

# Bugan—a new Mon-Khmer language of Yunnan Province, China

LI Jinfang  
Central University of Nationalities  
Beijing 100081, China

The Bugan number nearly 3000 and are found in the mountainous areas of southern Guangnan 广南 and northern Xichou 西畴 Counties in the southeastern part of Yunnan Province. The Bugan live in the following seven villages: 老挖龙 Laowalong [pə<sup>55</sup>luŋ<sup>13</sup>], 新挖龙 Xinwalong [pə<sup>55</sup>tsuŋ<sup>13</sup>], 九平 Jiuping [pə<sup>55</sup>tsian<sup>31</sup>], 石北坡 Shibeipo [pə<sup>55</sup>ɕe<sup>13</sup>], 新寨 Xinzhai [li<sup>31</sup>lan<sup>13</sup>], 马龙 Malong [pə<sup>55</sup>yu<sup>31</sup>] and 那拉 Nala. The Bugan and the Han Chinese live together in Jiuping, Xinzhai, and Nala; the other four villages are exclusively inhabited by Bugan. The Bugan call themselves [pə<sup>55</sup>kan<sup>33</sup>] in their own language, the surrounding Han call them Hualo or 花族 Huazu 'colorful people', because the Bugan women wear colorful traditional dresses made from sewing together triangular swathes of printed cloth. The Bugan do not consider themselves to be natives of Guangnan and Xichou but came here before the Han, the Miao/Hmong, and the Yao. Some Bugan people say their ancestors originated from Jiangxi, Sichuan, and Guizhou Provinces and have lived in Guangnan and Xichou for ten or more generations. The Bugan celebrate their own New Year's festival in April of the Chinese Lunar Calendar. During the festival days they sing native or Han songs, and dance together to music of the [pɔ<sup>31</sup>], a kind of Bugan instrument made of bamboo and calabashes. Nowadays, only a few old people are able to sing their native songs. The Bugan male clothing is the same as the Han's, females are accustomed to wearing long black skirts, colorful dresses, and headwraps. The Bugan used to marry only within their own ethnic group, but in recent times a few Bugan girls have married young Han men. The most common family names are nine in number and are: 李 Li, 王 Wang, 郭 Guo, 罗 Lou, 严 Yan, 卢 Lu, 普 Pu and Yi. All Bugan people speak their mother tongue and adults also can speak Chinese. There is no variation in the Bugan language. This paper is based on my 1994 investigation.

## 1. The Sound system

There is a double series of initials in the sound system, prenasalized and plain for stops and affricates. Most vowels possess a tense (ɥ) and lax (v) contrast.

Final consonants, stops and tones are prone to change. A part of the vocabulary can be pronounced with either final nasal or stop (same place of articulation), some words (but not in context) can be pronounced in two different tones. Sandhi changes are usual, especially tone changes; there are also some blends caused by fusion of syllables. *sau*<sup>33</sup> ‘bird’, *bi*<sup>31</sup> ‘two’, *bi*<sup>33</sup> ‘classifier’ ~ *sau*<sup>33</sup>*bi*<sup>13</sup> ‘two birds’, *wi*<sup>31</sup> ‘we’, *bi*<sup>31</sup> ‘two’, *pau*<sup>31</sup> ‘classifier’ ~ *wi*<sup>31</sup>*bi*<sup>31</sup> ‘we two’, *le*<sup>31</sup> ‘auxiliary, belong to’, *ɔ*<sup>31</sup> ‘I’ ~ *lio*<sup>55</sup> ‘mine, belong to me’.

Compared with the surrounding languages (Han, Zhuang, Yi/Lolo, Miao/Hmong, or Yao), Bugan syllables are rather subject to change.

### 1.1 Initials

p	ph	b	mb	ɱ	f	w		
t	th	d	md	nd	n	ɲ	l	
θ	s		ɕ	ʐ				
k	kh	g	ŋg	ŋ	x	q	ŋq	ɣ
	h	ʔ						
ts	tsh		mts	mtsh	mdz	ndz		

#### Figure 1. Initials

The Bugan language has 36 initials, /ʔ/ appears only before vocalic onset. [voice] and [aspiration] are contrastive features in some stops and in some double initials of the type ‘nasal + affricate’: /p b ph, k g kh, t d th, mts mtsh mdz/. There are five prenasalized stops, /mb ŋg ŋq md nd/. Durations of these initials are longer than those of corresponding non-nasalized stops /b g q d/ but their nasal resonance is not especially strong, sometimes it is only slightly perceptible. The same is true of the affricates /mts mtsh mdz/. With the tone 31, nasal /m/ of /mts mtsh mdz/ is pronounced as stop /p-/--*mtse*<sup>31</sup> ~ *ptse*<sup>31</sup> ‘three’, *mtsha*<sup>31</sup> ~ *ptsha*<sup>31</sup> ‘to rub with the hands, make a cord’. Before the rhyme /-i-/, initial /ts-/ is palatalized to [tɕ-]—*tshiou*<sup>31</sup> ~ *tɕhiou*<sup>31</sup> ‘to sneeze’, *tsiu*<sup>35</sup> ~ *tɕiu*<sup>35</sup> ‘to have money on sb.’ The prenasalized initial /ŋg/ sometimes is pronounced as a pure nasal [ŋ]—*nga*<sup>31</sup> ~ *ŋa*<sup>31</sup> ‘yellow’. Words with /g-, ŋq-, md-, mdz-/ are few in number; in my record, there is only one word for each of /g- ŋq-/, i.e., *gam*<sup>35</sup> ‘to stab’, *ŋqu*<sup>33</sup> ‘village’.

/p/	<i>pi</i> <sup>35</sup> ‘sun’; <i>piau</i> <sup>35</sup> ‘human being’
/ph/	<i>phɔ</i> <sup>35</sup> ‘(maternal) grandfather’; <i>phɛ</i> <sup>35</sup> ‘(maternal) grandmother’
/b/	<i>biou</i> <sup>33</sup> ‘mountain’; <i>bou</i> <sup>31</sup> ‘dust’
/mb/	<i>mbuŋ</i> <sup>55</sup> ‘to eat one’s fill’; <i>mban</i> <sup>55</sup> ‘to lash’
/m/	<i>me</i> <sup>13</sup> ‘mother’; <i>mau</i> <sup>33</sup> ‘younger brother’
/f/	<i>fei</i> <sup>33</sup> ‘cooked corn or other cereals’; <i>fi</i> <sup>31</sup> ‘to meet sb.’

/w/	pə <sup>0</sup> wat <sup>31</sup> ‘round’; wə <sup>35</sup> ‘to drink’
/t/	tau <sup>13</sup> ‘to look for’; taŋ <sup>31</sup> ‘to point to sb.’
/th/	tho <sup>31</sup> ‘large, big’; thu <sup>31</sup> ‘to fly’
/d/	di <sup>31</sup> ‘bad’; doṽ <sup>35</sup> ‘to pull out’
/md/	mda <sup>33</sup> ‘be light (of a lamp)’; mda <sup>33</sup> ‘be light (of the sky)’
/nd/	nda <sup>33</sup> ‘be bold and powerful’; nda <sup>33</sup> ‘be light (weight)’
/n/	na <sup>33</sup> ‘younger sister’; nau <sup>31</sup> ‘much, many’
/n̄/	n̄a <sup>31</sup> ‘mosquito’; n̄o <sup>13</sup> ‘to erect’
/l/	la <sup>33</sup> ‘red’; laŋ <sup>33</sup> ‘clear (liquid)’
/θ/	θi <sup>35</sup> mā <sup>31</sup> ‘dew’; θi <sup>35</sup> ‘alkali water, made from plant ash’
/s/	sa <sup>33</sup> ‘hard (material)’; saŋ <sup>35</sup> /sak <sup>55</sup> ‘hair’
/ç/	çaŋ <sup>31</sup> ‘green’; çε <sup>33</sup> ‘stomach’
/z/	zəuŋ <sup>31</sup> ‘old’; zo <sup>33</sup> ‘long’
/k/	kou <sup>31</sup> ‘to finish’; ka <sup>31</sup> ‘to beat with fist or a hammer, etc.’
/kh/	khə <sup>35</sup> ‘to fill a bowl with rice, etc.’; khou <sup>35</sup> ‘carry on one’s head’
/g/	gam <sup>35</sup> ‘to stab’
/ŋg/	ŋga <sup>31</sup> ‘yellow’; ŋgai <sup>31</sup> ‘askew’
/ŋ/	ŋa <sup>13</sup> ‘dark’; ŋa <sup>55</sup> ‘water buffalo’
/x/	xə <sup>31</sup> ‘horn’; xou <sup>55</sup> ‘monkey’
/q/	qau <sup>31</sup> ‘to nod’; qou <sup>33</sup> ‘to burn up’
/ŋq/	ŋqu <sup>33</sup> ‘village’
/y/	yəuŋ <sup>31</sup> ‘busy’; yəu <sup>31</sup> ‘to read’
/h/	ho <sup>31</sup> ‘slow’; ha <sup>31</sup> ‘to dry in the sun’
/ʔ/	ʔam <sup>31</sup> ‘warm’; ʔa <sup>33</sup> ‘to rain’
/ts/	pə <sup>55</sup> tse <sup>35</sup> ‘ear’; pə <sup>55</sup> tsə <sup>13</sup> ‘placenta’
/tsh/	n̄a <sup>33</sup> tshuŋ <sup>31</sup> ‘uvula’; tshə <sup>31</sup> ‘urine’
/mts/	mtse <sup>33</sup> ‘fruit’; mtsa <sup>35</sup> ‘one meal, classifier’
/mtsh/	mtsha <sup>13</sup> ‘to kill’; mtshu <sup>31</sup> ‘to lure’
/mdz/	mdze <sup>31</sup> ‘to plait (one’s hair)’; mdzaŋ <sup>35</sup> ‘insipid, lack salt’
/ndz/	ndzuŋ <sup>33</sup> ‘thin (human being)’; ndza <sup>55</sup> ‘beautiful’

## 1.2 Rhymes

a	<u>a</u>	ai	<u>ai</u>	au	<u>au</u>	au	<u>au</u>	ia	<u>ia</u>	<u>ia</u>
	ua	am	<u>am</u>	an	<u>an</u>					
ε	<u>ε</u>	ei	<u>ei</u>							
	ue	em	<u>em</u>	en	<u>en</u>					
e	<u>e</u>			en	<u>en</u>			ie	<u>ie</u>	
i	<u>i</u>			in						
ɔ	<u>ɔ</u>							io		
o	<u>o</u>			ou	<u>ou</u>			io	<u>io</u>	
u	<u>u</u>	ui	<u>ui</u>					iu	<u>iu</u>	iou
ə				ən				iə		<u>iou</u>
ɯ		<u>ɯ</u>						—		
y										
aŋ		<u>aŋ</u>	ã	<u>ã</u>	ap	at	<u>at</u>	ak	<u>ak</u>	<u>iam</u> iaŋ
<u>iaŋ</u>		iã	iap	iak	uan	uaŋ	uã			
		iẽ								
						et				
		ɔŋ	õ					ɔk		
oŋ		<u>oŋ</u>			op					ioŋ
<u>ioŋ</u>										
uŋ		<u>uŋ</u>			ũ			uk		
				ẽ						

The Bugan language has 90 rhymes. The tense vowels and lax vowels are contrastive: *kui*<sup>33</sup> ‘fire smoke’ ~ *kui*<sup>33</sup> ‘to dry by smoke’, *luŋ*<sup>33</sup> ‘well’ ~ *luŋ*<sup>33</sup> ‘abyss, deep cave’. Compared to the lax vowels, the tense vowel tongue position is lower and further back, the lax /a/ in *ta*<sup>31</sup> ‘near’ is [a], but the tense /a/ in *ta*<sup>31</sup> ‘to bet’ is close to [ɑ]. With the rising tonal syllables, the tense vowels are easy to hear; the laryngeal setting is very tense; but in the words with the falling tone (31) the laryngeal setting is weak.

There are three final stops, /-p, -t, -k/; they are not released. Words with final stops are limited; these words appear only with tones 55, 33, 31 (only two with tone 33 in my record). Some words can be pronounced either with final nasal or stop (same place of articulation) or the coda can be lost altogether: *nam*<sup>55</sup> ~ *nap*<sup>55</sup> ‘to close one’s mouth’; *çet*<sup>55</sup> ~ *çen*<sup>55</sup> ‘goat’; *biak*<sup>55</sup> ~ *bian*<sup>55</sup> ‘grape’; *pə*<sup>55</sup>*bop*<sup>31</sup> ~ *pə*<sup>55</sup>*bou*<sup>31</sup> ‘head’; *nuk*<sup>31</sup> ~ *no*<sup>31</sup> ‘to come’; *wək*<sup>31</sup> ~ *wə*<sup>31</sup> ‘iron pot’. A few words

with nasalized vowels lose their nasalization and become oral syllables or they lose the final and preserve the nasal as a nasalized vowel—*sã<sup>33</sup> ~ sa<sup>33</sup>* ‘eight’, *lan<sup>31</sup> ~ lã<sup>31</sup>* ‘horse’. The rhymes /iã iap uã ɛm õ ã/ appear only in Han and Zhuang borrowing. There is only one word with rhymes /iau iam iã iap iak ɛm ɛm ɔk ən ã/ for each of them. Most of those words are with final nasal or stop, and some are borrowings. Moreover, /uak/ appears only with one suffixed syllable: *ho<sup>31</sup>* ‘slow’; *ɲuak<sup>31</sup>* ‘very slow’.

/a/	ta <sup>31</sup> ‘near’; sa <sup>33</sup> ‘hard (material)’
/a/	la <sup>55</sup> ‘thin (material)’; ta <sup>33</sup> ‘shrivelled, flat’
/ai/	pə <sup>55</sup> mai <sup>35</sup> ‘pupil (of the eye)’; pə <sup>55</sup> lai <sup>33</sup> ‘tongue’
/ai/	ai <sup>33</sup> qou <sup>31(55)</sup> ‘cloud’; nai <sup>31</sup> ‘flat, level’
/au/	nau <sup>31</sup> ‘much, many’; tsau <sup>33</sup> ‘stingy, narrow-minded’
/au/	lau <sup>31</sup> ‘empty’; nau <sup>55</sup> ‘soft, pliable’
/au/	ɲgau <sup>35</sup> ‘slippery (road)’; sau <sup>31</sup> ‘tree’
/au/	tsau <sup>31</sup> ‘early’; sau <sup>31</sup> ‘garlic’
/ia/	mia <sup>31</sup> ‘salt’; pia <sup>55</sup> ‘cymbals’
/ia/	lia <sup>31</sup> ‘keep out (the wind)’; tsia <sup>55</sup> ‘to heat up’
/iau/	biau <sup>31</sup> ‘lunch, midday meal’
/ua/	kua <sup>55</sup> ‘son’; mə <sup>0</sup> kua <sup>31</sup> ‘folk song’
/am/	kham <sup>35</sup> ‘(to work) hard’; tam <sup>33</sup> ‘to sink’
/am/	am <sup>31</sup> ‘warm’; gam <sup>35</sup> ‘to stab’
/an/	lan <sup>13(31)tə<sup>0</sup>tan<sup>13</sup></sup> ‘stark-naked’; han <sup>33</sup> ‘move (house)’
/an/	lan <sup>31</sup> ‘naked’; lan <sup>33</sup> ‘blunt’
/aŋ/	te <sup>0</sup> tha, <sup>55</sup> ‘horizontal, across’; lan <sup>31</sup> ~ lã <sup>31</sup> ‘horse’
/aŋ/	lan <sup>33</sup> ‘clear (liquid)’; lan <sup>31</sup> ‘wooden basin’
/ã/	tshã <sup>31</sup> ‘greedy, fond of good food’; lã <sup>55</sup> / lan <sup>55</sup> ‘blind’
/ã/	bã <sup>55</sup> ‘sticky’; sã <sup>55</sup> / san <sup>55</sup> ‘disorder’
/ap/	te <sup>55</sup> map <sup>31</sup> ‘knot’; nap <sup>55</sup> ‘tense, tight’
/at	pə <sup>0</sup> wat <sup>31</sup> ‘round’; nat <sup>55</sup> /nan <sup>55</sup> tə <sup>55</sup> ‘to bear, to endure’
/at/	lat <sup>31</sup> ‘slippery (road)’; vat <sup>33</sup> /van <sup>13</sup> ‘to turn’
/ak/	pə <sup>0</sup> lak <sup>55</sup> ‘flat’; ndzak <sup>31</sup> ‘frozen, stiff’
/ak/	wak <sup>31</sup> /wa <sup>31</sup> ‘iron pot’; mak <sup>33</sup> /maŋ <sup>55</sup> ‘muddy (water)’
/iam/	tsiam <sup>55</sup> ‘soul’
/ian/	bian <sup>31</sup> ‘light (color)’; thian <sup>13</sup> ‘thousand’
/ian/	bian <sup>35</sup> ‘claw’; phian <sup>35</sup> ‘to support with the hand’
/iã/	miã <sup>31</sup> ‘life’
/iap/	pu <sup>55</sup> tsiap <sup>31</sup> ‘Chinese chives’
/iak/	biak <sup>55</sup> /bian <sup>55</sup> ‘grape’
/uan/	tshuan <sup>31</sup> ‘boat’; khuan <sup>33</sup> ‘solidify’

/uan/	ɲuan <sup>31</sup> ‘stupid’; ɲuan <sup>13</sup> ɕɛ <sup>13</sup> ‘intestines’
/uã/	luã <sup>13</sup> ‘disorder’; tshuã <sup>31</sup> ‘to send’
/ɛ/	ndɛ <sup>35</sup> ‘beat’; mtɛ <sup>31</sup> ‘sour’
/ɛ̄/	xɛ <sup>31</sup> ‘taste good’; sɛ <sup>31</sup> ‘smart’
/ɛi/	nei <sup>31</sup> ‘smooth’; thei <sup>35</sup> ‘false, be not true’
/ɛ̄i/	lɛ̄i <sup>35/13</sup> ‘the sting of a bee or wasp’; khɛ̄i <sup>55</sup> ‘to run’
/uɛ/	ɲguɛ <sup>31</sup> ‘crooked, bend’; khuɛ <sup>31</sup> ‘piece, lump’
/ɛm/	lɛm <sup>35</sup> ‘to lose (a game, etc.)’
/ɛ̄m/	lɛ̄m <sup>31</sup> ‘reed trumpet, a Chinese woodwind instrument’
/ɛn/	kɛn <sup>33</sup> ‘firm, secure’; then <sup>35</sup> ‘to lay out’
/ɛ̄n/	tɛ̄n <sup>55</sup> ‘short (human being)’; ɣɛ̄n <sup>35</sup> ‘cut’
/iẽ/	liẽ <sup>31</sup> tɔ <sup>13</sup> ‘sickle’; ʒiẽ <sup>33</sup> ‘rich (colors)’
/e/	te <sup>55</sup> ta <sup>31</sup> ‘true’; mtse <sup>31</sup> ‘three’
/ē/	bɛ̄ <sup>55</sup> ‘short (material)’; tɛ̄ <sup>31</sup> ‘accurate (shooting)’
/ie/	phie <sup>31</sup> ‘to force, compel’; tie <sup>55</sup> ‘hand’
/iɛ̄/	mie <sup>55</sup> ‘small’; piɛ̄ <sup>13</sup> ‘to change’
/en/	nen <sup>33</sup> ‘cloth’; ɣen <sup>33/55</sup> ‘be like, to take after’
/ɛ̄n/	tɛ̄n <sup>35</sup> ‘to rub, to scratch an itch’; nɛ̄n <sup>33</sup> ‘broken’
/et/	ʒet <sup>31</sup> ‘to fall down’; ɲet <sup>31</sup> ‘to swing’
/i/	xi <sup>33</sup> ‘far’ di <sup>31</sup> ‘bad’
/ī/	tsi <sup>35</sup> ‘cold’; ki <sup>35</sup> ‘to wipe, to rub’
/in/	min <sup>31</sup> ‘understand’; pin <sup>35</sup> ‘shoulder’
/ɔ/	thɔ <sup>31</sup> ‘large, big’; ɲɔ <sup>33</sup> ‘peppery, hot’
/ɔ̄/	tɔ̄ <sup>35</sup> ‘hold or carry in both hands’; lɔ̄ <sup>31</sup> ‘little, few’
/iɔ/	diɔ <sup>31</sup> ‘loose, inattentive’; biɔ <sup>31</sup> ‘two’
/ɔ̄ɲ/	tsɔ̄ɲ <sup>35</sup> ‘to hoe up (weeds)’; kɔ̄ɲ <sup>31</sup> ‘steep’
/õ/	luã <sup>13</sup> hõ <sup>55</sup> hõ <sup>55</sup> ‘in noisy disorder’; mõ <sup>55</sup> ɲu <sup>55</sup> ‘roof’
/ɔ̄k/	kɔ̄k <sup>31</sup> /kɔ̄ɲ <sup>31</sup> ‘bend upwards’
/o/	ʒo <sup>33</sup> ‘long’; ɣo <sup>33</sup> ‘high’
/ō/	tɔ̄ <sup>35</sup> ‘to climb’; mō <sup>31</sup> ‘heavy’
/ou/	kou <sup>31</sup> ‘deep’; ɲou <sup>55</sup> ‘wrinkle, crease’
/oū/	thou <sup>35</sup> ‘to prop up’; tsou <sup>31</sup> ‘to eat’
/io/	ta <sup>31</sup> bio <sup>33</sup> ‘to close, near’; pio <sup>55</sup> ‘to collapse’
/iɔ̄/	piɔ̄ <sup>31</sup> ‘to set upright’; pu <sup>55</sup> liɔ̄ <sup>31</sup> ‘coat’
/oɲ/	ɣoɲ <sup>31</sup> ‘busy’; poɲ <sup>55</sup> ‘blister’
/ōɲ/	pōɲ <sup>31</sup> ‘concave, hollow’; khōɲ <sup>55</sup> ‘protruding’
/op/	bop <sup>55</sup> mtse <sup>33</sup> ‘hail’; te <sup>55</sup> bop <sup>31</sup> ‘carp’
/ioɲ/	pioɲ <sup>35</sup> ‘to write down’; pion <sup>31</sup> ‘to make a sound’
/iɔ̄ɲ/	piɔ̄ɲ <sup>33</sup> ‘colorful’; piɔ̄ɲ <sup>31</sup> tie <sup>55</sup> ‘finger ring’

/u/	tshu <sup>55</sup> 'dry'; khu <sup>55</sup> 'expensive'
/u/	lu <sup>55</sup> 'small, young'; ʒu <sup>55</sup> 'wrong'
/ui/	ŋui <sup>55</sup> 'rainbow'; kui <sup>33</sup> 'fire smoke'
/ui/	pə <sup>0</sup> kui <sup>55</sup> 'craftsman'; kui <sup>33</sup> 'to dry by smoke'
/iu/	ɕiu <sup>31</sup> 'poor, poverty-stricken'; mu <sup>33</sup> ɕiu <sup>55</sup> 'China fir'
/iu/	piu <sup>31</sup> 'bear'; ŋiu <sup>33</sup> 'sweet potato'
/iou/	biou <sup>33</sup> 'mountain'; tsiou <sup>35</sup> 'to mend (clothes)'
/iou/	si <sup>55</sup> miou <sup>31</sup> 'future'; tsiou <sup>13</sup> 'to mend (shoes)'
/uŋ/	ndzu, <sup>33</sup> 'thin (human being)'; ʒuŋ <sup>31</sup> 'old'
/uŋ/	tsuŋ <sup>33</sup> 'like, be fond of'; luŋ <sup>31</sup> 'to close'
/ũ/	tũ <sup>55</sup> 'mouth'; nũ <sup>55</sup> 'brain'
/uk/	te <sup>55</sup> kuk <sup>31</sup> 'frost'; pə <sup>55</sup> nuk <sup>31</sup> 'heart'
/ə/	də <sup>33</sup> 'long(time)'; ʒə <sup>31</sup> 'see, catch sight of'
/iə/	biə <sup>13</sup> 'two (animals)'; biə <sup>33</sup> 'classifier (for animal)'
/ən/	mən <sup>33</sup> 'thick'
/ǝ/	lǝ <sup>55</sup> ɕi <sup>31</sup> 'grain'
/u/	lu <sup>31</sup> 'good'; khu <sup>35</sup> 'pool, pond'
/u/	tsu <sup>55</sup> 'shallow (water)'; tsau <sup>33</sup> lu <sup>55</sup> 'fermented glutinous rice'
/y/	khy <sup>55</sup> 'narrow'; khy <sup>31</sup> 'the period of the day (from 7 p.m. to 9 p.m.)'

### 1.3 Tones

There are six live tones: two level (55, 33), two rising (35, 13), one falling (31) and the slight tone (atonality) 'ø'. The slight tone 'ø' appears only in some prefixes. The dead tones have pitch shapes 55, 33, 31. Dead tones occur with either lax or tense vowel syllables. Tones are instable in Bugan, a part of the lexicon can be pronounced with either of two tones, ʒou<sup>33/55</sup> 'earth', do<sup>13/33</sup> 'to burn the grass on waste land, for cultivation', tsq<sup>13/33</sup> 'to bite', xau<sup>55/31</sup> 'valley', mtshi<sup>55/13</sup> 'to milk', lɕi<sup>13/35</sup> 'the sting of a bee or wasp', tsi<sup>33/35</sup> 'to stretch out (one's hand)', etc. Tonal change is common in context, and many cases show progressive assimilation, mə<sup>55</sup>xɛ<sup>553(31)</sup> 'taste bad', mə<sup>55</sup>nam<sup>55(35)</sup> 'one year', bi<sup>31</sup>nam<sup>31(35)</sup> 'two years', nam<sup>33(35)</sup>ni<sup>33</sup> 'this year', ɣo<sup>13</sup>tɛn<sup>33(35)</sup> 'very crowded', pə<sup>0</sup>lon<sup>35(33)</sup> 'the upper'. (Tone values in parentheses are unchanged citation values).

## Live tones:

Tone:	Shape:	Examples:
55	high level	la <sup>55</sup> ‘thin (material)’; tə <sup>0</sup> than <sup>55</sup> ‘horizontal, across’
33	mid level	la <sup>33</sup> ‘to turn round’; nan <sup>33</sup> ‘to sleep’
35	high rising	la <sup>35</sup> ‘to return, give back’; tan <sup>35</sup> ‘to close (a door)’
13	low rising	ta <sup>13</sup> ‘to carry on the back’; tan <sup>13</sup> ‘to keep domestic animals’
31	low falling	ta <sup>31</sup> ‘to bet’; tan <sup>31</sup> ‘to cook, to boil (fold, stable, etc.)’
0	slight	pə <sup>0</sup> çi <sup>55</sup> ‘left side’; tə <sup>0</sup> yo <sup>55</sup> ‘the inner’

## Dead tones:

Tone	Shape	Examples
55	high level	biak <sup>55</sup> /bian <sup>55</sup> ‘grape’; tsɛt <sup>55</sup> /tsɛn <sup>55</sup> ‘to hog’
33	mid level	mak <sup>33</sup> /man <sup>55</sup> ‘muddy (water)’; wat <sup>33</sup> /wan <sup>13</sup> ‘to turn’
31	low falling	zet <sup>31</sup> ‘to fall down’; kək <sup>31</sup> /kɔŋ <sup>31</sup> ‘bend upwards’

## 1.4 Syllable types

Syllables appear in 12 types (see below). Most syllables are type 4, 5, 7, 8, 9, 10, or 11; the rest are relatively rare. Type 12 has only one word in my record. All vowel onset syllables have glottal (hard) onset [ʔ]; I do not analyze them here. Vowels in the same syllable must all be tense or lax simultaneously, tense vowels and lax vowels do not occur together in same syllable.

1	VT	a <sup>33</sup> ‘came back’	ɔ <sup>33</sup> ‘raw, uncooked’
2	VVT	ai <sup>33</sup> ‘excrement’	au <sup>55</sup> ‘husband of one’s aunt’
3	VCT	am <sup>31</sup> ‘warm’	an <sup>31</sup> ‘to wash’
4	CVT	ta <sup>31</sup> ‘be close’	sa <sup>33</sup> ‘hard (material)’
5	CVVT	nai <sup>31</sup> ‘flat, level’	sau <sup>31</sup> ‘tree’
6	CVVVT	biou <sup>55</sup> ‘leech’	biou <sup>33</sup> ‘mountain’
7	CCVT	nde <sup>35</sup> ‘to beat’	mtse <sup>31</sup> ‘three’
8	CCVVT	ŋgau <sup>35</sup> ‘slippery (road)’	mtshai <sup>55</sup> ‘mad’
9	CVCT	nan <sup>33</sup> ‘to sleep’	zet <sup>31</sup> ‘to fall down’
10	CVVCT	bian <sup>35</sup> ‘claw’	khuan <sup>33</sup> ‘solidify’
11	CCVCT	ndzun <sup>33</sup> ‘thin (human)’	mdzan <sup>35</sup> ‘insipid’
12	CCVVCT	ŋguan <sup>13</sup> çɛ <sup>13</sup> ‘intestines’	



## 2. Lexicon

### 2.1 Word structure

#### 2.1.1 Simple words

There are two types: monosyllabic and disyllabic. Most Bagan words are monosyllabic: *pi*<sup>35</sup> ‘sun’, *ta*<sup>55</sup> ‘moon’, *tɔ*<sup>55</sup> ‘grandfather’, *ʒu*<sup>33</sup> ‘grandmother’, *buŋ*<sup>31</sup> ‘skin’, *nau*<sup>55</sup> ‘shoe’, *li*<sup>35</sup> ‘to change’, *tsi*<sup>31</sup> ‘to comb’. But there are also disyllabic forms: *bɔ*<sup>55</sup>*mo*<sup>33</sup> ‘star’, *ŋgɔ*<sup>13</sup>*nau*<sup>55(31)</sup> ‘thing’, *fu*<sup>55</sup>*da*<sup>13</sup> ‘money’, *tsi*<sup>31</sup>*lɔ*<sup>35</sup> ‘rabbit’, *tɔ*<sup>35</sup>*ti*<sup>55</sup> ‘to give’, *nou*<sup>13</sup>*tsau*<sup>31</sup> ‘to frighten (sb.)’, *e*<sup>55</sup>*e*<sup>55</sup> ‘sand’.

#### 2.1.2 Complex words

**2.1.2.1. Compound words.** A compound is formed in any of several ways: in parallel, verb-object, head-modifier, subject-predicate, or verb-complement.

Parallel type:

*tu*<sup>33</sup>-*ʒau*<sup>55(31)</sup> ‘go out’  
out-go

*mau*<sup>33</sup>-*na*<sup>33</sup> ‘sibling’  
younger brother-younger sister

Verb-object type:

*tsɔ*<sup>31</sup>-*ʒɔ*<sup>35</sup> ‘go hunting’  
hunt-game

*bi*<sup>33(35)</sup>-*man*<sup>55</sup> ‘marry (a woman)’  
buy-wife

Head-modifier type: most modifiers follow the head, a few modifiers precede the head.

*biou*<sup>33</sup>-*ɣɔ*<sup>33</sup> ‘rock hill, karst formation’  
hill-rock

*ʒuŋ*<sup>55(31)</sup>-*tse*<sup>31</sup> ‘foot of mountain’  
foot mountain

*da*<sup>13(35)</sup>-*nai*<sup>55</sup> ‘wave’  
water-jump

*da*<sup>35</sup>-*tau*<sup>35</sup> ‘rice field’  
water-field

Subject-predicate type :

*mɛ*<sup>55(33)</sup> *lã*<sup>55</sup> ‘the blind’  
eye-blind

*pə*<sup>0</sup>*qou*<sup>55</sup>-*luŋ*<sup>33</sup> ‘thunder’  
sky-make a sound

Verb-complement type:

*nu*<sup>33</sup>-*so*<sup>31</sup> ‘easy’  
do-easy

*kai*<sup>33</sup>-*so*<sup>31</sup> ‘comfortable’  
stay-good

**2.1.2.2. Derived words.** There are two main types of derivation: *prefix + head*, *head + suffix*. All prefixes are pronounced with tone, but a few of them are pronounced with the slight tone.

Prefix + head type:

*pə<sup>55</sup>*- prefix in words for body parts, kinship, nations, people, made objects, or nouns of locality: *~bop<sup>31</sup>/bou<sup>31</sup>* ‘head’, *~san<sup>33</sup>* ‘navel’, *~du<sup>33</sup>* ‘brother’, *~de<sup>31</sup>* ‘relatives by marriage’, *~mio<sup>31</sup>* ‘the Miao/Hmong’, *~khui<sup>55</sup>* ‘the Han’, *~kha<sup>13</sup>* ‘guest’, *~zur<sup>55(31)</sup>* ‘old people’, *~si<sup>55</sup>* ‘broom’, *~pon<sup>55</sup>* ‘hammer’, *~ci<sup>55</sup>* ‘left side’, *~ca<sup>55</sup>* ‘right side’.

*tə<sup>55/0</sup>*- prefix in words for body parts, localities, or animals: *~nou<sup>55</sup>* ‘the back of the body’, *~qou<sup>35</sup>* ‘the palm of the hand’, *~kau<sup>35</sup>* ‘middle’, *~yo<sup>55</sup>* ‘inner’, *~kə<sup>33</sup>* ‘tiger’, *~kɛ<sup>33</sup>* ‘squirrel’.

*te<sup>55</sup>*- prefix in words for plants, birds, rivers, fauna, made objects, or weather: *~tan<sup>55</sup>* ‘moss’, *~tan<sup>33</sup>* ‘pumpkin’, *~tso<sup>31</sup>* ‘sparrow’, *~kəŋ<sup>35</sup>* ‘shrimp’, *~map<sup>31</sup>* ‘knot’, *~ce<sup>33</sup>* ‘waistband’, *~tsi<sup>33</sup>* ‘snow’, *~kuk<sup>31</sup>* ‘frost’.

*lə<sup>0</sup>*- prefix in a few body part names: *~kə<sup>33</sup>* ‘the lower jaw’, *~po<sup>55</sup>* ‘shoulder’.

*na<sup>33</sup>*- prefix in small persons and things: *~la<sup>33</sup>* ‘baby’, *~mu<sup>33</sup>* ‘little girl’, *~tau<sup>33</sup>* ‘baby pig’, *~tsaŋ<sup>55</sup>* ‘mouse’, *~tie<sup>31</sup>* ‘index finger’, *~hau<sup>33</sup>* ‘taro’.

*pu<sup>55</sup>*- prefix in some animals: *~lan<sup>31</sup>* ‘stallion’, *~cen<sup>55</sup>* ‘nanny (goat)’.

*mu<sup>33</sup>*- prefix in some plants and female animals: *~paŋ<sup>31</sup>* ‘peach tree’, *~san<sup>55</sup>* ‘pine’, *~lou<sup>33</sup>* ‘rice straw’, *~tau<sup>33</sup>* ‘sow’, *~tsau<sup>33</sup>* ‘bitch’. Some female animals have the prefix *mu<sup>33</sup>*-, but the relevant males do not have the prefix *pu<sup>55</sup>*-, *ləpə<sup>31</sup>tau<sup>33</sup>* ‘boar’, *tsau<sup>33</sup>liə<sup>31</sup>* ‘dog’.

*tse<sup>0</sup>*- prefix in some birds and made objects: *~qa<sup>35</sup>* ‘duck’, *~ŋaŋ<sup>35</sup>* ‘goose’, *~van<sup>31</sup>* ‘(ring-necked) pheasant’, *~lou<sup>35(13)</sup>* ‘pliers’.

*mə<sup>33</sup>*- prefix in some made objects: *~tsa<sup>31</sup>* ‘hand straw cutter’, *~dou<sup>33</sup>* ‘firewood knife’, *~pe<sup>55</sup>* ‘patch’.

*o<sup>55</sup>*- prefix in some nouns of locality: *~du<sup>33</sup>* ‘upper reaches (of a river), upper place (of land)’, *~nda<sup>33</sup>* ‘the lower’, *~loŋ<sup>33</sup>* ‘sky’, *~la<sup>31</sup>* ‘under the sky’.

*di<sup>33</sup>*- prefix in January ~March, or December of the Chinese lunar calendar: *~tsaŋ<sup>35</sup>* ‘January’, *~ni<sup>31</sup>* ‘February’, *~sã<sup>13</sup>* ‘March’, *~liã<sup>31</sup>* ‘December’.

*mə<sup>55</sup>*- prefix in April ~November of the Chinese lunar calendar: *~pau<sup>33</sup>* ‘April’, *~mi<sup>33</sup>* ‘May’, *~bo<sup>55</sup>* ‘November’.

Head + Suffix type : In this type, the head is first, followed by the suffix (one or two syllables) to indicate certain conditions, parts of suffixes are reduplication.

ho<sup>31</sup> ŋuak<sup>31</sup> ‘very slow’

slow

ndzou<sup>31</sup> mi<sup>31</sup> ‘diamond bright’

bright

na<sup>13(35)</sup> ndo<sup>55</sup> ‘shiny black’

black

pou<sup>31</sup> pe<sup>33</sup> ‘very careless’

careless

nda<sup>33</sup> pə<sup>55</sup> lou<sup>55</sup> ‘very light (not heavy)’

light

lan<sup>13(31)</sup> tə<sup>0</sup> tan<sup>13</sup> ‘be stark-naked’

naked

luã<sup>13</sup> hõ<sup>55</sup> hõ<sup>55</sup> ‘in a mess’

disorder

ŋa<sup>35</sup> wa<sup>35</sup> wa<sup>35</sup> ‘very dark’

dark

Infix type: only one infix *xi*<sup>31</sup> ‘is found, and it indicates small female animals’, *li*<sup>55</sup> ‘cattle’, *pu*<sup>55</sup>*li*<sup>55</sup> ‘ox’, *mu*<sup>33</sup>*li*<sup>55</sup> ‘cow’, *na*<sup>33</sup>*li*<sup>55</sup> ‘calf’, *na*<sup>33</sup>*pu*<sup>55</sup>*li*<sup>55</sup> ‘small ox’, *mu*<sup>33</sup>*xi*<sup>31</sup> *li*<sup>55</sup> ‘small cow’, *mu*<sup>33</sup>*lan*<sup>31</sup> ‘mare’, *mu*<sup>33</sup>*xi*<sup>31</sup>*lan*<sup>31</sup> ‘small mare’, *mu*<sup>33</sup>*çen*<sup>55</sup> ‘nanny (goat)’, *mu*<sup>33</sup>*xi*<sup>31</sup> *çen*<sup>55</sup> ‘small nanny (goat)’ (*pu*<sup>55</sup>, *mu*<sup>33</sup>, *na*<sup>33</sup> are prefixes).

### 2.1.3 Semi-inflection

In some cases, related words differ only by vowel alternation, tense and lax vowel alternation, tonal alternation or consonants (initials) alternation. These include synonyms, antonyms, or the categories change.

Vowel alternation:

pho<sup>35</sup> ‘(maternal) grandfather’

mu<sup>31</sup> ‘you (singular)’

çi<sup>55</sup>po<sup>31(55)</sup> ‘yesterday evening’

ŋo<sup>33</sup> ‘peppery’

tsa<sup>13</sup> ‘to bite’

la<sup>35</sup> ‘to return’

phɛ<sup>35</sup> ‘(maternal) grandmother’

mi<sup>31</sup> ‘you (plural)’

ça<sup>55</sup>po<sup>31(55)</sup> ‘tomorrow evening’

ŋa<sup>33</sup> ‘salted’

tsou<sup>31</sup> ‘to eat’

li<sup>35</sup> ‘to change’

Tense vowel and lax vowel alternation:

kui<sup>33</sup> ‘fire smoke’

mda<sup>33</sup> ‘be light (of a lamp)’

luŋ<sup>33</sup> ‘well’

kui<sup>33</sup> ‘to dry with smoke’

mda<sup>33</sup> ‘be light (of the sky)’

luŋ<sup>33</sup> ‘abyss, deep cave’

Tonal alternation:

tso<sup>55</sup> ‘rake’

-tshuŋ<sup>31</sup> ‘throat’

tsaŋ<sup>35</sup> ‘to smell’

tso<sup>35</sup> ‘to harrow’

tshuŋ<sup>33</sup> ‘thirsty’

tsaŋ<sup>33</sup> ‘smelly’

## Consonants (initials) alternation:

laŋ<sup>33</sup> 'clear (water)'  
 ni<sup>33</sup> 'this'  
 pe<sup>31</sup> 'we'  
 mtsha<sup>13</sup> 'to kill'  
 nap<sup>55</sup> 'be closed'  
 duŋ<sup>33</sup> 'hole'

maŋ<sup>55</sup> 'muddy (water)'  
 ki<sup>33</sup> 'that'  
 he<sup>31</sup> 'they'  
 mtsa<sup>31</sup> 'to die'  
 ɲap<sup>55</sup> 'to close one's eyes, to shut up'  
 luŋ<sup>33</sup> 'well'

## 2.2 Loan words

As the result of communication with the Han and the Zhuang, the Bugan language has borrowed some words from Han and Zhuang languages; all the borrowings are modern words. Some Bugan words are similar to Yi/Lolo or other Tibeto-Burman languages, but it is uncertain whether they are cognates or borrowings.

## Chinese loan words :

Bugan	Chinese (Pinyin)	
miou <sup>31</sup>	miao	'temple'
pei <sup>35</sup>	bei	'tablet'
tshaŋ <sup>31</sup>	chang	'to taste'
mə <sup>31</sup>	mai	'pulse'
-kan <sup>13</sup>	jin	'axe'
pin <sup>35</sup>	bing	'soldier'
min <sup>31</sup>	ming	'understand'
lã <sup>55</sup> çi <sup>31</sup>	liangshi	'grain'
hu <sup>31</sup> tsiu <sup>13</sup>	hujiao	'pepper'
tsau <sup>33</sup>	jiu	'wine'
tsau <sup>35</sup>	zhao	'kitchen range'

## Zhuang loan words :

Bugan	Wuming (Zhuang)	
-man <sup>13</sup>	-man <sup>55</sup>	'plum'
-tsiap <sup>31</sup>	kep <sup>55</sup>	'chives'
-ku <sup>55</sup>	ku <sup>31</sup>	'eggplant'
ke <sup>13</sup>	kve <sup>24</sup>	'towel gourd'
tɛ <sup>55</sup>	tai <sup>33</sup>	'bag'

mɔ̃ <sup>55</sup>	mau <sup>42</sup>	'roof'
lan <sup>33</sup>	li:ŋ <sup>55</sup>	'umbrella'
bə <sup>35</sup>	bui <sup>35</sup>	'greasy, be bored with'

### 3. Grammar

#### 3.1 Word categories

Although Bugan has some cases of derivational morphology, we can divide Bugan word categories most surely on the basis of structure, distribution, and meaning. Categories are: nouns, pronouns, numerals, classifiers, verbs, adjectives, adverbs, prepositions, auxiliaries, conjunctions, or mood words.

##### 3.1.1 Nouns

Nouns can stand by themselves, or they can be modified by adjectives, pronouns, or numeral classifier phrases. Generally, the position of the modifier is after the head (noun).

lan <sup>31</sup> pou <sup>35</sup> 'a white horse'	mɛ <sup>55</sup> ɔ <sup>33(31)</sup> 'my children'
horse white	children I
mɛ <sup>55</sup> ki <sup>33</sup> 'that child'	wɛ <sup>33</sup> mɛ <sup>55</sup> 'the younger brother of the child'
child that	yng. brother child
ɔ <sup>31</sup> bi <sup>33(35)</sup> mou <sup>33</sup> mə <sup>55</sup> tshe <sup>13(35)</sup>	'I bought one knife.'
I buy knife one classi.	

When the cardinality of the noun is one, it can be directly modified by the classifier *bɔ̃<sup>55</sup>* 'one, classifier'.

wɔ̃ <sup>33</sup> bɔ̃ <sup>55</sup> 'one piece of stone'	bɔ̃ <sup>55</sup> kou <sup>13</sup> bɔ̃ <sup>55</sup> 'one corn'
stone class.	corn class.
puŋ <sup>55</sup> bɔ̃ <sup>55</sup> 'one flower'	pu <sup>55</sup> li <sup>31</sup> bɔ̃ <sup>55</sup> 'one coat'
flower class.	coat class.

Most nouns cannot be reduplicated, but many nouns that are concurrently classifiers, can be: *hɛ<sup>55</sup> hɛ<sup>55</sup>* 'every day'.

##### 3.1.2 Pronouns

Personal pronouns distinguish singular, dual, and plural, and the first plural pronouns distinguish inclusive and exclusive. *bi<sup>31</sup>* is a blend of '*bi<sup>31</sup>* (two) *pau<sup>31</sup>* (classifier of people).'

ɔ <sup>31</sup> ‘I’	wi <sup>31</sup> bi <sup>31</sup> ‘we two’	wi <sup>31</sup> ‘we (inclusive)’
		pe <sup>31</sup> ‘we (exclusive)’
mɔ <sup>31</sup> ‘you (singular)’	mi <sup>31</sup> bi <sup>31</sup> ‘you two’	mi <sup>31</sup> ‘you (plural)’
i <sup>31</sup> ‘he, she, it’	he <sup>31</sup> bi <sup>31</sup> ‘they two’	he <sup>31</sup> ‘they’

Some interrogative pronouns are formed with *-pau<sup>35</sup>* (indicating interrogation) and other morphemes, *o<sup>55</sup>pau<sup>35</sup>* ‘where’, *tsə<sup>55</sup>pau<sup>35</sup>* ‘when’, *tə<sup>55</sup>pau<sup>35</sup>* ‘how many, how much’, *ne<sup>13</sup>pau<sup>35</sup>* ‘how many (people)’, *ɣen<sup>55</sup>pau<sup>35</sup>* ‘why’.

Demonstrative pronouns have two basic forms—*ni<sup>33</sup>* ‘this’ and *ki<sup>33</sup>* ‘that’. There are some others, *ta<sup>55</sup>ni<sup>33</sup>* ‘here’, *ta<sup>55</sup>ki<sup>33</sup>* ‘there’, *mə<sup>55</sup>ni<sup>33</sup>* ‘this side’, *mə<sup>55</sup>ki<sup>33</sup>* ‘that side’, *naŋ<sup>13</sup>ni<sup>33</sup>* ‘like this’, *naŋ<sup>13</sup>ki<sup>33</sup>* ‘like that’. There are three deictic degrees to indicate location—*ki<sup>33</sup>/dɔ<sup>13</sup>* ‘that far’, *kɛ<sup>33</sup>* ‘that farther’, *o<sup>55</sup>kɛ<sup>33</sup>* ‘that farthest’. *dɔ<sup>13</sup>* is not often used.

mɛ <sup>55</sup>	ki <sup>33</sup>	xu <sup>55</sup> (13)	laŋ <sup>31</sup>	‘That boy rides a horse.’
child	that	ride	horse	
mɛ <sup>55</sup>	kɛ <sup>33</sup>	tsou <sup>31</sup>	fei <sup>33</sup>	‘That boy (farther) has a meal.’
child	that	eat	meal	
mɛ <sup>55</sup>	o <sup>55</sup> kɛ <sup>33</sup>	mtshau <sup>31</sup>	li <sup>55</sup>	‘That boy (farthest) herds oxen.’
child	that	herd	oxen	

Normally, pronouns cannot be either modified nor reduplicated.

### 3.1.3 Numerals

*bɔ<sup>55</sup>* ‘one’, *bi<sup>31</sup>* ‘two’, *mtse<sup>31</sup>* ‘three’, *pau<sup>33</sup>* ‘four’, *mi<sup>33</sup>* ‘five’, *pi<sup>33</sup>* ‘six’, *pou<sup>31</sup>* ‘seven’, *sã<sup>33</sup>* ‘eight’, *çi<sup>33</sup>* ‘nine’, *mã<sup>31</sup>* ‘ten’, *zu<sup>31</sup>* ‘hundred’, *thiaŋ<sup>13</sup>* ‘thousand’.

Different forms of ‘one’ and ‘two’ have different uses; *mə<sup>55</sup>* ‘one’ and *bi<sup>31</sup>* ‘two’ are used with classifiers to form a numeral classifier phrase.

*piau<sup>13</sup>(35)* (people) *mə<sup>55</sup>* (one) *pau<sup>31</sup>* (classifier of people) ‘one person’,  
*piau<sup>13</sup>(35)* (people) *bi<sup>31</sup>* (two) *pau<sup>31</sup>* (classifier of people) ‘two persons’.

mã <sup>31</sup> bɔ <sup>55</sup> ‘eleven’	mə <sup>55</sup> ʔu <sup>31</sup> lɛ̃ <sup>33</sup> bɔ <sup>55</sup>	‘one hundred and one’
mã <sup>31</sup> bi <sup>31</sup> ‘12’	bi <sup>31</sup> ʔu <sup>31</sup>	‘two hundred’
bi <sup>33(31)</sup> mã <sup>31</sup> ‘20’	mə <sup>55</sup> thian <sup>13</sup>	‘one thousand’
mə <sup>55</sup> ʔu <sup>31</sup> ‘100’	mə <sup>55</sup> vã <sup>13</sup>	‘ten thousand’

Normally, numerals cannot be modified or reduplicated.

### 3.1.4 Classifiers

Classifiers can be divided into three types—the classifiers for nouns (indicating measures of things, objects, etc.), for verbs (indicating measures of actions), or blends.

Classifiers for nouns:

pau <sup>31</sup>	for people	piau <sup>13(35)</sup> bi <sup>31</sup> pau <sup>31</sup>	‘two persons’
biə <sup>33</sup>	for animals	li <sup>55</sup> mtse <sup>31</sup> biə <sup>33</sup>	‘three oxen’
li <sup>33</sup>	for long-shaped objects	xa <sup>33</sup> mə <sup>55</sup> li <sup>33</sup>	‘one stick’
tshe <sup>13</sup>	for objects, river	you <sup>55</sup> mə <sup>55</sup> tshe <sup>13</sup>	‘one river’
tsuŋ <sup>55</sup>	for plants	sau <sup>31</sup> pau <sup>33</sup> tsuŋ <sup>55</sup>	‘four trees’
liu <sup>33</sup>	for sheet-shaped objects	yai <sup>35</sup> mə <sup>55</sup> liu <sup>33</sup>	‘one sheet of paper’
tsam <sup>33</sup>	pair	sau <sup>33</sup> mə <sup>55</sup> tsam <sup>33</sup>	‘a pair of birds’
pam <sup>35</sup>	portion	fei <sup>33</sup> mə <sup>55</sup> pam <sup>35</sup>	‘a portion of food’

Classifiers for verbs :

tsi <sup>35</sup>	time	ʔau <sup>31</sup> mə <sup>55</sup> tsi <sup>35</sup>	‘have been there once’
mtsa <sup>35</sup>	for eating	tsou <sup>31</sup> mə <sup>55</sup> mtsa <sup>35</sup>	‘have a meal’
tuŋ <sup>55</sup>	for biting	tsa <sup>13</sup> mə <sup>55</sup> tuŋ <sup>55</sup>	‘be bitten once’
ŋga <sup>31</sup>	for sleep	naŋ <sup>33</sup> mə <sup>55</sup> ŋga <sup>31</sup>	‘have slept once’
taŋ <sup>33</sup>	for fist	ndɛ <sup>35</sup> mə <sup>55</sup> taŋ <sup>33</sup>	‘give sb. a box’

Blends:

- mtse<sup>33</sup> for animals, consists of mə<sup>55</sup> ‘one’ and biə<sup>33</sup> (classifier), tə<sup>55</sup>kɔ<sup>33</sup> mtse<sup>33</sup> ‘a tiger’.
- biə<sup>13</sup> for animals, consists of bi<sup>31</sup> ‘two’ and biə<sup>33</sup> (classifier), tə<sup>55</sup>kɔ<sup>33</sup> biə<sup>13</sup> ‘two tigers’.
- mbau<sup>55</sup> for people, consist of mə<sup>55</sup> ‘one’ and pau<sup>31</sup> (classifier), piau<sup>13(35)</sup> mbau<sup>55</sup> ‘one person’.

Classifiers can be modified by numerals and demonstratives.

ma <sup>0</sup> kua <sup>31</sup>	mi <sup>33</sup>	tsiu <sup>33</sup>	‘five folk songs’
song	five	classifier	

fei<sup>33</sup> pau<sup>33</sup> pam<sup>35</sup> 'four portions of food'  
 food four classifier

ʒiu<sup>55</sup> bɔ̄<sup>55</sup> ni<sup>33</sup> 'this spoon'  
 spoon classifier this

au<sup>31</sup> tha<sup>33</sup> ki<sup>33</sup> 'that bundle of firewood'  
 firewood bundle that

A few classifiers can be reduplicated to indicate 'every , all'.

he<sup>55</sup> he<sup>55</sup> 'every day'  
 day day

mai<sup>55</sup> mai<sup>55</sup> 'every month'  
 month month

✽

### 3.1.5 Verbs

Some verbs have causative forms, indicated by 'ŋgɔ̄<sup>35</sup> + verb', the original meaning of ŋgɔ̄<sup>35</sup> is 'to drive out'.

xou <sup>35</sup> 'to ride (a horse)'	ŋgɔ̄ <sup>35</sup> xou <sup>35</sup> 'to order sb. to ride (a horse)'
paɯ <sup>31</sup> 'to get up'	ŋgɔ̄ <sup>35</sup> paɯ <sup>31</sup> 'to order sb. to get up'
tu <sup>33</sup> 'out'	ŋgɔ̄ <sup>35</sup> tu <sup>33</sup> 'to order sb. or sth. to get out'

Some verbs have durative aspect (continuous aspect), indicated by 'sai<sup>33</sup> + verb + nan<sup>31</sup>' or 'verb + nan<sup>13</sup>'.

ɔ̄<sup>31</sup> sai<sup>33</sup> pion<sup>13</sup> 'I'm writing.'  
 I dur. write

mu<sup>31</sup> n̄u<sup>33</sup> nan<sup>13(31)</sup> mə<sup>0</sup>dze<sup>55</sup> 'What are you doing ?'  
 you do dur. what

li<sup>55</sup> sai<sup>33</sup> tsou<sup>31</sup> tsiu<sup>55</sup> nan<sup>31</sup> 'The ox is eating grass.'  
 ox dur. eat grass dur.

Verbs can be modified by adverbs and auxiliary verbs.

pe<sup>13(35)</sup> mə<sup>55</sup> yen<sup>55</sup> me<sup>13</sup> 'The elder sister doesn't take  
 eld.sister not like mother after her mother.'

ɔ̄<sup>31</sup> faŋ<sup>55</sup> ʒau<sup>55(31)</sup> nai<sup>55</sup>/nɛ<sup>31</sup> 'I like to go to the market.'  
 I want go market

Verbs cannot be reduplicated.



### 3.1.6 Adjectives

Adjectives can be modified by different adverbs to indicate degrees.

1st degree	‘adjective + tɛ <sup>31</sup> ,’
comparative	‘adjective + tɛ <sup>31</sup> lɛ <sup>31</sup> ,’
superlative	‘kaŋ <sup>55</sup> + adjective + lɛ <sup>31</sup> ,’

ɲu <sup>35</sup>	ɔ <sup>31</sup>	lu <sup>31</sup>	tɛ <sup>31</sup>	‘My house is good.’
house	I	good	indeed	

ɲu <sup>35</sup>	mu <sup>31</sup>	lu <sup>31</sup>	tɛ <sup>31</sup> lɛ <sup>31</sup>	‘Your house is better.’
house	you	good	more	

ɲu <sup>35</sup>	i <sup>31</sup>	kaŋ <sup>55</sup>	lu <sup>31</sup>	lɛ <sup>31</sup>	‘His house is the best.’
house	he	most	good	most	

Adjectives can be modified by all adverbs.

mɔ <sup>31</sup>	tɛ <sup>31</sup>	‘be a bit too heavy’	kaŋ <sup>55</sup>	mɔ <sup>31</sup>	‘very heavy’
heavy	a bit		very	heavy	

mə <sup>55</sup>	lou <sup>33</sup>	‘be not cold’	tə <sup>0</sup> ka <sup>33</sup>	ɲu <sup>13</sup>	‘do (it) immediately’
not	cold		immediately	do	

Adjectives can be followed by 1~2 suffix syllables to indicate certain conditions (see § 2.1.2.2.), and most adjectives can be reduplicated.

ŋga <sup>31</sup>	ŋga <sup>31</sup>	‘deep yellow’	ndzun <sup>33</sup>	ndzun <sup>33</sup>	‘very thin (person)’
yellow	yellow		thin	thin	

### 3.1.7 Adverbs

Adverbs cannot be modified, their main grammatical function is to modify verbs and adjectives. Most of them occur before their heads, only few adverbs follow their heads (see 3.1.5, 3.1.6).

### 3.1.8 Prepositions

Prepositions form prepositional phrases with nouns and pronouns and play a sentence part.

pə <sup>0</sup>	nam <sup>55</sup>	thɛ <sup>31</sup>	tsə <sup>55</sup> ni <sup>33</sup>	‘(from ) last year until today.’
last	year	to	now	

pi<sup>13</sup> tho<sup>55(31)</sup> tsai<sup>31</sup>/pi<sup>33</sup> ta<sup>55</sup> ‘The sun is bigger than the moon.’  
 sun big than moon

i<sup>33(31)</sup> lai<sup>55</sup> ban<sup>55</sup> pa<sup>55</sup> sau<sup>31</sup> a<sup>33</sup> ‘He has fallen from the top of a tree.’  
 he fall from top tree come

### 3.1.9 Auxiliaries

mə<sup>55</sup> precedes adjectives, indicates quality or condition of sth. or sb.  
 mə<sup>55</sup> la<sup>13(33)</sup> ‘(It ) is red’, mə<sup>55</sup> ŋga<sup>55(31)</sup> ‘ (It ) is yellow’

la<sup>33</sup> precedes nouns, pronouns, forming a genitive.  
 ŋu<sup>33</sup> mə<sup>55</sup>ni<sup>33</sup> la<sup>33</sup> mu<sup>55(31)</sup> ‘This house is yours.’  
 house here belong-to you

le<sup>31</sup> follows nouns, pronouns, forms a genitive.  
 mo<sup>33</sup> ɔ<sup>31</sup> le<sup>31</sup> ‘The knife is mine.’  
 knife I belong-to

tsu<sup>31</sup> follows verbs, indicates continuous action.  
 mɛ<sup>55</sup> be<sup>35</sup> tsu<sup>31</sup> ɔŋ<sup>35(13)</sup> bi<sup>31</sup> tshe<sup>13</sup>  
 child hold sugar cane two classifier  
 ‘This boy is holding two sugar canes.’

### 3.1.10 Conjunctions

Conjunctions are often used to link up content words or phrases.

wɛ<sup>33</sup> le<sup>31</sup> du<sup>33</sup>  
 eld. brother and ygr. brother  
 ‘elder brother and younger brother’

mtse<sup>33</sup> tsɔ<sup>33</sup> kai<sup>33</sup> ma<sup>33</sup> mtse<sup>55(31)</sup>  
 banana have or haven’t  
 ‘(Do you) have any bananas?’

### 3.1.11 Mood words

They usually occur at the end of a sentence to indicate its mood. By itself a mood word has no meaning.

ma<sup>13</sup>, a<sup>33</sup> occur in assertives.

i<sup>31</sup> mə<sup>55</sup> nɔ<sup>31</sup> ma<sup>13</sup> ‘He doesn’t come here.’  
 he not come assert

zau<sup>31</sup>    yau<sup>31</sup>sau<sup>55</sup>    tsu<sup>31</sup>                    mə<sup>55</sup>    nam<sup>55</sup>    a<sup>33</sup>  
 go        read                    auxiliary        one        year        assert.  
 'He has gone to school for one year.'

ni<sup>55</sup> occurs in interrogatives.

i<sup>31</sup>    nɔ<sup>31</sup>    mə<sup>55</sup>    nɔ<sup>31</sup>    ni<sup>55</sup>                    'Does he come here?'  
 he    come    not    come    ques.

la<sup>0</sup> occurs in imperatives.

wi<sup>31</sup>    na<sup>55</sup>    la<sup>0</sup>                    'Let us go!'  
 we    go        imp.

### 3.2. Phrases

There are subject-predicate phrases, verb-object phrases, parallel phrases, head-modifier phrases, verb-complement phrases, and numerical-classifier phrases.

#### 3.2.1 Subject-predicate phrases

Subjects are usually formed by nouns, pronouns, nominal head-modifier phrases or parallel phrases. Predicates are usually formed by verbs, adjectives, verbal and adjective parallel (or head-modifier) phrases, or verb-complement phrases.

tsion<sup>33</sup>    ɲgɔ<sup>35</sup>                    'the deer steps on'  
 deer        step on

hɔŋ<sup>33</sup>        ʒuŋ<sup>55(31)</sup>    tsion<sup>33</sup>    tsan<sup>33</sup>                    'Footprints of deer are smelly.'  
 footprint    foot            deer        smelly

i<sup>31</sup>        nɔ<sup>31</sup>        mə<sup>55</sup>    tsi<sup>35</sup>                    'He has once come here.'  
 he        come        one        time

wɛ<sup>33</sup>        lɛ<sup>33</sup>        pɛ<sup>35</sup>                    ɲɛ<sup>31</sup>bio<sup>33</sup>    di<sup>31</sup>  
 eld. bro.    and        sis.-in-law        quarrel        terribly  
 'Elder brother quarrels with sister-in-law terribly.'

mɛ<sup>55</sup>    ɔ<sup>33(31)</sup>    ʒou<sup>13</sup>    tho<sup>31</sup>    ʒou<sup>13</sup>    ɣo<sup>33</sup>  
 child    I            also        big        also        tall  
 'My child is big and tall.'

### 3.2.2 Verb-object phrases

The elements which act as an object are the same as those that act as a subject:

te<sup>31</sup>            thun<sup>31</sup>go<sup>31</sup>  
 worship        buckwheat  
 'to offer buckwheat as a sacrifice to (ancestors)'

tan<sup>35</sup>    sau<sup>31</sup>    le<sup>33</sup>    lau<sup>35(13)</sup>  
 put-in garlic and prickly-ash  
 'to put some garlic and Chinese prickly ashes (in the bag)'

ta<sup>35</sup>ti<sup>55</sup>    mu<sup>31</sup>  
 give        you  
 'to give you'

pə<sup>55</sup>kan<sup>33</sup>    ɕɔ<sup>33</sup>        nuŋ<sup>31</sup>tsi<sup>13</sup>kɔ<sup>35</sup>    thie<sup>13</sup>tsu<sup>55</sup>  
 Bugan        afraid        Nong Zhigao        Emperor  
 'The Bugan were afraid of Emperor Nong Zhigao.'

### 3.2.3 Parallel phrases

Parallel phrases can be formed by two or more nouns, pronouns, verbs, or adjectives, some use conjunctions but others don't.

ɕu<sup>33</sup>        tau<sup>33</sup>        ɕu<sup>33</sup>        tsa<sup>35</sup>            'pork and chicken'  
 meat        pig            meat        chicken

ɔ<sup>31</sup>        le<sup>31(33)</sup>        i<sup>31</sup>        'he and I'  
 he        and            I

mu<sup>31</sup>    le<sup>33</sup>        na<sup>33</sup>mu<sup>33</sup>    za<sup>55</sup>        pɔ<sup>31</sup>  
 you    and        girl        dance     a reedpipe wind instrument  
 'You and the girls dance following the music (played by a reedpipe wind instrument).'

tsaŋ<sup>31</sup>    a<sup>33</sup>        tsou<sup>31</sup>            'take (it) back and eat'  
 take     assert.    come eat

kaŋ<sup>55</sup>    tho<sup>55(31)</sup>    kaŋ<sup>55</sup>    yo<sup>33</sup>            'big and high'  
 very    big            very    high

### 3.2.4 Head-modifier phrases

There are two types. When nouns act as the head they may be modified by adjectives, pronouns, nouns, or numerical classifier phrases (see § 3.1.1.). When

verbs or adjectives act as the heads, they may be modified by adverbs and time nouns (see § 3.1.5. and § 3.1.6.).

### 3.2.5 Verb-complement phrases

Verbs can be followed by adjectives, verbs, or numerical classifier phrases to complete their meaning, thus forming a verb-complement phrase.

ne<sup>31</sup>      bio<sup>33</sup> di<sup>31</sup>      ‘to quarrel terribly’  
 quarrel      terribly

kan<sup>35</sup>      thuŋ<sup>33</sup>      ‘to cut down’  
 cut      fall

bi<sup>35</sup>    tsu<sup>31</sup>      bi<sup>31</sup>    tshe<sup>13</sup>      ‘to hold two’  
 hold    auxiliary    two    classifier

ʒau<sup>31</sup>    yau<sup>31</sup>sau<sup>55</sup>    tsu<sup>31</sup>      mə<sup>55</sup>    nam<sup>55</sup>    a<sup>0</sup>  
 go      read                      auxiliary    one      year  
 ‘have gone to the school for one year’

i<sup>31</sup>    yo<sup>33</sup>    mtse<sup>31</sup>    tshu<sup>33</sup>  
 he    high    three    chi  
 ‘He is three chis (a unit of length) high.’

### 3.2.6 Numerical classifier phrases

These consist of ‘numeral + classifier’; some become blends (see §3.1.3, §3.1.4).

### 3.3 Sentence parts and word order

Bugan is a SVO language; only the existential sentence is OSV (see §3.4). Attributes follow heads; some adverbials follow heads, but the others precede heads. Complements always follow heads.

The elements which act as subject or object in a sentence are the same as those in a phrase; some examples are found in §3.1, §3.2; below are some more sentences.

S	V	O
nun <sup>31</sup> tsi <sup>13</sup> kə <sup>35</sup> thie <sup>13</sup> tsu <sup>55</sup>	tɛ <sup>31</sup> tou <sup>33</sup> (13)	pə <sup>55</sup> kan <sup>33</sup>
Emperor Nong Zhigao	pursue	Bugan
‘Nong Zhigao Emperor pursued the Bugan.’		

S	V	O Complement
pə <sup>55</sup> kan <sup>33</sup>	nə <sup>33</sup> mtsəŋ <sup>35</sup>	kə i <sup>33</sup> o <sup>55</sup> biou <sup>33</sup>
Bugan	spend	festival on the mountain top.
‘The Bugan spend festivals on top of the mountain.’		

S      V      O or S      Predicate  
 mi<sup>31</sup>   a<sup>33</sup>   ta<sup>33(35)</sup>   puu<sup>55</sup>   lio<sup>31</sup>   ni<sup>33</sup>   ʒa<sup>33</sup>   mə<sup>55</sup>ʒa<sup>33</sup>  
 you   come   look   coat   this   good   not   good  
 'Please come here to look my coat, and tell me if it is good or not.'

S      V      O  
 ɔ<sup>31</sup>   ndo<sup>31</sup>   se<sup>31</sup>   tau<sup>33</sup>   mə<sup>55</sup>ni<sup>33</sup>  
 I      like   sell   pig   this  
 'I'd like to sell this pig.'

S      Predicate  
 kou<sup>13</sup>   tai<sup>31(55)</sup>   mə<sup>55</sup>ni<sup>33</sup>   kaŋ<sup>55</sup>   mo<sup>31</sup>   ni<sup>55</sup>a<sup>0</sup>  
 corn   basket   this   very   heavy   mood word  
 'This basket of corn is very heavy.'

The elements which act as attributes and complements in a sentence are the same as those in a phrase (attribute equals the modifier of nouns). Adverbials are formed by adverbs, adjectives, time nouns, or pronouns. Some examples were given in §3.1 and §3.2, and there are some more examples below.

#### Adverbial Attribute

he<sup>33</sup>   ni<sup>33</sup>   ɔ<sup>31</sup>   mtsha<sup>13</sup>   tse<sup>0</sup>qa<sup>35</sup>   mi<sup>33</sup>biə<sup>33</sup>  
 today   I   kill   duck   five   classifier  
 'I have killed five ducks today.'

#### Adverbial

pə<sup>55</sup>kan<sup>33</sup>   kai<sup>33</sup>   qha<sup>35</sup>   tsu<sup>33</sup>nu<sup>33</sup>   mtsaŋ<sup>35</sup>  
 Bugan   on   way   spend   festival  
 'The Bugan spent the festival on the road (when they moved).'

#### Attribute Adverbial Complement

ya<sup>31</sup>   thu<sup>55</sup>   ni<sup>33</sup>   khəŋ<sup>35</sup>   sou<sup>55</sup>   o<sup>55</sup>   pɛ<sup>13</sup>tou<sup>13</sup>  
 take   vegetable   this   all   put   inner   basket  
 'Please put all vegetables in the basket.'

#### Adverbial Attribute Complement

i<sup>31</sup>   ban<sup>55</sup>   o<sup>55</sup>   tɛ<sup>55</sup>   ɔ<sup>33</sup>   be<sup>35</sup>   tham<sup>55(33)</sup>   tsa<sup>13</sup>   biə<sup>31</sup>   no<sup>31</sup>  
 he   from   inner   pocket   pull   take   egg   hen   two   come  
 'He takes two eggs out from his pocket.'

In subjects or objects, heads are often modified by several attributes (modifiers). In these cases, adjectives are general, closest to the head, then personal pronouns; demonstrative pronouns are always the farthest from the head.

lan<sup>31</sup>   pou<sup>35</sup>   mə<sup>55</sup>ni<sup>31</sup>   'this white horse'  
 horse   white   this

man<sup>55</sup>                    ɔ<sup>31</sup>        ki<sup>33</sup>    mi<sup>33</sup>    pau<sup>35(31)</sup>    lɛ<sup>13</sup>    lu<sup>31</sup>  
 daughter-in-law I        those five classifier all good  
 ‘All of my five daughters-in-law are excellent.’

The older Bagan people (60 years old and up) are accustomed to inserting *kai*<sup>33</sup> ‘have’ between the head and the modifier when the modifier is a numeral-classifier phrase.

li<sup>55</sup>    kai<sup>33</sup>    mi<sup>33</sup>    bi<sup>ə33</sup>                    ‘There are five oxen.’  
 ox        have    five    classifier

xa<sup>33</sup>    kai<sup>33</sup>    mə<sup>55</sup>    li<sup>33</sup>                    ‘There is one stick.’  
 stick    have    one    classifier

### 3.4 Sentence patterns

#### 3.4.1 Existential sentences

Existential sentences indicate that someone has something or there is something in some place, and all objects in this pattern are placed before the subject and verbs; the sentence order is OSV.

pə<sup>0</sup>qou<sup>55</sup>    pi<sup>35</sup>        kai<sup>33</sup>        mtse<sup>31</sup>    bɔ<sup>31(55)</sup>  
 sky            sun        have        three    classifier  
 ‘There are three suns in the sky.’

ton<sup>13</sup>        saw<sup>31</sup>    ɔ<sup>31</sup>        kai<sup>33</sup>        bi<sup>ɔ31</sup>  
 bucket        wood    I            have        pair  
 ‘I have a pair of water buckets.’

mtse<sup>33</sup>tsɔ<sup>33</sup>    mu<sup>31</sup>    kai<sup>33</sup>    ma<sup>33</sup>    mtse<sup>55</sup>  
 banana        you    have    or        not  
 ‘Do you have any bananas?’

#### 3.4.2 Assertives and negatives

Some assertives have no linking verb.

ki<sup>33</sup>        man<sup>55</sup>                                    ɔ<sup>31</sup>                    ‘That is my daughter-in-law.’  
 that        daughter-in-law    I

i<sup>31</sup>        khɔ<sup>33</sup>    pə<sup>55</sup>khui<sup>55</sup>                    ‘He may be a Han.’  
 He        may    Han

bi<sup>31</sup>        wɛ<sup>33</sup>        du<sup>33</sup>    kaŋ<sup>31</sup>                    ‘(They) two are blood brothers.’  
 two        brother    be    blood

Linking verbs have two forms—*ni*<sup>33</sup>/*nu*<sup>33</sup>. They are used in assertives. The original meaning of *nu*<sup>33</sup> is ‘do’; it is not often used as a linking verb. *ni*<sup>33</sup> may be related to *ni*<sup>33</sup> ‘this’. *saŋ*<sup>55</sup> is used in negatives.

o<sup>31</sup> ni<sup>33</sup>/*nu*<sup>33</sup> pə<sup>55</sup>kan<sup>33</sup>  
I be Bugan  
‘I am a Bugan.’

o<sup>31</sup> mə<sup>55</sup> saŋ<sup>55</sup> piau<sup>13</sup> pə<sup>55</sup>se<sup>33</sup>  
I not be man Guangnan  
‘I am not a person who lives in Guangnan Town.’

mou<sup>33</sup> mə<sup>55</sup>ni<sup>33</sup> lio<sup>55</sup> mə<sup>55</sup> saŋ<sup>55</sup>  
knife here my not be  
‘This knife is not mine.’

### 3.4.3 Comparative sentences

Comparative sentences are used to compare the conditions and characters of people or things. Basically, their nuclear form is ‘adjective - *tsai*<sup>31</sup>/*pi*<sup>13</sup> - noun (pronoun or nominal phrase)’; *tsai*<sup>31</sup>/*pi*<sup>13</sup> are prepositions, they govern nouns (or nominal phrases) and form a prepositional phrase (or a prepositional clause).

li<sup>55</sup> tho<sup>31</sup> tsai<sup>31</sup>/*pi*<sup>13</sup> tau<sup>33</sup>  
ox big than pig  
‘An ox is bigger than a pig.’

mɛ<sup>55</sup> i<sup>31</sup> sɛ<sup>31</sup> tsai<sup>31</sup>/*pi*<sup>13</sup> mɛ<sup>55</sup> mu<sup>31</sup>  
children he smart than children you  
‘His children are smarter than your children.’

Although Bugan is a tonal language, most of its words are monosyllabic, and only a few words show morphological changes, still, the Bugan language is very close to Mon-Khmer. From its basic vocabulary, we can clearly observe the close relation between Bugan and other Mon-Khmer languages. From the following wordlist, we note that Bugan shares many cognates in basic vocabulary with Mon-Khmer languages especially with Lai/Bolyu of Guangxi Zhuang Autonomous region, China.<sup>1</sup> In coming papers, I will discuss the origin of Bugan tones, Bugan’s relation to Lai/Bolyu and its position in the Mon-Khmer stock.<sup>2</sup>

<sup>1</sup> Bugan and Lai/Bolyu words come from my investigations, Old Mon (spoken in the Dvaravati Kingdom of Central Thailand in the VI to IXth Centuries A.D.) words from Diffloth: *The Dvaravati Old Mon Language and Nyah Kur*, and the words from the other Mon-Khmer languages come from F. E. Huffman, “An Examination of lexical correspondences between Vietnamese and some other Austroasiatic languages,” *Lingua* 43:171-98 (1977). Vietnamese phonetic values are taken from Laurence C. Thompson. 1987. *A Vietnamese Reference*



	B G	L	V	C	LW	K	OM
one	bə <sup>55</sup> /mə <sup>55</sup>	mə <sup>33</sup> /məi <sup>31</sup>	một	muəy		mooy	*mway
two	biə <sup>31</sup> /bi <sup>31</sup>	mbi <sup>55</sup>	hai				*baar
three	mtse <sup>31</sup>	pai <sup>55</sup>	ba	bəy			*pii?
four	pau <sup>33</sup>	pu:n <sup>53</sup>	bốn	buən	paon		*pan
five	mi <sup>33</sup>	me <sup>33</sup>	năm [nəm]	pram	phon		*(m-)suun
six	piə <sup>33</sup>	piu <sup>53</sup>	sáu [səu]				*t(-w-)raw
seven	pou <sup>31</sup>	pai <sup>55</sup>	bảy [bɛi]				*tɲpəh
eight	sā <sup>33</sup>	sa;m <sup>53</sup>	tám				*tɲcaam
nine	çi <sup>33</sup>	çən <sup>53</sup>	chín				*(k/t)ɲciit
ten	mā <sup>31</sup>	man <sup>33</sup>	mười [muəi]				*cas
hundred	zu <sup>31</sup>	zə <sup>33</sup>					
hand	tie <sup>55</sup>	ti <sup>55</sup>	tay [tɛi]	day	te?	ti?	*təy
bone	za <sup>35</sup>	pa:u <sup>31</sup> ze <sup>55</sup>	xương [suəŋ]	cqəŋ	sə?aŋ	c?aaŋ	*j(l)uut
foot	zun <sup>31</sup>	zəŋ <sup>55</sup>	chân [çan]	(cəəy)	chuəŋ		*juŋ
tail	pa <sup>55</sup> wei <sup>31</sup>	zi <sup>31</sup>	đuôi [đuəi]	(kantuy)			*pɾtaa?
tooth	tsə <sup>35</sup>	maŋ <sup>31</sup>	răng [zəŋ]	(tmin)			*ɲiək
hair	sək <sup>55</sup>	suk <sup>53</sup>	tóc [təukp]	saq	haək		*səək
eye	pə <sup>0</sup> mɛ <sup>33</sup>	ʔai <sup>53</sup> ma <sup>31</sup>	mat	(pnɛɛk)	?ŋae		*mat
neck	kəŋ <sup>33</sup>	ləŋ <sup>31</sup>	cổ	kaa			*kəə?
nose	pə <sup>0</sup> mā <sup>31</sup>	ləŋ <sup>33</sup> mi <sup>11</sup>	mũi [mui]	craəmoh	maəh	muh	*(cə)- məh
tongue	pə <sup>0</sup> lai <sup>33</sup>	lim <sup>31</sup>	lưỡi [luəi]	leas Bru			*klntaak
bird	sau <sup>33</sup>	sən <sup>53</sup>	chim [cim]	saem			*kɲciəm
dog	tsau <sup>33</sup>	tsu <sup>53</sup>	chó [cə]	ckæ	sə?	sə?	*clur
fish	se <sup>0</sup> qou <sup>33</sup>	qə <sup>53</sup>	cá [ka]	ka?	ka?		*kaa?
tree	sau <sup>31</sup>	sa:u <sup>55</sup>	cây [kɛi]	(kuəl)			*chuu?
leaf	ləu <sup>13</sup>	lə <sup>11</sup>	lá	slək	hla?	hla?	*slaa?
root	yau <sup>13</sup>	zi <sup>11</sup>	rễ	rih	reh	rieh	*ris
stone	təu <sup>33</sup>	mau <sup>11</sup>	dá	tmaa	səmo?		*tməə?
cave	ləŋ <sup>33</sup>	ləŋ <sup>33</sup>	lờ		dələh Brao		*srɯŋ
river	yəu <sup>55</sup>	a:n <sup>55</sup>	sông [səuŋm]	(stiŋ)	kloŋ		*krooŋ
water	da <sup>35</sup>	nde <sup>53</sup>	nước [nuək]	tək			*daak
road	ho <sup>55</sup> tsu <sup>33</sup>	kə <sup>53</sup>	dương [đuəŋ]	*			*trəw
wall	ləŋ <sup>13</sup>	pɛ <sup>33</sup> və <sup>13</sup>	tường [tuəŋ]	cəŋceəŋ	ndəŋ		
I	ə <sup>31</sup>	a:u <sup>55</sup>	anh [ʔɛŋ]	?añ			*?əy
son	kua <sup>55</sup>	qu:n <sup>55</sup>	con [kən]	koun	kuən	kəən	*kəən
year	nam <sup>35</sup>	nam <sup>13</sup>	năm [nəm]	cnam	naim		*cnaam
weave	ta <sup>31</sup>	ta:n <sup>55</sup>	dan [dan]	tbaaŋ	taŋ	taaŋ	*taaŋ
eat	tsəu <sup>31</sup>	tsə <sup>55</sup>	xôi [səi]	sii	som		*caa?
spin	wəŋ <sup>13</sup>	pin <sup>33</sup>	quay [kwɛi]	(wil)			*wiən
die	mtsa <sup>31</sup>	ʔet <sup>55</sup>	chết [cet]				*ət
cut	yɛn <sup>35</sup>	an <sup>53</sup>	cát [ket]	kat			*c-m-aa?
bite	tsə <sup>13</sup>	tsən <sup>53</sup>	cán [kən]	kat	kiət		*kuut

*Grammar.* Honolulu: University of Hawaii Press. BG=Bugan, L=Lai/Bolyu, V=Vietnamese, C=Cambodian, LW=Lawa, K=Khmu/, OM=Old Mon.

<sup>2</sup> I would like to thank Professor Jerold A. Edmondson. This paper has benefited substantially in form and content from his help. Responsibility for any errors or misconceptions remains mine alone.