

Eastern Cagayan Agta Phonemics

By: Tom Nickell

0. Introduction

The purpose of this paper is to describe the phonemics and morphophonemics of Eastern Cagayan Agta, a language of northern Philippines spoken by an estimated 1,500 people living in the northeast corner of Luzon, in Cagayan Province.

1. Phonemics

1.1 Syllable

The syllable in Eastern Cagayan Agta consists of one vowel as syllable peak and consonants as optional onset and/or coda. The syllable is the minimal phonological unit that can occur in isolation. These are four non-suspect syllable patterns: V, VC, CV, and CVC.

- /i/ grammar particle - definite article, "the"
- /ak/ first person singular pronoun
- /ko/ first person, singular, possessive pronoun
- /beg/ loincloth

1.2 Phonological word

A phonological word is a sequence of syllables that is marked by the occurrence of primary stress. One syllable words, such as particles, do not carry primary stress. Phonological words of two, three, four, five, and six syllables have been observed.

/bə.gá/ rice
 /di.sa.lád/ inside
 /ka.tál.la.kày/ older-male-friend
 /màg.ngi.di.ngi.dít/ to-laugh
 /í.pá i.na.gen.án/ for-naming-that-one

1.3 Suprasegmental Phonemes

To date, only one suprasegmental phoneme has been established, i.e. stress. There are three degrees of stress: primary, secondary and weak stress. A polysyllabic word has one primary stress and, if more than three syllables long, has a secondary stress also. Syllables with neither primary nor secondary stress carry weak stress, as do monosyllabic words mentioned above. Suffixation causes stress to shift.

The postulation of stress as a suprasegmental phoneme is based on the contrast evident in several minimal pairs, e.g.

/síngir/ type of wasp
 /singír/ trade
 /allád/ feather
 /állad/ fence
 /gasát/ about to die (having convulsions)
 /gásat/ to find luck, good fortune
 /gí'sán/ to move to one side
 /gisán/ *to sleep in mountains w/out shelter*
 /adígi'/ house post
 /a dígi'/ some blood
 /sulát/ lime bottle
 /súrat/ letter

The majority of the examples above, showing contrastive stress, involve the use of loan words from Ilocano. The following are examples showing stress in analagous environments and are not borrowed terms.

/ātəŋ/	son/daughter-in-law
/utáng/	iron
/bí.gu'/	new
/bí.gál/	thick
/bá.gat/	to shoot fish
/rák.nəb/	wave (of ocean)
/la.gíd/	to pull
/í.f.ni.gəb/	roasted green rice

1.4 Interpretation of semi-vowels, long consonants and glottal.

1.4.1 Semi-vowels

High vocoids are interpreted as vowels where they occur as syllable peak, and as consonants where they occur as coda or onset. Criteria for this interpretation are nonsuspect syllable patterns, and observed syllabicity.

i/y	/hi.dí'/	/hidí/	third person plural pronoun
	/bab.béi/	/babbéy/	woman
	/ki.rái/	/kiráy/	eyebrow
	/tai.ék/	/tayék/	top - a child's toy
	/di.dí.ia/	/didiya/	upstream
	/ni.iá'.ən/	/niyaen/	now

u/w	[gi.pú']	/gipú/	conjunction--since
	[dì.be.léu]	/dibeléw/	across shore
	[ráb.uat]	/rábwat/	package
	[ua.déi]	/wadey/	demonstrative--here
	[dè.de.iá.uən]	/dedeyáwən/	respect

1.4.2 Long consonants

Long consonants are regarded as a sequence of two identical consonants. The consonant patterns observed in nonsuspect data indicate a syllable break between consonants in sequence, as in:

[bís.gal]	/bís ¹ gal/	arm band
[búk.tət]	/búktet/	pregnant

Examples of long consonants and their interpretation are:

[kál:əp]	/kál.ləp/	night
[kál:əb]	/kál.ləb/	lid
[ʼás:ap]	/ʼás.sap/	shallow
[ták:ɛp]	/ták.kep/	steep hill
[kád:əp]	/kád.dəp/	search in the dark
[umém:an]	/umém.mang/	to rest
[pad:ɪŋ]	/pad.díŋ/	wall
[bál:ɨk]	/bál.lɨk/	little

All consonants can occur as members of a homogeneous cluster.

1.4.3 Glottal stop

Glottal stop always occurs on onset with the VC syllable pattern and on coda with the CV syllable pattern in word final position. All vowel clusters are separated by glottal stop in Eastern Cagayan Agta.

/ʼu.gɛ́tʼ/	vein	/di.gíʼ/	blood
/ʼó.níʼ/	yes	/di.góʼ/	soup
/ʼi.láy/	friend	/bitúʼ/	rock
/mataʼan/	type of fish	/ʼo.taʼ/	to vomit

1.5 Phonemes: Contrast and description

There are twenty-one phonemes in Eastern Cagayan Agta: fifteen consonants and six vowels. The consonants are: p, b, t, d, k, g, s, l, r, m, n, ng, w, h, y, and the vowels are: i, e, a, o, u, and ə.

The glottal stop is not considered a phoneme. (See morphophonemics for Glottal Insertion Rule.)

1.5.1 Evidence for separation of phonemes

Following are pairs that show the contrast between phonemes.

1.5.1.1 Consonants

p/b	/kálləp/	/kálləp/	night
	/kálləb/	/kálləb/	lid
	/bukál/	/bukál/	ball joint of pelvis
	/pukál/	/pukál/	thigh
t/d	/kótkot/	/kótkot/	to dig
	/kódkod/	/kódkod/	to scratch
	/lótlot/	/lótlot/	swift current
	/lódlod/	/lódlod/	to soak

	[tukák]	/tukák/	frog
	[dukák]	/dukák/	desire
k/g	[kálkəl]	/kəlkal/	to cradle a child on one's hip
	[gálgəl]	/galgal/	to chew meat
	[kelkel]	/kelkel/	to value
	[gəlgel]	/gelgel/	to wash clothes by hand
	[makkák]	/makkák/	bitter
	[makág]	/makág/	to shoot eels
m/n	[mi']	/mi/	1st person plural exclusive pronoun
	[ni']	/ni/	oblique person marker
	[dəgmén]	/dəgmén/	cold
	[memmém]	/memmém/	to fetch a small amount of water
n/ng	[ngidít]	/ngidít/	laugh
	[nidi']	/nidi/	3rd person plural oblique pronoun
ng/g	[ibílang]	/ibílang/	to count
	[ibílag]	/ibílag/	to dry
	[biyáng]	/biyang/	to interfere
	[biyág]	/biyág/	to fill one's stomach with food

m/ng	/ngi.dót/	/ngidít/	laugh
	/mi' /	/mi/	1st person plural
			exclusive pronoun
	/sí.nga' /	/sínga/	to blow one's nose
n/l	/sí.ma' /	/síma/	barb of arrow
	/na' /	/na/	3rd person singular
			possessive
	/la' /	/la/	grammar particle - 'just'
l/r	/ku.rót/	/kurót/	summit
	/ku.lót/	/kulót/	kinky
	/mag.gúr.gur/	/maggúrgur/	to scratch
	/mag.gúl.gul/	/maggúlgul/	to whine (as a dog)
l/d	/ba.sád/	/basád/	sand
	/pa.sál/	/pasál/	to work without eating
	/bú.ðak/	/búðak/	flower
	/bú.lak/	/búlak/	pouring water
r/d	/pad.díng/	/padding/	wall
	/bá.ríng/	/báring/	hopefully
	/i.kár/	/ikár/	to cough
	/lá.kad/	/lákad/	to walk

r/h occur in free variation, e.g.

/i.kár/	to cough
/i.káh/	to cough
/kur.sád/	to kick
/kuh.sád/	to kick
/ros.rós/	to strip bark
/hos.hós/	to strip bark

1.5.1.2 Vowels

i/ɛ	[séng.gɛt]	/sénggɛt/	bright light
	[sing.gɛt]	/singgɛt/	high-pitched wail
i/e	[dè.déyá.wən]	/dèdeyáwən/	respect
	[di.dí.ya]	/didiya/	upstream
i/a	[sa.ngét]	/sangét/	to cry
	[si.ngét]	/singét/	fork of tree
i/ə	[də.gét]	/dəgét/	to sew
	[di.gét]	/digét/	sea
e/a	[ma]	/ma/	abilitative prefix
	[me]	/me/	nonvolitional prefix
e/ə	[kélag]	/kélag/	earthworm
	[kəlang]	/kəlang/	a sliced part
ɛ/ə	[tak.nég]	/taknég/	to fall
	[tak.nág]	/taknág/	to stand
a/ə	[kə.báng]	/kəbáng/	scar
	[ka.bánga]	/kabánga/	spouse
a/o	[ko.bíl]	/kobíl/	to hide
	[ka.bíl]	/kabíl/	to grab
o/u	[so.bét]	/sobet/	to insert a machete
	[su.bét]	/subet/	to grasp between two fingers

1.5.2 Description of phonemes and their allophones

/ p / is a voiceless bilabial stop, which has two allophones
[p] and [P].

[p] is slightly aspirated and occurs only as syllable onset.

[pa.té.pat]	/patépat/	type of reed
[ka.pég]	/kapég/	wing

[P] is unreleased and occurs only as syllable coda.

[á.t _ε P]	/átεp/	roasted green rice
[s _ε P.s'P]	/sipsíp/	mosquito bite

/ b / [b] is a voiced bilabial stop, which occurs as syllable onset and coda. Utterance final it is unreleased.

[bab.béy]	/babbéy/	female
[mag.wa ^b]	/magwáb/	to yawn

/ t / is a voiceless alveolar stop, which has two allophones,
[t] and [^t]. [t] is a slightly aspirated alveolar stop, which occurs only as syllable onset.

[tén.non]	/ténnon/	clothes
[i.pé.ta']	/ipéta/	to say

[^t] is an unreleased alveolar stop, which occurs only as syllable coda.

[ké.mo ^t]	/kémot/	to keep
[kó ^t .ko ^t]	/kótkot/	to dig

/ d / [d] is a voiced alveolar stop, which occurs as syllable onset and coda. Utterance final it is unreleased.

[di.sa.lá ^d]	/disalád/	inside
[lá.du']	/ládu/	to have fever

/ k / is a voiceless velar stop, which has two allophones, [k] and [k̟]. [k̟] is slightly aspirated and occurs only as syllable onset.

[ku.lé ^t]	/kulét/	skin
[lo.ké ^t]	/lokét/	mud

[k̟] is unreleased and occurs only as syllable coda.

[sa.ré ^{k̟}]	/sarek/	to kill head lice
[ma.ká ^{k̟}]	/makák/	bitter

/ g / [g] is a voiced velar stop, which occurs as syllable onset and coda. In utterance final position it is unreleased.

[gi.pú ^{g̟}]	/gipú/	since
[ba.gás]	/bagás/	rice
[bɛg̟]	/beg/	loin cloth

/ m / [m] is a voiced bilabial nasal. It occurs as onset and coda.

[ma.bé.sa ^m]	/mabésa/	wet
[ta.ká.tɛm̩]	/takátem/	a class of betel nut

/ n / [n] is a voiced alveolar nasal. It occurs as onset and coda.

[na.mók]	/namók/	mosquito
[ta.wén]	/tawén/	year

/ ng / [ŋ] is a voiced velar nasal. It occurs as onset and coda.

[ŋgi.dít]	/ngidit/	laugh
[kə.báng]	/kəbang/	scar

/ s / [s] is a voiceless alveolar fricative. It occurs as onset and coda.

[sɪ.yu']	/sɪyu/	machete
[ʼi.pas]	/ʼipas/	cockroach

[r] / r / is a voiced alveolar vibrant, which has three allophones, [r], [h] and [ʀ]. [r] occurs as [h] in free variation as onset and coda.

[mag.i.kár] or [mag.i.káh]	/magikar/	to cough
[ros.rós] or [hós.hós]	/rosrós/	to strip bark

[ʀ] is a voiced alveolar flap, which occurs intervocalically, and also occurs as [h] in free variation.

[mag.sú.ʀo'] or [mag.sú.ho']	/magsúro/	to teach
[sa.ʀék] or [sa.hék]	/sarék/	to kill head lice

/ l / [l] is a voiced alveolar lateral. It occurs as onset and coda.

[la.káy]	/lakáy/	older male
[pél.pəl]	/pélpel/	to flatten bread dough

/ h / [h] is a voiceless glottal fricative.

[hi.kón]	/hikón/	emphatic 1st person singular pronoun
[ha']	/ha/	oblique grammar particle

/ w / [w] is a voiced rounded bilabial semivowel. It occurs as syllable onset and coda.

[wá.lu']	/wálu/	eight
[ka.wé.gi']	/kawégi/	left
[di.be.léw]	/dibeléw/	opposite shore

/ y / [y] is a voiced unrounded palatal semivowel.
It occurs as syllable onset and coda.

[yé.nɛn]	/yenen/	currently
[ká.yu']	/káyu/	wood
[bab.béy]	/bab.béy/	female

/ i / [i] is a high closed front unrounded vocoid,
which occurs as syllable peak. It has two allophones,
[i] and [ɪ].

[i] occurs in any open syllable, and in closed syllables
which have glottal or nasals as coda.

[ki.ráy]	/kiráy/	eyebrow
[di.dí.ya']	/didíya'/	downstream
[tá.bi']	/tábi/	fat
[ngá.min]	/ngamin/	all

[ɪ] is a high open front unrounded vocoid, which occurs
in any closed syllable except when the syllable is closed by
a glottal or a nasal.

[díg.dɪg]	/dígdig/	bank of stream;
[síg.pɪt]	/sígpit/	strut for tying palm thatch to

/ e / [e] is a mid close front unrounded vocoid, which
occurs as syllable peak. It has two allophones, [e] and [ɛ].

[e] occurs in any open syllable.

[sé.sɛt]	/séset/	thorn
[ka ^d .dé.mɛt]	/kaddémæt/	just arrived

[ɛ] is a mid open front unrounded vocoid, which occurs in
any closed syllable except when the syllable is closed by [y],
or [w].

[bɛɣ] /bɛɣ/ -13-

join cloth

[bab.béy]

/babbéy/

female

[di.be.léw]

/dibeléw/

opposite shore

/ a / [a] is a low half-open central unrounded vocoid, which occurs as syllable peak in all word positions. It has two allophones, [a] and [ɐ].

[a] occurs in any syllable except when the onset of the syllable is [p], [s], [t], [n], or [m] and the coda is [l].

[ɐ] is a low close front unrounded vocoid which only occurs when the onset of the syllable is [p], [s], [t], [n], or [m] and the coda is [l].

[máɫ.pas]

/malpas/

to complete

[náɫ.pas]

/nalpas/

completed

[sáɫ.u.wá.saw]

/saluwásaw/

to flirt

[páɫ.lúngo']

/pallúngo/

first

[ka.táɫ.lakay]

/katállakay/

older male friend

[páɫ.ták]

/palták/

to string a bow

/ o / [o] is a mid half open back rounded vocoid. It occurs as syllable peak.

[i.ké.mot]

/ikémot/

to keep

[i.ó.ni']

/óni/

yes

~~[i.ó.yun]~~

~~/éyun/~~

~~yes + disclaimer of
responsibility~~

/ u / [u] is a high half-open back rounded vocoid. It occurs as syllable peak.

[i.és.bu']

/esbu/

urine

[i.úg.ma']

/ugma/

morning

/ə / [ə] is a mid close central unrounded vocoid.

It occurs as syllable peak.

/d̥ə.la' /	/d̥əla /	yet
/b̥i.lə.kəd /	/biləkəd /	rat

1.6 Text

1) entamon agay kayong manganop. 2) kapisan ayo.
 3) kasidsidain d̥əlag ta agay awan d̥əla paglalakwan na ogdin
 ay hidi. 4) maski la mina ta b̥ərab̥ək hay. 5) ngem maski
 nu umangay kitam manganop nu lokon di kitam manon, ogdin na
 hidi 5 1/2) awan na serbey na manon. 6) sagga balik man i
 pagbayad na ogdin na hidi ha pilas. 7) anya-narod. 8) nu
 atoy kasordi na hidi man igipu na baknang hidi a ket
 anya-narod anusan tam ay. 9) mapiya i nangap-pangalapan
 ha pangapon. 10) agay, umangay ak bas mina agay kwan
 mangrakad ha kwa ayo putik. 11) ngem mamanteng ak man
 waden. 12) kitam bas bila agay ngamin.

Literal translation

1) See again brother-in-law to hunt. 2) Kapisan Creek
 there-yonder. 3) To get-viand eel because friend none yet
 just for-selling-to Ilocanos there them. 4) Whatever just
 should because baby-pigs there. 5) But whenever if go we-
 inclusive to-hunt if to-take-advantage-of they we-inclusive
 again, Ilocano of they 5 1/2) none of purpose of again.
 6) Then because small the payment of Ilocano of they for
 meat. 7) What-then? 8) If there-is need they of they
 since rich they, and what-then, endure we-incl. that-there.

- 9) Good the to-hunt-in-a-place-for-hunting for supper.
10) Friend, go I should-also should friend kwan to-stake-out
at kwa there-yonder Putik. 11) But afraid I maybe. 12) We-
inclusive should-also also friend all.

Free Translation

- 1) Let's go hunting brother-in-law. 2) There at Kapisan
Creek. 3) We'll get eels for viand because, friend, there
is simply nothing yet to sell to the Ilocanos. 4) Whatever
(is there we) should (get) because (there are) little pigs
there. 5) But whenever we go hunting the Ilocanos take
advantage of us again. 5 1/2) There is no purpose in (going)
again. 6) Then the payment of Ilocanos for meat is small.
7) What then? 8) If they need something, what then, we
will endure it, since they are rich.

- 9) I know (or, 'there is') a good place for getting
supper. 10) Friend, I should go, friend, to stake out there
at Putik Creek. 11) But I am afraid maybe. 12) We should
all be included.

¹ Based on the non-suspect phonological word patterns of Eastern Cagayan Agta, and based on the phonemic analysis of Casiguran Dumagat by Tom Headland (1974:13), the syllable patterns V, VC, and CV are listed here. Actually, glottal stop predictably occurs either as coda or onset or both on such syllable patterns.