

A new case of “rhinoglottophilia:” from nasalisation to aspiration

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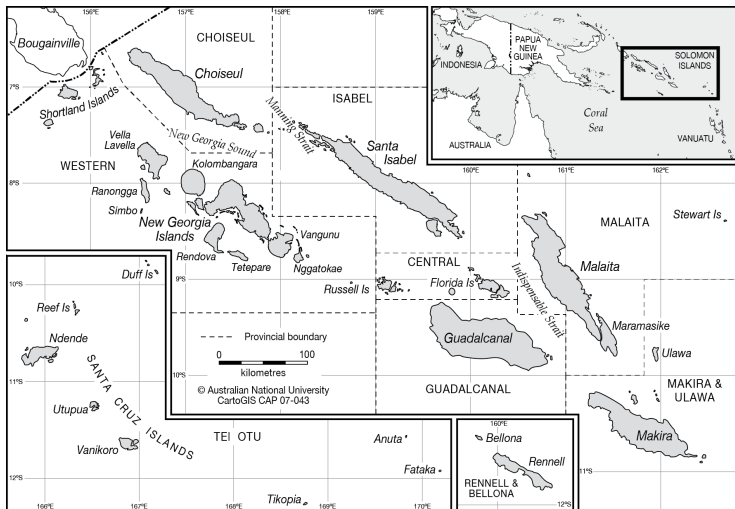
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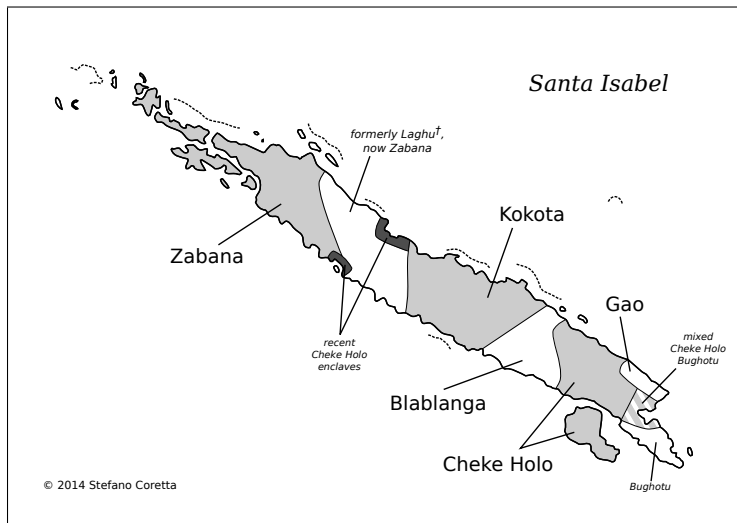
Overview

- **Cheke Holo** (Oceanic) nominalisation patterns
 - apparently unrelated phonomorphological correspondences between sets of verbs and nouns
- **rhinoglottophilia**: “the mysterious connection between nasality and glottality” (Matisoff 1975)
 - from aspiration/voicelessness to nasalisation (H > N)
 - opposite direction seemed rarer (N > H)

Cheke Holo, Santa Isabel



Cheke Holo, Santa Isabel



Cheke Holo consonants

Table 1: Phonemic consonants of Cheke Holo (adapted from White 1995)

	Labial	Alveolar	Palatal	Velar	Glottal
Vls. un.	p	t	tʃ	k	ʔ
Vls. asp.	p ^h	t ^h		k ^h	
Voiced	b	d	dʒ	g	
Fricative	f v	s z		ɣ ɣ ^h	h
Nasal	m m̥	n ŋ	ɲ ɲ̥	ŋ ŋ̥	
Rhotic		r ɾ			
Lateral		l l̥			

Nominalisation I

Table 2: Patterns of correspondences in verbs and nouns in Cheke Holo

Pattern	Verb	Noun		
I	p-, t-, k-	/pore/ 'to comb'	p ^h -, t ^h -, k ^h -	/p ^h ore/ 'comb'
II	r-, l-	/lehe/ 'to die'	gr-, gl-	/glehe/ 'death'
III	ɣ-	/ɣoɾa/ 'to paddle'	g-	/goɾa/ 'paddle'
IV	h-	/haru/ 'to tie'	ŋ-	/ŋaru/ 'knot'
		/dafi/ 'to be bright'		/nadafi/ 'sun'
V	D/N/?/CC-	/moia/ 'to be dry'	na-(D/N/?/CC)	/namoia/ 'reef'
		/ʔugra/ 'to fish'		/naʔugra/ 'fishing'
		/fnera/ 'to wound'		/nafnera/ 'wound'

One source?

- Tryon & Hackman (1983:63)
 - don't mention all the patterns
 - POc *ga- 'instr' for Pattern II (gL)
 - obscure morphological process for Pattern I (Ch)
- White et al. (1988) and White (1995)
 - they recognise all patterns
 - do not provide a unified account and simply "relegate" them in the morphology of the language
- → the key is **Pattern V**: D/N/?/CC ~ na-D/N/?/CC

POc article *na I

- POc *na (Lynch et al. 2011:70–72, Blevins & Kaufman 2012)
 - marks NP as definite
 - mostly with non-human nouns
 - reflexes of *na in several Oceanic languages
- Santa Isabel: Zabana *na-/∅*, Kokota/Blablanga *-na*

POc article *na II

- **Pattern V** (na-): *retention* of ancient article
 - prefix *na-* is found with voiced consonants, nasals, glottal stop and consonant clusters (but there are exceptions)
 - *syncope* of vowel in all other patterns: *na- > *n-

Deriving Cheke Holo nominalisation I

- **Pattern IV** (*nh > ŋ-): it follows the historical change *H(V)R and *R(V)H > R̥ in Cheke Holo
 - PSIs *namaha > Z *namaha*, CH /naŋa/ 'love'
 - PCH *na-haru (from /haru/ 'to tie') > *nharu > /ŋaru/ 'knot'

Deriving Cheke Holo nominalisation II

- **Pattern III** (*ny > *ng > *ⁿg > g): *fortition and loss of prenasalisation*
 - record of loss of prenasalisation in Bughotu (Ivens 1933)
 - PCH *na-ɣapa > CH *nyapa > *ⁿgapa > /gapa/ 'step'

- **Pattern II** (*nr > *n^gr > *n^{gr} > gr, *nl > *n^gl > *n^{gl} > gl): *excrecent stop and loss of prenasalisation*
 - PCH *na-lehe (from /lehe/ 'to die') > *nlehe > *n^glehe > /glehe/ 'death'
 - place lenition to nasal glide (placeless) N/[ŋ] (Ohala & Lorentz 1977, Howe 2004), velarised liquids (Recasens 2011)

Rhinoglottophilia I

- **Pattern I** (NC > C^h): *rhinoglottophilia*
- Matisoff (1975) for Written Tibetan
- **interaction between nasal and laryngeal features**
- laryngeals nasalise surrounding vowels (H>N)
 - English, Thai and Lao (Tai-Kadai), Lahu, Lisu, Hayu, Arakanese (Sino-Tibetan), East Gurage (Semitic), Ponapeic (Oceanic), Bantu languages

Rhinoglottophilia II

- from nasalisation to aspiration (Blevins & Garrett 1993):
 - Souther Thailand varieties (Tai-Kadai; Matisoff 1975), Basque (Igartua 2011, 2015). New Caledonian.
 - Owerri (variety of Igbo): *CVNV > *CNV > CⁿṼ > C^hṼ (both voiceless and voiced)
 - **Algonquian**: *NC > hC
 - **Old Tibetan**: Old Tibetan NC > C^h in modern Tibetan varieties that lost clusters (Jacques 2011, Hill 2007)

From NC to C^h

- **Pattern I** (*nC > *ŋC > *^hC > C^h): nasal place lenition and devoicing, ŋ > h (**rhinoglottophilia**), post-aspiration
- *link to Pattern II*: place lenition
- post-aspiration: PSIs *fihiki > Z *fihiki*, CH /fik^hi/, Silverman (2003)
- PCH *na-pore (from /pore/ 'to comb') > *npore > *ŋpore > *^hpore > /p^hore/ 'comb'

Conclusions

- apparent idiosyncratic patterns of correspondences between verbs and nouns in Cheke Holo
- no previous study proposed an unified account
- POC article *na as the source
- voiceless aspirated consonants of Pattern I can be explained with rhinoglottophilia
- new evidence for $N > H$

Thanks for your attention!



References I

- Blevins, Juliette & Andrew Garrett. 1993. The evolution of Ponapeic nasal substitution. *Oceanic linguistics* 199–236.
- Blevins, Juliette & Daniel Kaufman. 2012. Origins of Palauan intrusive velar nasals. *Oceanic Linguistics* 51(1). 18–32.
- Hill, Nathan W. 2007. Aspirated and unaspirated voiceless consonants in Old Tibetan. *Languages and Linguistics* 8(2). 471–493.
- Howe, Darin. 2004. Vocalic dorsality in Revised Articulator Theory. *Ms. University of Calgary*.
- Igartua, Iván. 2011. La aspiración de origen nasal en la evolución fonológica del euskera: un caso de ‘rhinoglottophilia’. *Anuario del Seminario de Filología Vasca “Julio de Urquijo”* 42(1). 171–189.
- Igartua, Iván. 2015. Diachronic effects of rhinoglottophilia, symmetries in sound change, and the curious case of Basque. *Studies in Language* 39(3). 635–663.
- Ivens, W. G. 1933. A grammar of the language of Bugotu, Ysabel island, Solomon islands. *Bulletin of the School of Oriental Studies* 7(141–177).

References II

- Jacques, Guillaume. 2011. A panchronic study of aspirated fricatives, with new evidence from Pumi. *Lingua* 121(9). 1518-1538.
- Lynch, John, Malcolm Ross & Terry Crowley. 2011. *The Oceanic languages*. London: Routledge.
- Matisoff, James A. 1975. Rhinoglottophilia: the mysterious connection between nasality and glottality. In Charles A. Ferguson, Larry H. Hyman & John J. Ohala (eds.), *Nasálfest: Paper from a symposium on nasals and nasalisation*, 265-288. Stanford: Stanford Universals Project.
- Ohala, John & James Lorentz. 1977. The story of [w]: an exercise in the phonetic explanation for sound patterns. In *Annual meeting of the berkeley linguistics society*, vol. 3, .
- Recasens, Daniel. 2011. Articulatory constraints on stop insertion in consonant clusters. *Linguistics* 49(5). 1137-1162.
- Silverman, Daniel. 2003. On the rarity of pre-aspirated stops. *Journal of Linguistics* 39(03). 575-598.
- Tryon, Darrell T. & Brian D. Hackman. 1983. *Solomon Islands languages: An internal classification*. Department of Linguistics, Research School of Pacific Studies, Australian National University.

References III

- White, Geoffrey. 1995. Maringe. In Darrel Tryon (ed.), *Comparative Austronesian dictionary: an introduction to Austronesian studies*, vol. 1 2, 787-791. Berlin New York: Mouton de Gruyter.
- White, Geoffrey, Francis Kokhonigita & Hugh Pulomana. 1988. *Cheke Holo (Maringe/Hograno) dictionary*. Pacific Linguistics Australian National University.