

From PEK to JFK

b1f6c1c4

untPhesoca

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1 Introduction

Target audience

- Mandarin speakers with Beijing accent who want to learn English with New York City accent, or English pronunciation in general. Note that one do *not* need to be proficient in Beijing dialect to use this guide. Also note that this guide is *not* complete.
- Anyone willing to locate the exact pronunciation of a word in New York City English (NYCE).
- Anyone willing to locate the exact pronunciation of a character in Beijing Mandarin.

How to learn NYCE pronunciation Learn IPA first. Then read *Teaching Pronunciation, A Course Book and Reference Guide* by Marianne Celce-Murcia, et. al. After that, find some words, find their pronunciation using this guide, and practice.

How to find the pronunciation of a word in NYCE

1. Get an authoritative pronunciation dictionary, like Longman Pronunciation Dictionary, with General American English annotation (usually abbreviated as GenAm or AmE.)
2. Lookup the word in the dictionary.
3. Split the reference pronunciation into phonemes.
4. Lookup each phoneme in section JFK.
5. Reassemble IPAs back to get the exact phonetics of a word in NYCE.
6. Go through the rest subsections, if any, of JFK to get the exact pronunciation.

2 Definition

2.1 Semivowels & Vowels

	Front		Central		Back
Semivowels	j ɥ ɥ ^w	ɟ ɥ ɥ ^w	ɟ ɥ ɥ ^w	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Close	i y y ^w	ɟ y y ^w	ɟ ɥ ɥ	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Near-close	ɟ y y ^w	ɟ y y ^w	ɟ ɥ ɥ	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Close-mid	e ø ø ^w	e ø ø ^w	ə ø ^β ø	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Mid	e ø ø ^w	ɟ ø ø ^w	ə ø ^β ø	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Open-mid	ɛ œ œ ^w	ɟ œ œ ^w	ɟ ɥ ^β ɥ	ɥ ɥ ^β ɥ	ɥ ɥ ^β ɥ
Near-open	æ œ	ɟ œ	ɟ ɥ	ɥ ɥ	ɥ ɥ
Open	a œ	ɟ œ	ɟ ɥ	ɥ ɥ	ɥ ɥ

3 PEK

	∅	b	p	m	f	d	t	n	l	g	k	h	j	q	x	zh	ch	sh	r	z	c	s	
		b̥	pʰ	m	f	d̥	tʰ	n	l	ɡ̊	kʰ	ɣ̥ ɣ	ḑz̥ ḑz̥ʲ	tɕʰ tɕʲ	ɕ ɕʲ	ḑz̥	tɕʰ	ɕ	ɹ̥	ḑz̥	tɕʰ	ɕ	
a	ʔä	ä											-			ä		-	ä				
ia	jä	-											jä			-							
ua	wä v̥ä	wä											-			wä		-					
o	ʔw̥o̥ḷ̥	w̥o̥ḷ̥											-										
io	j̥o̥ḷ̥ j̥o̥ḷ̥												-										
uo	w̥o̥ḷ̥	-											w̥o̥ḷ̥					w̥o̥ḷ̥					
e	ʔɣ̥ḷ̥ ʔü̥ḷ̥	-											ɣ̥ḷ̥ ü̥ḷ̥					ɣ̥ḷ̥ ü̥ḷ̥					
ie	jɛ je̥	jɛ je̥	-		jɛ je̥		-		-		-		jɛ je̥	-		-		-		-			
üe	ɸɛ ɸø̥	ɸɛ ɸø̥	-		ɸɛ ɸø̥		-		-		-		ɸɛ ɸø̥	-		-		-		-			
i	i̥	i	-		i		-		-		-		i	-		i̥ ʔi̥ ɹ̥ḷ̥		i̥		i̥			
u	u ^{βw} ʔu̥	u u̥	u ^β u̥		-		u u̥		-		-		-	-		u u̥		-		-			
ü	y ^u y̥ ^u	-											y y̥			-							
ai	ʔaḷ̥ ʔäḷ̥	aḷ̥ äḷ̥	-		-		aḷ̥ äḷ̥		-		-		-	-		aḷ̥ äḷ̥		-		aḷ̥ äḷ̥			
uai	waḷ̥ v̥äḷ̥	-											waḷ̥ v̥äḷ̥			-		waḷ̥ v̥äḷ̥		-		-	
ei	ʔëḷ̥	ëḷ̥											-			ëḷ̥		-		ëḷ̥		-	
ui	weḷ̥ v̥ëḷ̥	-											weḷ̥			-		u̥ḷ̥		-		-	
ao	ʔaḷ̥ ʔäḷ̥	aḷ̥ äḷ̥	-		-		aḷ̥ äḷ̥		-		-		-	-		aḷ̥ äḷ̥		-		-			
iao	j̥aḷ̥ j̥äḷ̥	j̥aḷ̥ j̥äḷ̥											-			j̥aḷ̥ j̥äḷ̥		-		-			
ou	ʔw̥öḷ̥	-	-		-		w̥öḷ̥		-		-		-	-		w̥öḷ̥		-		-			
iu	ʔj̥o̥ḷ̥	-	j̥o̥ḷ̥	-		j̥o̥ḷ̥	-	j̥o̥ḷ̥	-		-		-	j̥o̥ḷ̥		-		-		-			
an	ʔan̊ ʔän̊	an̊ än̊											-			an̊ än̊		-		-			
ian	jɛn̊ jɛn̊	jɛn̊ jɛn̊	-		jɛn̊ jɛn̊		-		-		-		jɛn̊ jɛn̊	-		-		-		-			
uan	wan̊ v̥än̊	wan̊ v̥än̊											-			wan̊ v̥än̊		-		-			
üan	ɸ̥än̊ ɸ̥ɛn̊	-											ɸ̥än̊ ɸ̥ɛn̊			-		ɸ̥än̊ ɸ̥ɛn̊		-			
en	ʔɛn̊	ɛn̊											-			ɛn̊		-		-			
in	j̥in̊	j̥in̊	-		-		j̥in̊	-		-		-	j̥in̊	-		j̥in̊		-		-			
un	wən̊ v̥ɛn̊	u̥n̊											wən̊			-		u̥n̊		-			
ün	ɸ̥yn̊	-											ɸ̥yn̊			-		ɸ̥yn̊		-			
ang	ʔaŋ ^ɣ ʔäŋ ^ɣ	aŋ ^ɣ äŋ ^ɣ											-			aŋ ^ɣ äŋ ^ɣ		-					
iang	j̥aŋ ^ɣ j̥äŋ ^ɣ	j̥aŋ ^ɣ j̥äŋ ^ɣ											-			j̥aŋ ^ɣ j̥äŋ ^ɣ		-					
uang	w̥aŋ ^ɣ v̥äŋ ^ɣ	w̥aŋ ^ɣ w̥äŋ ^ɣ											-			w̥aŋ ^ɣ w̥äŋ ^ɣ		-					
eng	ʔɿŋ ^ɣ	ɿŋ ^ɣ											-			ɿŋ ^ɣ		-					
ing	j̥ɿŋ ^ɣ	j̥ɿŋ ^ɣ	-		j̥ɿŋ ^ɣ		-		-		-		j̥ɿŋ ^ɣ	-		j̥ɿŋ ^ɣ		-		-			
ueng	w̥ɿŋ ^ɣ v̥ɿŋ ^ɣ	w̥ɿŋ ^ɣ w̥											-			w̥ɿŋ ^ɣ w̥		-					
ong	-	-											-			-		-					
iong	ɸ̥öŋ ^ɣ ɸ̥üŋ ^ɣ	-											ɸ̥öŋ ^ɣ ɸ̥üŋ ^ɣ			-		-					

	55	35	214	51
er	-		ɿ̥	ɿ̥ ɸ̥ ɹ̥
m			m̊	
n			n̊	
ng			ŋ ^ɣ	

4 JFK

4.1 Consonants

Remarks

- All:
 - Before /ʈʂʑʑɜɪw/: Add ^w
- /ptk/:
 - After /s/ \wedge Onset: p t k
spin, step, skip
 - Before /fvθðszʑɜ/: p t k
caps, sets, axe
 - Before /pbtɔkɡʈʂʑɜ/: p^ɪ t^ɪ k^ɪ
apt, costco, ack
 - Onset with strong vowel: p^h t^h k^h
pet, tee, kit
 - Otherwise: In the middle
tap, bit, ask
- Merging into affricates:
 - /t/ + /ʃ/ \rightarrow t^fw \sim t^hw
 - /d/ + /ʒ/ \rightarrow d^ʒw
 - /t/ + /s/ \rightarrow ts \sim ts^h
 - /d/ + /z/ \rightarrow dz
 - /t/ + /ɹ/ \rightarrow t^ɹw \sim t^hw
 - /d/ + /ɹ/ \rightarrow d^ɹw

	IPA	Example	Remark
/m/	m ṁ ṃ	me, aim (TODO) custom, random	Solo in syllable After /td/
/n/	n ṇ ^ɪ ṇ ṇ ^ɪ	need sudden suddenly can	Solo in syllable \wedge End of word Solo in syllable End of word
/ŋ/	ŋ ṅ ^ɪ	singer sing	End of word
/p/	p \sim p ^h	(See remarks)	(See remarks)
/b/	b b ^ɪ	bee, cab object	Before /pbtɔkɡʈʂʑɜ/
/t/	t \sim t ^h t ^w \sim t ^{hw} ɾ ∅ ʔt ⁿ ʔt ^l ʔt ^h ʔt ^h \sim ʔ	(See remarks) string, tree letter accent actor actor actor what, (+ the fuck)	(See remarks) Before /ɹ/ After a vowel \wedge Before unstressed vowel After /n/ \wedge Before unstressed vowel Coda \wedge Before /n/ Coda \wedge Before /l/ Coda \wedge Before an consonant End of word
/d/	d d ^ɪ d ^w ɾ ∅ ʔd ⁿ ʔd ^l	dip, sad goodgame drill ladder vendor (TODO) actor actor	Before /pbtɔkɡʈʂʑɜ/ Before /ɹ/ After a vowel \wedge Before unstressed vowel After /n/ \wedge Before unstressed vowel Coda \wedge Before /n/ Coda \wedge Before /l/
/k/	k \sim k ^h	(See remarks)	(See remarks)
/g/	g g ^ɪ	good, bag flagged	Before /pbtɔkɡʈʂʑɜ/
/f/	f	feel, half	
/v/	v	vigor, have	
/θ/	θ	theme, bath	
/ð/	ð	them, with	
/s/	s	some, has	
/z/	z	zoo, ads	
/ʃ/	ʃ ^w	shoe, bash	
/ʒ/	ʒ ^w	genre, massage	
/h/	h ∅ ∅	who what human	Before /w/ Before /j/
/l/	l ḷ l \sim ḷ ^ɪ ḷ ^ɪ ḷ ^ɪ ḷ ^ɪ ḷ ^ɪ	timely like blink fill bulk model	In the -ly suffix Solo onset Onset Solo coda Coda Solo in syllable
/ɹ/	ɹ ^w ɹ ^ɪ ɹ ^ɪ ^w ɹ ^ɪ ^w	real bother trump drum	Solo in syllable After /t/ After /d/
/j/	j ç	you huge	After /h/
/w/	w w̃	walk twin	After /t/

4.2 Vowels

/æ/ raising rules

1. Two Exceptions: Tense: can't, avenue
2. Function word with simple coda: Lax
can *v.*, had
3. Loanwords, names, abbreviations: Lax
café, Canada, piano
4. (Trim the word to its stem)
madder → mad
5. End of syllable: Lax
matter
6. Before a consonant and then a vowel: Lax
manager, hammer
7. Before /mn/: Tense
can *n.*, plan, planning, ham
8. Before /ŋ/: Tense
hang, thank
9. Before /bdʒgfθsf/: Tense
cab, mad, bag, craft, path, mass, flash
10. Before /ptʃkvðzʒl/: Lax
apple, pat, patch, act, avid,
plazma, cashmere, rally
- p^{hw}ɪ̃nstənˈjʊ̃nəvɜːsətiː

	Property	IPA	Example	Remark
/æ/	tense	eə̃	bath	/æ/ raising
	lax	æ̃	trap	
/aɪ/	tense	aɪ̃	price	
/aʊ/	tense	aʊ̃	mouth	
	tense rhotic	ɑː̃ ɒə̃˞	palm, lot start	
/ʌ/	lax	ʌ̃	strut	
/eɪ/	tense	eɪ̃	face	
/e/	rhotic	eə̃˞	square	
	lax	ɛ̃	dress	
/ɜː/	rhotic	ɜː̃	nurse	
/ə/	rhotic, weak	ə̃˞	letter	
	lax, weak	ə̃	comma	
/i/	tense	iː̃	fleece	
	tense, weak rhotic	/iː/ iə̃˞	happy near	
/ɪ/	lax	ɪ̃	kit	
	lax, weak	ɨ̃	roses	
/oʊ/	tense	oʊ̃	goat	
/ɔɪ/	tense	ɔɪ̃	choice	
	tense rhotic	ɔə̃̃ oə̃˞	thought north, force	
/ɔ/	lax	ɔə̃̃	cloth	
/u/	tense	uʊ̃	goose	
	tense, weak	uʊ̃̃	into	
	rhotic	ʊə̃˞ oə̃˞	cure tour	After /j/ otherwise
	lax	ʊ̃	foot	
/ʊ/	lax, weak	ɵ̃	omission	