

# Ayta Mag-anchi Reduplication

Allan Johnson  
De La Salle University  
allan\_johnson@sil.org

This paper will examine the forms of reduplication found in the Ayta Mag-anchi language of the Philippines. This reduplication falls into two main categories: 1) That which is currently active in the language, functioning as an inflection or derivation, and 2) That which is fossilized in the present-day language - no longer functioning as an inflection or derivation, but fixed as a permanent part of an Ayta root. The currently active reduplication is found to have two main forms, but with a lot of overlap in function. The examples will be presented according to the meaning components carried by this reduplication. The fossilized reduplication is found to co-occur with some other interesting fossilized morphological patterns, and will be presented according to the patterns found, along with some questions of origin which are yet to be answered.

## 1. Introduction

This paper is a summary of the forms of reduplication found in the Ayta Mag-anchi language of the Philippines. This language is spoken by a relatively small group of people, with a population of maybe 8000, based on estimates made in a 1985 language survey, and adjusted to take into account other information that has come out since then. The people live inland on the island of Luzon, toward the west side, in the provinces of Tarlac and Pampanga. Their language is closely related to Botolan and other Sambal languages found on the west coast, in the province of Zambales. They are separated from these other languages by a range of mountains which includes Mt. Pinatubo, the volcano which made its presence felt in June of 1991. The Ayta Mag-anchi dialect is spoken in an area that is east and northeast of the volcano.

In the years from 1990 through 1998 I worked on learning and studying this language. Then in 2005 an Ayta Mag-anchi dictionary was completed by Kurt and Margaret Storck of SIL, and their dictionary was my source of data for this investigation. The reduplication patterns found in this dictionary fall into two main categories:

- 1) Reduplication which currently functions in the language as an inflection or derivation.
- 2) Fossilized reduplication – that which doesn't function or no longer functions as an inflection or derivation, but is fixed as a permanent part of an Ayta root.

The currently active forms of reduplication operate on a presently existing root or word form to create a related word with an added semantic component. If both a reduplicated and non-reduplicated form of a word exist in the language with related meanings, this is taken to be a case of currently-active reduplication, and the difference in meaning is attributed to the reduplication.

If removing the reduplication from a word results in a non-existent word form, this means that what I'm looking at is fossilized reduplication. If removing the reduplication leaves only a single syllable, this is usually good evidence of fossilization, because single-syllable roots are quite rare in the Ayta language, with roots most commonly being two syllables in length. This is the case for Austronesian languages in general as well, as noted by Blust (2001:15-16). This

fossilized reduplication seems to be a process that served to CREATE roots rather than being used to modify existing roots.

This paper is divided into two parts in accordance with this distinction - first the currently active reduplication; then the fossilized forms.

## 2. Forms of reduplication that are currently active in the language

Two kinds of reduplication are found to be currently active in Ayta Mag-anchi. These are full reduplication of a 2-syllable root, and CV reduplication. What I'm referring to as CV reduplication is the duplication of the initial CV of a root or stem. This can be simple and straightforward, as when the reduplication is the only affixation:

CV- root  
/mimiha/                  adj      'only one, alone'

Or there can be other affixation following the reduplication, in which case the reduplication ends up inside the final word form rather than at the beginning:

ka- CV- root -an  
/katatagʔayan/          adj      'very tall, very high'

And there can be other affixation preceding the reduplication, so that what ends up being reduplicated is an affix rather than part of the root:

mi- CV- ka- root  
/mikakahonol/          n          'siblings'

Another complication that can be found in Ayta CV reduplication is an interesting interaction with the consonant assimilation of the *maN-*, *naN-*, or *paN-* prefixes. No examples of this were found in the current source of data, but for the sake of completeness, here is an example of the pattern:

paN- root  
/tokho/                      v          'tempt'  
/panokho/  
/panonokho/                n          'temptation'

The interesting thing here is that the reduplicated syllable includes the consonant *n*, which didn't exist in the root. It was created by assimilation of the *N* of *paN-* to the *t* of *tokho*. This seems to say that the reduplication has to have occurred after the affixation with *paN-*. But this conflicts with the view that CV reduplication is the duplication of the INITIAL CV of a root or stem. According to that view, CV reduplication of *panokho* should result in *papanokho* rather than *panonokho*. So this seems to be a different kind of CV reduplication. Two other examples of this pattern are:

aN- paN- root		
/kaʔilaŋan/	n	‘need’
/ampaŋaʔilaŋan/		
/ampaŋaŋaʔilaŋan/	v	‘needing’

paN- root		
/buhay/	n	‘life’
/pamuhay/		
/pamumuhay/	n	‘living’

Further evidence that this is a different kind of CV reduplication comes from comparing its function with that of the rest of the CV reduplication data, which will be examined next. In these three examples the reduplication seems to have just a grammatical function, not really adding any component of meaning. But the rest of the data will show that the typical Ayta CV reduplication does carry a semantic component.

Looking at the meanings that are added to a word by reduplication, I don't always find a clear-cut distinction between the meaning carried by CV reduplication and the meaning carried by full reduplication. Some meanings can be carried by either form. So in order to get a better picture of how these two forms compare, I'll look at them together, grouping the examples according to the various semantic functions found:

(a) Limited or constrained

This function seems to belong primarily to CV reduplication. But yet, notice the similarity of the two cases of full reduplication. The CV reduplication on numerals to mean ‘just that number and no more’ is quite common in the language.

CV reduplication:

/miha/	adj	‘one’
/mimiha/	adj	‘only one, alone’
/lowa/	adj	‘two’
/lolowa/	adj	‘just two’
/piɾad/	adj	‘a few’
/piɾipiɾad/	adj	‘just a few’
/kakapag/	adv	‘alone, only one(s)’
/tagloh/	v	‘go directly’

/intatagloh/ v 'just went directly'

Full reduplication:

/miha/ adj 'one'

/kamiha-mihaʔan/ adj 'only'

/hait/ n 'space, to intersperse plants, interrupt speech'

/nakihait-hait/ v 'just interrupted'

(b) Moderated or diminished

This function seems to belong primarily to full reduplication, but yet I find one case of CV reduplication that also seems to fit in. These are cases where the reduplicated word represents an inferior copy of the real thing that would be represented by the un-reduplicated form.

Full reduplication:

/baŋka/ n 'canoe, native boat, outrigger, rowboat'

/baŋka-baŋka/ n 'raft'

/tai/ n 'variety of taro root (edible)'

/tai-tai/ n 'root similar to *tai*, but cannot be eaten'

/kayo/ n 'tree, wood'

/kayo-kayo/ n 'stalk of a plant'

/kayo-kayoʔan/ n 'bush'

/kayo-kayon bokot/ n 'backbone'

/gamad/ adj 'rapid'

/gamad-gamad/ v 'rather fast'

/aŋan-aŋan/ adj 'approximately, estimation'

CV reduplication:

/hapilin/ adv 'in case, if it should be, if it might be'

/hahapilin/ adv 'perhaps, maybe (less certain)'

(c) Intensified or durative

This function seems to be common for both CV and full reduplication. Carrying a concept to its extreme, whether extreme smallness or extreme largeness. Where a time scale is taken to its

extreme endpoints, such as ‘very first’ or ‘very last’, I’m including that in this function as well. An interesting word to notice here is *muna*, whose meaning seems to be roughly the same whether it takes on CV or full reduplication.

CV reduplication:

/ʔibon/	adj	‘small’
/ʔiʔibon/	adj	‘very small’
/tagʔay/	n	‘height’
/katatagʔayan/	n	‘very tall, very high place’
/nariglim/	adj	‘dark’
/naririglim/	adj	‘very dark’
/hilik/	v	‘to see’
/pinihihikan/	v	‘stared (with plural agent)’
/tapol/	v	‘look for’
/pinagtatapol/	v	‘searched and searched’
/mamapawatah/	adv	‘entire day and night’
/mamapayabi/	adv	‘all day long’
/bughi/	adj	‘first’
/kabubughian/	n	‘the beginning, first of all’
/muna/	v	‘to go ahead’
/mumuna/	adv	‘first’
/bayo/	adj	‘new’
/bayo/	conj	‘before’
/babayo/	adv	‘just now, just begun’

Full reduplication:

/muna/	v	‘to go ahead’
/muna-muna/	adv	‘firstly’
/munan muna/	adv	‘first of all’
/huyot/	adj	‘last’
/ha kahuyut-huyutan/	adv	‘finally’

/aŋga/	conj	‘until, end’
/aŋga-aŋga/	adv	‘forever, for eternity’
/labay/	v	‘to want, desire’
/labay-labay/	v	‘to like, desire greatly’
/uwik/	v	‘to burn’
/maŋuwik-uwik/	adj	‘painful; with a shooting pain that travels deep’
/tsimɨŋ/	adj	‘quiet’
/nakatsimɨŋ-tsimɨŋ/	v.stat	‘silent’
/higla/	adj	‘happy, glad, joyful, pleased’
/maghigla-higla/	v	‘to celebrate’
/hali/	intj	‘go on, go ahead’
/hali-hali/	adv	‘to continue and continue’
/mita/	v	‘to go, walk’
/mita-pita/	v	‘to keep walking’

#### (d) Repetitive or intensified

Like the previous category, this function can also communicate intensity. But I've made it a separate category because it also includes an idea of repetition that isn't in the previous category. Like the previous category, this one seems to be common for both CV and full reduplication.

#### CV reduplication:

/tampoh/	n	‘end’
/mamatatampoan/	v	‘off balance, rocking’
/tumbuk/	v	‘to hit’
/pinagtutumbuk/	v	‘hit repeatedly’
/gano/	v	‘to beat’
/pinaggagano/	v	‘beat up badly’
/hodhod/	v	‘to scrape out’
/pinaghohodhod/	v	‘scraped and scraped for a long time’

/putoh/	v	‘to cut’
/naŋapuputoh/	v	‘cut to pieces, plural’
/hugat/	n	‘wound’
/naŋahuhugatan/	v	‘having many wounds’

Full reduplication:

/buwadɪn/	v	‘to move s.t.’
/buwad-buwad/	v	‘toss & turn, keep turning over’
/'balik/	v	‘to return’
/ampi'balik-'balik/	v	‘go back and forth’
/ampibal'ik-bal'ik/	v	‘turn over and over’
/lowa/	adj	‘two’
/lowa-loway ihip/	v	‘to doubt, undecided’
/galaw/	v	‘to move’
/galaw-galawan/	n	‘toy (something to be manipulated repeatedly)’
/koa/	v	‘to get, take’
/paŋoa-koa/	v	‘taking more and more’

(e) Plural or iterative

This function is similar to the previous category in that there may be some repetitive or iterative quality - but the idea of intensity is gone, replaced by simply a plural meaning. This meaning seems to be more often carried by CV reduplication, but there are also a few examples of full reduplication.

CV reduplication:

/patɪl/	n	‘cousin/sibling’
/mipapatɪl/	n	‘family’
/?ali/	n	‘younger sibling’
/mitata?ali/	n	‘siblings’
/?anak/	n	‘child, offspring’
/mitata?anak/	n	‘family’

/honor/	v	‘to follow, obey’
/mihohonor/	n	‘succession, one after the other’
/lopon/	v	‘to gather around, crowd around’
/nilolopon/	v	‘to gather around (plural)’
/lipay/	n	‘side’
/mitatalipay/	adj	‘all around’
/yari/	v	‘finish, happen’
/mapikakayarian/	v	‘to be decided by a group’
/miha/	adj	‘one’
/pimimihain/	v	‘to join multiple things together’
/mat̃si/	v	‘to die’
/maŋamamat̃si/	n	‘to die, plural’
/miha/	adj	‘one’
/pamimiha/	n	‘unity’
/pakikimiha/	n	‘unity, oneness’
/napagmimihaʔan/	v	‘were united’

Full reduplication:

/p̃irad/	adj	‘a small amount of something’
/p̃irad-p̃irad/	adv	‘little by little’
/watah/	n	‘morning’
/winatah-watah/	adv	‘every morning’
/ʔapo/	n	‘grandchild’
/kaʔapo-ʔapoan/	n	‘descendants’
/bali/	n	‘house’
/pamibali-bali/	n	‘whole family, household’
/hino/	intg	‘what/who’
/hino-hino/	pron	‘whatever/whoever’
/hinon hinoman/	pron	‘no matter who, whoever’



## (f) Reciprocal

This function is a special case of the previous category. Like the previous category, it includes a plural meaning, but this is a special kind of plural where plural actors are doing the same thing to each other. This meaning is carried by CV reduplication, but not by full reduplication. I'll note briefly that *pi-* or one of its more hidden forms *mi-*, *ni-*, or *pami-* is involved in every example of this as well, but a fuller discussion of this would be best left for another time.

## CV reduplication:

/habi/	v	'to say'
/nihahabi/	v	'said to each other'
/kotaŋ/	v	'to ask'
/ampikokotaŋ/	v	'asking each other'
/tupa/	v	'to meet'
/napitutupa/	v	'met each other'
/tsipon/	v	'gather, meet together'
/ampitsitsipon/	v	'meeting together, plural'
/hundo/	v	'to continue'
/pamihuhundo/	n	'agreement'

## (g) Describing habitual characteristics

I've kept this category separate from the rest because it shows an interesting morphological pattern using CV reduplication, describing a person's character in terms of a characteristic that he's known for. But this category might also be viewed as a subset of the intensified / durative category.

## CV reduplication:

/diŋʔiy/	n	'embarrassment'
/madiŋʔiyin/	adj	'bashful, shy'
/haglap/	n	'help'
/mahahaglapin/	adj	'helpful'
/torak/	v	'to step on'

/totorak/	n	‘a snake that doesn't bite even if stepped on’
-----------	---	------------------------------------------------

Full reduplication:

/tahak/	v	‘to chop up or hack’
/tahak-tahak/	n	‘refuse of chopped vegetables’

### 3. Fossilized reduplication

This reduplication is no longer active in the language, but is found as structural patterns within Ayta roots. Examining these according to the forms found:

#### 3.1 Just reduplication alone (246 occurrences)

(a) CVC reduplication of a CVC syllable (171 occurrences)

/bagbag/	n	‘jungle, forest’
/dugdug/	v	‘to hit’
/hiwhiw/	n	‘chick’
/kilkil/	v	‘to wrap around’
/podpod/	adj	‘worn out’

(b) CV reduplication of a CV syllable (25 occurrences)

/baba/	n	‘chin’
/gogo/	n	‘root, used for making shampoo’
/hihi/	v	‘blame’
/pipi/	v	(1) ‘to wash’
/tutu/	v	‘to learn’

(c) CV reduplication of a CVC syllable (35 occurrences)

/bi <sup>h</sup> biy/	n	‘mouth’
/gogot/	n	‘tooth’
/lilih/	v	‘to avoid, go around, detour’
/papag/	n	‘bed’
/tutub/	v	‘to be covered, hidden’

(d) CV reduplication of CVCV (9 occurrences)

Note that since this form already has two syllables before reduplication, it could also represent the CV reduplication of an existing root and thus fall into the category of active rather than fossilized reduplication. The only way to determine which category it belongs to is to find out whether the final CVCV is a root on its own. As far as I've been able to determine, those listed here are all trisyllabic roots containing a reduplicated syllable, rather than disyllabic roots with CV reduplication.

/babara/	v	‘pretend’
/gagano/	v	‘to beat’
/kikili/	n	‘underarm’

(e) CV reduplication of CVCVC (5 occurrences).

The comment of 3.1d applies here and to section f) as well. These could conceivably be disyllabic roots that have undergone CV reduplication. But as far as I've been able to determine, the disyllabic roots that would be needed for these examples don't exist.

/dururoh/	n	‘to chant’
/gagalot/	n	‘a knife with serrated edge used in harvesting rice’
/kokolok/	n	‘dove’

(f) CV reduplication of CVCCVC (1 occurrence)

/lalaŋʔay/	v	‘hearty, flirtatious laugh’
------------	---	-----------------------------

### 3.2 Reduplication with a vowel inserted between the matching syllables (42 occurrences)

Note that when the intervening vowel is *i*, it always matches the vowel of the reduplicated syllable. The converse is close to true, but not quite. There is one example in the data *gihagih* where the vowel of the reduplicated syllable is *i*, but the intervening vowel is something else.

(a) CVC a CVC (15 occurrences)

/batabat/	n	‘fence, blockade’
/gihagih/	v	‘hang onto, or rub shoulders with s.o.’
/kilakil/	v	‘to shake’
/poŋapoŋ/	n	‘fern that is edible’

(b) CVC *i* CVC (11 occurrences; *i* always matches V of reduplicated syllable)

/binibin/	n	‘quicksand’
/dikirik/	adj	‘extreme, profuse’
/tiŋitiŋ/	v	‘to buzz’

(c) CVC *i* CVC (6 occurrences)

/bukibuk/	n	‘shrew, mouse’
/kolikol/	n	‘back of knee’
/pahipah/	v	(ampahipah <i>i</i> ) ‘cause to swing around’
/tsilitsil/	v	‘to roll up’

(d) CVC o CVC (6 occurrences; V of reduplicated syllable usually *o*)

/hobohob/	v	‘to exert effort, force’
/poyopoy/	v	‘to roast peeled sweet potatoes’
/tayotay/	adv	‘little by little’

(e) CVC u CVC (4 occurrences; V of reduplicated syllable usually *a*)

/dagudag/	v	‘piled up’
/gahugah/	n	(kagahugah) ‘friend’
/sogusog/	v	(manogusog) ‘to make a whooshing sound’

### 3.3 Reduplication with infixation of the first of the matching syllables (44 occurrences)

These are fossilized infixes, having become a fixed part of the root in the present day language. It may be that some of these different forms of infix are actually descendants of a single original infix, having undergone different phonological changes as they were passed down to the present-day language.

(a) -al- CVC CVC (29 occurrences)

/balunbun/	v	‘to herd, lead, drive’
/galahgah/	v	‘to shell’
/haliphip/	v	‘to suck from a straw’
/palitpit/	n	‘ditch, canal, furrow’
/salotsot/	n	‘drawstring’

(b) -aw- CVC CVC (3 occurrences)

/hawonhon/	v	‘to wade across’
/hawoyhoy/	v	‘follow a stream to go somewhere’
/tawugtug/	n	‘mountain’

(c) -a- CVC CVC (2 occurrences)

/ʔaibʔib/	v	‘drink, sip with mouth directly from a stream or bucket’
/kaikhih/	v	(kaikhihin) ‘rake up as leaves, scoop from with s.t.’

(d) -ay- CVC CVC (4 occurrences)

/hayokhok/	n	‘flying ant’
/kayimkim/	v	‘to dry, shrivel up’
/payidpid/	v	‘to be pushed by floodwaters or wind’
/tayintin/	adv	(manayintin) ‘throbbing pain of a tooth, stinging pain’

(e) -il- CVC CVCVC (1 occurrence; -il- matching V of reduplicated syllable)

/pilikpikiw/	n	‘edible center of plant’
--------------	---	--------------------------

## (f) -an- CVC CVC (3 occurrences)

/ganakgak/	v	(kaganakgakan) ‘to laugh heartily’
/ganokgok/	v	(maŋganokgok) ‘to growl as stomach’
/panihpih/	n	(namanihpih) ‘clear sky’

## (g) -ag- CVC CVC (2 occurrences)

/hagiḃhiḃ/	adj	(managiḃhiḃ) ‘icy cold’
/ʔagiḃʔiḃ/	adj	(maŋagiḃʔiḃ – variant form) ‘icy cold’

The most commonly occurring infix form is *-al-*, and three of the other forms could possibly be variants of this. For *-aw-*, one of the examples, *tawugtug*, is known to be cognate with *talugtug* in a related language. A possible explanation for their relationship is that *talugtug* was the earlier form, but the pronunciation of the consonant *l* was influenced by the adjacent *u*; assimilating to it and becoming *w*, the consonantal form of *u*. Perhaps a similar history is behind the other two examples *hawoŋhoŋ* and *hawoyhoy*.

For the infix form *-ay-*, three of the four examples, *kayimkim*, *payidpid*, and *tayititit* support a similar possibility of the form *-ay-* having developed from an original *-al-*. In this case the consonant *l* appears to have assimilated to an adjacent *i* or *í*, becoming *y*, the consonantal form of *i*. One example of an *-ay-* infix doesn't fit this explanation, however. Following the same rationale, it would be expected that if the original form for ‘flying ant’ had an *-al-* infix, by assimilation of the *l* to the adjacent vowel, the present-day form would have become *hawokhok* rather than *hayokhok*.

For the fifth form *-il-*, this appears to be a case of vowel harmony, where the pronunciation of the vowel of the infix *-il-* has shifted to match the vowel of the reduplicated syllable. There is only one example here, but similar cases of vowel harmony with this same vowel were seen in section 3.2b, and more will be seen in 3.4e. This doesn't tell me what the original form of the infix was, but *-al-* is the best candidate, since it has the *l* in common with *-il-*.

### 3.4 Reduplication along with both vowel insertion and infixation (19 occurrences)

Just as in section 3.3, the most common form of infix found here is *-al-*.

## (a) -al- CVC a CVC (10 occurrences)

/balokabok/	n	‘mold, mildew’
/halukahuk/	v	(manalukahuk) ‘growing well’
/talagatag/	n	‘joist, floor support beam’

## (b) -al- CVC ḃ CVC (1 occurrence; ḃ again matching V of reduplicated syllable)

/kalitikiḃ/	v. stat	‘to gnash teeth’
-------------	---------	------------------

## (c) -al- CVC i CVC (1 occurrence)

/talanɟanɟ/            v        ‘to dry’

(d) -al- CVC u CVC (1 occurrence)

/balakubak/            n        ‘dandruff’

(e) -il- CVC i CVC (3 occurrences; *-il-* and *i* both matching V of reduplicated syllable)

/bilikibik/            v        ‘enjoy, soothes’

/diligidig/            adj     (maniligidig) ‘continuous rumbling sound of thunder’

/kilitikit/            v        ‘sound & feel of grinding’

Note that all three cases of *-il-* once again are examples of vowel harmony, as was seen in 3.2b and 3.3e

(f) -il- CVC i CVC (2 occurrences; *-il-* and *i* both matching V of reduplicated syllable)

/dilikidik/            v        ‘to make a loud thundering roar, loud sharp thunder’

/ʔsilinjitsinj/        v        (manilinjitsinj) ‘buzzes, buzzing’

Similar to *-il-*, both cases of *-il-* are also examples of vowel harmony.

(g) -ul- CVC o CVC (1 occurrence)

/mulotomot/            v        ‘to murmur’

### 3.5 Reduplication preceded by an additional unspecified syllable (70 occurrences)

There doesn't seem to be any regular pattern predicting what this syllable will be. Looking at the entire collection of data, most of the Ayta consonants and vowels are found to occur at some time or other as part of this undefined syllable. I will refer to this unspecified syllable as ‘xx’ for a CV syllable or as ‘xxx’ for CVC.

(a) xx CVC CVC (32 occurrences)

/bukitkit/            adj     ‘rummages for s.t. to steal’

/hagokgok/            n        ‘abrupt grunt of pig’

/kulahlah/            n        ‘grasshopper’

/modikdik/            v        ‘catch a glimpse of s.o. or s.t. going by’

/ʔsimudmud/        v. stat ‘form of punishment’

(b) xx CV CV (11 occurrences)

/bitata/            v stat ‘cocked as a gun’

/hulili/            v        ‘to visualize’

/koʔsifsi/            v        ‘to get a surface wound’

/monini/            n        ‘child’

/takoko/            n        ‘hat’

## (c) xx CV CVC (21 occurrences)

/baŋoŋot/	v	‘to die in ones sleep’
/gamimil/	adj	‘weak grip’
/hɪlɪlad/	v	‘to pass, walk between’
/ʔsiboboh/	adv	‘directly, straight’
/tugigih/	v	‘avoid, detour’

## (d) xxx CV CV (2 occurrences)

/hɪklili/	v	‘to carry under arm’
/palsoso/	n	(palsosoan) ‘kettle for boiling water’

## (e) xxx CV CVC (3 occurrences)

/kumbibit/	v. stat	‘to hang on to s.t.’
/tamboboŋ/	n	‘game using four players’
/ʔumbabad/	n	‘hammock for a baby’

## (f) xxx CV CVCVC (1 occurrence)

/taŋgiginih/	n	‘little finger’
--------------	---	-----------------

**3.6 Reduplication preceded by two additional syllables (20 occurrences)**

When two additional syllables precede the reduplicated syllable, there's an interesting pattern which I'm not sure how to explain. In 19 cases out of 20, these two syllables take the form CalV(C), where C and V represent any consonant or vowel, the C in parentheses is optional, and where *al*, though not always literally that exact form, is one of a set of forms which in the rest of the reduplication data have been seen to be fossilized infixes. In the conclusion of his discussion of *\*qali/kali-* morphology, Blust (2001:36) notes this same pattern for the form of the Proto-Austronesian *\*qali/kali-* prefixes, saying, ‘In many words the inferred morpheme consists of STOP + a + l + VOWEL (usually i)’. So what we will see in this section is what Blust has identified as fossilized *\*qali/kali-* prefixes. As in section 3.5, I will use ‘x’ to represent the unspecified C’s and V of this CalV(C) pattern, thus representing the overall pattern as ‘xalx’ or ‘xalxx’, depending on whether there is one C or two.

## (a) xalx CVC CVC (9 occurrences)

/ʔalubaybay/	n	‘preserve in salt brine’
/balitiktik/	n	‘rice beginning to head’
/kalibaŋbaŋ/	n	‘tree, having butterfly-shaped leaves with lemon fragrance’
/kalibiybiy/	n	‘ants, large black’
/kalitiptip/	n	‘firefly’
/.alipohpoh/	v. stat	(naŋalipohpoh) ‘billowing’
/.aliwidwid/	v	(maŋaliwidwid) ‘unfocussed, dizzy’
/palahiŋhiŋ/	n	(palahiŋhiŋan) ‘ring finger’

/talibohboh/          adj      ‘overflowing’

Note that two consonants have been left unspecified here, just marked with ‘.’ in the phonetic form. They could be either *k* or glottal stop, but I haven’t yet determined which, because the unaffixed forms don’t occur in the data.

(b) xalx CV CV (2 occurrences)

/dalipapa/          n          ‘sole of foot, palm of hand’

/taligaga/          v          ‘to be anxious’

(c) xalxx CV CVC (1 occurrence)

/halimbabaw/      adj      ‘crested’

(d) xalxx CV CVCVC (1 occurrence)

/kalimbubuyog/    n          ‘bumblebee’

(e) xalxx CVC a CVC (1 occurrence)

/ʔalimbuhuh/      n          ‘a sudden blowing, roaring wind, monsoon, south wind’

(f) xagx CVC CVC (2 occurrences)

/tagipuhpuh/      v          (managipuhpuh) ‘setting of sun’

/tagitiptip/        v          ‘disappear in the distance’

(g) xulx CVC CVC (2 occurrences)

/ʔulanahnah/      n          ‘weak body’

/tuliniɲniɲ/        v          ‘to shine’

(h) xuwx CV CV (1 occurrence)

/kuwahihi/         n          ‘parakeet’

The Ayta *kuwahihi* is cognate with the Tagalog *kulasisi*. Another example of the same sound change in the Ayta language is the word for ‘carabao’, which in the neighboring Kapampangan language is *damulag*<sup>1</sup>. In the Ayta language the original *ul* has become *uw*, and the word is spoken as *damuwag* or *damwag*. Similar to the development of *-aw-* and *-ay-* from *-al-*, a possible explanation for these *-uw-* variants is by assimilation of *l* to an adjacent vowel. This time it’s the preceding vowel *u* which is the target of assimilation. It seems that the order of the phonemes doesn’t matter. What matters is whether there is an adjacent high vowel. If a high vowel is preceding the *l*, it can assimilate to that, and if a high vowel is following the *l*, it can assimilate to that.

---

<sup>1</sup> Note that there is also a change from *s* to *h* in *kuwahihi*. This is a well known characteristic of the Ayta language.



(i) xxxx CVC CVC (1 occurrence)

/tsimoʔikʔik/ v 'to choke because of something getting stuck in ones throat'

This is the one example out of these twenty which doesn't follow the CalV(C) pattern, because *im* is too different from the expected *al*.

Summarizing this section, we've seen 19 examples of fossilized *\*qali/kali-* prefixes. The patterns found in this collection of Ayta data suggest that this *\*qali/kali-* prefix could contain a fossilized infix. But this analysis is not without problems. If *kali-* contains an infix, what is it that was infixed? The 'prefix' that would be left if the infix is removed doesn't seem to have any regularity to its form.

### 3.7 Other duplication patterns

In this section are a few residual patterns which, though not reduplicating a complete syllable, do reduplicate enough of the syllable to create rather melodic sounding words.

(a) CVC CVC (with initial C alternating)

/tikbik/ n (patikbik) 'calm, peaceful'  
 /tangan/ adv 'pronounce incorrectly'  
 /lungun/ v stat (naglungunan) 'to be weak'  
 /nanuninigtsin/ adj 'quiet, night time'

(b) ...CVC x CVC (with initial C alternating)

/.olokodok/ adj (mamolokodok) 'rumbling noise of full stomach'  
 /bulonjudyon/ n 'flute'  
 /kilikitsik/ adj 'sizzling'

(c) CVC xx CVC (with initial C alternating)

/dunjalun/ v. stat 'clinking noise of s.t.'  
 /tagalbag/ adj 'tasteless'

(d) ...CVC CVC (with final C alternating)

/koyukyun/ n 'dragonfly'

(e) CVC x CVC (with final C alternating)

/bigabil/ v stat 'bulge'  
 /tolatod/ n 'shin of leg'

(f) CVC CVC (with V alternating)

/gongan/ v 'begin to spoil'

**References:**

- Blust, Robert A. 2001. Historical morphology and the spirit world: the \*qali/kali- prefixes in Austronesian languages. In “Issues in Austronesian Morphology: A focusschrift for Byron W. Bendor”, ed. By Joel Bradshaw and Kenneth Rehg, 15-73. *Pacific Linguistics* 519. Canberra: Pacific Linguistics
- Blust, Robert A. 2002. The History of Faunal Terms in Austronesian Languages. *Oceanic Linguistics* 41 (1):89-139.

The preceding document was presented at the Tenth International Conference on Austronesian Linguistics (10-ICAL). To properly reference this work, please use the following format:

<LastName>, <FirstName>. 2006. <PaperTitle>. Paper presented at Tenth International Conference on Austronesian Linguistics. 17-20 January 2006. Puerto Princesa City, Palawan, Philippines.  
<http://www.sil.org/asia/philippines/ical/papers.html>

For other papers that were presented at 10-ICAL, please visit <http://www.sil.org/asia/philippines/ical/papers.html>.