

Bora Nominalisation Across Strata: A Stratal OT Approach

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This paper develops a Stratal Optimality Theory analysis (Bermúdez-Otero, 2017) of nominalisation in Bora (ISO 639-3: *boa*, Boran), arguing that floating low tones associated with category-changing morphology are cyclically evaluated at distinct grammatical strata. Bora exhibits a floating low tone associated with category change at the word level: verbal bases become nouns through tonal modification (e.g. *májchò* [máxt̪ò] ‘to eat’ → *májchó* [máxt̪ó] ‘food’) (Napurí & Panduro, 2018). The same low tone appears at the left edge of nominal subordinate clauses, lowering and lengthening the clause-initial pronoun (e.g. (1) /úú/ ‘2SG’ → [⁺úú:] ‘2SG\NOM’). I propose that both phenomena instantiate a single nominalising ̀ ‘NOM’ morpheme inserted at different structural heights—within the word at the lexical stratum and within a nominalising clausal head at the phrasal stratum.

At the word level, nominalisation is evaluated in a grammar where the realization of the nominalising morpheme is prioritized while the prosodic structure of the lexical word remains fixed. The relevant ranking is *RealiseMorpheme*, *IDENT-μ*, *MAX-H* >> *IDENT-Tone*. Under this ranking, the floating low tone associated with nominalisation must surface. At the same time, the moraic structure of the lexical base is preserved and underlying tonal specifications must be retained. Because *IDENT-μ* dominates *IDENT-Tone*, the grammar does not permit vowel lengthening as a strategy for accommodating additional tonal material. Instead, the nominalising low tone is integrated through tonal reassociation within the existing prosodic structure. The result is systematic tonal modification in derived nouns while maintaining the moraic shape of the lexical base.

At the phrase level, nominal subordination is evaluated under a different grammar in which prosodic requirements associated with clausal structure become active. The ranking at this level is **CONTOUR*, *RM*, *PRWD-[μμ]_σ* >> *IDENT-μ*, *MAX-H*. As at the lexical level, the floating low tone must surface. However, the phrasal grammar also requires the head of the subordinate clause to form a bimoraic prosodic word. Because *PRWD-[μμ]_σ* dominates *IDENT-μ*, lengthening becomes necessary to satisfy the prosodic requirements of the construction. At the same time, the constraint **CONTOUR* prevents the realization of multiple tones on a single syllable, favouring a uniform low tonal melody across the lengthened vowel. Consequently, a short high-toned pronoun surfaces as long and low in nominal subordinate clauses.

The contrast between these two grammars reflects genuine stratal reranking. At the lexical level, preservation of moraic structure is prioritized, preventing lengthening and forcing the nominalising tone to be realized through tonal reassociation within the word. At the phrasal level, however, a prosodic requirement for bimoraicity outranks moraic faithfulness, allowing the grammar to satisfy the same tonal morpheme through lengthening and tonal overwriting. The same floating nominalising low tone therefore produces distinct phonological outcomes depending on the domain of evaluation. Bora nominalisation thus provides evidence that a single tonal exponent can underlie both derivational and clausal nominalisation while being interpreted by different constraint rankings across strata. This analysis supports a cyclic organization of phonological grammar in which prosodic and tonal constraints are reorganized between lexical and phrasal phonology, contributing new empirical evidence from Amazonian tonology to the study of Stratal Optimality Theory.

- (1) *Nàníyò méé ùù méûyónè*
 nà.ní.jò mé: 'ùù: méj.-ì.-jó.-nè
 uncle collect 2SG\NOM collect-FUT-FRU-CLF:thing
 'The uncle collected what you should have collected'

Word-level

RM, IDENT-μ, MAX-H >> IDENT-Tone

(01)	è+/máxtjò/	RM	IDENT-μ	MAX-H	IDENT-Tone
☞	a) [màxtjò]				**
	b) [màxtjò]			*!	**
	c) [mǎ:xtjò]		*!		*
	d) [mâ:xtjò]		*!		**
	e) [máxtjò]	*!			

Phrase-level

*CONTOUR, RM, PRWD-[μμ]_σ >> IDENT-μ, MAX-H

(02)	/úú/+è	*CONTOUR	RM	PRWD-[μμ] _σ	IDENT-μ	MAX-H
☞	a) [ùù:]				*	*
	b) [ùù]			*!		*
	c) [úú]		*!	*		
	d) [úù:]	*!			*	
	e) [úù:]	*!			*	
	f) [úú:]	*!			*	

References

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