#### **ILLUSTRATIONS OF THE IPA**

# Hakka Chinese

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Hakka Chinese is also known in China as Kejia dialect. The present study is based on phonetic data collected from native speakers of Hakka Chinese, male and female, aged between 18 and 22, during our field trips to Hakka-speaking Meixian County in the northeastern part of Guangdong Province in southeastern China in 2007. The speakers have lived all their life in Meijiang District of the county, speaking Meijiang variety which is considered representative of Meixian Hakka. The style of speech illustrated here is that typical of the educated younger generation and the recording is that of a 22-year-old male college student.

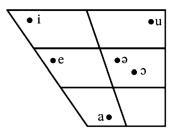
## **Consonants**

			Dental/				
	Bilabial	Labiodental	alveolar	Palatal	Velar	Labial-velar	Glottal
Plosive	p p <sup>h</sup>		t t <sup>h</sup>	c ch	k k <sup>h</sup>	k <sup>w</sup> k <sup>wh</sup>	
Affricate			ts ts <sup>h</sup>				
Nasal	m		n	ŋ	ŋ		
Fricative		f	S	ç			h
Approximant		υ		j			
Lateral			1				
approximant							

p	ра⊣	'father'	t	ta√	'to hit'	c	cau	'to call'	k	ka⊣	'home'
$p^h$	$p^ha \bot$	'to crawl'	th	t <sup>h</sup> a⊣	'he/she'	ch	$c^h$ $_{\rm D}$ $_{\rm LC}$	'tomato'	k <sup>h</sup>	$k^ha \bot$	'to block'
m	ma⊣	'mother'	n	na⊣	'to take'	ŋ	nau∖	'urine'	kw	k <sup>w</sup> a⊣	'melon'
f	fa⊣	'flower'	s	sa⊣	'sand'	ç	çi⊣	'to hope'	k <sup>wh</sup>	k <sup>wh</sup> a⊣	'to boast'
υ	υa⊣	'frog'	ts	tsa⊣	'residue'	j	jai⅃	'coconut'	ŋ	ŋa⅃	'tooth'
			tsh	ts <sup>h</sup> a⊣	'fork'				h	ha∖	'down'
			1	la⊣	'to pull'						

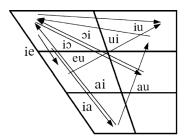
## Syllabic consonants

## **Vowels**



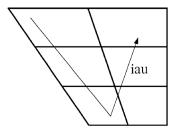
i	si⊣	sim⊣	sin⊣		sip┐	sit⊓	
	'west'	'heart'	'new'		'to collect'	'excuse'	
e	se√	sem⊣	sen⊣		sep√	set√	
	'to wash'	'forest'	'star'		'garbage'	'color'	
a	sa⊣	sam⊣	san⊣	saŋ⊣	sap∃	sat⊓	sak∃
	'sand'	'clothes'	'hill'	'sound'	'to involve'	'tongue'	'stone'
Э	Fcs		s⊃n⊣	səŋ⊣		sət√	sɔk√
	'shuttle'		'sour'	'trade'		'to brush'	'rope'
u	su⊣		sun⊣	suŋ⊣		sut∃	suk┐
	'book'		'grandson'	'double'		'art'	'cooked'
Э		səm√	sən⊣		səp∃	sət⅂	
		'(a surname)'	'body'		'ten'	'to eat'	

## Diphthongs



ai	sai						
	'basking'						
ia	sia⊣	tsiam⊣		siaŋ⊣	tsiap√		siak√
	'some'	'sharp'		'fishy'	'to receive'		'tin'
au	sau⊣						
	'to burn'						
eu	seuY						
	'skinny'						
ъi	Fice						
	'not nice'						
ci				siɔŋ⊣			vkcis
				'suitcase'			'to whittle'
ui	sui⊣						
	'though'						
iu	siu⊣			siuŋਖ਼			siuk√
	'to repair'			'to worship'			'to lodge'
ie			sien⊣			siet√	
			'before'			'snow'	

## **Triphthong**



iau | siau+ 'to rid'

## Tones (citation form)

☐ (high level)		it⊓ 'wing'
⊣ (mid level)	i⊣ 'clothes'	
∖ (high falling)	in 'idea'	
√ (mid falling)	i√ 'rain'	it√ 'benefit
⊥ (low level)	i⊔ 'aunt'	

#### **Conventions**

### Consonants, syllabic consonants, vowels, diphthongs and triphthong

Syllable-initial [t th] are apico-laminal denti-alveolar; syllable-initial [s] is laminal alveolar; syllable-initial [ts tsh] are laminal alveolar or laminal denti-alveolar; syllable-initial [c ch  $\eta$ ] are lamino-anterodorsal alveolo-prepalatal or anterodorsal postalveolo-palatal; and [c] is laminal prepalatal or anterodorsal palatal. All consonants occur in syllable-initial position, and only unreleased [p t k], i.e. [p tr k], and [m n  $\eta$ ] occur in syllable-final position.

Syllabic alveolar approximant  $[\underline{\mathfrak{z}}]^1$  is preceded only and obligatorily by homorganic [s ts ts<sup>h</sup>], and syllabic nasals  $[\mathfrak{m}]$  and  $[\mathfrak{n}]$  occur in isolation.

Vowels<sup>2</sup> [i a e  $\circ$  u] occur in open and closed syllables; and [ $\circ$ ] occurs only in closed syllables. [a] occurs before [p t k m n  $\eta$ ]; [i e  $\circ$ ] only before [p t m n]; and [ $\circ$  u] only before [t k n  $\eta$ ]. [i u] are about cardinal in open syllables; [u] before [k  $\eta$ ] is slightly mid-centralized; [e] = [ $\circ$ ]; [a] = [ $\circ$ ]; and [ $\circ$ ] = [ $\circ$ ].

Diphthongs [ai au ui  $\circ$ i eu] occur only in open syllables; [ia iu] in open and closed syllables; and [ie io] only in closed syllables. In closed syllables, [ia] occurs before [p k m  $\eta$ ]; [iu io] before [k  $\eta$ ]; and [ie] before [t n]. [ia] = [ $\dot{\mu}$ ]; [ai] = [ $\dot{\mu}$ ]; [ie] = [ $\dot{\mu}$ ]; [au] = [ $\dot{\mu}$ ]; [au] = [ $\dot{\mu}$ ]; [au] = [ $\dot{\mu}$ ]; [io] = [ $\dot{\mu}$ ]; [io] = [ $\dot{\mu}$ ]; and [oi] = [ $\dot{\mu}$ ].

Triphthong [iau] occurs only in open syllables and is preceded by a large majority of the consonants, including a zero consonant. [iau] = [iäŭ].

#### **Tones**

Citation tone  $[\ ]$  occurs only on checked syllables. Citation tones  $[\ ]$  occur on open syllables and closed syllables with a nasal ending.  $[\ ]$  occurs on all syllable types, and when occurring

<sup>&</sup>lt;sup>1</sup> The syllabic alveolar approximant [1] which is prevalent in many Chinese dialects is referred to as the apical vowel by Chinese dialectologists, and the non-IPA symbol [1] (Pullum & Ladusaw 1996) in place of [1] is widely used in China.

<sup>&</sup>lt;sup>2</sup> In the recorded speech in this Illustration, there is a weak frication on vowel [i] when not preceded by a consonant.

on checked syllables, it is realized as mid to low-mid falling. On compounds, before  $[J \lor Y]$ ,  $[H] \to [Y]$  and  $[Y] \to [Y]$ ; and before [Y],  $[Y] \to [Y]$ . Citation tones  $[Y + J \lor Y]$  do not undergo tone sandhi before [Y] or [Y].  $[Y + Y] \to [Y \lor Y] \to [Y \lor Y]$  on compounds illustrate simultaneous tone sandhi application to tones on the non-compound-final syllables.

## Transcription of recorded passage

The passage recorded and transcribed here is 'The North Wind and the Sun'. iu+ it¬ pai+ aı | pet+ fuŋ+ tʰuŋ」 pit⊥ tʰeu」 hok+ e+ au¬ man+ pin⊥ kʷo¬ voi+ | au¬ loi+ au¬ çi+ | tu¬ mo+ mak+ e¬ cat+ kʷo¬ | au¬ ten+ au¬ ten+ | lu¬ hoŋ¬ iu+ tsak+ pin⊥ haŋ⊥ ten+ kʷo¬ loi⊥ | ki⊥ son+ hoŋ¬ tsok+ ten+ it⊥ cʰan¬ tʰai+ lau+ || ki⊥ ten+ pin⊥ tsʰiu+ va+ | man+ kʰo+ i+ sien+ vok¬ ki⊥ tʰo+ ha+ lau+ e+ loi⊥ | man+ tsʰiu+ voi+ || pet+ fuŋ+ tsʰiu¬ tsʰiu¬ tsʰiu¬ tsʰiu¬ tsh·iu¬ tsh·iu¬ tsh·iu¬ tsh·iu¬ tsh·iu¬ tsh·iu+ e+ em+ tet+ iat+ sat⊥ || tau¬ mi+ ha⊥ | pet+ fuŋ¬ mo⊥ pʰan¬ fap+ e⊥ | tsʰiu¬ tsh·iu¬ tsok+ lau+ e¬ tho+ | pit⊥ tʰeu</code> an+ lat+ sai¬ ha+ çi+ | e¬ tsak+ pin⊥ tsh·iu¬ tsok+ lau+ e¬ tho+ ha+ loi⊥ || e+ ha+ | pet+ fuŋ¬ ts₁⊥ hau+ sən⊥ pin+ | ki⊥ ten+ lioŋ+ tsak+ | han+ he+ pit⊥ tʰeu⊥ kʷo¬ voi+ ||

#### Simplified orthographic version (non-standard vernacular)

有一摆呀,北风同日头壳欸拗瞒人过会,拗来拗去,都无脉个结果。拗等拗等,路上有只人行等过来,佢身上着等一件大褛。佢丁人就话,瞒可以先握佢脫下褛欸来,瞒就过会。 北风就尽命牯吹,董系,佢越吹, 欸只人就作褛欸揞得越煞。到尾下,北风无办法欸,就尽得佢欸。过一下,日头俺辣晒下去, 欸只人就作褛欸脱下来。欸下,北风只好承认,

## Traditional orthographic version (non-standard vernacular)

有一擺呀,北風同日頭壳欸拗瞞人過會,拗來拗去,都無脈個結果。拗等拗等,路上有隻人行等過來, 佢身上着等一件大樓。佢丁人就話, 瞒可以先握佢脫下樓欸來,瞒就過會。 北風就盡命牯吹,董係,佢越吹, 欸隻人就作褸欸揞得越煞。到尾下,北風無辦法欸, 就盡得佢欸。過一下,日頭俺辣晒下去, 欸隻人就作褸欸脫下來。欸下,北風只好承認, 佢丁兩隻,還係日頭過會。

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