ILLUSTRATIONS OF THE IPA

Standard Chinese (Beijing)

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The style of speech illustrated is that typical of the educated younger generation in Beijing. The recording is that of a 25-year-old female graduate student who has lived all her life in Beijing.

Consonants

	Bilabial	Labiodental	Dental	Alveolar	Post-alveolar	Palatal	Velar
Plosive	p p ^h		t	t t ^h			k k ^h
Affricate			ts	s ts ^h	t∫ t∫ ^h	tç tç ^h	
Nasal	m			n			ŋ
Fricative		f		S	l	Ç	X
Approximant	W				ñ	j	
Lateral Approximant				1			

-	p ^h a¬	'eight' 'to lie prone' 'mother' 'to send'	t ^h n s ts	na√ sa¬ tsa¬	'to build' 'he/she' 'to include' 'to cast' 'to circle' 'to wipe'	$ \int_{t_0^h} t_0^h \\ c \\ tc \\ tc^h $	t∫ ^h a¬ ¢ia¬ t¢ia¬	'sand' 'residue' 'to insert' 'shrimp' 'to add' 'to nip off'	k^h η	$\begin{array}{c} k^h \text{color} \\ a \text{gen} \end{array}$	'subject' 'dirty' 'to drink'
W	wa∃	'frog'	1	la¬	'to pull'	J		'person'	i	ia∃	'duck'

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Syllabic consonants

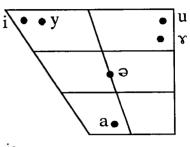
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'to think'
\GammaI. S
          'poem'
Ţį∖
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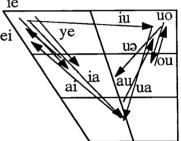
Vowels

i	i⊓	'clothes'	in¬	'sound'
y	y1	'fish'	yn⊓	'dizzy'
a	fa⊓	'to send'	an∃	'safe'
Э	№ 1	'son'	ən∃	'favour'
u	u∃	'house'	xuŋ∃	'bombing'
γ	Y 1	'goose'	-	_

Diphthongs

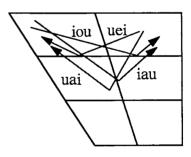
ai au ou uo ei ye ie ia	ai⊓ au⊓ ou⊓ ∫uo⊓ xei⊓ cye⊓ cie⊓ cia⊓	'sorrow' 'hollow' 'Europe' 'to speak' 'black' 'boot' 'some' 'shrimp'	çyen çien çiaŋ	'to announce' 'fresh' 'fragrant'
ua uə	xua∃	'flower'	xuan∃ xuən∃	'merry' 'marriage'
iu			çiuŋ٦	'chest'





Triphthongs

iau	çiau∃	'to disappear'
uai	∫uai⊓	'to fall down'
iou	çiou∃	'to rest'
nei	vuei∃	ʻach'



Tones (citation forms)

[٦]	(high level)	[pa¬]	'eight'
[1]	(mid to high rising)	[pa1]	'to pull out'
$[\vee]$	(mid to low to mid dipping)	[pa⊿]	'to hold'
[١]	(high to low falling)	[pav]	'father'

Conventions

Consonants, syllabic consonants, vowels, diphthongs, and triphthongs

syllable-initial [1] is apical denti-alveolar or apical alveolar. [c, tc, tch] occur only before [i] or [y]. Voiceless syllable-initial obstruents often become voiced when the following rhyme is associated with the neutral tone. [m] occurs only in syllable-initial position; [n] occurs in both syllable-initial and syllable-final positions; and [n] occurs only in syllable-final position. [w] has a free variant form of [v].

[\downarrow] occurs only in isolation or after [s, ts, ts^h, \int , t \int , t \int ^h]. [\downarrow] in isolation or when following $[[], t [], t []^h]$ is a syllabic apical post-alveolar approximant; when following [s,]ts, tsh] it is a syllabic apico-laminal or laminal denti-alveolar approximant. Syllabic apico-laminal or laminal denti-alveolar and syllabic apical post-alveolar approximants, often called apical vowels, occur only in open syllables.

Vowels [i, y, a, u] occur in open syllables as well as syllables closed by a nasal; [x] occurs only in open syllables. In open syllables, [i, y, u] are about cardinal, [a] = [a], and [x] is slightly diphthongized from [x] to [x]. In syllables closed by a nasal, [i, y] are about cardinal, [a] = [a], and [u] = [v]. [a] is a plain mid-central schwa in syllables closed by a nasal; in open syllables [\ni] is rhotacized, i.e. [\ni].

Diphthongs [ai, au, ou, uo, ei] occur only in open syllables; [ie, ia, ye, ua] occur in open syllables and syllables closed by a nasal; and [uə, iu] occur only in syllables closed by a nasal. [ai] = [ai], [au] = [av], [ou] = [ou], [uo] = [uo], [ei] = [ei], [ie] = [ie], [ye] = [ye], [ua] = [ua],and [iu] = [iu].

All triphthongs occur only in open syllables. In [iau, uai, iou, uei], [a] = [a], [o] = [o], and

A rhyme which may be a monophthong, diphthong, triphthong, 'vowel+nasal', or 'diphthong+nasal' may undergo er-hua. er-hua refers to suffixation of a rhotacized subsyllabic [8] to a rhyme, or to rhotacization of a vowel or a sequence of two vowels in a rhyme. In the cases where the rhyme ends with [0], [x] or [u], the vowel is rhotacized, i.e. $[\sigma]$, [x] or [w], instead of the rhyme being suffixed with [x]; and in the cases where the diphthong or triphthong ends with [i] or [e], [i] or [e] is deleted. Thus, [i, y, x, a, u, x] \rightarrow [i \Rightarrow , y \Rightarrow , x \Rightarrow , $a_{\mathcal{F}}$, $u_{\mathcal{F}}$, respectively; [ie, ye, ai, ei, ia, ua, uo, ou, au] \rightarrow [i\(\sigma\), y\(\sigma\), a\(\sigma\), $a_{\mathcal{F}}$, ia\(\sigma\), ua\(\sigma\), uo\(\sigma\) ou, au], respectively; and [uai, uei, iou, iau] → [uar, uar, iou, iau], respectively. In the cases where the rhyme ends with [n], the nasal ending is deleted. Thus, $[in, yn, an] \rightarrow$ [ia, ya, aa, aa], respectively; and [ien, yen, uan, uan] \rightarrow [iaa, yaa, uaa, uaa], respectively. And, in the cases where the rhyme ends with $\lceil \eta \rceil$, the nasal ending is deleted and the rhyme is nasalized. Thus, $[i\eta, a\eta, a\eta, u\eta] \rightarrow [\tilde{i}\tilde{\delta}, \tilde{\delta}\tilde{\delta}, \tilde{a}\tilde{\delta}, \tilde{w}]$, respectively; and $[ia\eta, ua\eta, iu\eta] \rightarrow$ [ĩãỡ, ũãỡ, ĩữ], respectively.

Tones

 $[\ \]$ on monosyllables may realize as $[\ \]$ or $[\ \]$ +silence+ $[\ \]$. On compounds, $[\ \] \rightarrow [\ \]$ before another $[\[\]]$, and $[\[\]] \to [\]]$ before $[\[\]]$, $\[\]]$ or the neutral tone; and optionally, $[\[\]] \to [\]]$ after $[\[\]]$ or [1] and before any tone, and $[N] \to [N]$ or [N] before another [N]. On a component syllable of a compound, [7], [4], [4] or [8] may lose its citation form and become the neutral tone. The pitch value for the neutral tone varies, depending mainly on the preceding citation tone. The general rules are: (\lor) when following $[\lnot]$, (\lor) when following $[\lnot]$, (\lnot) when following $[\lor]$, or (\bot) when following [\lor].

Transcription of recorded passage

iouv i¬ xueid|peiv fəη¬ kən¬ thaiv iaη(Δ) t fəη¬ tsaiv naəv t fəη¬ luənv feid də(¬) pənılinı tav || [uordze(v)][uordze(v)] [uordze(v)] [uordze(v)] [uordze(v)] [uordze(v)] [uordze(v)]lian(\dagger) xau\la(\dagger) | fuo\langle fei\non\cien\teiau\langle tfei\langle go(\dagger) kuo\langle lu\langle to(\dagger) pa\langle dfa\langle pei | fəŋ | tciou | mau | tsu | lə(|) tciə | | p^h in | miŋ | də(|) $t[^h$ uei | $[k^h]$ | [t] $t^huei \dashv de(\dashv) \text{ ye} \dashv i \dashv xai(\dashv) \mid nei \dashv qe(\dashv) \text{ ye} \dashv t \nmid a \dashv de(\dashv) p^ha \dashv t s i (\dashv)$ kuol də(+) yel tçinl || taul muol liarul | peil fənl meil t[x1lə(l) | t[11 xaul tciou(+) suanv lə(\bot) || i \top xuə \otimes v | t^haiv ian(\bot) t | thu \top lai(\lor) i+ faiv | neiv gə(\bot) אפת mav fanv tciou(+) bav phauv tsi(ר) t^h uoר le(v) ciav lai(ב) || suov iv | peiv

Orthographic version

有一回,北風跟太陽正在那兒爭論誰的本領大。説著説著,來了 一個過路的,身上穿了一件厚袍子。他們倆就商量好了,說,誰能先 叫這個過路的把他的袍子脱下來,就算是他的本領大。北風就卯足了 勁兒,拼命的吹。可是,他吹得越厲害,那個人就把他的袍子裹得越 緊。到末了兒,北風沒轍了,只好就算了。一會兒,太陽出來一晒, 那個人馬上就把袍子脱了下來。所以,北風不得不承認,還是太陽比 他的本領大。

Notes

- 1. The palatographic and linguagraphic data collected by the authors of this study from the native speakers of Beijing, male and female, in their early twenties show that there are no retroflex sounds in their speech.
- 2. [1], an apical post-alveolar approximant, in this study was transcribed as [z], representing a voiced apical pre-palatal fricative in Karlgren (1915–1926) and as [1], representing a retroflex approximant in Chao (1968).
- 3. $[\int, t \int, t \int^h]$, apical post-alveolar fricative and affricates, in this study were transcribed as [s, ts, tsh], representing apical pre-palatal fricative and affricates in Karlgren (1915– 1926) and as [s, ts, tsh], representing retroflex fricative and affricates in Chao (1968).
- 4. [4], a syllabic apico-laminal or laminal denti-alveolar approximant when following [5, ts, tsh, in this study was transcribed as [1], representing an apical alveolar vowel in Karlgren (1915–1926) and as [z], representing a syllabic voiced dental fricative in Chao (1968).
- 5. [\downarrow], a syllabic apical post-alveolar approximant when following [$\int_{t} t \int_{t}^{h} t dt$] or in isolation, in this study was transcribed as [1], representing an apical post-alveolar vowel in Karlgren (1915–1926) and as [4], representing a syllabic retroflex approximant in Chao (1968).
- 6. The non-IPA symbols, [1] and [1], representing the 'apical vowels' in the Peking (Beijing) dialect first appeared in Karlgren (1915–1926) and are widely used by the linguists in China.

References

CHAO, Y.-R. (1968). A Grammar of Spoken Chinese. Berkeley: University of California Press. KARLGREN, B. (1915–1926). Etudes sur la phonologie chinoise. Leyde: E.-J. Brill.