrontingHorizontalStronger: [ó-cûə]~[ń-cîa] "bed~beds" (SG-PL), Aghem [1], (1979:8)

			HORIZONTAL ABLAUT (H)											
Frontward F (FH)													Backward B (BH)	
			Front				Central					Back	•	Magnitudes
Ascending V (AV)				T1		T1		T1		T1		T1		
VERTICAL ABLAUT (V)			i		у		i		u		ш		u	
									l	pward U (UO) 🦯				T1 harder
			I										υ	
														T1 hard
			e		Ø		е				Υ		0	
														T1 strongest
								э			OBLIQUE ((0)	
														T1 stronger
			ε		œ						Λ		э	
														T1 strong
			æ								a		υ	
	•			OBLIQUE (O)			1							T1 weak
Descending D (DV)			Slowping S (SO)					a						

Figure 1: Ablaut Routes

References

Hyman, L. M, 1979. Aghem grammatical structure, Los Angeles, University of Southern California, SCOPIL, 7.

Tschonghongei, Nelson C. 2018. Mbuk documentary grammar, PhD Thesis, University of Yaounde 1

Tschonghongei, Nelson C. 2019. Ajumbu verb patterns, KPAAMCAM Database, Unpublished

Voll, Rebecca. 2017. A grammar of Mundabli [boe], a language of Lower Fungom region of North-West Cameroon. Utrecht: LOT.