



Phonology of Agta Lopenze

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Language Background

Agta Lopenze is a distinct underdocumented - if not undocumented - critically endangered Philippine Negrito language spoken by yet to be determined number of speakers living in and around the remote hillsides of Villa Espina and its adjacent barangays in Lopez town, southern part of Quezon Province. The language is theoretically identical to the more known Agta of the Alabat Island whose population, as Lobel (2013) noted, are greatly dominated at present by migrants from Lopez. It is this close association of Lopez and Alabat Agtas and their language that gave Agta or Inagta Lopenze occasional mention in the linguistic literature.

Abstract

This poster presents a synchronic description of its phonology: the phonemic inventory (i.e., consonants and vowels and their allophones), suprasegmental features (i.e., syllable and stress), phonotactics, and morphological processes. In addition, brief notes on the proposed orthography are discussed.

Phonemic Inventory

Inagta Lopenze has twenty-two (22) sounds, but only twenty (20) of them—i.e., sixteen consonants and four vowels—are phonemic. Minimal pairs (i.e., word positions for consonants and the order of syllables for vowels) are used to establish the phonemic status of each sound. The two remaining sounds are the loaned [r] and the allophonic [ɔ].

Inagta Lopenze Consonants

	Manner of Articulation	Voiced (v)	Place of Articulation				
			Bilabial	Dental	Alveolar	Palatal	Velar
Stop	-v		p		t		k
	+v		b		d		g
Fricative	-v				s		h
	+v						
Nasal	-v						
	+v		m	n			ŋ
Trill	-v						
	+v				r		
Lateral	-v						
	+v				l		
Approximant	-v						
	+v					j	w

Inagta Lopenze Vowels

	Front	Central	Back
High	i		u
Mid	e		ɔ
Low		a	

Suprasegmental Features

Suprasegmental features are speech aspects involving more than single speech sounds (Ladefoged & Johnson, 2014). These features include syllables, stress, and diphthongs.

Syllables are phonological units higher than phonemes, and these units consist of one or two consonants and a vowel. The vowel in a syllable is called a nucleus (V). The consonant preceding the nucleus is called an onset, while the consonant that follows the nucleus is a coda. For example, in the word [ʔek], [ʔ] is the onset, [e] is the nucleus, and [k] is the coda.

Inagta Lopenze Syllable Structure

Syllable Structure	Examples
CV	ʔa: lem afternoon
	be: bui pig
	de: geu sun, day
	ge: ʔen fruit
CVC	ha: mu to kiss somebody
	kel: det lightning
	lam: ʔaw puddle
	nas: nas to chew
	ʔug: bun nestling, chick
	jab: ʔus to blanch

Generally, in Inagta Lopenze, roots (i.e., unaffixed words) typically have one (monosyllabic) or two (disyllabic) syllables, although there are roots with more than two syllables (up to five).

Inagta Lopenze Roots

Root	Examples
Monosyllabic	an predicate marker
	ba question marker
	de in, on, at
	hu personal and common absolutive nominal marker singular
	nu personal and common ergative nominal marker singular
Disyllabic	teq: dek to stand, arise
	tu: ʔuk to burn
	ʔu: tuk to sip
	wi: diʔ youngest child
	ju: mus to drown
Multisyllabic	ʔa: hen jug siblings
	ga: la muj fingers
	la: bi: hsg unclear, blurry, murky
	na: lad nad palate
	pi: ji: pus to rub one's eyes
	hin: la la: baw middle finger
	ka: ʔi la: nan menstruation
	ka: li: ban ban butterfly
	ma: na: nag deg male monkey
	ba: lin ta: ta: wu iris of the eyes
	su: su: gc lc: ran goose bumps

Stress is a suprasegmental feature of utterances, including vowels. As for stress at the word level, it refers to the prominence (i.e., length, loudness, and pitch) of the stressed vowel. In Inagta Lopenze, stress falls either on the penultima (i.e., the syllable before the last) or on a closed or open ultima (i.e., the final syllable).

Stress Positions in Inagta Lopenze

Penultima	Ultima
be: ʔe: je crocodile	ʔag: taʔ endonym of the Negritos of Lopez
bi: lan moon	ba: lin kas squint-eyed
ka: gun wedding	dag: ʔum cloud
la: duk shooting star	di: lum evening, night
mu: raʔ underdeveloped	gu: ma ʔan coconut
na: ʔi: pad river shore	ha: wun face
pi: jak fish fingerlings	hi: bas low tide
sak: la: gen jaw	hab: tu to search, find, look for
ʔu: ʔan beetle	ta: lik tik Tarctic hornbill
wi: diʔ youngest child	ʔu: waj rattan

Stress is also phonemic in Inagta Lopenze. Recent studies on Philippine languages revealed that the most reliable determinant of stress is length; the stressed syllable is longer than its unstressed counterpart. This is evident in the words that completely similar speech sounds but with different meaning. It is illustrated in the following examples below.

Contrastive Stress in Inagta Lopenze

Penultima	Ultima
ba: tin castrated	ba: tin snare
ba: ʔu coconut shell	ba: ʔu terrapin
ka: ʔun to eat	ka: ʔun to fetch
sa: kaj bamboo coffin	sa: kaj to ride
sa: jug river	sa: jug floor
su: su breast	su: su snail

Diphthongs. The glides /w/ and /j/ may combine with certain vowels to form diphthongs. In Inagta Lopenze, the following diphthongs occur: /aw/, /ew/, /uw/, /aj/, /ej/, and /uj/.

Inagta Diphthongs

Diphthongs	Penultima	Ultima
/aw/	daw ha two	de kaw you
		hi kaw you
		ʔi yaw
/ew/		be hew young girl
		a hew person
		de gcw day
		ka hew tree
/uw/		hak hew leave
		na u dow stop
		hu ngow home
		ta gai shot
/aj/		la gai put
		pa vai rice seedling
		ha nai cut down (trees)
/ej/		e mti palm leave
		be lci house
		a wqi give
		la kqi look for
/uj/		ha pui fire
		ba ling hui cassava
		iq uk tui rise out of the water
		a mu smell
		be bui pig

Phonotactics

In a given language, **phonotactics** refer to restrictions on segment sequences or what are considered phonologically well-formed (Crystal, 2006). In Inagta Lopenze, such constraints are fairly straightforward: all fifteen (15) consonants occur at onset and coda—except /h/—positions. However, there is only one word in the data where /h/ is in the coda position—i.e., beh-en [beh: ʔen] to sneeze.

Consonant Occurrences in Onset and Coda Positions

Phoneme	Onset	Coda
/p/	pu sed navel	luk nsp to dive
/b/	ban ʔas monitor lizard	ka ba kab edible frog
/t/	ta wu person	si ʔit bamboo twig
/d/	da lun jan breadfruit	bi hud fish eggs
/k/	ku buʔ chest	tu ʔuk to have sunburn
/g/	gu ma ʔak tomorrow	bu leg blind
/ʔ/	ʔak net to climb	ʔi jaʔ no
/m/	ma an to see	di lum night, evening
/n/	nu ʔu forehead	mab hun many
/ŋ/	ne pen tooth	ʔu lan freshwater shrimp
/s/	su kab leg	ka ja kas coconut leaf
/h/	ha ʔut to choke	o
/w/	wi diʔ youngest child	ka bu tiw mushroom
/j/	ju mus to drown	ga la muj finger
/l/	le mak land	i bil to cry
/r/	ri mas a species of breadfruit	pa sa dut napkin (for menstruation)

Inagta Lopenze vowels occur at all syllable positions—i.e., antepenultima, penultima, and ultima.

Vowel Occurrences in Antepenultima, Penultima, and Ultima Positions

Phonemes	Antepenultima	Penultima	Ultima
/i/	gi luʔ guʔ housefly	hi iup to blow	di giʔ blood
/u/	ʔul ja bid centipede	ku lat oyster mushroom	buk buk worm
/e/	be ʔe: je crocodile	ʔa get ʔet sand	ʔa ʔa ntj termite
/a/	ʔa hen jug sibling	ba laʔ kis bark	dan ja to play

Morphological Processes

Morphophonological processes refer to sound changes with respect to morphology. In Inagta Lopenze, there are two, namely: assimilation and cliticization.

Assimilation is the process in which two sounds become alike. Generally, this process can be regressive (i.e., right to left) or progressive (i.e., left to right). For instance, in Inagta Lopenze, it is clearly seen in the affixation of paN- and maN-, whereby the homorganic nasal N is influenced by the word-initial sound of the root, as in (1) – (5).

(1)	/paN-/ + /bajaj/	→	[pambajaj]
	NOM + house		something used at home
(2)	/paN-/ + /dingding/	→	[pangdingding]
	NOM + wall		something used as a wall
(3)	/paN-/ + /gamut/	→	[pangamut]
	NOM + cure		cure
(4)	/paN-/ + /sinturun/	→	[pangsinturun]
	NOM + belt		something used as a belt
(5)	/paN-/ + /atup/	→	[pan-atup]
	NOM + roof		something used as a roof

In (6), the assimilation is backwards, hence, regressive—from the word-initial /b/ to the homorganic /N/, which has three allophones [m, n, ŋ] depending on the word-initial sound of the root it attaches to. Moreover, assimilation can be one, in which two sounds become completely alike, as in (7), in which the homorganic /N/ becomes [m] and replaces the word-initial /b/, since [m] and /b/ are both bilabial.

(6)	/paN-/ + /batin/	→	[pamatin]
	NOM snare		an ensnaring instrument
(7)	/maN-/ + /batin/	→	[mamamatin]
	NOM snare		someone who ensnares animals

Epenthesis. Cliticization is a morphosyntactic process in which a bound morpheme phonologically attaches to another word (its host). In Inagta Lopenze, the bound form of the absolutive first-person singular personal pronoun <ek> cliticizes to the sentence-initial element in (8). During the cliticization process, the [h] sound is inserted at the boundaries of the first full word and the pronominal clitic <ek>

- (8) ʔig pa la ju:=(h)ek-de gu ma ʔak
1sg.pa.1a.ju:=(h)ek-de gu.ma.ʔak
"I am going to leave tomorrow."

The epenthetic [h] is inserted only when the host of <ek> ends in a vowel to preserve the syllable structure.

Additionally, the genitive or ergative case marker <nu> cliticizes too, specifically, to the word (with an open ultima) it follows. In (9), [ŋ] is the cliticized form of /nu/.

- (9) ʔigpalaba haʔku nu damit de deje → ʔigpalaba haʔkuŋ damit de deje
"I will have him/her wash my clothes."

Notes on Orthography

Brief notes on Inagta Lopenze orthography are in order. First, the community of Inagta Lopenze speakers is yet to have a standardized orthography. Second, there are only a few Inagta Lopenze speakers who can write. With this reason, a proposed orthography has been made to consistently represent the speech sounds in writing. Each sound, including phones such as [r] and [ɔ], has its own orthographic representation, preventing ambiguity. Finally, it is imperative that a community-based orthography is carried out in the future to standardize Inagta Lopenze.

Proposed Inagta Lopenze Orthography

Phoneme & Allophone	Orthographic Representation
/p/	<p>
/b/	
/t/	<t>
/d/	<d>
/k/	<k>
/g/	<g>
/ʔ/	- (in a word-medial position) (in a word-final position)
/m/	<m>
/n/	<n>
/ŋ/	<ng>
/s/	<s>
/h/	<h>
/w/	<w>
/j/	<j>
/l/	<l>
/r/	<r>
/i/	<i>
/u/	<u>
/e/	<e>
/a/	<a>