Introduction to the Bunun language

Languages of Taiwan
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1 Overview

This presentation is an overview of the Bunun language, in particular its grammar. I will concentrate mainly on two dialects: Takivatan and Isbukun.

- **2. Background**: General information about Bunun language; its speakers, dialects, geographical location; a short grammar outline; previous research

- **3. Phonology**: The sound system of Bunun; the phoneme inventory of Takivatan and Isbukun Bunun; an overview of some systematic differences between dialects; some information on vowel combinations; syllables; word stress; interactions between morphology and phonology; some audio samples of Takivatan and Isbukun

- **4. Morphology**: Words and morphemes; word classes; some important affix types: verbal affixes and definiteness markers; different types of verbs; different types of pronouns

- **5. Intermezzo**: Some information about Bunun culture

- **6. Syntax**: Clause structure; topicalisation; complement clauses; auxiliary verb constructions; adjuncts of place, time and manner; clause combining

- **7. What we do not know about Bunun**

2 Background

2.1 *Bunun and its speakers*

With around 50,156 ethnic members, the Bunun are the fourth-largest of the Taiwanese indigenous tribes.

Tribe	Population	Tribe	Population
Amis	178,067	Sediq	(10,000)
Paiwan	85,718	Tsou	6,585
Atayal	71,452	Saisiyat	5,698
Bunun	**50,156**	Yami	3,513
Truku	24,578	Kavalan	1,172
Rukai	11,684	Thao	647
Puyuma	11,367	Sakizaya	343
		TOTAL	**494,318**

Table 1: Taiwanese aboriginal groups ordered according to population size CIP 2009

Before the Japanese took control of Taiwan, the Bunun were living high up in the mountains in the northern and central part of the Central Mountain Range. They often lived in relatively small, semi-permanent settlements and travelled extensively through the interior. It is believed that originally the Bunun tribe was all settled in the Xinyi District of the County Nantou (南投縣信義鄉). From there, the various Bunun clans gradually expanded their territory south- and eastwards from the end of the 17th century onward.

Bunun had a reputation as skilful hunters. They were generally hostile towards intruders from the outside and used to be headhunters, but this habit died out with the coming of Christianity from the end of the 19th century onward. Their traditional lifestyle all changed when Taiwan was ceded to Japan at the end of the First Sino-Japanese War in 1895.

The Japanese saw the 'high mountain tribes' (mainly the Atayal and Bunun) as a liability and started a long and often difficult pacification campaign (between 1909 and 1911 there were at least 11 punitive expeditions; Anonymous 1911). The eventual goals was to control the use of weapons and force the aboriginal tribes to move down from the mountains and concentrate them into central villages with a school and – importantly – a police post. The Japanese introduced basic health care and wet rice agriculture, whereas traditional Bunun agriculture had traditionally centred around millet.

During the second part of the 20th century, an increasing number of aborigines in Taiwan have moved to the cities, and this is also the case for the Bunun. Nevertheless, a considerable part of the Bunun population still feels connected to the mountains.

In recent decades, many aborigines in Taiwan have moved to the cities. Nevertheless, a considerable segment of the modern Bunun population somehow feels connected to the mountains and prefers to live in villages near or in the mountains in central and east Taiwan, as can be seen in Map 1.

2.2 Bunun and its dialects

The Bunun language is in all likelihood either one of the primary sub-branches of the Austronesian language family or an immediate daughter of a primary sub-branch. It is traditionally subdivided into five dialects. Traditionally, these dialects are grouped into a northern, a central, and a southern dialect branch (e.g. Ogawa & Asai 1935) and this classification appears to be correct from a historical and a linguistic perspective.
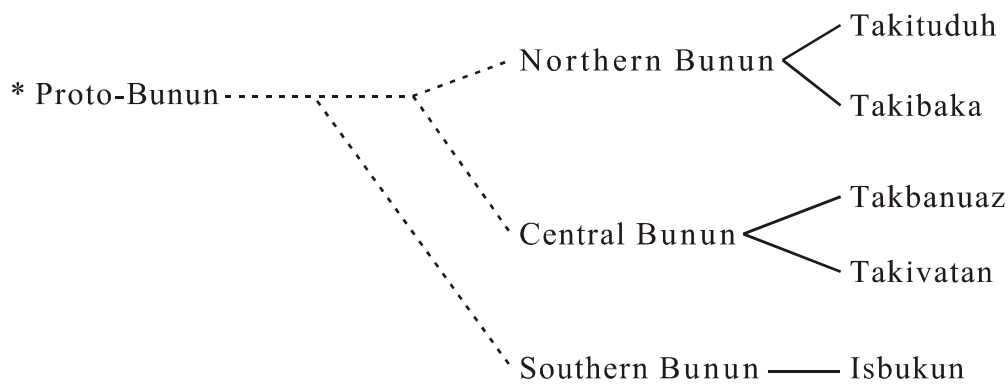
Illustration 1: Bunun dialect tree

Isbukun is the largest Bunun dialect by far, followed by Takbanuaz and Takivatan. Both Northern dialects are almost extinct. We do not have any exact data about the actual number of speakers of each dialect, but I estimated in De Busser 2009 that Takivatan has certainly less than 1700 speakers. The differences between dialects are sometimes quite large, especially between branches. Most speakers are able to understand the Isbukun dialect to some extent, mainly because the Bunun Bible translation is heavily based on that dialect.

The term *Bunun* actually just means 'human' (this is the case for many terms referring to peoples and languages). The names of the dialects correspond to corresponds to the five Bunun clans that, according to Bunun oral tradition, all find their origin in the *ʔasaŋ Ðaiŋʔað* 'the Large Village', the original settlement of the Bunun that probably was situated somewhere in Nantou. The element *tak-* or *taki-* means 'originate from', and it is used in many family names and names of minor clans. The names of four of the Bunun dialects thus mean:

- **Taki-Vatan**: originating from Vatan. Vatan is both the name of a former settlement in Nantou and of a person. Here, it probably refers to the settlement (compare with Isbukun below.)

- **Tak-Banuað**: originating from Banuað. Banuað was a settlement in Nantou.

- **Taki-Tuduh**: originating from Tuduh. No idea where or who Tuduh is.

- **Taki-Bakha**: originating from Bakha. Again, I do not know where Bakha would be.

Isbukun, which is also called *Bubukun* (/ɓɔbukun/) by the Isbukun themselves, follows a slightly different pattern. The prefix *is-* means 'belong to' and, unlike *taki-*, can be used to refer to people and not only places.[1] Bukun was probably a leader that lead the majority of the Isbukun from Nantou towards the South. The *bu-* in Bubukun is just CV-reduplication: it repeats the first two phonemes of *Bukun*. *Bubukun* probably means something like 'the Bukuns' or 'the people of Bukun'.

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1   Note that you can also refer to the Takivatan as *Isvatan*.

2.3 Geography

Map 1 gives an overview of where the Bunun people live. The black area on the map indicates the Bunun heartland and stretches from the township Ren-ai (仁愛鄉) in the county Nantou (南投縣) in the north to Yan-ping (延平鄉) in the county Taitung（台東縣）in the South. All of these areas are in the mountains or at mountain sides and were until recently relatively inaccessible. Even today, Bunun villages tend to be in the mountains or very close to the mountains.
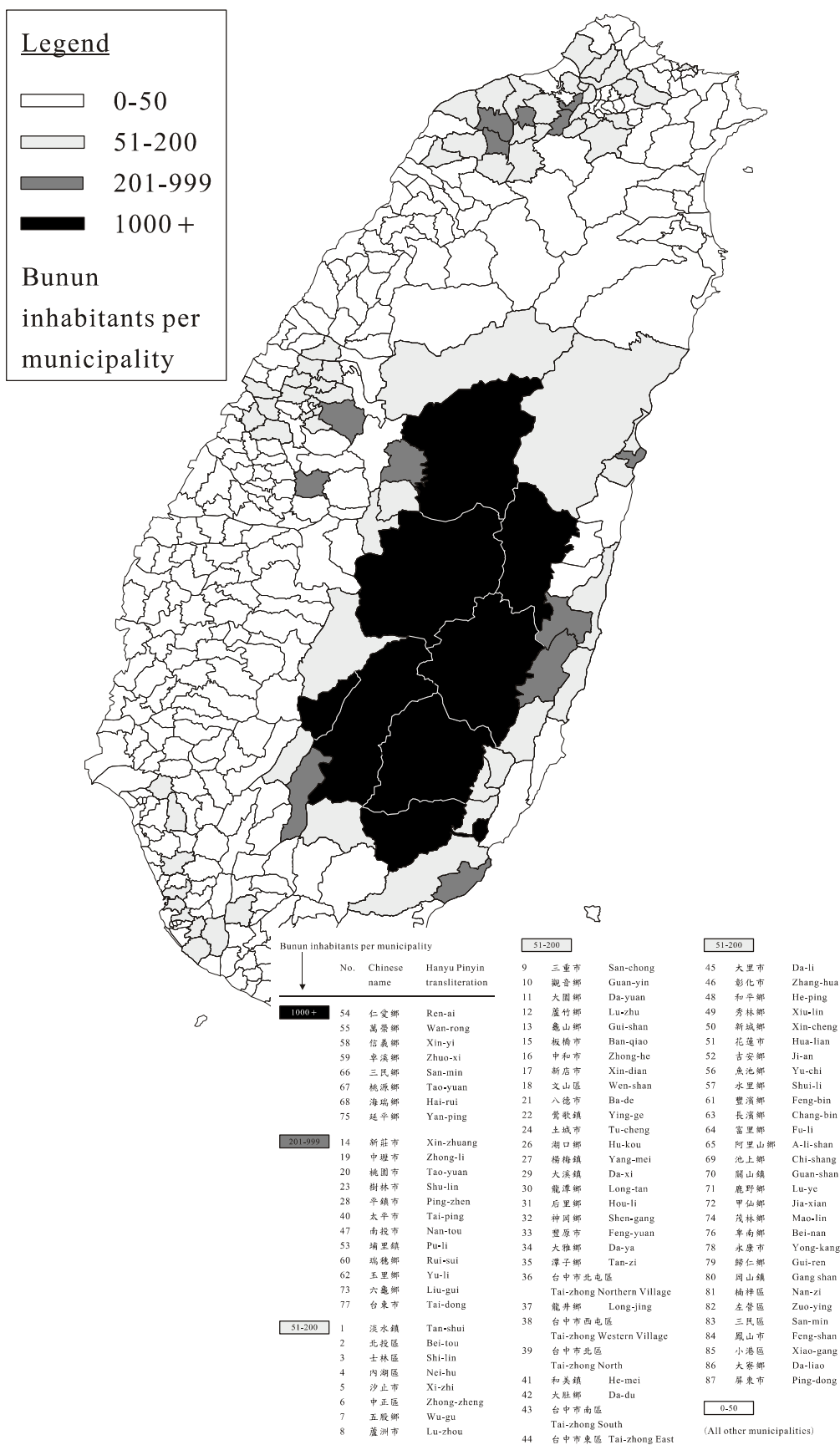

Illustration 2: Picture of Mayuan, a Bunun village in Hualien (馬遠村)

There are geographical differences between the different dialects:

- Isbukun is spoken in the counties Nantou, Kaohsiung and Taitung.

- Takbanuaz is spoken in Nantou and in southern Hualien.

- Takivatan is spoken in Nantou and central Hualien.

- Takituduh and Takibakha are both spoken in Nantou.

Legend

☐	0-50
☐	51-200
☐	201-999
■	1000+

Bunun inhabitants per municipality

Bunun inhabitants per municipality

	No.	Chinese name	Hanyu Pinyin transliteration
1000+	54	仁愛鄉	Ren-ai
	55	萬榮鄉	Wan-rong
	58	信義鄉	Xin-yi
	59	卓溪鄉	Zhuo-xi
	66	三民鄉	San-min
	67	桃源鄉	Tao-yuan
	68	海瑞鄉	Hai-rui
	75	延平鄉	Yan-ping
201-999	14	新莊市	Xin-zhuang
	19	中壢市	Zhong-li
	20	桃園市	Tao-yuan
	23	樹林市	Shu-lin
	28	平鎮市	Ping-zhen
	40	太平市	Tai-ping
	47	南投市	Nan-tou
	53	埔里鎮	Pu-li
	60	瑞穗鄉	Rui-sui
	62	玉里鄉	Yu-li
	73	六龜鄉	Liu-gui
	77	台東市	Tai-dong
51-200	1	淡水鎮	Tan-shui
	2	北投區	Bei-tou
	3	士林區	Shi-lin
	4	內湖區	Nei-hu
	5	汐止市	Xi-zhi
	6	中正區	Zhong-zheng
	7	五股鄉	Wu-gu
	8	蘆洲市	Lu-zhou

51-200			
9	三重市	San-chong
10	觀音鄉	Guan-yin
11	大園鄉	Da-yuan
12	蘆竹鄉	Lu-zhu
13	龜山鄉	Gui-shan
15	板橋市	Ban-qiao
16	中和市	Zhong-he
17	新店市	Xin-dian
18	文山區	Wen-shan
21	八德市	Ba-de
22	鶯歌鎮	Ying-ge
24	土城市	Tu-cheng
26	湖口鄉	Hu-kou
27	楊梅鎮	Yang-mei
29	大溪鎮	Da-xi
30	龍潭鄉	Long-tan
31	后里鄉	Hou-li
32	神岡鄉	Shen-gang
33	豐原市	Feng-yuan
34	大雅鄉	Da-ya
35	潭子鄉	Tan-zi
36	台中市北屯區 Tai-zhong Northern Village
37	龍井鄉	Long-jing
38	台中市西屯區 Tai-zhong Western Village
39	台中市北區 Tai-zhong North
41	和美鎮	He-mei
42	大肚鄉	Da-du
43	台中市南區 Tai-zhong South
44	台中市東區 Tai-zhong East

51-200			
45	大里市	Da-li
46	彰化市	Zhang-hua
48	和平鄉	He-ping
49	秀林鄉	Xiu-lin
50	新城鄉	Xin-cheng
51	花蓮市	Hua-lian
52	吉安鄉	Ji-an
56	魚池鄉	Yu-chi
57	水里鄉	Shui-li
61	豐濱鄉	Feng-bin
63	長濱鄉	Chang-bin
64	富里鄉	Fu-li
65	阿里山鄉	A-li-shan
69	池上鄉	Chi-shang
70	關山鎮	Guan-shan
71	鹿野鄉	Lu-ye
72	甲仙鄉	Jia-xian
74	茂林鄉	Mao-lin
76	卑南鄉	Bei-nan
78	永康市	Yong-kang
79	歸仁鄉	Gui-ren
80	岡山鎮	Gang-shan
81	楠梓區	Nan-zi
82	左營區	Zuo-ying
83	三民區	San-min
84	鳳山市	Feng-shan
85	小港區	Xiao-gang
86	大寮鄉	Da-liao
87	屏東市	Ping-dong

0-50		
(All other municipalities)		

Map 1: Distribution of Bunun across Taiwan

2.4 Grammar outline

- Bunun dialects tend to have four vowels (/i e u a/) and around 17 consonants.

- Bunun dialects are agglutinative. There are about 200 different affixes, most of which occur on verbs.

- There are two main word classes, nouns and verbs. Most other word classes have a combination of noun-like and verb-like properties.

- Bunun dialects are all verb-initial and have a special voice system for determining which argument is the most important in a clause. This system is usually called a focus system or a Philippine-style voice system.

- There are no adverbs. Many adverbial concepts are expressed by auxiliary verbs. Time, place and manner are expressed by words that sometimes behave like verbs and sometimes like nouns.

2.5 Previous research

There is a fair amount of literature on Bunun dialects He et al. 1986; Jeng 1977; Lin et al. 2001; Zeitoun 2000 and in recent years, MA students in Taiwan wrote a number of dissertations on various Bunun dialects. Below are some publications that I think are noteworthy.

- It is probably fair to say that the first substantial linguistic description of the Bunun language is in Ogawa & Asai 1935. The book is a monumental description of the nine languages that were recognised by Japanese anthropologists. The Bunun section contains an introduction into the language and text samples for the five dialects.

- French Catholic missionaries, mainly from the *Missions étrangères de Paris*, have been active throughout Taiwan for quite some time. They produced some useful dictionaries, but none of them appeared in print: Flahutez 1970, Duris 1987.

- Jeng 1977 was the first to dedicate an entire book to a theoretical linguistic analysis of an aspect of Bunun grammar. He based his study on the Takbanuað dialect.

- He et al. 1986 is a sketch grammar of the Isbukun dialect spoken in Sanmin (三民鄉) in Kaohsiung.

- Li 1988 was the first (and as far as I know the only one) to publish a comparative study of all Bunun dialects.

- Zeng 2006 is book describing a large number of affixes in Isbukun Bunun.

- Huang 2004a, Huang 2004b, Huang 2005a, Huang 2005b, Huang 2006, Huang 2008 are a string of phonological studies of various Bunun dialects.

- Zeitoun 2000 is a sketch grammar of Isbukun Bunun.

- For my PhD, I made a study of Takivatan morphosyntax De Busser 2009.

Most of the data in this talk is from two works:

1. De Busser 2009: an overview of Takivatan Bunun grammar spoken in Mayuan village in Hualien.

2. Zeitoun 2000: a description of Isbukun Bunun in Dongpu village in Nantou.

I will use the Takivatan Bunun data as a basis and, wherever possible, compare it to Isbukun. Much of the dialect comparison is based on Li 1988 and on my own data.

3   Phonology

3.1   Phoneme inventories

Bunun dialects tend to have four vowels (/i e u a/) and around 17 consonants.

Articulation			Takivatan Phoneme	Takivatan % in text	Isbukun Phoneme
Front	Close	Unrounded	/i/	23.89	/i/
Front	Open	Unrounded	/a/	52.95	/a/
Front	Mid	Unrounded	/e/	0	
Back	Close	Rounded	/u/	23.16	/u/

Table 2: Takivatan and Isbukun vowel inventory

	Bilabial	Labiodental	Dental	Alveolar	Velar	Uvular	Glottal
Plosive	p			t	k **(g)**	q	ʔ
Implosive	ɓ			ɗ			
Nasal	m			n	ŋ		
Fricative		v	ð	s		χ	**h**
Affricate				(dʒ)			
Lateral				l			

Table 3: Takivatan and Isbukun consonant inventory (bold = only Takivatan; italics = only Isbukun)

(Note: the phoneme /dʒ/ is not mentioned in Zeitoun 2000, but it is very common in some Isbukun varieties, e.g. in Taidong.)

Writing conventions:
- /ɓ/ = b
- /ɗ/ = d

In other texts, but not in this talk:
- /ð/ = z

- /dʒ/ = j
- /ŋ/ = ng
- /ʔ/ = '

3.2 Some differences between dialects[2]

1. Isbukun often has a uvular fricative /χ/ or zero in final and post-consonantal position and a glottal fricative /h/ in initial and intervocalic positions where Takivatan and Takbanuað have the uvular stop /q/.

Isbukun	**Takbanuað**	**Takivatan**	**Takituduh**	**Takibakha**	
bitvaχ	bitvaq	bitvaq	bitvaq	bitvaq	'thunder'
dihanin	diqanin	diqanin	diqanin	diqanin	'sky, heaven'
haisiŋ	qaisiŋ	qaisiŋ	?	?	'rice, food'

2. Intervocalic glottal stops that are obligatory or optional in other dialects are often not present in Isbukun.

Isbukun	**Takbanuað**	**Takivatan**	**Takituduh**	**Takibakha**	
mapais	mapaʔis	mapaʔis	mapaʔis	mapaʔis	'bitter'
su	suʔu / su	suʔu / su	suʔu	suʔu	'you'

3. On the other hand, Isbukun sometimes has a glottal stop where other dialects tend to have a glottal fricative /h/.

Isbukun	**Takbanuað**	**Takivatan**	**Takituduh**	**Takibakha**	
luʔum	luhum	luhum	luhum	luhum	'cloud'
ʔuknav	huknav	kuknav	huknav	huknav	'leopard'

4. Taidong Isbukun often has /dʒ/ were Takbanuað and Takivatan have /t/.

Isbukun	**Takbanuað**	**Takivatan**	
dʒina	tina	tina	'mother'
adʒikis	atikis	atikis	'small'

There is little data on Takituduh and Takibakha (the two Northern dialects).

3.3 Vowel combinations: diphthongs or not?

Bunun dialects have a number of vowel combinations. Illustration 3 gives an overview of the ones that occur in Takivatan.

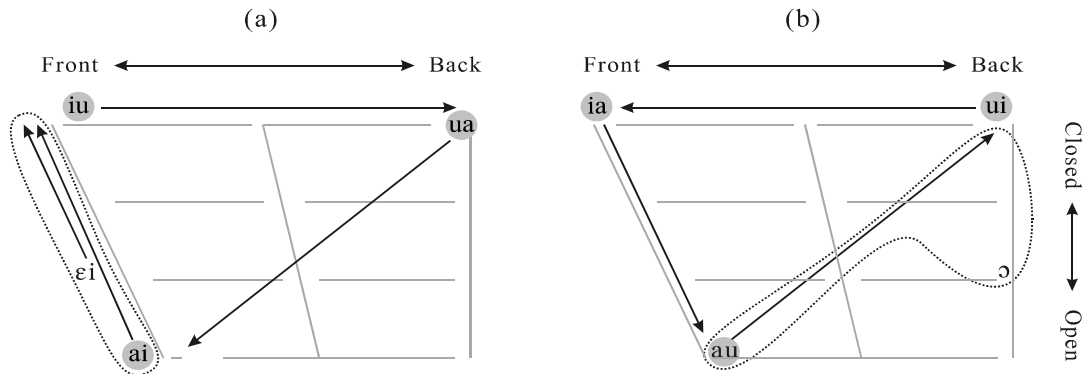2 The data in this section are from my own research and from PJ-K Li 1988

Illustration 3: Vowel combinations in Takivatan Bunun

The problem is that they can occur both syllable-internally and at morpheme boundaries. Some examples:

Inside a word	**At morpheme boundaries**
haiða 'have'	*kitŋa-in* 'begin-PRV' → 'have started'
dauk 'slow'	*tupa-un* 'say-UF' → 'say (something)'
kuis 'slender'	*maqtu-in* 'be possible-PRV' → 'have been possible'

Another problem is that very often you can insert a glottal stop (/ʔ/) between the two vowels, no matter whether they are at the boundary of a syllable or inside a word, as in the examples below:

buan 'moon'	[ɓwan] or [ɓuʔan]
kuis 'slender'	[kwis] or [kuʔis]

This means it is not clear what these vowel combinations are. Are they diphthongs (e.g. /ua/), glides (e.g. /wa/), or something else (e.g. /u/ + /a/).

Some publications on this topic: Huang 2005a, Huang 2006, Huang 2008; De Busser 2009

3.4 Syllables

The syllable structure in Bunun is:

(C)V(V)(C)   (C are consonants; V are vowels)

This means the smallest syllable you can get consists of only a vowel, and the largest syllable of a consonant followed by two vowels, followed by a consonant. Examples:

V	*u* 'yes'	CV	*ni* 'not'
VV	*ai* 'interjection'	CVV	*bai* 'grandmother'
VC	*is-* 'instrumental orientation'	CVC	*ŋan* 'name'[3]
VVC	*aip* 'singular demonstrative'	CVVC	*ŋaus* 'first(ly)'

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3   Actually, CVC words almost always have long vowels, so you could say they are actually CVVC. For instance *ŋan* is actually /ŋaan/

3.5 Word stress

Most words in Bunun have penultimate stress on the word root. This means that stress falls on the second-to-last syllable of the form that remains when you take away all the affixes.

qaisiŋ 'rice'	[ˈqai.sɪŋ]	
baluku 'bowl'	[ba.ˈlu.ku]	
haðun-in 'as one pleases'	[ˈha.ðu.nin]	(stress is not changed by the suffix *-in*)

Some affixes do change the stress, such as the undergoer focus suffix *-un* and the locative focus suffix *-an*.

liskin 'think'	[ˈlɪʃ.kɪn]	(penultimate)
but:		
in-liskin-an 'VIA-think-LF' → 'thoughts'	[ɪn.lɪʃ.ˈki:.nan]	(last root syllable)

3.6 Morpho-phonology

Morpho-phonology deals with the interactions between the morphology of a language and its sound system. In Bunun, these interactions are quite straightforward. Below are the most important rules for Takivatan:

- **Vowel contraction**: two identical vowels combine and are collapsed into one

asa 'want, must' + -aŋ 'PROG'	→	*asaŋ* [ˈasăŋ]
haiða 'have' + -aŋ 'PROG'	→	*haiðaŋ* [ˈhaiðăŋ]

- **Vowel deletion**: two vowels combine and one is deleted

haiða 'have; exist' + -in 'PRV'	→	*haiðin* [ˈhaiðĭn]
muqna 'be next' + -in 'PRV'	→	*muqnin* [ˈmuqnĭn] / [muqnain]
ma- 'DYN' + alʔu 'rest'	→	*malʔu* 'to rest'
ma- 'DYN' + iqumis 'life'	→	*miqumis* 'to live'

- **Metathesis**: two two vowels exchange places. In Takivatan this is always /ia/ → /ai/
  This happens only with a very smally number of words when they are followed by particular suffixes.

qansiap 'understand'	→	*qansaip-un* 'understand-UF'
		qansaip-an 'understand-LF'

3.7 Some examples of Takivatan and Isbukun

Below are some audio samples to give you an impression of how Bunun actually sounds and of the phonological differences between the dialects. First, an example of Isbukun speech

Compare this with Takivatan Bunun.

Interestingly, the Bunun Bible Bible Society 2000 is heavily based on the Isbukun dialect, but it is used by members of all dialect groups. Below is a example of a Takivatan person reading from the Bunun Bible.

4   Morphology

(The data in this section is mainly based on De Busser 2009.)

4.1   Morphemes and words

As I mentioned before, Bunun is an agglutinative language, which basically means that words in Takivatan Bunun consist of at least one root and possibly one or more bound morphemes and that these morphemes are all distinctly recognisable. In the example below, you can see that all the morphemes that make up the word can be detected in the word itself:

> *naispinqansiapin* 'will have made somebody understand something'

na-	*is-*	*pin-*	*qan-siap*	*-in*
IRR-	TRANSFER-	CAUS.INCH-	understand	-PRV

A word in Takivatan is composed of:

- A **root** (in the example above: *siap*): the part of the word that carries the lexical meaning; the root is obligatory.

- Zero or more **prefixes** (example: *na-*, *is-*, *pin-* and *qan-*)

- Zero or more **suffixes** (example: *-in*)

- Zero or more **infixes** (none in the example above): an infix is an affixes occuring side the root of a word. An example:

  1. *tinasʔi kaku*
     t-in-asʔi   kaku
     PST-build   school
     'build a school

- **Reduplication** (none in the example above): a repetition of a part of the word. An example:

  2. ma-sihal →   ma-si-sihal
     STAT-good   STAT-RED-sihal
     'good'   'very good'

In Bunun, there are three major types of reduplication. Most can have a number of functions, depending on what words they combine with:

1. **stem-reduplication**: The entire word stem (the root or the root plus a number of affixes) is repeated. Stem-reduplication can express:

   - *Continuative* (on verbs): 'continuously', 'all the time'

saipuk 'help' → **_saipuk_**-*saipuk* 'help continuously'

- **_Distributive_** (on verbs): 'everybody'

  ʔaða 'equally' → **_ʔaða_**-*ʔaða* 'all equally, everybody equally'

- **_Generic_** (on question words and verbs)

  maq 'which one? what?' → **_maq_**-*maq* 'whichever'

  madas 'take somebody somewhere' → **_madas_**-*madas* 'take somebody wherever you go'

2. **CV-reduplication**: One consonant and vowel, usually those at the beginning of the root, are repeated. CV-reduplication is used to convey:

   - **_Intensifying_** (on verbs): 'very'

     ma-tamasað 'powerful' → *ma-**ta**-tamasað* 'very powerful'

   - **_Habitual_** (on verbs): 'by habit'

     maun 'eat' → **_ma_**-*maun* 'usually eat, always eat'

   - **_Repetitive / continuative_** (on verbs): 'repeatedly', 'continuously'

     baðbað 'talk, have a conversation' → **_ba_**-*baðbað* 'keep talking, have a long conversation'

   - **_Plural_** (on nouns):

     bananʔað 'man' → *ba-**na**-nanʔað* 'the men'

   - **_Recursive_** (on nouns):

     uvaðʔað 'child' → *u-**va**-vaðʔað* 'my children and children's children and children's children's children and...'

3. **Ca-reduplication**: The first consonant of the root is repeated and followed by an /a/. Ca-reduplication expresses:

   - **_Human_** (on numerals and some other words)

     dusa 'two' → **_da_**-*dusa* 'two people'

     piaq 'how many' → **_pa-piaq_** 'how many people'

4.2 Word classes

The two major word classes in Bunun are nouns and verbs (see Table 4). Most other word classes (with the exception of interjections) can be defined in terms of how noun-like or verb-like they are. Some interesting facts:

- There are no adverbs in Bunun. Most adverbial concepts are expressed by auxiliary verbs

3. *Kavavaʔa musbai*
    kavavaʔa   *mu-isbai*
    immediately   TOWARD-cause.to.move
    'Quickly run away'

4. *nakitŋa kuðakuða*
   na-**kitŋa**   kuðakuða
   IRR-start   work

   'we will begin to work.'

- Adjectives are a subclass of stative verbs. There is no separate class of adjectives.

- Many words in Bunun can be used both as nouns and verbs. In the example below, both the personal pronoun *nak* 'I' and the noun *uvaðʔað* can be analysed as verbs.

5. *Manaka uvaðʔaðaŋa ...*
   ma-nak=a   uvaðʔað-aŋ=a
   DYN-1S.N=SUBORD child-PROG=SUBORD
   ' But I, because I was still a child,
   [I had cut off a part of the leg of the pig called "masbinauku"].'

Nouns behave fairly straightforwardly and they do not take a lot of affixes normally, so we will skip them in this discussion.

		Noun	**Verb**
1	Can be head of a predicate	+	+++
2	Can be modifier in a predicate	—	+++
3	Can have arguments	(+)	+++
4	Can occur in serial verb constructions	—	++
5	Can be head of an argument	+++	—
6	Can be modifier in an argument	+	+
7	Can have focus affixes	++	+++
8	Can have aspectual affixes	+	+++
9	Can have bound pronouns	—	+++
10	Can have -ti/-tun/-ta	+++	++
11	Can have -ki/-kun/-ka	++	+++
13	Can have verbal prefixes	(+)	+++
16	Can be stem-reduplicated	—	+
17	Typical function of stem-reduplication		lexical aspect, generic
18	Can be CV-reduplicated	++	++
19	Typical function of CV-reduplication	PL, REC, HABIT	lexical aspect (HABIT, DUR, ITER, COMPL, DISTR), GNR
22	Refers to an event	+	+++
24	Refers to a referent	+++	+

+++ : typically; ++ : often; + : rarely; — : never; (+) : only specific members

Table 4: Criteria for the distinction between nouns and verbs in Takivatan (De Busser 2009:186)

4.3 Verbs

Most verbs in Bunun belong to a small number of major verb classes:

1. **Dynamic verbs** typically express a dynamic event, that is, they represent a situation that evolves or changes. These events can have an agent and a patient (e.g. *sb eats sth*), or only an agent (e.g. *sb falls over*).

    Agent and patient:

    6. *ma-tasʔi amu lumaq*
       DYN-build 1P   house
       'We build a house.'

    Only agent:

    7. *ma-qaisa   amu*
       DYN-spread.out   1P
       We spread out (e.g. over an area of land)

    If they do not have any focus suffixes *-un* or *-an* (see), dynamic verbs typically either have a prefix *ma-* or no prefix at all. They normally have a causative prefix *pa-*:

    8. *ma-tasʔi*   'build sth'   ↔   *pa-tasʔi*   'make sb build something'
       DYN-build   CAUS.DYN-build

2. **Stative verbs** express a state, that is, a situation that is relatively stable. Bunun adjectives are the largest subclass of stative verbs.

    9. *ma-naskal*   'beautiful'
       STAT-beautiful

    If they do not have any focus suffixes, adjectives normally take a prefix *ma-* (which derives from a different historical source than the dynamic *ma-* above!). Its causative prefix is *pi-* (not *pa-*).

    10. *pi-sihal*   'cause something to be good'
        CAUS.STAT-good

3. **Locative/directional** verbs express a movement or a stationary position.

    11. *mun-han*   'go to'
        TOWARD-be.at/go.to

    12. *maisna-ʔisaq*   'come from which place'
        FROM-where

4. **Auxiliaries** are verbs that do not necessarily express an event by themselves. In Bunun, they typically express adverbial concepts, which in other languages are often expressed with adverbs (things like absolute and relative time, manner, negations, etc.). Auxiliaries can be used by themselves in a clause, but they more often support another verb with a lexical meaning.

13. ***asa*** *pis-baqais-un*
    have.to RETURN-hot-UF
    'You have to reheat it.'

14. *huat* *mu-ðaða* *lukis* (*huat-in* *huat-un* ...)
    apparently TOWARD-above tree apparently-PRV apparently-UF
    Apparently, something went up into the trees.' (Actually, it were monkeys.)

Auxiliary verbs have normally no affix that indicates what type of verb they are

either take no affix that indicates which type of verb they are, or they take a prefix that reflects the meaning of the main verb of the clause. For example, if the main verb is a dynamic verb, the auxiliary might get a prefix *ma-*.

15. ***kinuð-un*** *qaimaŋsuð-tun* *uman-**un***
    finally-UF thing-DEF.REF.MED take.away**-UF**
    Finally, the thing was taken away.

4.4 Verbal affixes

Bunun dialects have more than 200 verbal affixes (prefixes, infixes and suffixes). It is impossible to discuss all of them, but I will give a short overview of the most important ones.

1. **Focus (or voice) suffixes** indicate whether the agent, the undergoer, or the location is the most important participant (the topic or the subject, depending to who you speak) of the clause.

   • no suffix: the agent is the most important participant (this is often called agent focus)

     16. *tasʔi* 'make/build' (the person doing the building is important)

   • *-un*: the undergoer, usually the patient, is the most important participant (this is called undergoer or patient focus)

     17. *tasʔi-un* 'make/build' (the thing being built is important)

   • *-an*: the location is the most important participant (this is called locative focus)

     18. *tasʔi-an* 'make/build something so that it stays in a fixed spot'

2. **Participant orientation prefixes** indicate which undergoer is the most important participant.

   • *is-* indicates that this is the instrument

     19. *is-tasʔi* 'use a tool to make something'
         INSTR-make

   • *sin-* indicates that it is a resultative object (an object that is created as the result of the action)

20. *sin-saiv*   'have given something to somebody'
RES.OBJ-give

21. *sin-tupa*   'communicate something (successfully)'
RES.OBJ-say

3. **Event type prefixes** indicating what type a verb belongs to and how it should be interpreted.

   - *ma-₁* indicates that a verb is dynamic

      22. *ma-tasʔi*   'make or build something'
      DYN-build

   - *pa-* indicates that a verb is dynamic and causative

      23. *pa-tasʔi-un*   'have something build'
      CAUS.DYN-build-UF

   - *ma-₂* (confusing, isn't it) indicates that a verb is stative

      24. *ma-sihal*   'good'
      STAT-good

   - *pi-* indicates a stative verb that is causative

      25. *pi-sihal*   'cause something to be good, make something good'
      CAUS.STAT-good

   - *min-* indicates inchoative verbs

      26. *min-qansiap*   'begin to understand, gain understanding'
      INCH-understand

   - *pin-* indicates an inchoative verb that is causative

      27. *pin-qansiap*   'make somebody understand'
      CAUS.INCH-understand

   - and so on, and so on, and so on...

4. **Tense-aspect-modality affixes**:

   - *na-* marks irrealis, that is, something in the future or something that should be done

      28. *na-siða*   *qaimaŋsuð*
      IRR-take   thing
      'I/you… will pick up some things.'

   - *-in* marks perfective

      29. *tum-vasu-in*
      RIDE-train-PRV
      'We had gone there by train / We had arrived there by train.'

- *-in-* marks resultative and past

> 30. *tinasʔi*
> *-in-tasʔi*
> PST-make
> 'have built'

- *-aŋ* marks progressive

> 31. *haiðaŋ*
> *haiða-aŋ*
> have-PROG
> 'still have'

More detailed studies of verbal affixes in Bunun are Zeng 2006 for the Isbukun dialect and De Busser 2009 for Takivatan.

5 Intermezzo

5.1 Structure of traditional Bunun society

Interestingly, traditional Bunun society did not have fixed social stratification or a centralised leadership. Instead, important decisions were made by consensus, after consultation with a select group of elders. When war or hunt created the need for a leader, the person who was most experienced typically was appointed as the leader. His status depended on his success as a warrior or hunter and was usually derived from the number of human or animal skulls he had acquired in previous expeditions (Huang 1995 refers to this as the great man model).

This is very similar to how Siraya society has been described by 17th century Dutch sources.

5.2 Hunting and headhunting

Although there was a fair amount of agriculture (millet, yams, etc.), Bunun culture is strongly centred around the hunt and even today Bunun pride themselves of being skilful hunters.
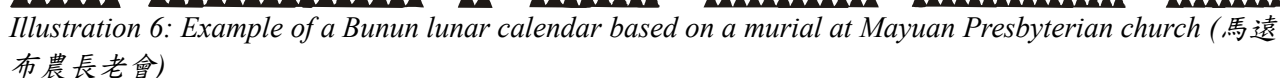

Illustration 5: Bunun hunter in traditional dress with gun

Illustration 4: Performance of earshooting festival

Traditionally, the Bunun also used to be headhunters, but this tradition seems to have died out after the coming of the Japanese and the conversion of the majority of Bunun society to Christianity.

The status of a man in traditional Bunun society depended on how skillful he was in hunting and headhunting. Houses used to have bone altars that displayed the skulls or certain bones of killed animals or vanquished enemies. These also had a spiritual meaning.

5.3 The Bunun lunar calendar

A unique aspect of Bunun culture is that it developed (apparently independent of other writing systems) a symbolic notation which was carved on wood to keep track of important events and periods throughout the lunar calendar. An example is given below.

Illustration 6: Example of a Bunun lunar calendar based on a murial at Mayuan Presbyterian church (馬遠布農長老會)

Each triangle represents one day, the triangular arches refer to times of the month when hunting is allowed, and geometrical figures on sticks indicate that certain agricultural actions are allowed or forbidden.

5.4 Polyphonic singing

In 1952, the Bunun got a moment of world fame when the Japanese ethnomusicologist Kurosawa Takatomo sent some of their ritual songs to a UNESCO meeting. Musicologists were surprised that they had developed eight-part polyphonic singing.

6 Syntax

In this section, we will compare Takivatan and Isbukun data, because there are some very interesting differences between the two dialects.

6.1 Clause structure

All Bunun dialects have what is called a Philippine-style voice system or a focus system. This means that you do not just have a simple active-passive distinction, like in English, but there are multiple 'voices'. We saw in 4.4 that Bunun distinguishes between an actor focus (the agent is the topic), an undergoer focus (the undergoer is the topic), and a locative focus (the location is the topic). Examples from Takivatan.

32. *siða-Ø   malŋaŋaus-ta   maduq-ta*
    take-AF   shaman-DEF.REF.DIST   millet-DEF.REF.DIST
    'The shaman took millet.'

33. *siða-un*   *asik*
    take-UF   shrub
    'they gathered the shrubs.'

34. *maqtu*   *pa-siða-ʔan-in*   *ŋabul*   *vanis*
    can   CAUS.DYN-take-LF-PRV   antler   wild.boar
    'We could [in that place] catch deer and wild boar.'

All Bunun dialects have a verb-initial argument order; this means that if no special syntactic process is going on, the verb that is the syntactic head of the clause should appear in the clause before all arguments (agents, patients, etc.). Here is an example from Takivatan.

35. *na-is-kalat-un*   *ðaku*   *tuqnað-i*   *asu*
    IRR-INSTR-bite-UF   1S.N   bone-PRT   dog
    'I want to give the bone to a dog to bite it.'

This example contains three arguments (*ðaku*, *tuqnaði* and *asu*). This is the largest number of arguments that can occur on one verb, but in most situations you will find no more than one.

If there is more than one verb in the clause, the syntactic head is the first verb. Usually, the topic of the clause will appear with the syntactic head, for example the auxiliary, rather than on the verb that carries most of the meaning.

36. *aupa*   **_na-kitŋa_**   **_sak_**   *laupaku*   **_baðbað_**   *tu*
    thus   IRR-begin   1S.F   now   have.conversation   COMPL
    ma-quaq-a   *Bunun-a*   *min-haiða*
    DYN-how.come-LNK   Bunun-LNK   INCH-exist
    'And thus I will start now to tell how the Bunun came into existence...'

In Takivatan, the ordering of arguments in a clause is fixed. For instance, a free noun phrase agent will always become before a free noun phrase patient.[4] (There are some exceptions: some verbal prefixes change the order of arguments, but I will not go into that in this talk.) This means that when the focus suffix changes, for example from actor focus (no suffix) to undergoer focus (suffix *-un*), the order of the arguments does not change.

You can see this by comparing the two examples below. The first is an agent focus construction (it has no suffix) of the veb *siða* 'take'. *Aipi* is the agent, *qaimaŋsuð* the patient.

37. *siða*   *aipi*   *qaimaŋsuð*   *ma-tauŋtauŋ*
    take   DEM.S.PROX.VIS   thing   DYN-beat
    'He [this one here] takes things and beats them against something else.'

The next example contains an undergoer construction siða-un 'take-UF'. As you can see, the agent (*ðaku* 'I') and the undergoer (*qaimaŋsuð* 'thing') are still in the same order as in the example above.

38. *na-siða-un*   *ðaku*   *qaimaŋsuð-ti*
    IRR-take-UF   1S.N   thing-DEF.REF.PROX
    I want to take this thing [and put it on the table].

---

4 A free noun phrase is a noun phrase that has a freestanding noun as its head. This means that bound pronouns, which attach to the verb, are not included in my definition above.

An interesting fact about the Takivatan dialect is that it is possible to leave out all arguments and most of the affixes from the clause, if you can recover them from the context. Only the root of the main verb or the auxiliary needs to be present to have a grammatical clause. For instance, if all your conversation partners know what you are talking about, you could express 35 as *kalat* and 37 or 38 as *siða*.

In Isbukun, the situation appears to be different. Examples in Zeitoun 2000 indicate that the argument order changes with the focus suffix.

39. *ma-ludah   tama   ʔalaŋ*
    DYN-beat father   Name
    'Father beats Alang.'

40. *ludah-un   ʔalaŋ   tama*
    beat-UF   Alang   father
    'Alang is beaten by father.' (Zeitoun 2000:65-66)

As far as I know, it is also ungrammatical in Isbukun to have a verb with all affixes stripped off.

6.2 Topicalisation

Topicalisation is another grammatical phenomena that works differently in Takivatan and Isbukun. In Takivatan, the partical *-a* is used to topicalise the argument targeted by the focus suffix (so the agent in an actor focus construction, the undergoer in an undergoer construction, …) by placing it in front of the clause (we call this left-dislocation).

41. **_kahaŋ-a_**   *ma*   *ni*   *sadu-an*
    high.grass-LDIS INTER   NEG   see-LF
    'In the high grass, I did not see [the deer] there.'

Isbukun has two topicalisers. The particle *hai* topicalises the argument targetted by the focus suffix.

42. *Tama hai   ma-ludah   ðaku*
    father LDIS DYN-beat   me
    'Father, he beats me.'

The particle a topicalises arguments that are not targetted by the focus suffix.

43. *Đaku a   ma-ludah   tama*
    me   LDIS DYN-beat   father
    'I, father beats me.'

6.3 Complement clauses and auxiliary verbs

The most productive way to string verb phrases together into something more complex is by using the particle *tu*, which introduces complement clauses. A complement clause is a clause that functions as an argument in another clause. Very often, this involves speech verbs and verbs of cognition. (The examples in this section are from Takivatan, unless indicated otherwise.)

44. *min-qansiap-in   tu   maupa-ta*
    INCH-understand-PRV   COMPL   be.thus-DEF.REF.DIST
    'I started to understand that it was like that.'

45. *a   tupa-ka   Tiaŋ   tu*
    INTER   tell-DEF.SIT.DIST   T.   COMPL

    ma   tusasaus-du   naipi   ma   vaðaqvaðaq-in-dau
    INTER   sing-EMO   DEM.S.PROX.NVIS   INTER   squirm-PRV-EMO
    'And Tiang said: "While I was singing, that deer, well, was squirming."'

Bunun *tu* is also commonly used to create complex verb phrases involving auxiliary verbs and some question words.[5]

46. *tuða   tu   ka-han-in*
    real   COMPL   ASSOC.DYN-go.to-PRV
    'We really had arrived there together.'

47. *asa   tu   pa-sapal*
    have.to   COMPL   CAUS.DYN-fur
    'You have to prepare the bed (because I want to go to sleep).'

In some constructions with auxiliary verbs, *tu* is obligatory, but in many it appears to be optional.

Finally, *tu* can also be used for introducing purposive ('in order to') or consequence ('as a result') clauses. Below is an example of a consequential clause with *tu*.

48. *aupa taun-han-in   tu   min-qansiap-in* …
    thus   THROUGH-be.at-PRV   COMPL   INCH-understand-PRV
    'And thus, when we had arrived, we quickly found out [that the people that had arrived there before...]'
    <u>Literally</u>: 'Thus, we had arrived and as a result gained understanding that ...'

7   What we do not know about Bunun

During the last decade and a half, research into Bunun dialects has gained some momentum. Nevertheless, there are a lot of things we do not know about Bunun and a lot of research that needs to be done.

- At the moment, there is no complete grammar of any Bunun dialect

- There is also no dictionary that is widely available

- We know little about the two northern dialects

- There are many aspects of Bunun grammar, especially syntax, that are not entirely – or even entirely not – clear to us

- Relatively little is know about comparative Bunun dialectology.

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5   Question words are very much like verbs in Bunun: they can take all verbal morphology, such as tense-aspect-mood marking and focus suffixes, and they can have bound personal pronouns.

8 List of abbreviations

1P	first person plural	DISTR	distributive, indicates that the same event happens in many places at the same time	LDIS	left-dislocation
1S	first person singular			LF	locative focus
AF	actor focus			N	neutral case
CAUS.DYN	causative and dynamic			NEG	negative
CAUS.INCH	causative and inchoative	DUR	durative	PL	plural
CAUS.STAT	causative and stative	DYN	dynamic	PROG	progressive
COMPL	complementiser	EMO	emotive particle	PRT	particle
DEF	definiteness marker	GNR	generic	PRV	perfective
DEM.S.PROX.NVIS		INCH	inchoative	PST	past
	singular proximal non-visual demonstrative	INSTR	instrumental	REC	recursive
		INTER	interjection	RED	reduplication
DEM.S.PROX.VIS		IRR	irrealis	RES.OBJ	resultative object
	singular proximal visual demonstrative	ITER	iterative, indicates that an action is performed many times	STAT	stative
				SUBORD	subordinator
				UF	undergoer focus

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