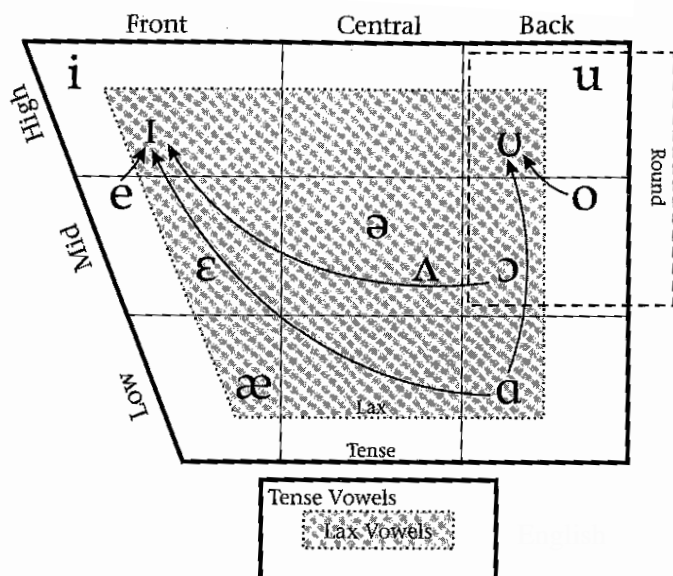


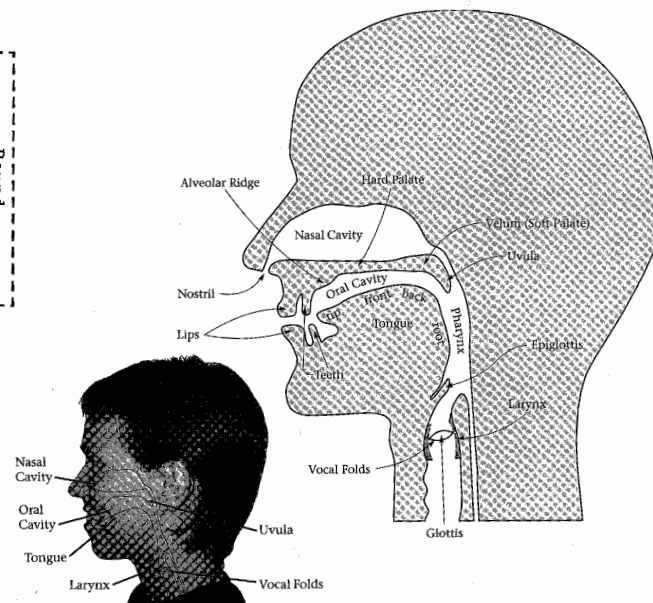
## Articulatory Phonetics

English vowel space



Vocal Tract

(4) Sagittal section of the vocal tract



IPA for English consonants

		Place of Articulation															
		Bilabial		Labio-dental		Inter-dental		Alveolar		Post-Alveolar		Palatal		Velar		Glottal	
Manner of Articulation	Stop	p	b					t	d					k	g	ʔ	
	Fricative			f	v	θ	ð	s	z	ʃ	ʒ					h	
	Affricate									tʃ	dʒ						
	Flap								ɾ								
	Nasal		m						n					ŋ			
	Lateral Liquid								l								
	Retroflex Liquid								ɭ								
	Glide	w	w <sup>3</sup>									j					

State of the Glottis

Voiceless

Voiced

- 1 (i) Madonna \_\_\_\_\_  
(ii) [nɑrt] \_\_\_\_\_  
(iii) [hɑbi:bi:] 'my darling' \_\_\_\_\_  
(iv) voiced bilabial stop \_\_\_\_\_

- 3 (i) Janelle \_\_\_\_\_  
(ii) [ɑʊtʃɪ] \_\_\_\_\_  
(iii) [dʒe:miʃ] 'university' \_\_\_\_\_  
(iv) tense high front vowel \_\_\_\_\_

- 2 (i) Stevie \_\_\_\_\_  
(ii) [ʃeɪp] \_\_\_\_\_  
(iii) [xɑmsɑ] 'five' \_\_\_\_\_  
(iv) voiceless interdental fricative \_\_\_\_\_

- 4 (i) Gump \_\_\_\_\_  
(ii) [foʊmou] \_\_\_\_\_  
(iii) [qɑtʰɑr] 'Qatar' \_\_\_\_\_  
(iv) lax low back vowel \_\_\_\_\_