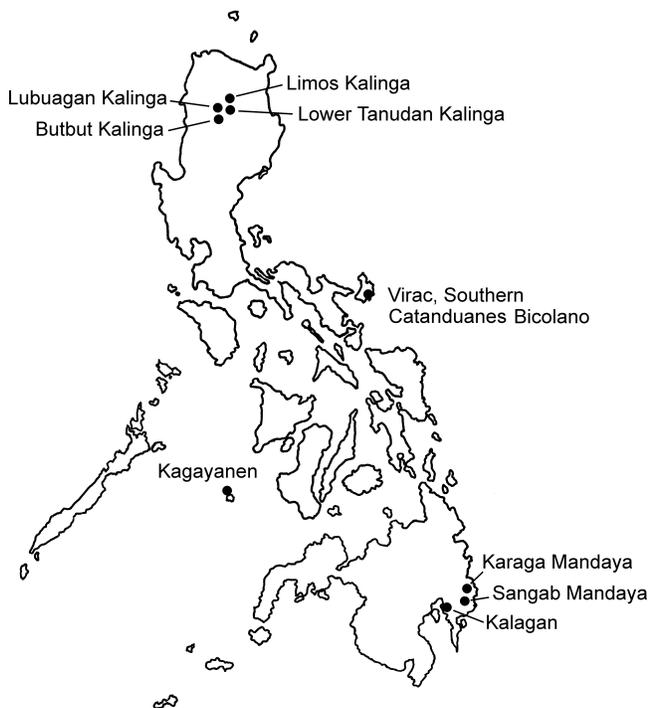


An Unlikely Retention

A comparative look at the (inter)dental approximant

*The (inter)dental approximant, which we symbolize as [ɹ̥], of the Philippine language Kagayanen has been claimed to be both phonemic and a retention from a proto language (Olson, et al. 2009). It is the goal of this paper to demonstrate how the (inter)dental approximant compares with the claimed phonemic inventory of Proto-Austronesian and to give a possible explanation for the variety of reflexes of *l seen in the Philippine Languages (Blust 1991, 1998). The suggestions in this paper for the phonetic value of *l are based on phonetic detail of the (inter)dental approximant described by Olson and Mielke (2007) and other descriptions from Philippine Languages.*

The Philippines



What is an interdental approximant?

It is an approximant articulated with tongue between the teeth, the the tip of the tongue comes out of the mouth and the bottom of the tongue comes in contact with the lower lip.

Where does it occur?

It occurs in 9 Philippine languages:

1. **Lower Tanudan Kalinga** [klm] (Olson, Machlan & Amangao 2008)
2. **Butbut Kalinga** [kyb] (Olson, et al. 2009)
3. **Limos Kalinga** [kmk] (Olson, et al. 2009)
4. **Lubuagan Kalinga** [knb] (Olson, et al. 2009)
5. **Virac, Southern Catanduanes Bicolano** [bln] (McFarland 1974, Payne 1978)
6. **Kagayanen** [cgc] (Harmon 1977, MacGregor 1995)
7. **Karaga Mandaya** [mry] (Gallman 1983)
8. **Sangab Mandaya** [myt] (Gallman 1983)
9. **Kalagan** [kqe] (Arcenas 2004, Gallman 1983).

Where does the interdental approximant fit in PAN phonology?

It regularly corresponds with the reflexes of PAN *l.

PAN *l, the R-L-D Consonant

In Austronesian languages (particularly Philippine languages) there is a correspondence of R-L-D-y (Conant 1911) for Proto-Austronesian *l. This is the same position in which we find the interdental approximant. In some languages the reflex of *l is one or more of ɹ, l, d, Ø, ʔ, n, y, ɸ.

No answer has yet been proposed providing motivation on why we see such a range of reflexes. Zorc (1975: 264-6) acknowledges the irregular correspondences involving liquids but leaves this unexplained. One possibility is that these variations are all strategies to bring the tongue inside the mouth due to social pressures while maintaining an auditory / perceptual cue.

Comparing the interdental approximant of Kagayanen to the velarized segment of Aklano in cognates

Scheerer (1920) points out that the “noteworthy” articulation of an ‘l’ sound in Aklano is related to the the [l] of the R-L-D series. This is also supported by Zorc (1975: 256-8). This segment also corresponds with the Kagayanen interdental approximant, as shown in the following data:

English	Kagayanen	Aklano
[eng]	[cgc]	[akl]
WORD INITIAL		
earthworm	ɔ̃a'ɔ̃agu	ɬago
wide, broad	'ɔ̃apad / 'mɔ̃apad	ɬāpad / ma-ɬāpad
WORD MEDIAL		
rope	ka'ɔ̃at	kaɬat
palm of hand	'paɔ̃ad	pāɬad
eight	'waɔ̃ɔ̃u	waɬu
path	'daɔ̃an	dāɬan
down, below, also under	da'ɔ̃im	i-dāɬum
house	'baɔ̃aj	baɬay
WORD FINAL		
thick	'dakmiɔ̃	dāmuɬ
itch (v)	ka'tiɔ̃	katuɬ
boast	'bugaɔ̃	pa-bugaɬ

Showing the variation mentioned in PAN *l, the R-L-D Consonant

The following data demonstrate the various reflexes: ɬ, l, d, Ø, ʔ, n, y, ɔ̃.

English Gloss	Kankanaey	Tagalog	Kagayanen	Aklano	Bantoanon: Sibalenhon	Caluyanun	Southern Catanduanes Bicolano	Blust (1999)
[eng]	[kne]	[tgl]	[cgc]	[akl]	[bno]	[clu]	[bln]	[PAN]
three	to'lo	tat'lo	'tallo	---	---	---	tuɔ̃u	*telu
moon	'bowʔn / 'boʔʔn	bu'wan	'buɔ̃an	būɬan	buyan	bulan	buɔ̃an	*bulaN / *qiNas
deep	mʔ'losɔ̃j ('losɔ̃j)	lālim	'daɔ̃im	dāɬum / ma-dāɬum	marayum	madalim	haɔ̃aɔ̃um	---
eggplant	tʔ'loɔ̃j	---	---	taɬung	tayung	tarung	taɔ̃ung	---
eight	wʔ'ʔo	walo	'waɔ̃ɔ̃u	waɬu	wayu	walu	waɔ̃u	---
itch (scratch an, verb)	gog'ʔoʔʔn (gog'ʔo)	'kamot	ka'tiɔ̃	katuɬ	katuy	katil	katuɔ̃	*karaw
path	'danʔn	da'ʔan	'daɔ̃an	dāɬan	rayan	dalan	daɔ̃a	*zalan

English Gloss	Kankanaey	Tagalog	Kagayanen	Aklano	Bantoanon: Sibalenhon	Caluyanun	Southern Catanduanes Bicolano	Blust (1999)
[eng]	[kne]	[tgl]	[cgc]	[akl]	[bno]	[clu]	[bln]	[PAn]
palm of hand	ʔɜd'pɜ	pālad	'paðad	pālad	payar	palad	paðad	---

Comparing the interdental approximant in cognates cross-linguistically

The following data show the continuity of data across seven of the nine languages which employ the interdental approximant articulation.

English	Butbut	Lubuagen	Majukayong	Minangali	Kagayanen	Kalagan	Southern Catanduanes Bicolano	Blust (1999)
[eng]	[kyb]	[knb]	[kmd]	[kml]	[cgc]	[kqe]	[bln]	[PAn]
three	tu'ðu	ti'ðu	tu'ðu	tuðu	'tallo	toðu	tuðu	*telu
moon	'h ^w uðan	'buðan	so'ðag	soðag	'buðan	boðan	buðan	*bulaN / *qiNas
path	'tʃaðan	'keðsa	'qaðsa	ʔaðsa	'daðan	daðan	daða	*zalan
house	---	---	---	---	'baðaj	baðaj	---	*rumaq
deep	---	---	---	---	'daðim	maðaðom	haðaðum	---
eggplant	---	---	---	---	---	taðom	taðung	---
eight	---	---	---	---	'waððu	waðo	waðu	---
itch	---	---	---	---	ka'tið	katoð	katuð	---
palm of hand	---	---	---	---	'paðad	paðad	paðad	---
man (adult male)	la'ðaʔi	leðaki	la'ðaqi	laðaʔi	mama	---	laðki	---
worm	ʔo'ðan	ku'ðan	'qoðan	batoð	lulagu	---	---	*kulay
seed	h ^w u'ʔoɿ	βuķeð	'vuqað	buʔoð	lisu	---	---	---
blood	'tʃaða	'tʃaða	'daða	daða	'liŋɲissa	---	---	*daraq

Why is the interdental approximant a retention?

1. Its markedness makes it an unlikely candidate for independent innovation.
 - a. It is socially marked.
 - b. It is articulatorily marked (difficulty).
 - c. It is typologically marked (rarity).
2. Its geographic distribution is on the periphery. (Nichols 1997)
3. There are allophonic/phonemic distributions in the languages in which it occurs that suggest a retention.
4. Other approximants occur in cognates in some of the languages in which the interdental approximant does not occur.
5. Different Philippine subgroups exhibit the interdental approximant in cognates.
6. The Tai-Kadai evidence. Li talks about correspondences of l, ð and ɣ when reconstructing Proto-Tai(Li 1973: 337, 1977: 140). Central Hongshuihe Zhuang [zch] (Eric Jackson p.c.).

The only [variety] that does [have the interdental pronunciation] for sure is the variety spoken somewhere in Shanglin County; I have the Zhuang name of the village (which is [kʷeR⁴⁴ð̚eow⁴¹] in IPA, with the tongue clearly coming over the teeth and out of the mouth in the onset of the second syllable...). (Eric Jackson p.c.)

What makes the interdental approximant unlikely?

1. Due to social pressure to not show the tongue when speaking (the mocking of speakers using the interdental approximant), this articulation is currently not preferred. It is not liked, in a sense “unlikely” or unliked. (Arcenas 2004, Gallman 1983, Harmon 1977)
2. It is unlikely that in the future the sound will be retained due to language shift and social pressure resisting the articulation. It is an “endangered” articulation.
3. It is an unlikely candidate to advance to the status of “proto-articulation” in comparative studies when compared with other candidates due to its rarity in each sub-group. (Gallman 1983, Harmon 1977, McFarland 1974, Reid 1973)

The added value to Proto-Austronesian comparative work

The comparative work provided through this study suggests that there is at least a level of complexity not yet acknowledged in Proto-Austronesian phonology related to the frontness and backness of reconstructed approximants. This complexity could be stated more conservatively as an allophonic distribution of [l] and [ð̚]. It could be more boldly stated a need to reconstruct [ð̚] instead of [l]. A third option might be to reconstruct both [l] and [ð̚].

In historical linguistics our assumptions about a proto-language’s phoneme inventory are limited by our understanding of the phoneme inventory of the daughter languages. Without the right observations from the daughter languages, we are liable to make invalid conclusions about their proto forms. There has been a lack of attention given to the phonemic status of the (inter)dental approximant because of its categorization as an allophone of [l] or as in the cases of its reflexes with [r]. This oversight has affected the perceived options available in the reconstruction of the phoneme inventory of PAN.

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