

# Phonetics and Putonghua Phonetics

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## Basic concepts of Phonetics

- Elements
- Syllable

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## ELEMENT

Element is the smallest unite of  
phonetics which can not be divided  
further.

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## Classification of Element

- Vowel
- Consonant

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## VOWEL

1. Voiced speech sound resulting from the unrestricted passage of the air stream through the mouth or nasal cavity without audible friction or stoppage
2. Most prominent sound in a syllable.

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A vowel is described in terms of :

- (a) Relative position of the tongue in the mouth: front, central, back
- (b) Relative height of the tongue in the mouth: high, mid, low and
- (c) Relative shape of the lips: spread  
rounded, unrounded

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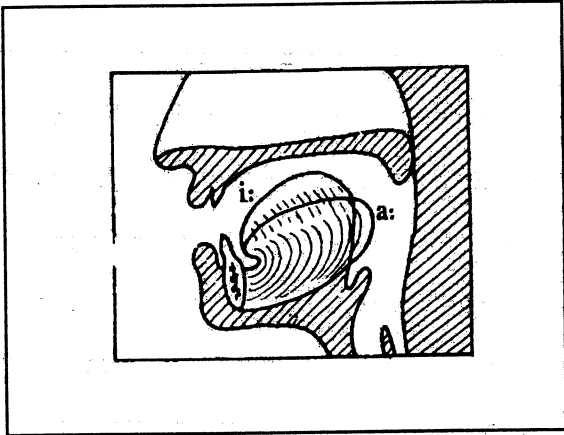
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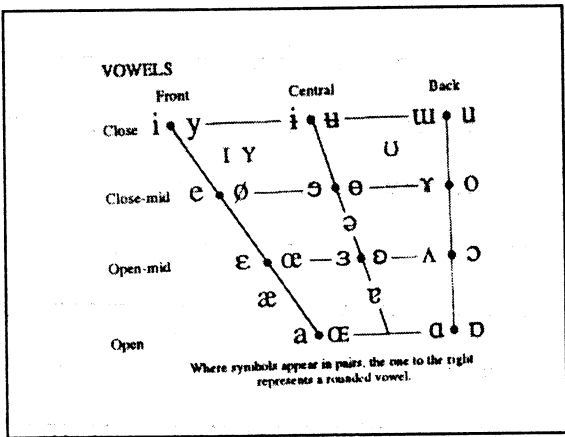
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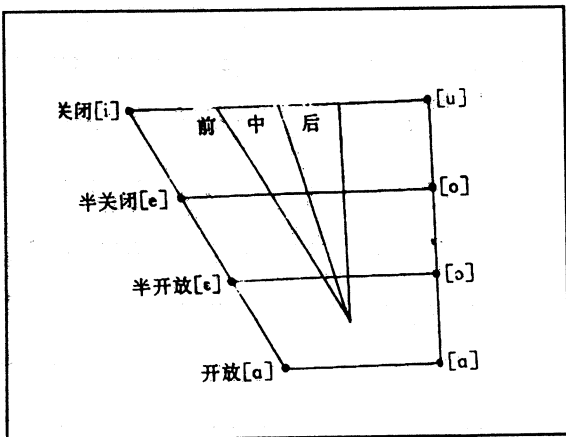
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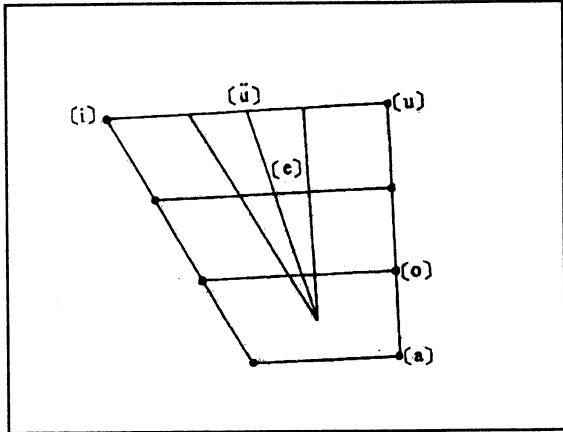
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**CONSONANT**

1. Conventional speech sound made, with or without vocal fold vibration, by certain successive contractions of the articulatory muscles which modify, interrupt, or obstruct the expired air stream so that its pressure is raised

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**CONSONANT**

2. Speech sound element articulated by either stopping the outgoing breath stream or creating a narrow opening of resistance against the energy of the breath stream; consonant sounds are separated from vowel sounds on this physiologic basis, and may also be defined according to manner of formation and place of articulation.

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Physiologic basis of consonants

- Manner of formation
- Place of articulation

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Place of articulation

That location along the length of the vocal tract from the anterior portion to the posterior point where the tract is occluded or narrowed to produce a specific consonant phoneme; includes the lips, teeth, alveolar ridge, palate, and glottis

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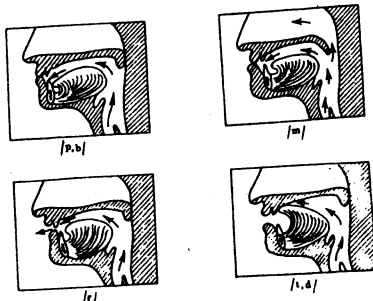
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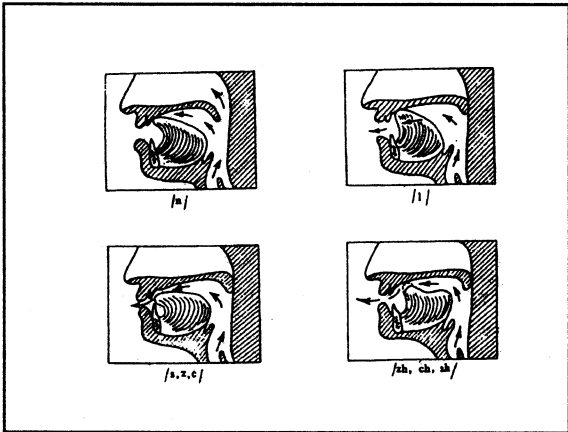
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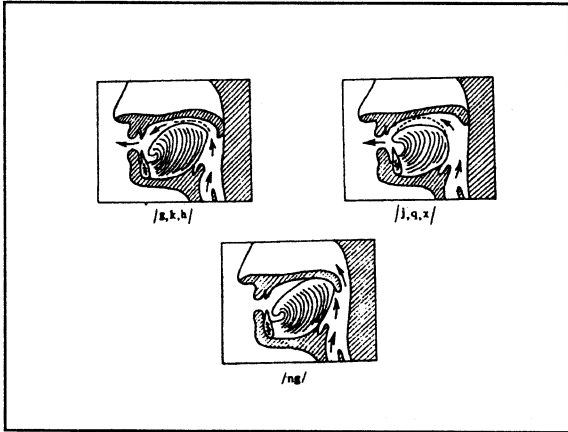
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**Manner of articulation**

(a) Direction of air or voice emission from the vocal tract, or

(b) Degree of narrowing of the vocal tract.

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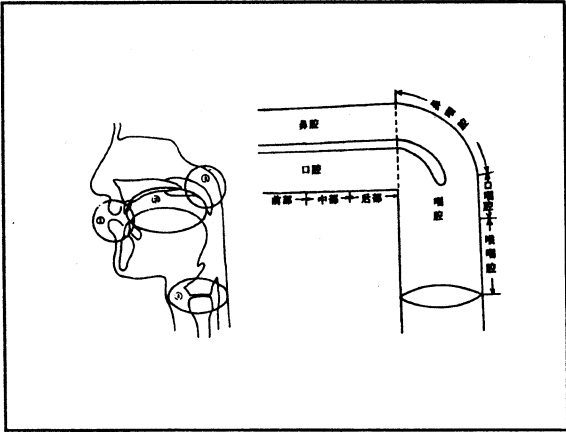
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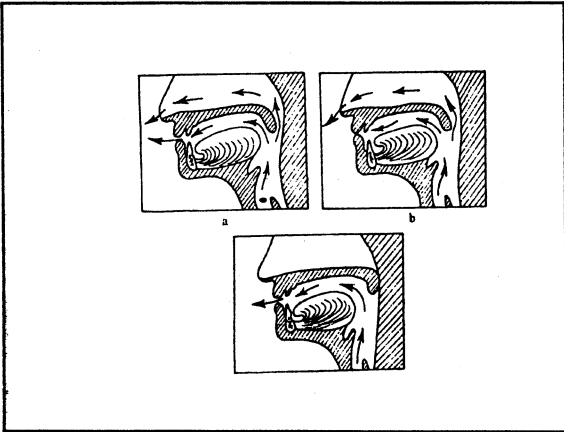
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## SYLLABLE

1. One of a series of pulses of sound energy considered the basic physiologic and acoustic unit of speech.
2. Unit of speech consisting of a vowel for a central phoneme; the vowel may stand alone or be surrounded by one or more consonants.

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## PUTONGHUA PHONETICS

- Symbol of Pinyin
- Shengmu
- Yunmu

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### Shenmu

*Consonants which locate at the beginning of syllable and have the function of distinguish the meaning.(21)*

### Yunmu

*Following Shengmu, including vowel and few consonants which eligible to appear after vowel.(39)*

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表 12-1 汉语辅音分类表

		发音部位					
		双唇音	唇齿音	舌尖音	舌尖中音	舌尖后音	舌根音
发音方式	塞音	p			t		k
	擦音	b	f	s	d	sh	x
	塞擦音			c		ch	q
	边音			z	l	zh	j
	鼻辅音	m			n		ng

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