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ILLUSTRATION OF THE IPA

Kam (Rongjiang Variety)

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The Rongjiang variety of Kam described in the present study is a southern Dong dialect (ISO 639-3: [kmc]), which belongs to the Tai-Kadai Languages (Edmondson & Luo 2008; Pittayaporn 2021).

Rongjiang (榕江) is located in southeastern Guizhou Province, in the south of Qiandongnan Miao and Dong Autonomous Prefecture, straddling the Pearl River and Yangtze River basins, as shown in Figure 1. It is adjacent to Liping (黎平) and Congjiang (从江) to the east, Libo (荔波) to the south, Sandu Sui Autonomous County (三都水族自治县) and Leishan County (雷山县) in Qiannan Prefecture (黔南州) to the west, and Jianhe County (剑河县) to the north, with a total area of 3,300 square kilometers. Rongjiang has a total population of 379,900, of which ethnic minorities account for about 85 percent, with Dong, Miao, Han, and other ethnic groups dominating the county's population. The majority of the county can speak the Kam language, with the exception of a few areas.

The plosives of Kam in Rongjiang are divided into aspirated and unaspirated, except for /ʔ/. It has a rich tone inventory, with 15 tones, and the tones are closely linked to consonant aspiration and vowel length. Liang (1980), Zheng & Yang (1985), Wu (2012), among others, have studied its phonetic system.

The present Illustration is based on data collected with a male native Kam speaker aged 50, an elementary school teacher in former Chejiang Township (now merged into Gucheng Town), Rongjiang County, who has not spent long periods of time outside of the area. The monosyllabic morphemes used in the investigation are from the *Dong Han Common Dictionary* (*侗汉常用词典*), and totaled 1,726.

The phonetic characteristics of Kam are analyzed and described on the basis of acoustic data. The devices used during the recording sessions were a laptop computer (Thinkpad X1 Carbon Gen 10, Beijing, China), an external sound card (Sound Blaster X-Fi Surround 5.1 Pro, Creative Labs, Singapore), a mixing console (Behringer XENYX 302USB Premium 5-Input Mixer, Beijing, China), and a unidirectional collar clip microphone (ECM-44B, SONY, Tokyo, Japan). The software was Adobe Audition 2023, recording with a sampling rate of 44.1k Hz and 16-bit resolution. The recordings were carried out in a quiet room. The basic speech parameters are extracted by Praat software (Boersma & Weenink 2020). It should be

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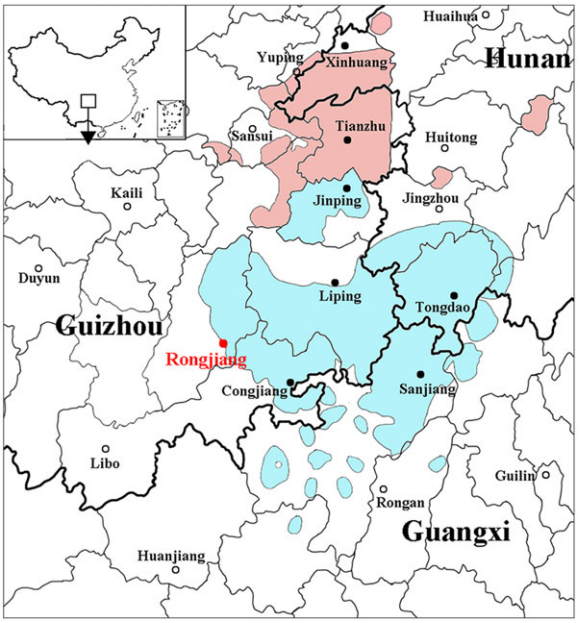

Figure 1. (Colour online) Distribution of Kam. The areas of the northern dialect are shaded light red and the areas of the southern dialect are shaded blue. The map is drawn from C1–12 of *Language Atlas of China* (*中国语言地图集*).

noted that Chao's five-scale pitch system is applied to transcribe the tones throughout this article (Chao 1980).

Consonants

	Bilabial	Palatalized Bilabial	Alveolar	Palatalized Alveolar	Palatal	Velar	Labialized Velar	Glottal
Plosive	p	p^j	t		c	k	k^w	ʔ
	p^h	p^{hj}	t^h		c^h	k^h	k^{hw}	
Nasal	m	m^j	n		ɲ	ŋ	$ŋ^w$	
Fricative			s		ç			h
Approximant	w				j			
Lateral Approximant			l	l^j				

As shown in Consonants table, the consonants of Kam comprise 26 phonemes. Plosives (with the exception of glottal) contrast in terms of aspiration: they may be either aspirated vs. unaspirated. The bilabial plosives, bilabial nasals, and lateral approximants contrast in terms of palatalization, and the velar plosives and velar nasals have labialized counterparts.

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The following minimal and near-minimal pairs illustrate the contrasts summarized above:

MANNER	CONSONANT	EXAMPLE	GLOSS
Plosives	p	pa^{355}	'fish'
	p^h	p^ha^{25}	'gray'
	t	ta^{355}	'eye'
	t^h	t^hu^{25}	'egrets'
	k	ka^{355}	'to pull'
	k^h	k^ha^{25}	'ear'
	p^j	p^ja^{355}	'stone'
	p^{hj}	$p^{hj}e^{451}$	'to give'
	k^w	k^wa^{355}	'to register'
	k^{hw}	$k^{hw}a^{12}$	'tail'
	c	ca^{355}	'awn of grain'
	c^h	c^ha^{451}	'to climb'
	ʔ	$ʔa^{355}$	'song'
Nasals	m	ma^{355}	'vegetable'
	n	na^{355}	'thick'
	ɲ	$ɲa^{355}$	'river'
	ŋ	$ŋa^{22}$	'to slander'
	m^j	m^ja^{211}	'hand'
	$ŋ^w$	$ŋ^wa^{211}$	'to raise'
Fricatives	s	sa^{355}	'ford'
	ç	$ça^{355}$	'to cover'
	h	ha^{22}	'only if'
Lateral approximants	l	la^{22}	'to seek'
	l^j	l^ja^{355}	'scar'
Approximants	w	wa^{22}	'to say'
	j	ja^{355}	'cloth'

Plosives

Plosives in Kam appear in 409 monosyllabic morphemes, accounting for 23.7 percent of the total. Kam plosives, all voiceless, show the places of articulation: bilabial, alveolar, palatal, velar, and glottal. In addition to the glottal, all plosives come with a general two-way

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contrast in aspiration. Figure 2 presents a spectrogram of /ka^{355}/ 'to pull' and /k^{h}a^{25}/ 'ear'. It intuitively demonstrates the difference in the voice onset time (VOT) between the two. The VOT of unaspirated plosives, that is, /p/, /t/, /c/ and /k/, is shorter with the release and voicing onset occurring within approximately 12 ms. On the other hand, the VOT of aspirated plosives, that is, /p^{h}/, /t^{h}/, /c^{h}/ and /k^{h}/, is about 55 ms, as shown in Figure 3.

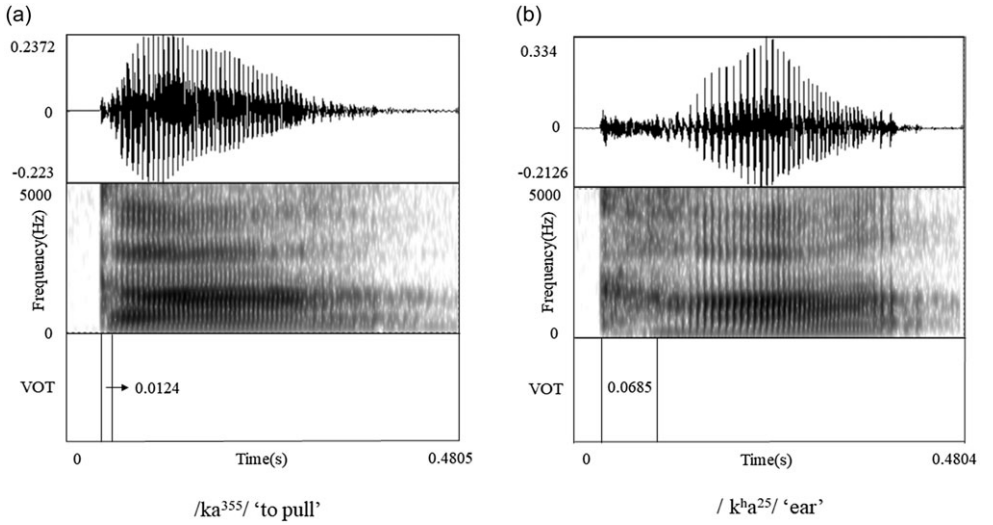

Figure 2. (Colour online) Waveforms and spectrograms for the minimal pairs of /ka^{355}/ 'to pull' vs. /k^{h}a^{25}/ 'ear' in Kam.

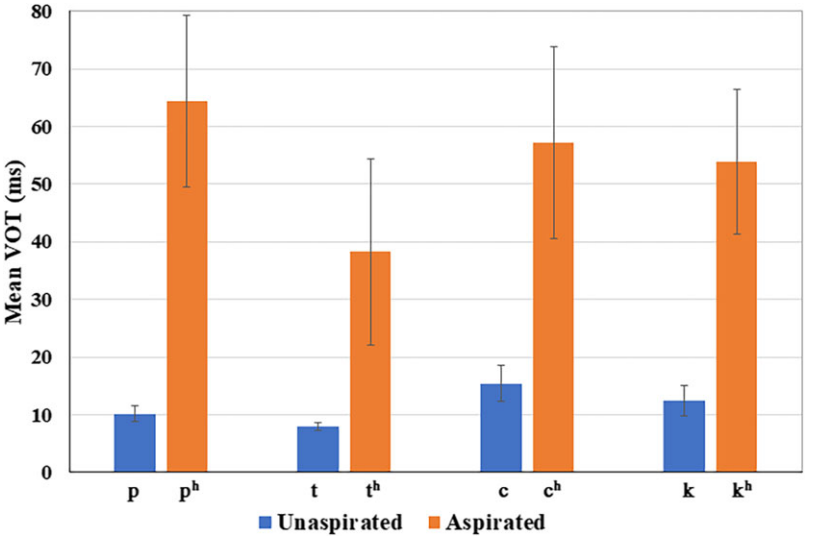

Figure 3. (Colour online) VOT of plosives in Kam, the unaspirated and aspirated are indicated by distinct colors. The mean and standard deviation were calculated using 10 tokens of each plosive from the single speaker.

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In addition to appearing in the onset position, the unaspirated plosives /p/, /t/, and /k/ can also appear as stop codas following vowels. With the exception of a few modal particles, syllables beginning with a vowel are preceded by the glottal plosive /ʔ/.

Nasals

Nasals are present in the different places of articulation: bilabial (/m/, /m^{j}/), alveolar (/n/), palatal (/ɲ/), and velar (/ŋ/, /ŋ^{w}/). /m/ (as in /ma^{355}/ 'vegetable' and /taːm^{355}/ 'handle'), /n/ (as in /na^{355}/ 'thick' and /paːn^{355}/ 'male') and /ŋ/ (as in /ŋa^{22}/ 'to slander' and /paːŋ^{355}/ 'straw') can occur both in onset and coda position, while /m^{j}/ (as in /m^{j}a^{211}/ 'hand'), /ɲ/ (as in /ɲa^{355}/ 'river') and /ŋ^{w}/ (as in /ŋ^{w}a^{211}/ 'to raise') occur only in onset position.

Fricatives

There are three fricatives which are produced at three places of articulation: alveolar /s/, as in /sa^{355}/ 'ford', palatal /ç/, as in /ça^{355}/ 'to cover', and glottal /h/, as in /ha^{22}/ 'only if'. Fricative spectra (made with a 23 ms window centred on the peak of noise intensity) in three fricative samples of Kam are provided in Figure 4. The energy distribution of the

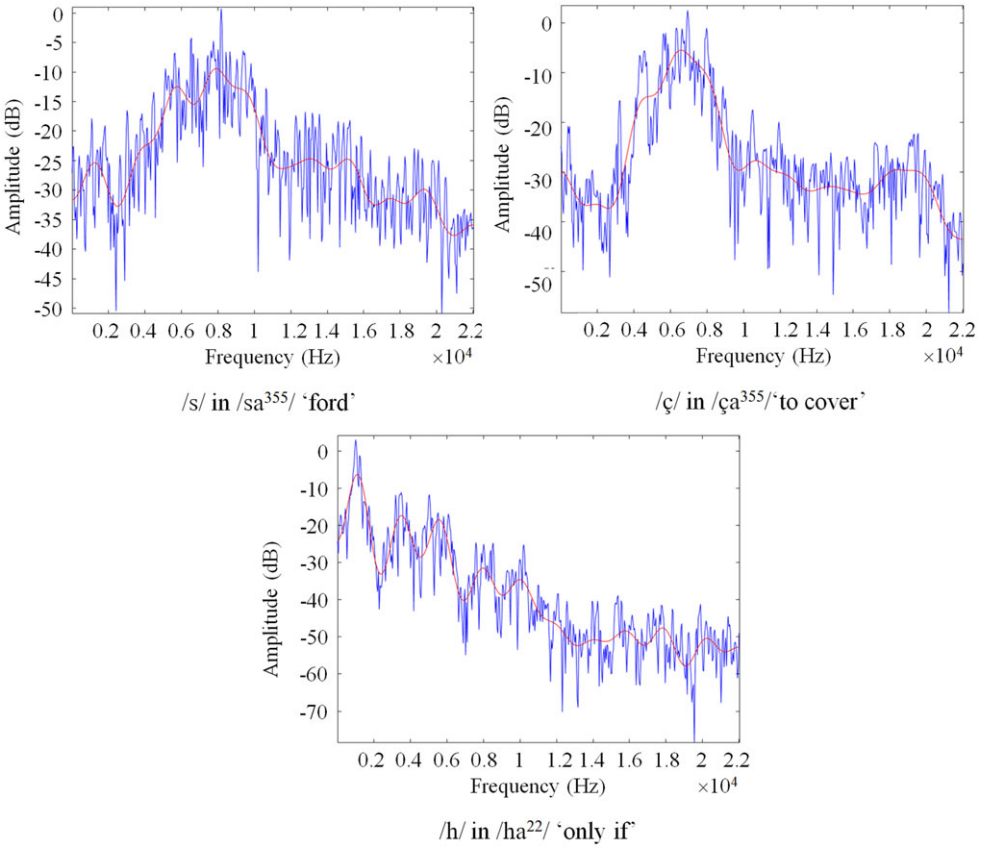

Figure 4. (Colour online) FFT spectrum (blue line) and spectral envelope (cepstrally smoothed spectrum, red line) (made with a 23 ms window centred on the peak of noise intensity) of the frication in /sa^{355}/ 'ford', /ça^{355}/ 'to cover' and /ha^{22}/ 'only if'.

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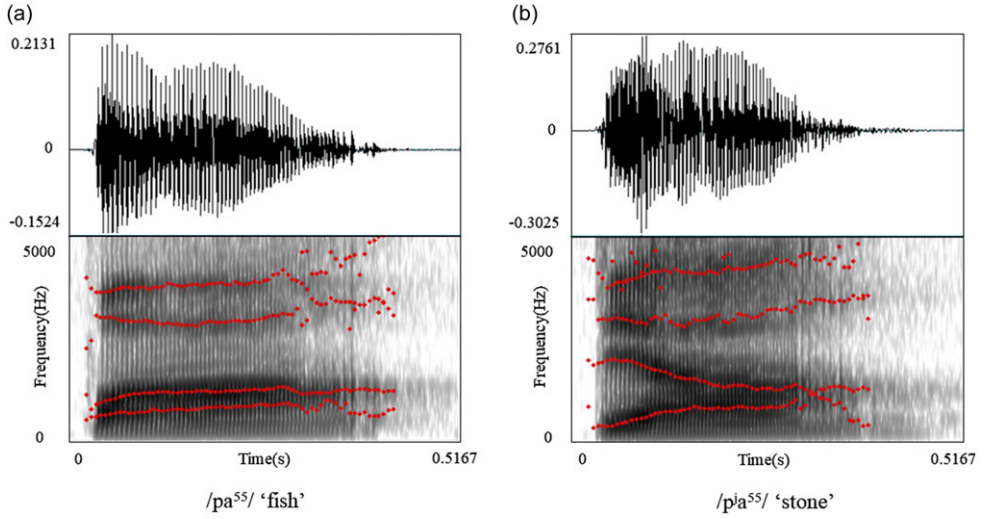

Figure 5. (Colour online) Waveforms and spectrograms for the minimal pairs /pa^{355}/ 'fish' vs. /pʲa^{355}/ 'stone'. The red dotted lines represent the formants.

three fricatives is different. /s/ has its energy mainly concentrated between 5000–10000 Hz. The energy of /ç/ is primarily between 4000–8000 Hz. As for /h/, its greatest energy is mainly below 2000 Hz, and it gradually decreases as the frequency rises.

Lateral approximants and approximants

There are two lateral approximants, /l/ and /lʲ/ and two approximants, /j/ and /w/.

Palatalized consonants

In Kam, the voiceless unaspirated bilabial plosive, voiceless aspirated bilabial plosive, voiced bilabial nasal, and lateral approximant each have a palatalized counterpart, namely, /pʲ/ (as in /pʲa^{355}/ 'stone'), /pʰʲ/ (as in /pʰʲe^{451}/ 'to give'), /mʲ/ (as in /mʲa^{211}/ 'hand'), and /lʲ/ (as in /lʲa^{211}/ 'to shake'). According to the spectra for plain /p/ and palatalized /p/ in Figure 5, vowels after a palatalized consonant begin with a high F2 similar to that of a /i/.

As shown in Figure 6, we statistically analyzed the mean F2 onset of the plain consonants and corresponding palatalized consonants. The mean F2 onset of plain consonants was around 1000 Hz, while that of palatalized consonants was around 2000 Hz. The F2 onset of palatalized consonants is significantly higher than that of plain consonants.

It is worth noting that the consonants which have the palatalized contrast /p pʰ m l/ are slightly velarized, which is especially apparent when followed by /i/, enlarging the physiological and acoustic difference between plain vs. palatalized consonants.

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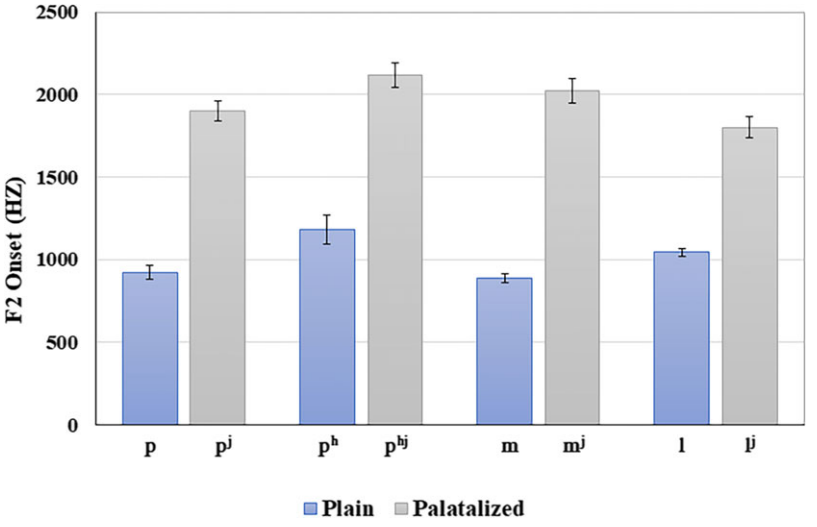

Figure 6. (Colour online) The mean F2 onset after plain vs. palatalized consonants in Kam. The mean and standard deviation were calculated using 10 tokens of each consonant from the single speaker.

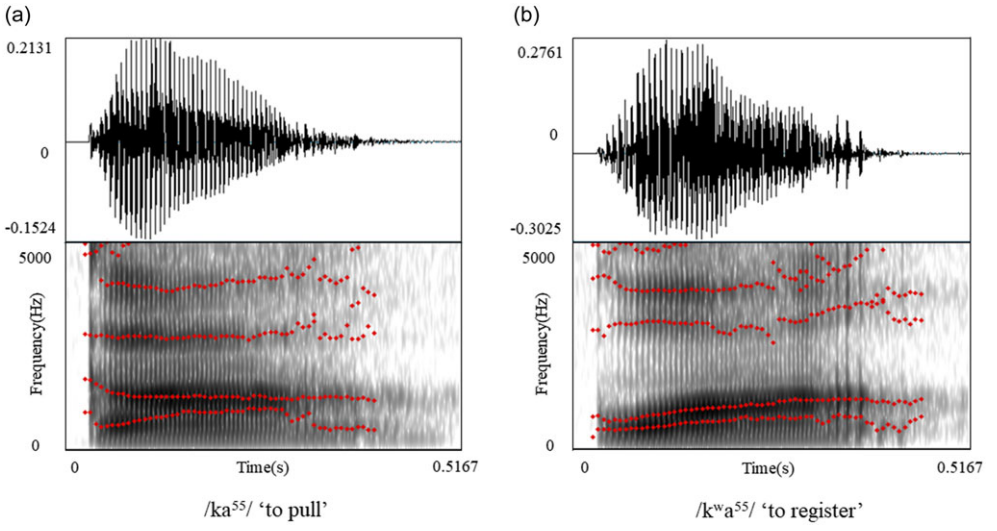

Figure 7. (Colour online) Waveforms and spectrograms for the minimal pairs /ka^{355}/ 'to pull' vs. /k^{w}a^{355}/ 'to register'. The red dotted lines represent the formants.

Labialized consonants

Velar plosives and nasals have labialized counterparts: /k^{w}/ (as in /k^{w}a^{355}/ 'to register'), /k^{hw}/ (as in /k^{hw}a^{12}/ 'tail' and /ŋ^{w}/ as in /ŋ^{w}a^{211}/ 'to raise' (i.e. these consonants are pronounced with rounded lips), so that the consonants have some pronunciation features similar to /u/, as shown in Figure 7.

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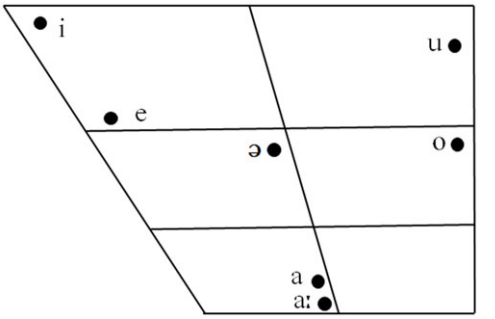
Vowels



Monophthongs

VOWEL	EXAMPLE	GLOSS
a	pa^{355}	'fish'
e	pe^{355}	'dam'
i	pi^{355}	'cup'
o	po^{22}	'gourd'
u	pu^{355}	'to pick'
aː	taːm^{355}	'handle'
əm	pəm^{323}	'plop'

Kam has seven vowel phonemes: /a/, /aː/, /ə/, /e/, /i/, /o/ and /u/, among which /a/, /e/, /i/, /o/ and /u/ can be found in open syllables. All seven vowels can occur in closed syllables with nasal codas /m n ŋ/ and stop codas /p t k/. Stops have no audible release when they appear in coda position. It should be noted that, although /a/ is technically a low front vowel in the IPA, we are using this symbol to denote a low central vowel.

The vowel chart is plotted based on the relative F1 and F2 values of vowel phonemes in Kam, as shown in Figure 8. The values of formants are extracted from open syllables whose vowels are /a/, /e/, /i/, /o/ and /u/, and closed syllables whose vowels are /a/ and /ə/. We chose 10 syllables with different consonants for each vowel, then extracted the values of the stable segment of the formants using Praat software, with the default Settings.

/a/ is a low central vowel, which can be a monophthong by itself or followed by nasal and stop codas. It has two allophones, [ɐ] and [ɑː]. When /a/ is the monophthong final, it is pronounced similarly to [ɑː] (e.g. /pa^{355}/ 'fish', /ta^{355}/ 'eye'). And when it occurs in closed syllables, it is close to [ɐ] (e.g. /pan^{355}/ 'bamboo', /tam^{355}/ 'pond').

Like /a/, /aː/ is a low central vowel, and /aː/ is pronounced close to [ɑː] (e.g. /paːn^{355}/ 'male', /taːm^{355}/ 'handle'). The /aː/ and /a/ differ in length when followed by nasal codas or stop codas. As in Table 1, by separately calculating the average duration of /aː/ and /a/ in all the monosyllabic morphemes with nasal codas and stop codas in Kam, the mean duration of /aː/ is identified as 180 ms, and that of /a/ as 58 ms. It is noteworthy that with nasal codas, long nuclei have short codas, while short nuclei have long codas. For example, Figure 9 shows spectrograms of two syllables with a nasal coda, /taːm^{355}/ 'handle' and /tam^{355}/ 'pond'.

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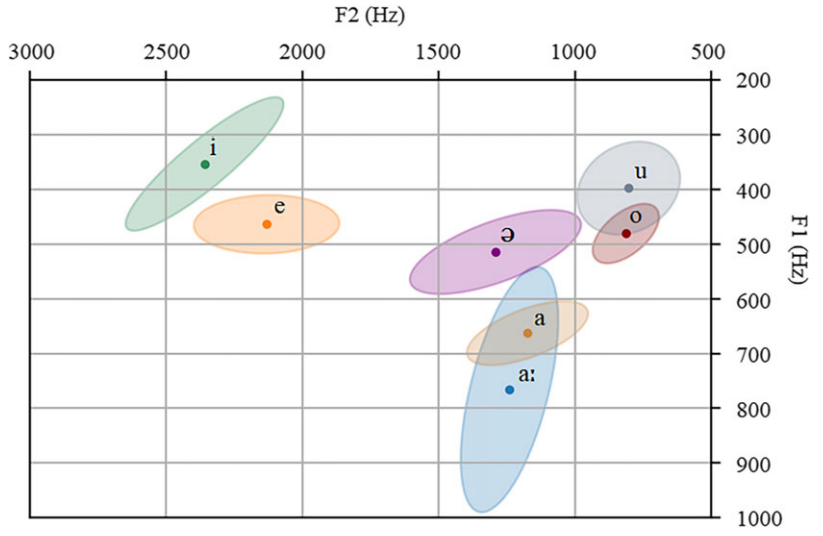

Figure 8. (Colour online) Acoustic plots for the vowels of Kam, F1and F2 of each vowel were based on mean formant values of 10 open syllables. The ellipses show the F1 and F2 values to 2 standard deviations.

Table 1. Duration of /a:/ and /a/

Vowel	Tokens	Vowel Duration (ms)	
		Mean	SD
/a:/	20	180	33.0
/a/	20	58	15.8

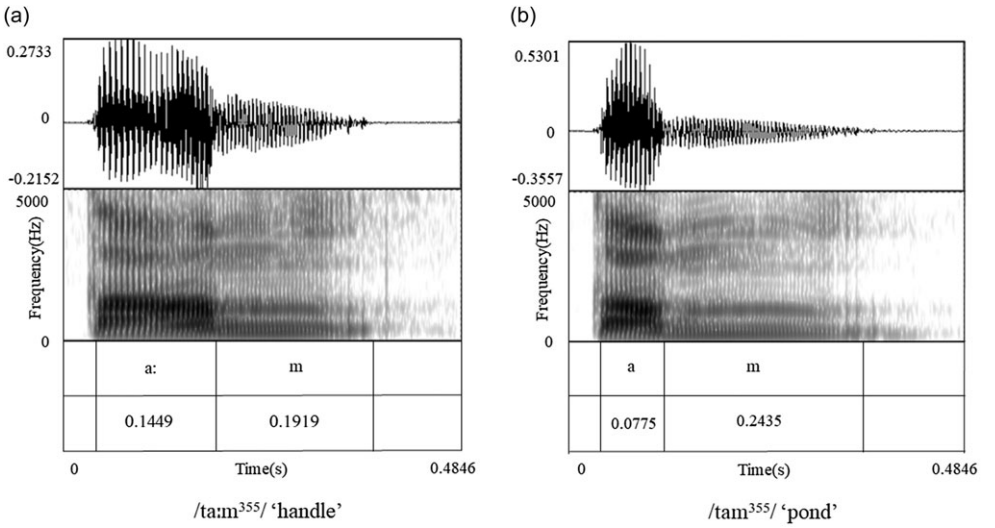

Figure 9. (Colour online) Waveforms and spectrograms for the minimal pairs /ta:m^{355}/ 'handle' vs. /tam^{355}/ 'pond'.

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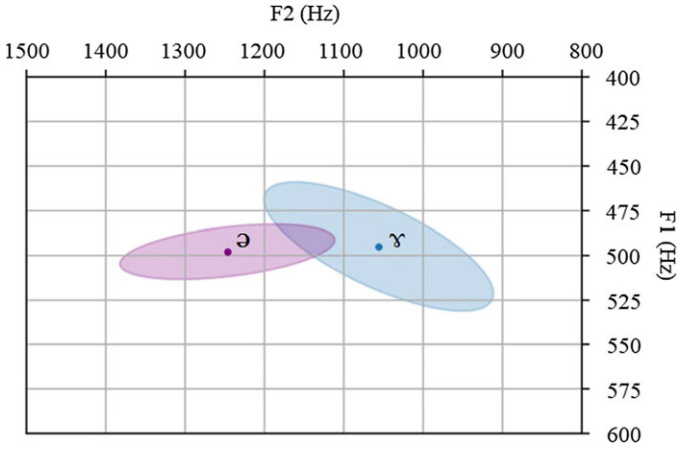


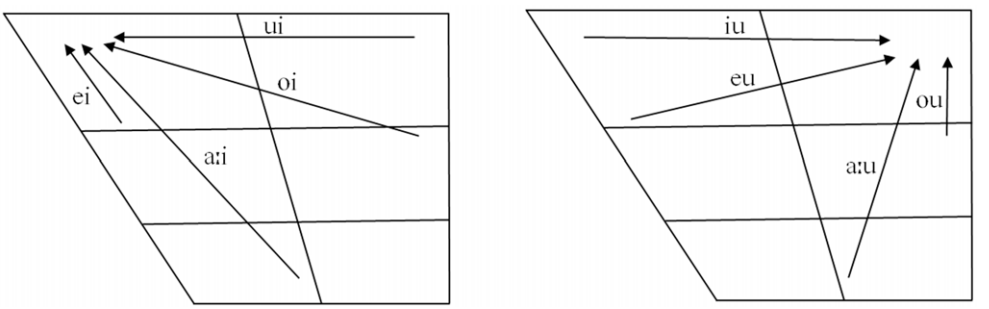
Figure 10. (Colour online) Two allophones [ə] and [ɤ] of /ə/ in F1 vs. F2 vowel space.

The duration of the two syllables is almost equal, but /aː/ is significantly longer than /a/, and in /am/, the duration of /m/ is longer than in /aːm/.

/ə/ has two allophones, [ə] and [ɤ]. When the coda is /m/ or /ŋ/, the nucleus is [ɤ] (e.g. /pəm^{323}/ 'plop', /təŋ^{51}/ 'black'). In other cases, the nucleus is pronounced [ə]. As in Figure 10, we calculated the average values of F1, F2 of syllables with /m/, /ŋ/ and with other codas, of which each category was calculated from seven tokens. F2 of /ə/ followed by /m ŋ/ is lower than that of /ə/ followed by other consonantal codas.

There are two allophones of /e/ in different contexts. When occurring in open syllables, /e/ is realized as [e]. In other cases, /e/ is pronounced with a tongue position a little higher than /ɛ/ and a little lower than /e/ (e.g. /pen^{22}/ 'to prepare'). As a high front vowel, /i/ has two allophones and is pronounced [i] when it follows a palatalized consonant (e.g. /lʲi^{211}/ 'centimeter'). In other cases, following the plain consonants which have plain vs. palatalized contrast (i.e. /p pʰ m l/, which, as mentioned above, are velarized apparently when followed by /i/), it is pronounced [əi] with a schwa-like onglide (e.g. /pi^{355}/ 'cup', /pik^{42}/ 'crucian'). /u/ is a high back vowel. There are two allophones of /u/. When /u/ is used as a monophthong vowel, it is pronounced [u] (e.g. /pu^{355}/ 'to pick', /ku^{355}/ 'whistle'); when it is a nucleus with a consonantal coda, it is pronounced [ʊ] (e.g. /pup^{323}/ 'lung', /hut^{13}/ 'poor').

Diphthongs



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VOWEL	EXAMPLE	GLOSS	VOWEL	EXAMPLE	GLOSS
a:i	pa:i^{355}	'to go'	a:u	pa:u^{355}	'horn'
ei	pei^{323}	'to compensate'	eu	peu^{355}	'bag'
oi	coi^{355}	'to tear'	iu	ciu^{355}	'we'
ui	pui^{355}	'fire'	ou	tou^{355}	'moss'

There are eight diphthongs in Kam, all of which only occur in open syllables. Table 2 presents the mean and standard deviation of F1 and F2 of these diphthongs, and each based on the measurements of 10 tokens at 20 percent and 80 percent of the vowel duration.

Table 2. Mean F1 and F2 of the diphthongs measured at 20 percent and 80 percent of the vowels

	F1 (Hz)				F2 (Hz)			
	20%		80%		20%		80%	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
a:i	820	54.6	378	30.2	1325	108.2	2183	99.3
a:u	725	64.8	410	24.3	1025	36.5	739	51.5
ei	543	50.0	333	34.3	1887	112.6	2319	134.0
eu	524	66.6	422	45.4	1949	120.3	844	98.1
oi	528	23.6	362	30.6	985	124.7	2189	154.2
iu	335	43.7	379	29.6	2212	143.3	787	68.7
ui	403	36.0	322	33.0	836	101.0	2338	132.6
ou	467	82.0	366	41.2	847	87.9	672	57.1

When followed by /i/, the F2 of /a:/ is higher than when followed by /u/, indicating that the articulation of /a/ is more fronted. In addition, we transcribe the diphthongs in /a:i/ and /a:u/ with a long /a:/ instead of with a short /a/. This is because we statistically averaged the duration of /a:/ among 10 monosyllabic morphemes containing /a:i/ and /a:u/ and found that the average duration is about 183 ms. The average duration of /a:/ with nasal or stop codas is 180 ms, which is similar to that of /a/ with vowel codas, so /a/ in /a:i/ and /a:u/ should be notated as the long vowel /a:/. In the diphthongs of /eu iu ou au/, the F1 and F2 of the /u/ in /eu/ are larger than the others, close to [ʊ].

Tones

Unchecked Tone			Checked Tone		
T355	pa^{355}	'fish'	T55	pap^{55}	'wrinkle'
T25	p^{h}a^{25}	'gray'	T34	p^{h}at^{34}	'to vibrate'

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T211	pa^{211}	‘rake’	T43	pak^{43}	‘radish’
T323	pa^{323}	‘aunt’	T323	pa:k^{323}	‘mouth’
T12	p^{h}a:i^{12}	‘display’	T12	p^{h}a:t^{12}	‘blood’
T41	pa^{41}	‘locust’	T42	pa:k^{42}	‘white’
T51	pa^{51}	‘leaf’			
T451	p^{h}a^{451}	‘break’			
T22	pa^{22}	‘bran’			

Previous studies have shown that Kam has a total of 15 tones, nine unchecked and six checked, and the latter are split into long and short tones (Liang 1980; Zheng & Yang 1985; Long 2018).

The pitch trajectory of each tone is illustrated in Figure 11. The f0 values of each tone were extracted using the Praat software, with the default Settings (Boersma & Weenink 2020). Each tonal contour is obtained by averaging across five tokens. Tonal values are marked using the five-scale pitch system developed by Chao (1980), where 5 is highest and 1 is lowest. To facilitate observation and comparison, we have charted the pitch trajectory of unchecked and checked tones separately.

Among the nine unchecked tones, the f0 contour of T355 goes from middle to high and then remains level towards the end. T25 is a low-high rising tone, which has a larger slope than T355. T211 is a low falling tone, and the f0 contour of T211 moves up from high to low and then remains level towards the end. T323 is a falling-rising tone and T12 is a low rising tone. T41 and T51 are both falling tones, but T41 is a mid-falling tone, and T51 is a high-falling tone. T451 is a rising-falling tone. T22 is the only level tone.

Among the six checked tones, there is one level tone, two rising tones, two falling tones and one falling-rising tone. T55 is a high level tone, and T34 is a high rising tone. T43 is a high falling tone. T323 is a falling-rising tone, which is the same contour as unchecked tone T323. T12 is a low rising tone. T42 is a low falling tone, of which the slope of the f0 contour is smaller than T43. It is noteworthy that the duration of T55, T34 and T43 is about 50 ms, while the duration of T323, T12 and T42 is more than 100 ms, which is significantly longer.

Some scholars have simplified the tone categories. Liang (1980) indicated that the distribution of checked and unchecked tones are in complementary distribution depending on the absence vs. presence of a coda, and claimed that the tone value of the six checked tones are the same or similar to the first six unchecked tones, thus simplifying the number of tones to nine. However, for the studies on language change and historical comparison of related languages, it would be more convenient to display all the 15 tone categories of Kam separately. In addition, as investigated in this study, the tone values of the mentioned unchecked and checked tones are not exactly the same. Thus, we keep the 15 tones of Kam separate.

The consonants and tones in Kam have strict cooccurrence restrictions. As shown in Table 3, aspirated plosives can only appear in unchecked tones T25, T12, T451 and checked tones T34 and T12, while unaspirated plosives can only appear in unchecked tones T355, T211, T323, T41, T51, T22 and checked tones T55, T43, T323 and T42, and other consonants can appear in all tones. According to the principle of complementary distribution, the aspirated plosives can be regarded as allophones of unaspirated plosives in the same position, distinguished by tones. However, we are currently unable to determine whether

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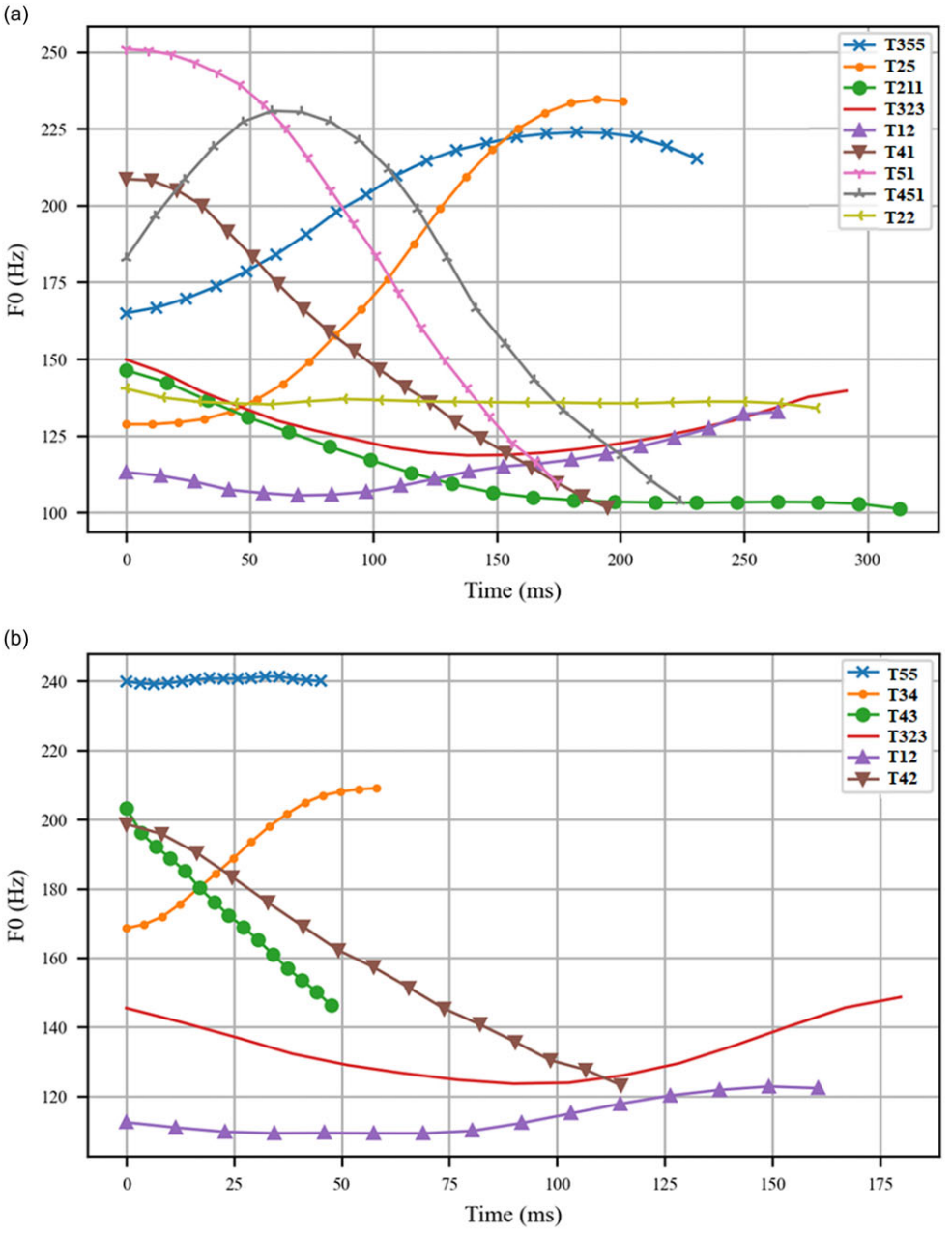

Figure 11. (Colour online) f0 contours of Kam tones for the one speaker; (a) unchecked tones; (b) checked tones.

Kam speakers distinguish these phonemes by tone features or aspiration features, this needs to be investigated by perceptual experiments. Therefore, the aspirated and unaspirated plosives are temporarily divided into different phonemes, and the tones are not merged.

There is a close relationship between checked tones and vowel length in Kam. When followed by the stop codas /p/, /t/, /k/, the nucleus vowels /a/ and /ə/ are short and appear

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Table 3. Onset consonants and tones

Tones		Plosives	Other Consonants
Unchecked Tones	T355, T211, T323, T41, T51, T22	p t c k p^j k^w	m n ɲ ŋ m^j $ŋ^w$ l l^j s ç h w j ʔ
Checked Tones	T55, T43, T323, T42		
Unchecked Tones	T25, T12, T451	p^h t^h c^h k^h p^{hj} k^{hw}	
Checked Tones	T34 and T12		

Table 4. Checked tone distribution of vowels with stop codas

Tones	T55, T34, T43			T323, T12, T42		
Vowels	ap	at	ak	a:p	a:t	a:k
	əp	ət	ək	ep	et	ek
			ip	it	ik	
			up	ut	uk	
		ok	op	ot	ok	

only in T355, T34 and T43; when /a:/, /e/, /i/, and /u/ are the nuclei, they are long, and only appear in T323, T12 and T42. /o/ is special in that it can be used as a nucleus in all checked tones. When the coda is /p/, /t/, the vowel /o/ is long and only appears in T323, T12 and T42. When the stop coda is /k/, /o/ is long if it appears in T323, T12 and T42, and short if it appears in T355, T34 and T43. The long vowel [o:] and the short vowel [o] show a complementary distribution, so are merged and notated as /o/, as shown in Table 4.

Syllable structure

Kam is a tone language, and all the consonants can be onsets. Vowels are divided into four categories: monophthongs, diphthongs, vowels with stop codas, and vowels with nasal codas. Therefore, there are four combinations of consonants and vowels, namely CV, CVV, CVS, and CVN. Among the 1,726 monosyllables investigated, CV, CVV, CVS, and CVN accounted for 19.5, 20.2, 19.0, and 41.3 percent, respectively. Table 5 shows the syllable structure and examples.

Transcription of the recorded passage

The passage used for the recordings is the story 'The North Wind and the Sun,' which is transcribed using the consonants, vowels, and tones of Kam described above. The transcription below is broad phonemic. The symbol '|' marks a pause and '‖' marks the end of the sentence. The transcription of each sentence is presented in three versions: the first line is an IPA transcription; the second, in italics, is a Kam writing system transcription; and the third is the interlinear morphemic glossing. Abbreviations used in interlinear glossing follow the Leipzig Glossing Rules (LGR,

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Table 5. Syllable structure and examples of Kam

Syllable Structure	Example			
CV^T	pa^{355}	'fish'	pi^{355}	'cup'
	ta^{355}	'eye'	ku^{355}	'whistle'
CVV^T	$pa{:}i^{355}$	'to go'	$pa{:}u^{355}$	'horn'
	$ta{:}i^{22}$	'big'	$ka{:}u^{355}$	'to revise'
CVS^T	pap^{55}	'wrinkle'	pak^{55}	'rockfish'
	tap^{55}	'liver'	tat^{55}	'to cut'
CVN^T	$pa{:}n^{355}$	'male'	$pa{:}ŋ^{355}$	'straw'
	$ta{:}n^{355}$	'single'	$ta{:}ŋ^{355}$	'corral'

http://www.eva.mpg.de/lingua/resources/glossing-rules.php). The non-standard abbreviation (not included in the LGR) is: PREP = preposition. Additionally, a free English translation is also provided.

$ləm^{211}$	pak^{55}	$taŋ^{323}$	$ta^{355}mən^{355}$
Lemc	*Bagl*	*Daengh*	*Dal Menl*
wind	north	and	sun

'The North Wind and the Sun'

$li^{323}ji^{355}ta{:}u^{51}$ |	$ləm^{211}$	pak^{55}	$taŋ^{22}$	$ta^{355}mən^{355}$ |	
Lis yil daov |	*lemc*	*bagl*	*daengh*	*dal menl* |	
once	wind	north	and	sun	

$ɲa{:}u^{22}ko^{211}$	$tɕa^{51}$	$taŋ^{355}$	$pa{:}u^{51}$	nou^{211}	$pən^{22}si^{22}$	$ma{:}k^{323}$ ‖
nyaoh goc	*jav*	*daengl*	*baov*	*nouc*	*benh siih*	*mags* ‖
PREP	DEM.DIST	each.other	dispute	who	ability	big

'Once the north wind and the sun were arguing about who was stronger.'

tan^{355}	pai^{355}	tan^{355}	ma^{25}	su^{22}	tan^{355}	me^{211}	$ʔuk^{33}$	$p^ha{:}ŋ^{25}$	t^ham^{451}	ma^{25} ‖
Daenl	*bail*	*daenl*	*map*	*suh*	*daenl*	*meec*	*ugs*	*pangp*	*taemk*	*map* ‖
argue	go	argue	come	just	argue	NEG	come.out	high	low	come

'They kept arguing but there was no result.'

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ha^{25}na:i^{22}	wu^{355}	k^{hw}ən^{25}	li^{323}	muŋ^{41}	ɲən^{211}	c^{h}a:m^{211}	ta^{22}ma^{25} |
Hap naih	*wul*	*kuenp*	*lis*	*mungx*	*nyenc*	*qamt*	*dah map* |
now	GEN	road	have	CLF	person	walk	come.over

wu^{355}	çən^{25}	ma:u^{22} |	tan^{323}	mei^{41}	kuk^{323}m^{j}in^{211}la:u^{41}	na^{355}nok^{55} ‖	
wul	*xenp*	*maoh* |	*daens*	*meix*	*gugs miinc laox*	*nal nogl* ‖	
GEN	body	3SG	wear	CLF	coat	thick	

'Then there came a traveler wearing a thick coat.'

ja^{211}	ma:u^{22}	su^{22}	taŋ^{355}	wa^{22}	la:i^{355}	ja:ŋ^{41} |	nou^{211}	sin^{12}	li^{323}	muŋ^{41}
Yac	*maoh*	*suh*	*daengl*	*wah*	*lail*	*yangx* |	*nouc*	*siint*	*lis*	*mungx*
two	3SG	just	each.other	say	good	PFV	who	can	AUX	CLF

ɲən^{211}	c^{h}a:m^{12}	ta^{22}ma^{25}	na:i^{22} |	l^{j}an^{51}	kuk^{323}m^{j}in^{211}la:u^{41}	ta^{22}kun^{51} |	
nyenc	*qamt*	*dah map*	*naih* |	*liaenv*	*gugs miinc laox*	*dah gunv* |	
person	walk	come.over	DEM	take.off	coat	before	

laŋ^{41}	son^{451}	muŋ^{41}	ca^{51}	pən^{22}si^{22}	ma:k^{323} ‖
laengx	*sonk*	*mungx*	*jav*	*benh siih*	*mags* ‖
at.once	think	CLF	DEM.DIST	ability	big

'They agreed that whoever of the two was able to make the traveler take off his coat would be considered the stronger of the two.'

ləm^{211}	pak^{55}	laŋ^{41}	soŋ^{451}so^{22}	wat^{34}	ma^{25}	ja:ŋ^{41} ‖
Lemc	*bagl*	*laengx*	*songk soh*	*wadp*	*map*	*yangx* ‖
wind	north	at.once	hard	blow	come	PFV

'Then the wind blew with all its might.'

nou^{211}	wo^{41}	ma:u^{22}	ça:ŋ^{22}	wat^{34}	ja:t^{42} |	muŋ^{41}	ɲən^{211}	c^{h}a:m^{12}	ta^{22}ma^{25}
Nouc	*wox*	*maoh*	*xangh*	*wadp*	*yadx* |	*mungx*	*nyenc*	*qamt*	*dah map*
who	know	3SG	more	blow	hard	CLF	person	walk	come.over

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ca^{22}	tei^{211}	kuk^{323}mʲin^{211}laːu^{41}	çaːŋ^{22}	jat^{43}	cən^{323} |	ta^{22}lən^{211}	ləm^{211}	pak^{55}
jah	*deic*	*gugs miinc laox*	*xangh*	*yadc*	*jeans* |	*Dah lenc*	*lemc*	*bagl*
DEM: PROX	OBL	coat	more	wrap	tight	then	wind	north

me^{211}	li^{323}	ci^{51}tɕot^{323}	jaːŋ^{41} |	kop^{323}	li^{323}	sa^{51}	jaːŋ^{41} ‖
meec	*lis*	*jiv jods*	*yangx* |	*gobs*	*lis*	*sav*	*yangx* ‖
NEG	AUX	method	PFV	have.to	AUX	stop	PFV

'The stronger the wind blew, the more tightly the traveler held his coat, until the wind grew tired and stopped blowing.'

ta^{22}	ʔi^{355}ha^{25} |	ta^{355}mən^{355}	ʔuk^{323}ma^{25}	jaːŋ^{41} |	maːu^{22}	kʰut^{12}həp^{211}həp^{211}	laːu^{12}
Dah	*il hap* |	*dal menl*	*ugs map*	*yangx* |	*Maoh*	*kudt hebc hebc*	*laot*
after	a.while	sun	out	PFV	3SG	warmly	one

pʰeŋ^{25} |	muŋ^{41}	ɲən^{211}	cʰaːm^{12}	ta^{22}ma^{25}	ca^{22}	laŋ^{41}	təi^{211}
peengp |	*mungx*	*nyenc*	*qamt*	*dah map*	*jah*	*laengx*	*deic*
shine	CLF	person	walk	come.over	DEM:PROX	at.once	OBL

məi^{41}	kuk^{323}mʲin^{211}laːu^{41}	ca^{22}	lʲan^{51}	lui^{22}ma^{25}	jaːŋ^{41} ‖
meix	*gugs miinc laox*	*jah*	*liaenv*	*luihmap*	*yangx* ‖
CLF	coat	DEM:PROX	take. off	down	PFV

'Then the sun shone out warmly, and immediately the traveler took off his coat.'

ha^{25}naːi^{22}	ləm^{211}	pak^{55}	ca^{51}çi^{22}	lʲiŋ^{41} |
Hap naih	*lemc*	*bagl*	*jav xih*	*liingx* |
now	wind	north	have.to	acknowledge

kaːu^{41}	ja^{211}	maːu^{22}	kop^{33}caːŋ^{33}	ta^{355}mən^{355}	pən^{22}si^{22}	maːk^{33} ‖
gaox	*yac*	*maoh*	*gobs jangs*	*dal menl*	*benh siih*	*mags* ‖
between	two	3SG	still	sun	ability	big

'And so the north wind agreed that the sun was truly the stronger of the two.'

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